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FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

Synthesis of the lessons derived from case studies in Brazil, Cambodia,
the Congo, Côte d'Ivoire, Myanmar, Peru, Thailand and Viet Nam

ANNEX: COUNTRY CASE STUDIES

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INTERNATIONAL TROPICAL TIMBER ORGANIZATION

Fiscal and non-fiscal incentives for sustainable forest management

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Annex: Country case studies

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The main report is available at www.itto.int/technical_report

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**Case Studies on Incentives for
Sustainable Natural Forest Management and
Forest Plantation Establishment and Development in
Cambodia, Myanmar, Thailand and Vietnam**

By

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7 June 2020

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Acronyms and Abbreviations

BAAC	Bank for Agriculture and Agricultural Cooperatives
CFUGs	Community Forestry User Groups
CIF	Cost Insurance and Freight
cm	centimetre
dbh	diameter at breast height
DMC	Department of Marine and Coastal Resources
DNP	Department of National Parks, Wildlife and Plant Conservation
ELCs	Economic Land Concessions
ESIA	Environmental and Social Impact Assessment
FA	Forestry Administration, Cambodia
FD	Forest Department, Myanmar
FIO	Forest Industry Organization
FOB	Free on Board
FSC	Forest Stewardship Council
ha	hectare
LUC	Land Use Certificate
m	metre
m ³	cubic metre
MAFF	Ministry of Agriculture, Forestry and Fisheries, Cambodia
MARD	Ministry of Agriculture and Rural Development, Vietnam
MMK	Myanmar Kyat
MNRE	Ministry of Natural Resources and Environment, Thailand
MONREC	Ministry of Natural Resources and Environmental Conservation, Myanmar
MRRP	Myanmar Rehabilitation and Reforestation Program
MTE	Myanma Timber Enterprise
MYR	Malaysian Ringgit
NFP	National Forest Programme
NGOs	Non-governmental Organizations
NWFPs	Non-wood Forest Products
PFE	Permanent Forest Estate
PFES	Payment for Forestry Environmental Services
QIPs	Qualified Investment Projects
RFD	Royal Forest Department, Thailand
THB	Thai Baht
VFV Land	Vacant, Fallow, and Virgin Land
VND	Vietnamese Dong
%	Percent

Executive Summary

1.0 Introduction

The forests in Cambodia, Myanmar, Thailand and Vietnam have significantly contributed to the socio-economic development of the countries. As an important renewal resource, the forests still have a high potential to provide goods and services and contribute to the long-term sustainable development of the countries, including poverty alleviation in remote rural areas. Nevertheless, while natural forests will continue to contribute to national development, in the coming years, forest plantations will increasingly contribute to poverty reduction and in meeting domestic wood demand and for the export market, especially in Thailand and Vietnam where a nation-wide logging ban on the natural forests has been imposed since 1989 and 2016 respectively.

While several tropical countries have experimented with fiscal, non-fiscal and other tools (taxes, subsidies, special economic zones, etc.) in trying to increase the domestic supply of wood, their effectiveness has not been systematically examined. What is better known is that many governments have used disincentives, such as the imposition of log export bans, quotas and fees, and set volume targets for domestic processing to stem the economic leakage from the sector. Results have been mixed and not always positive.

This paper will examine, among others, the type of incentives, both fiscal and non-fiscal, including enabling incentives, that enhance the sustainable management of natural forest and in the establishment and development of forest plantation in Cambodia, Myanmar, Thailand and Vietnam. It includes disincentives that could be removed to further enhance sustainable forest management. It will also provide recommendations to further enhance the sustainable management of natural forests and in the development of forest plantations in Cambodia, Myanmar, Thailand, and Vietnam.

2.0 Institutions, Policy, Legislation and Land Tenure

Institutions

In Cambodia, the FA manages the Permanent Forest Reserves and Private Forests; while the Fisheries Administration manages mangroves and inundated forests, and the Ministry of Environment manages the Protected Areas and Ramsar sites. In Myanmar, the FD is responsible for managing the forests, including biological diversity conservation, watershed protection, restoration of degraded forest ecosystems, and research and development (R&D).

In Thailand the RFD manages forests outside of protected areas and promotes community forestry and the establishment and development of forest plantations by the private sector. The DNP manages the protected areas while the DMC manages the coastal flora and fauna, including mangrove forests. In the case of Vietnam, the Vietnam Administration of Forestry (VNFOREST) is responsible for managing the natural forest resources, including the rights to establish, manage, develop and exploit products from forest plantations.

Policy and Legislation

All the four countries have promulgated policies and stringent laws, including decrees and regulations in Cambodia and Vietnam, to manage, protect and conserve their forest resources, including water and biological diversity, as well as in the establishment and development of forest plantations. They have also developed and implemented forestry programs to enhance the sustainable use of all the natural resources in the country.

The Cambodian National Forest Policy Statement (2002) underscores the government's commitment to conserve and manage of its forests sustainably and with the participation of local communities, while the Myanmar Forest Policy (1995) identifies the need to practise sustainable forest management, protect the forest ecosystems, and promote people's participation in all forest activities. It has also stipulated that up to 30% of the total land area of the country be gazetted as Reserved Forests, including Protected Public Forests, and 5% as the Protected Area System.

The National Forest Policy (1985) of Thailand has set a target of 40% of the country area to be under the permanent forest estate, comprising 15% as protected forests for nature conservation, recreation and environmental quality protection, and 25% as production forests to produce timber and other forest products. It also emphasizes the involvement of public and private sectors to develop and manage the forest areas, especially the local community to reforest and afforest degraded forest land. In Vietnam, the policy for the forest sector is expressed through various State decisions, instructions and programs, such as the 2006-2020 Vietnam Forestry Development Strategy (VFDS) which focuses on sustainable forest management and development.

In terms of legislation, the Forestry Law (2002) of Cambodia provides the regulatory framework for the management, harvesting, use, development and conservation of forests, while the Forest Law

(2018) in Myanmar empowers the FD to implement the forest policy and the plans relating to conservation of water, soil, biological diversity and the environment.

In Thailand, the Forest Act, B.E. 2484 (1941) which was amended in 2019 and the National Forest Reserve Act, B.E. 2507 (1964) that was amended in 1979 and 1985 address logging operations and NWFPs collection, transportation of timber and non-timber products and sawnwood production, as well as the classification of national reserved forests into management categories.

The Forestry Law (2017) of Vietnam provides guidance to conduct forest survey and monitoring, and the categorization of its forests and forest land by function, origin, geographical condition, tree species, timber reserve, and forest land without forests planned for forestry to ensure the forest resources are effectively managed to achieve sustainable forest management in the overall context of sustainable development.

Recognizing the important role played by local communities in contributing towards the attainment of sustainable forest management through their efforts to restore, protect and manage the forest land allocated to them, as well as in improving their livelihoods and in rural development, the four countries have also promulgated specific legislation to promote community forestry. In Cambodia, the Community Forestry Guidelines (2006) and the Sub-decree on Community Forestry Management (2003) provide the rules for the establishment, management and use of community forests, while the Myanmar's Community Forestry Instructions (CFI) (2019) provides communities the commercial rights over timber and non-timber forest products and acknowledge their customary and traditional land tenure rights.

In Thailand, the Forest Community Act, 2562 (2019) provides the right for the local community to establish and manage community forests, while in Vietnam the interests of the community are safeguarded under the Forest Protection and Development Law (1991) that was amended in 2004 and 2016, the Land Law (1993) which was amended in 1998, 2003 and 2013, and the Forestry Law (2017).

The governments of Cambodia, Myanmar and Vietnam collect royalties on logs harvested from the forest, based on their physical properties, durability, practical purposes and economic values. In Cambodia, the royalties for roundlogs with a diameter larger than 30 cm range from US\$ 275.00/m³ for *Dalbergia cochinchinensis*, a Luxury grade log, to US\$ 27.50/m³ for Grade III roundlogs; while in Myanmar, the royalties range from MMK 16,635/m³ (US\$ 11.09) for teak to MMK 3,330/m³ (US\$ 2.22) for the other four grades of logs.

In the case of Thailand, a permit is required to extract logs from reserved forest areas where the fee is fixed at THB 15,000 (US\$ 468.75) for teak wood and THB 7,500 (US\$ 234.38) for wood from the other tree species, while no fee will be charged for the permit to extract logs from trees planted on privately owned land.

In Vietnam, timber species are grouped into eight Groups, from Group I to Group VIII with the highest value being Group I and the lowest being Group VIII. The royalties or tax rate is based on the timber price at forest gate which ranges from 35% for timber in Group I to 12% for timber in Group VIII.

In addition, the countries also collect various types of fee, such as for the movement of timber and timber products and the use of chainsaws. In Cambodia, the transport permit is fixed at KHR 40,000 (US\$ 10.00), while in Thailand the permit fee for teak is fixed at THB 50 (US\$ 1.56), while wood from the other species is fixed at THB 20 (US\$ 0.62), and for forest products, it is fixed at THB 10 (US\$ 0.31).

In addition, Thailand also imposed a fee for issuing certificates of origin for logs, wood products and charcoal for trade in the domestic market or export to overseas market which ranges from THB 35,200 (US\$ 1,100.00) to THB 1,400 (US\$ 43.75).

In Myanmar, all movement of forest produces must be accompanied by a removal pass and based on the types of forest product, the fees vary from MMK 270/m³ (US\$ 0.18) for timber from conversion forests to MMK 495/consignment (US\$ 0.33) such as a boatload of charcoal.

The annual permit fee for the use of chainsaws in Myanmar is fixed at MMK 10,000 (US\$ 6.67), while that in Cambodia it is fixed at KHR 60,000/unit (US\$ 15.00).

A reforestation fee of US\$ 2.50/m³ is levied for all species, while a forest maintenance fee at 5% of the value of all timber and non-timber forest products are levied by the government in Cambodia. In Myanmar, a maximum 10% of the domestic or export value of the forest produce must be paid to the FD as an ecosystem services fee.

Cambodia also imposed an export tax for all timber and non-timber forest products which is fixed at 1% of FOB of the total value in the permit. In Myanmar, the exporter is required to pay for an export declaration and a security fee per shipment at MMK 30,000 (US\$ 20.00) and MMK 20,000 (US\$ 13.33) respectively, while in Thailand, an export tax of 40% is imposed for the export of logs and sawn timber to the overseas market.

Land Tenure

The Land Law (2001) in Cambodia differentiates three types of property and ownership rights, namely, State Public Property, State Private Property and Private Property. More specifically, it allows the State to grant to private companies to harvest the production forests that are not being used, and collective ownership to indigenous communities, but they are not allowed to transfer or dispose it to a third party.

In Myanmar, the Forest Law (2018) allows the government to grant private ownership, including trees planted in private plantations and those established outside forest land and community forests that are registered at the FD district office. All teak trees remain formally under state ownership. In the case of Thailand, all the natural forests regardless of their status as protected areas or National Forest Reserves are owned by the State, whereas all trees established on private lands are private property.

The amended Land Law in 2003 in Vietnam stipulates that land is under public ownership with the State acting as the representative. In this regard, the natural forest is under public ownership but organizations, households and individuals may be allocated or leased natural forest for long-term forestry use, but without private ownership. They cannot transfer, mortgage, and inherit the user rights. Meanwhile, according to the Forestry Law (2017), organizations, households, individuals and communities are allowed to own planted production forests established on their own land and forests that they received from transfer, gifts or inherited from other owners. More specifically, the tenure of forest can be divided into four types, namely, private tenure, state tenure, common tenure, and through forest contracting.

3.0 Forest Management and Development

Natural Forest

In Cambodia, a logging moratorium was imposed on all natural-forest concession areas since 2002 due to poor management and regulatory control, while Myanmar has imposed a nation-wide moratorium on logging for one year in 2016-17 and for the Bago Ranges for 10 years starting from 2016–2017 to 2026-2027. In the case of Thailand and Vietnam, the governments have imposed a nation-wide logging ban on the natural forests since 1989 and 2016 respectively. This is due to ineffective control and over-exploitation in the past, often illegal, as well as the continued decline and degradation of the forest areas.

In Cambodia, forest management through the use of a forest concession system was introduced after 1991 where the government granted 36 commercial forest concessions covering an area of seven million ha or about 65 % of the county's forests. However, as a result of the logging moratorium imposed on all natural-forest concession areas in January 2002, there is currently about 3.3 million ha of forest areas still under valid concession licences.

The number of trees allowed for harvesting or felling is based on the forest inventory and technical guidelines as stipulated in the Code of Practice for Forest Harvesting. It should ensure natural regeneration of the forest and protect wildlife habitats and the cutting cycle adopted is 25 years.

All selected trees for harvesting are marked for directional felling with the minimum felling limits allowed varying from 45 cm dbh for Luxury grade timber species to 30 cm dbh for Non-Graded timber species. A post-harvest survey is conducted to assess whether the forest concessionaire has complied with the guidelines as provided in the Code of Practice for Forest Harvesting.

The natural forest in Myanmar is managed under the Myanmar Selection System (MSS) and has adopted a felling cycle of 30 years. The prescribed minimum girth at breast height for felling of teak is fixed at 6.5 ft (1.98 m) throughout the country, while the girth limits for the other hardwoods vary with species and locations. It also involves girdling/green marking of teak, selection marking of other non-teak hardwoods, enumeration of future yield trees down to a fixed girth limit and prescribing the annual allowable cut (AAC) for teak and other hardwood species. Currently, the AAC for teak has been reduced by 55% and that for non-teak hardwood species by 33% so as to ensure the sustainability of future harvest.

During forest harvesting, MTE has to strictly adhere to the many adopted manuals, code, guidelines and instructions for systematic felling and transportation of timber, such as the National Code for Forest Harvesting Practices in Myanmar (2000), the Reduced Impact Logging Guidelines (2008), and the Standard Operating Procedures for Timber Harvesting Operations (2020).

Post-harvest silvicultural treatment in Myanmar involves the felling of less valuable trees interfering with the growth of teak, thinning of congested teak and other commercially important species, protecting seed bearers, climber cutting, and felling of Ficus-bound trees.

As a result of over-exploitation in the past, uncontrolled shifting cultivation and illegal logging, a nation-wide moratorium on logging for one year in 2016-17 and for the Bago Ranges for 10 years starting from 2016–2017 to 2026-2027 was declared to allow the forests to recover.

In Thailand, logging became an important economic sector in the 1930s which peaked during the period from the 1960s to mid-1980s. However, as a result of ineffective control and excessive logging,

often illegal, the forest areas continued to decline at an alarming rate and this has led to a logging ban of the natural forests since 1989.

Although the current National Forestry Policy states that efficiency in timber production should be increased through appropriate forest management techniques using both selection and clear-felling systems, with the logging ban in force, this provision has become irrelevant. Silvicultural treatments such as thinnings are not allowed, and only the production of NWFPs is allowed which is mainly being carried out by the local people.

Currently, the emphasis in forest management is on patrol, recreation and other services. There are no management plans for the National Reserved Forest areas and the annual operational plan of these forests covers activities such as protection, reforestation, nursery activity and land allocation. There are also no records of national-level forest inventories and during the logging period, inventories were regional or local in scale and they contained data only on teak.

The forest management practices adopted in Vietnam mainly focus on managing the Protection Forests, the Special-use Forests, and the Production Forests. Logging the natural forests was dominant before 1960, but by the 1990s, degradation and loss of natural production forest had become serious, and this coupled with uncontrolled forest exploitation had led to a logging ban being imposed on the natural forests in 2016.

Nevertheless, timber harvesting activities in Production Forests were clearly regulated by MARD. The main prescriptions to ensure that the natural forests are managed sustainably are that at the time of harvest, the natural forest must have a minimum timber volume ranging from 150 m³/ha for the evergreen broadleaved forest to 80 m³/ha for the mixed forest of timber with bamboo. The minimum diameter of harvestable trees must be of at least having a dbh ranging from 45 cm for Timber Groups I and II to 35 cm for Timber Groups VII and VIII, including Dipterocarp forest. In addition, the number of marked trees that meet the minimum dbh for felling should not be greater than 30% of all harvestable trees in the licensed area.

Upon completion of forest harvesting, a field inspection and evaluation will be conducted and based on the results and the remedial action taken to address any shortcomings, the State authority will close the forest.

Plantation Forest

All the four countries have embarked on large-scale forest plantation establishment and development to supplement wood supply from the natural forests and to meet the demand of the wood-based industry, as well as for the export markets.

Taking cognizance of the Agricultural Strategic Development Plan, 2019-2023, the FA of Cambodia has set a target to establish at least 10,000 ha of forest plantations annually, inclusive of 9,000 ha by the private sector, and to distribute annually 10 million tree seedlings to farmers, local communities, landowners, and private sector companies.

To further promote and incentivize individuals or legal entities to plant trees on their own legally acquired land, the procedures, legal requirements, and processes from registration to the application to harvest established tree plantations have been streamlined and simplified. The dominant timber species planted are *A. mangium*, *A. auriculiformis*, *E. camaldulensis*, a few varieties of *Eucalyptus* hybrid derived from *E. grandis* and *T. grandis*; with the rest being native species, such as *Hopea odorata*.

In Myanmar, among some notable forest plantation projects undertaken by the government were the East Bago Yoma Project (EPP) from 1979 to 1984 and the Special Teak Plantation Program from 1988 to 2037 which was halted in 2005-2006 due to limited budget, shortage of manpower, weak governance, etc.. However, the FD had managed to establish 64,777 ha of the special teak plantation over the 8-year period.

The rotation adopted for special teak plantation is 40 years while that for commercial (normal) plantation which is planted with teak is 60 years. For the industrial plantations which are planted with *Eucalyptus* species, *G. arborea*, etc., the rotation is 10 years, and for village supply plantations which are planted with *Acacia catech*, *Cassia mimosoides* and *Eucalyptus* species, the rotation is 5 years. At the rotation age, the special teak plantations and commercial (normal) teak plantations will be clear-felled and replanted, while the industrial and village supply plantations will be clear-felled and coppiced.

At the end of 2018, a total of 1,049 thousand ha of forest plantations had been established in Myanmar. Under the MRRP from 2017-2018 to 2026-2027, the government through the FD and DZGD will establish a total of 142,685 ha of forest plantations or 55.3% of the target area of 258,111 ha, with the private sector establishing the balance of 115,426 ha of commercial forest plantations.

Since the 1980s, Thailand has embarked in developing commercial forest plantations mainly by government agencies such as the RFD and FIO, corporate companies, landowners, and farmers. In this regard, the government implemented the Private Tree Farm Incentive Plantation Promotion from 1994

to 2002 (except 2001), with a planting target of 1.28 million ha. The program encouraged the private sector and farmers to plant specified economic tree species on their lands at 1,250 seedlings/ha where it was subsidized by the government at THB 15,008/ha (US\$ 469.00).

An estimated 80,126 farmers joined the program and a total of 169,400 ha (1,058,750 rai) was planted which represents 13.2% of the target. The program is still ongoing even though it was officially planned to end in 2002.

It has been reported that teak trees grown in plantations on good soils may reach an average dbh of 60 cm and 30 m in height in about 50 years with the mean annual increment (MAI) reaching 13.52 m³/ha. Typically, 1,200 to 1,600 stems per hectare are planted with the first and second thinnings carried out when the dominant height reaches about 9 m or 10 m and 17 m to 18 m respectively. At year 50, the final stand of about 62 trees/ha or 10 trees/rai will be felled.

At the end of 2018, a total of 1.55 million ha of forest plantations with 1.49 million ha or 96.1% being privately owned. The main industrial species planted are *Eucalyptus camaldulensis* and teak, with smaller plantations of *Acacia* species, *Gmelina arborea* and *Pinus merkusii*. Other broadleaved species such as *Pterocarpus maccrocarpus*, *Dipterocarpus* species, *Swietenia macrophylla* and *Hopea odorata* are also planted on a small scale.

In Vietnam, the development of forest plantation began in earnest in 1976 when the then Ministry of Forestry conducted, among others, the national afforestation program that had increased the areas of forest plantation from 219,000 ha in 1975 to an estimated 1 million ha in 1985. Other notable programs were the Program 327 from 1993-1998 and its successor, the Program 661 or the Five Million Hectare Reforestation Program from 1998-2010. In this regard, Program 327 had assisted in protecting 1.69 million ha and restoring 700,000 ha of natural forest, as well as afforestation of 640,000 ha of degraded forest land; while Program 661 had increased the forest cover by 2.2 million ha comprising 900,000 ha of new plantations and 1.3 million ha of natural regeneration, as well as 2.5 million ha of forest plantations consisting of 1.6 million ha of timber plantations and 900,000 ha of planted industrial trees.

As of 2018, the total planted forest is 4.24 million ha with 3.50 million ha or 80.5% located in the Production Forests which are available for harvesting, while 741 ha located in Special-use Forests and Protection Forests are restricted and/or not permitted to be harvested. An estimated 1.5 million ha of the forest plantations established were of *Acacia* species, representing 47% of the total forest plantation areas in Vietnam. The dominant tree species planted are *Acacia mangium* x *A. auriculiformis*, *E. camaldulensis* and *E. urophylla* with a rotation of 5-7 years, either as monoculture stands and/or in mixed-forest stands.

4.0 Incentives and Disincentives for Natural Forest

Incentives

All the natural forests in Myanmar, Thailand and Vietnam are owned by the governments, while in Cambodia, an estimated 16.8% or 1.43 million ha of the total natural forests are privately owned. In Cambodia, MAFF is allowed to reduce or waive the royalties and premiums for any forest products collected for scientific purposes and those collected by local communities under customary use rights or harvested in community forests. MAFF is also allowed to delay the payment of royalties and premiums on forest products for a permit holder who the FA has recognized for practising sustainable forest management under existing legislation, although this is rare in practice.

The other fiscal incentive is the exemption from import tax for the purchase of vehicles and other equipment used in sustainable forest management related projects implemented between the FA and its partners.

The government has also established a “National Forestry Development Fund” which is similar to the Forest Development Fund established by Malaysia to further enhance sustainable forest management. The Fund will be used for undertaking, among others, reforestation; silviculture and forest rehabilitation; forest protection; community forestry development; and forest extension services.

Similar to Cambodia, the government in Myanmar provides an exemption from paying royalties on tree species extracted for research, educational, public or religious work, and utilized within one year and within 20 miles (32 km) from the area of the extraction. It also provides an exemption of land-based fee for the community forests established on the forest lands; payment of tax for forest products harvested by CFUGs or its members for personal use; and payment of tax on the sale of forest products harvested from community forests and sold within the village.

The FD of Myanmar has assured that land tenure that is initially granted for 30 years to the CFUGs for community forests will be extended for another 30 years at a time and as many times as appropriate. They are also given the right to form enterprises which can harvest and commercialize wood and NWFs, and are free to sell their products at current market prices.

In Thailand, local villagers living in National Forest Reserves are granted the right to collect free of charge dry and dead wood for use as fuelwood and construction timber, while in protected areas they

are allowed to collect free of charge dry fuelwood and some NWFPs, for household consumption and for sales.

A private company in Thailand could waive tax of 10% of its profit if the company provides support to the forest community on forest conservation of up to THB 100,000 per year (US\$ 3,125.00). A company could also waive tax of up to 2% of its profit if it supports forest community projects to mitigate climate change.

The RFD provides free seedlings to poor forest-dependent people who are permitted to live in reserved forest areas to reforest their occupied land. In addition, community forest management committees and community forest members are given the right to search for forest products and utilize the natural resources and biological diversity for households' consumption.

In Vietnam, households who are contracted by the State to protect the Production Forests and Protection Forests will receive a payment of VND 400,000/ha/year (US\$ 20.00). If they are contracted to undertake the planting of forest trees to reforest the areas, they will also receive a grant of VND 1.6 million/ha/year (US\$ 80.00) during the first three years and VND 600,000/ha/year (US\$ 30.00) for the next three years for the purchase of seedlings and fertilizers, and in managing the planted areas.

Households, individuals and communities who are contracted to protect and manage the Special-use Forests and Protection Forests are also funded by the State through money collected from Payment for Forestry Environmental Services (PFES). Currently, the environmental users such as hydropower plants have to pay VND 36/kilowatt-hour (kwh) for using water to produce electricity; while the water companies have to pay VND 52 /m³ of the water they sell. The State also provides grant at VND 40 million/year (US\$ 2,000.00) to communities and villagers who live in the buffer zone of Special-use Forests to enable them to improve the production capacity of the forest land.

Poor households could access loans at the Vietnam Bank for Social Policies (VBSP), while others who could not access loans from the VBSP could access them from the Agriculture and Rural Development Bank (Agri-bank). Both banks provide loans of up to VND 50 million (US\$ 2,500.00) for 10 years at a preferential low-interest rate of 1.2% per annum.

Since the introduction of the Reducing Emissions from Deforestation and Forest Degradation (REDD) initiative to Vietnam in 2010, the government has facilitated forest owners to manage natural forests to meet the REDD requirements for payment from the World Bank since it has committed to pay for 40 million ton of carbon from emission reduction.

The allocation of production forest land to households, individuals and enterprises by the government for 50 years will enable them to invest with a longer perspective in forest protection and development. The LUC granted to them could be used as collateral in their application for bank loans which could then be used to enhance the management and development of the forest land. In addition, the transfer by state forest enterprises to households and communities through contracts to protect Special-use Forests and Protection Forests should create benefits and encourage them to protect the natural forests located in these forest land, albeit that they receive very little benefits as they are prohibited from harvesting the forests.

The co-management scheme introduced in recent years in Special-use Forests has enabled local people and communities to be involved in forest management as they are given certain rights, such as the right to collect some NWFPs.

The government has also provided public extension services, including free training and technical assistance, to forest owners and this has facilitated and enabled them to adopt the latest protocols and techniques in forest management, protection and development, and thus contributing to sustainable forest management.

Disincentives

In Cambodia, the logging moratorium imposed in January 2002 on all natural-forest concession areas has adversely affected an estimated 3.3 million ha of concession forests not being able to be placed under sustainable forest management even though the existing forest concession companies still hold valid concession licences.

The successful annual coupe bidders harvesting production forests that are located outside forest concession areas are not permitted to export the extracted forest products and by-products unless there is a surplus from domestic consumption which require approval from MAFF. Besides, annual coupe operators could not compete with operators involved in clear-felling of ELCs areas for agro-industry purposes as they are not required to prepare sustainable forest management plans. These have impeded the annual coupe operators from practising sustainable forest management.

In addition, the export ban imposed since 2006, among others, on roundlogs, sawnwood, fuelwood and charcoal sourced from natural forests is seen as a disincentive for managers of natural forests to enhance efficient forest utilization in the overall context of sustainable forest management.

The log export ban imposed in Myanmar since 2014 has to a certain extent impeded full forest resources utilization and sustainable forest management practices to be applied, while the logging

moratorium that is still enforced in the Bago Yoma region until 2026-2027 has also adversely affected the natural forests not being able to practise sustainable forest management.

The action taken by MTE to reduce its annual allowable cut (AAC) of teak by 55% and for non-teak hardwood species by 33% will not only affect its financial cash flow and thus its ability to undertake environmentally sound forest harvesting practices, but also encourages illegal logging of the country's natural forests.

In Thailand, the logging ban enforced since 1989 has impeded the application of silvicultural treatments of logged-over forests, especially those with abundant natural regeneration that requires canopy opening to provide the much-needed sunlight for their growth.

Under the National Park Act, B.E. 2504 (1961), the RFD is not permitted to collect seeds from protected areas to produce the seedlings for free distribution to forest communities to undertake reforestation unless it has the agreement of the DNP. The poor forest-dependent people living in protected areas are also not permitted to harvest NWFPs for commercial use which would have provided the additional incomes to improve their livelihoods.

Private companies could not receive carbon credit from the trees that they have planted in degraded areas under the various reforestation programs launched by the government, including on their own land, since currently there are no laws and regulations on carbon credit and benefit-sharing mechanisms in Thailand. There is also no mechanism and/or legal framework to implement and incentivize the payment for ecosystem services (PES) from natural forests as those practised in Vietnam.

The logging ban on natural forests imposed in Vietnam since 2016 has resulted in four state companies that managed 88,000 ha of natural forests and which have been awarded the FSC certificates to cease all forest operations.

Local people who receive their forest tenure through contracting arrangement do not receive any law enforcement support from the relevant government agencies to effectively protect their forests from encroachment or illegal logging. This has impeded their ability to manage and develop the forest areas as they do not have the authority to enforce sanction or mete out punishment.

Communities that are allocated natural Production Forest areas do not receive any payment from the government for their efforts in protecting the forests as compared with those allocated natural forests in Special-use Forests or Protection Forests. As such, they have yet to undertake any significant measures to protect and manage their allocated natural Production Forest areas.

The re-allocation of state-owned forest and agricultural enterprises' (SFAEs) forest and forest land that have been poorly managed or ineffectively used to local households and communities has been very slow, especially customary land. As a result, local people still lack land for production, while forests are still being poorly managed and forest land ineffectively used or even left abundant.

5.0 Incentives and Disincentives for Plantation Forest

Incentives

All the four countries have embarked on large-scale forest plantation establishment and development to supplement wood supply from the natural forests and to meet the demand of the wood-based industry, as well as for the export markets. They have provided a number of fiscal incentives to encourage and support forest plantation establishment and development which include royalty exemption, reduction of export tax, reduction or even free land rental fee, and other taxes and fees. Non-fiscal incentives provided are often in the form of subsidies, preferential low-interest bank loans as those provided in Thailand and Vietnam, and free seedlings provided by forestry agencies to farmers, households and local communities to establish forest plantations or plant trees on their own land or on legally allocated land by the governments.

In Cambodia, owners of private forest plantations registered with the FA are not required to pay any licence fees to harvest and use timber and non-timber forest products from their plantations, including royalty, permit fee for transportation and transport quota. The government provides preferential land rental fees ranging from US\$ 5.00 - US\$ 10.00 /ha/year for the best soil type to being free for deteriorated land. In this context, the collection of the concession land rental fee for long-term crop and permanent crop, such as the planting of fast-growing tree species, will only commence from the third or the fourth year of production.

In its efforts to further promote investors to invest in forest establishment and development, the government has allowed a reduction of 50% of the total obligatory export fees for the export of products from forest plantation and a 100% exemption of export fees for furniture and final processed products produced from forest plantation. In this regard, a company that produces furniture and fixtures using plantation wood and in the production of paper and paper products with capital investment greater than US\$ 500,000.00, the company is entitled to enjoy incentives such as profit tax exemption and duty-free import of production equipment.

In addition, if a company investing in forest plantation establishment has received a Final Registration Certificate, the company is entitled to a profit tax exemption period which consists of a Trigger Period

+3 years + Priority Period. The maximum Trigger Period is the first year of the company gaining profit or three years after the company earns its first revenue, whichever is sooner. The company is also entitled to an import duty exemption on machinery and equipment; a 100% tax exemption for export; and an exemption of visas and work permit fees for its employed foreign citizens.

The government of Cambodia, through the FA, provides free seedlings to the public for planting on degraded public forest land and land confiscated from illegal encroachment. Furthermore, individuals and corporate entities involved in forest plantation establishment and development could lease land from the government of up to 50 years. The lease could be renewed, but the renewed term may not exceed 50 years.

Under the Sub-decree on the Mortgage and Transfer of Rights, investor or economic land concessionaire in forest plantation establishment and development are given the right to mortgage or transfer his/her right over the land concession as well as the buildings and/or other immovable properties that he/she has constructed on the land.

Individual or company that has been granted the right to use public forest land for tree planting in partnership with the FA that is approved by MAFF is able to develop, utilize, sell and distribute their products in accordance with the agreement with the FA and MAFF, albeit that the benefits derived will have to be shared between the government and the individual or company as agreed in the agreement which could be for a period not exceeding 50 years.

In addition, the Sub-decree on Economic Land Concessions authorizes MAFF to grant ELCs with investment capital of US\$ 2.5 million and area of more than 1,000 ha, while that by the provincial authorities are with investment capital of below US\$ 2.5 million and area of below 1,000 ha, mainly for the establishment of agro-industrial crops where *A. mangium* plantation is established as an inter-crop with cassava.

In Myanmar, if incentives are sought for a project valued between MMK 7.5 billion (US\$ 5 million) and MMK 150 billion (US\$ 100 million) and requires the right to use the land, as well as approval from a relevant ministry is needed, endorsements from the Myanmar Investment Commission (MIC) headquarters is required; otherwise, endorsement by the Directorate of Investment and Company Administration (DICA) State or Regional offices is sufficient. In this context, investments in private forest plantation establishment and development are most likely to be in the category requiring a MIC permit.

The fiscal incentives available in Myanmar include income and corporate tax holidays ranging from 7 years in Zone 1 which is classified as least developed and where the establishment of forest plantations is likely to occur to 3 years for Zone 3 which is with adequate development. As such, this incentive will only likely to be of interest for short-rotation plantations which could generate taxable income within the 7-year tax holiday period.

In addition, the government also provides an exemption of land-based fee for the community forests established on the forest lands; exemption of payment of tax for forest products harvested by CFUGs or its members for personal use, and the payment of tax on the sale of forest products harvested from community forests and sold within the village.

The FD of Myanmar provides free seedlings required for the establishment of the first rotation forest plantation and annually about 10 million free seedlings of fast-growing species were distributed to individual farmers, school children, local communities and non-governmental and governmental organizations.

Since 2019, the government allows teak and other hardwood poles, posts and logs from state-owned and private plantations to be exported to the international market, especially thinned poles and posts from forest plantations.

In addition, the land leased for 30 years for forest plantation establishment is renewable of up to two 10-year periods, and can be inherited or sold to another person or organization according to the existing laws and with the permission of the FD.

In the case of Thailand, persons extracting logs from trees planted on privately owned land are not required to pay for a transport permit. For those who are transporting wood for personal use within the area of the province where the wood was processed or if the wood is sourced from trees planted on land that has been licensed by the relevant government agencies, they are also exempted from paying any fee to the authorities.

The RFD provides an estimated 6 million free seedlings each year to local and poor people to plant trees in their own land or on degraded forest land in forest reserves and protected areas that are legally occupied by them. There is a plan to double the number of seedlings of up to 12 million seedlings by next year.

Action is currently being taken to amend relevant laws and regulations to allow private sector companies which are only allowed to trade in non-teak logs to be able to export teak logs to the international market, which is presently the exclusive right of FIO. This is envisaged to be completed by the end of 2020.

For farmers who are registered with the RFD, they will be provided with THB 18,750/ha (US\$ 585.94) or THB 3,000/rai for establishing fast-growing tree plantation within three years or THB 31,250/ha (US\$ 976.56) or THB 5,000/rai for slow-growing tree species within five years for areas ranging from 0.1-8 ha (1-50 rai). FIO also provides THB 84,194/ha (US\$ 2,631.01) for poor local communities to plant teak on its land or THB 40,700/ha (US\$ 1,271.88) for the establishment of *Eucalyptus* plantation.

The Renewable Energy Department has been promoting private biofuel plants to buy wood chips from farmers, especially from their planted fast-growing trees, such as *Eucalyptus*, *Acacia auriculiformis* and *A. mangium*, where a farmer would receive THB 1,000 (US\$ 31.25) for a metric ton of wood chips from the biofuel company.

The Bank for Agriculture and Agricultural Cooperatives (BAAC) provides preferential loans to farmers, farmer groups and agricultural cooperatives through its Tree Bank Project for the establishment of forest plantations, similar to the Vietnam Bank for Social Policies (VBSP) and the Agriculture and Rural Development Bank (Agri-bank) in Vietnam.

The first type of loan that used trees and land as collateral had just ended on 31 March 2020. The second type of loan that uses only trees as collateral is still ongoing where the maximum loan amount is THB 125,000 (US\$ 3,906.25) per applicant and the annual interest rates charged for the first, second and third year are 10%, 9.25%, and 8.50% respectively. When the loan enters the 4-5 years, the interest rates charged is between 6% and 7%. The payback period is between 15-20 years from the date of the loan. The grace period would not be more than 18 months to 1 year and 6 months. These loan conditions were also applicable to the first type of loan which had just ended on 31 March 2020.

The BAAC also provides loans through its Green Credit Project where the maximum loan that can be given to a borrower would not be more than 80% of the project cost and not more than 50% of the collateral value, such as land, guarantors, etc.. The current annual interest rate charged to farmers or individuals is at 6%, while that for entrepreneurs, community enterprises, organizations, farmer groups and agricultural cooperatives it is at 4.5%. The payback period should not exceed 15 years from the date of the loan. The grace period that the bank could give would not be more than 1 year.

Through its Reforestation to Generate Income Loans scheme, the BAAC also provides loans to farmers who are in debt and wish to have a career change. The maximum loan that can be given to an applicant would not exceed THB 100,000 (US\$ 3,125.00). The annual interest rate charged is at 3.875% for the first 3 years, 4.875% for year 4 to 6, 5.875% for year 7 to 9, and 6.875% for year 10 and onwards. The repayment of the loan would not be more than 15 years. In this regard, the repayment of the principal of the loan could be waived for the first 5 years and the borrower only needs to pay the interest on the loan.

The amended Article 7 of the Forest Act, B.E. 2484 (1941) in 2019 has enabled the private sector and local communities to plant highly-economic-forest tree species on their own land and could harvest the trees without having to apply and get approval from the RFD as was required in the past. In addition, since 2015, the private sector, farmers and local communities who are approved to cultivate on reserved forest areas are not required to pay the annual land rent of THB 94/ha (US\$ 2.94) or THB 15 per rai (US\$ 0.47 US\$) which they used to pay before 2015. This has motivated the private sector, farmers and local communities to plant forest trees on their own land.

In Vietnam, the State exempts land rent for the first 15 years, and halve the rent for the next 7 years for enterprises and companies which are involved in afforestation, forest protection, planting of medicinal plants and/or NWFPs in extremely poor communes and/or poor regions. If those enterprises and companies' businesses are not located in poor regions or areas, the State will only exempt land rent for the first 11 years, and reduce it to 50% for the next 5 years.

In the case where enterprises and companies have rented land from households, individuals, or communities, the State will provide funding which is equal to 20% of the land rent for the first 5 years. In addition, enterprises are also exempted from paying rents on land used to build worker/labourers' accommodation or dormitory, constructing factories, warehouses, drying yards, and roads.

For small and medium enterprises (SMEs) which are engaged in forest plantation, the State will exempt them from paying land rent for the first 5 years and reduces it to 50% for the next 10 years.

The State will only collect 10% of corporate income tax from agriculture-forestry enterprises and companies that undertake forest plantation activities, including those involving forest nursery. Furthermore, agricultural cooperatives are fully exempted from paying any tax if they are involved in forest plantation or forest nursery activities.

A preferential corporate tax rate of 10% is given to enterprises and companies which are involved in afforestation and forest plantation projects in difficult socio-economic areas. In addition, enterprises and companies starting new investment in difficult socio-economic areas and are involved, among others, in the production of energy-saving products, machines and equipment for agriculture, forestry and fishery, and in developing traditional industries, will enjoy a corporate income tax rate at 17% for 10 years from the first year of income generation.

For the period 2011-2020, the government has allowed enterprises and companies which rent Special-use Forest areas for ecotourism development to be exempted from paying corporate income tax for the first 5 years, and will only need to pay 50% of the corporate income tax for next 5 years. After these periods, the enterprises and companies will need to pay corporate income tax at 10%.

For foreign direct investment (FDI) enterprises that are involved in forest plantation establishment and development, the State will exempt them from paying corporate income tax for the first two years, and they only need to pay at 50% for the next four years. After these periods, the FDI enterprises will have to pay corporate income tax at 20%. They will also receive an import tax exemption on, among others, equipment and supplies needed to execute their investment projects in Vietnam.

To encourage enterprises to employ a large number of ethnic minority labourers, enterprises are allowed a reduction of their income tax equal to the additional expenses incurred in employing ethnic minority labourers. Business entities in Vietnam are also allowed to set up a tax-deductible research and development (R&D) fund where they can appropriate up to 10% of annual profits before tax to the fund.

For households who are allocated forest land for planting trees, they could also access to loans of up to VND 15 million/ha (US\$ 750.00) at a preferential low-interest rate of 1.2% from the Vietnam Bank for Social Policies (VBSP) or the Agriculture and Rural Development Bank (Agri-bank), similar to the Bank for Agriculture and Agricultural Cooperatives (BAAC) of Thailand. The duration of the loan will not exceed 20 years.

Depending on the tree species planted and the rotation adopted, the State will provide to households that are allocated Production Forest areas for forest plantation development grants ranging from VND 5 million/ha (US\$ 250.00) to VND 10 million/ha (US\$ 500.00) for the purchase of high-quality seedlings to increase the productivity of their forests.

In cases where households, individuals and communities have forest plantations established on bare land and/or bare hills, the State will provide an additional grant of up to VND 8 million/ha (US\$ 400.00) for planting large timber tree species with a rotation of more than 10 years, while for small timber tree species with a rotation of less than 10 years, this additional grant is VND 5 million/ha (US\$ 250.00). If these forest plantations are located in the frontier regions the households, individuals and communities would be granted a further VND 2 million/ha (US\$ 100.00).

If households, individuals and communities use newly developed high-yielding forest seedlings in planting on their allocated land for forest plantation development, the State will provide support amounting to 60% of the total cost of production so to reduce the risk they might face in planting the newly developed seedlings.

To ensure an adequate supply of quality forest seedlings for plantation establishment, the State provides support at VND 50 million/ha (US\$ 2,500.00) for newly established nurseries by state-owned organizations, and VND 300,000/ha/year (US\$ 15.00) for 5 years for them to manage and protect existing nurseries. The State also grants VND 5 billion (US\$ 250,000.00) to develop tissue culture facilities, while VND 300 million (US\$ 15,000.00) will be granted to communes having at least 1,000 ha of Forest Production areas for the development of their nurseries.

To overcome the lack of knowledge among the households in producing seedlings and managing forest trees, the State provides VND 500,000/ha (US\$ 25.00) for four years for extension workers to render their services to communes. The State also provides tuition fee at VND 2 million/month/employee (US\$ 100.00) for three months to upgrade the skills of forest plantation workers.

Furthermore, the State provides financial support of up to 50% of the marketing cost incurred by forest enterprises to develop their markets both domestically and internationally, as well as 50% of the cost for their personnel to attend trade fairs or exhibitions.

Disincentives

In Cambodia, the full implementation of forest plantation workplans by concession companies are often affected by local people staging demonstrations against them due to land conflicts as the environmental and socio-economic assessments for granting of ELCs have been conducted with limited consultation with the local community and indigenous people. This has led to the loss of local community land to concession holders without compensation or final resolution to land ownership.

Under the Sub-decree on The Implementation of the Law on the Amendment of the Investment Law in 2005, teak plantation of less than 1,000 ha and tree plantation of mainly fast-growing species for the pulp and paper industry of less than 200 ha will not be eligible for profit tax exemption, import duty exemption on machinery and equipment, and the 100% tax exemption on export.

The majority of the ELCs areas granted is located in remote areas with limited developed infrastructures and as such the concessionaires have to incur additional cost to develop the basic infrastructures to facilitate their operations, including transportation of their products to the market place. This has, to a certain extent, deterred concessionaires to extensively invest in forest plantation establishment and development.

There is also a lack of comprehensive, timely and readily available market information for investors. This coupled with fluctuation of prices in the international market has created uncertainty and affected efforts to promote the private sector to substantially invest in forest plantation development in Cambodia.

In Myanmar, the current interest rate policy of the Central Bank of Myanmar (CBM) has severely limited the option of debt financing for forest plantation establishment and development. The CBM has fixed the maximum lending rate by state banks at 8.5% and that of commercial banks at 13% as of late 2019. From February 2019, the CBM has allowed commercial banks to offer unsecured loans at 16% which includes a limit on lending which is fixed at 80% of a bank's deposit base, strict collateral demands on borrowers, and the requirement that lending terms do not exceed one year.

In addition, although the state-owned Myanmar Agriculture Development Bank (MADB) is mandated to provide loans for the private sector to establish and develop forest plantations, it does not accept, at present, leased state land or planted trees as collateral for loan application like those offered by the Bank for Agriculture and Agricultural Cooperatives (BAAC) of Thailand.

Similar to Cambodia, the majority of the forest areas granted for forest plantation establishment is located in remote areas with limited infrastructural development. As such, investors will incur high cost to prepare their own basic infrastructures to facilitate their operations. This has impeded their ability to extensively invest in forest plantation development in the country.

Marketing mechanisms for wood products from plantations by the private sector are still under-developed in Myanmar. This coupled with the lack of market information and the current demand for thinning products from forest plantations are affecting efforts to promote the private sector to substantially invest in forest plantation development.

Current investors have also voiced a number of constraints that have impeded increased investment in forest plantation development in Myanmar. These include the unavailability of large contiguous blocks of land within reserve forest, or lack of access to such areas; land tenure issues, especially the informal occupation of forest land for farming; complicated procedures to acquire land and to harvest, transport, process and trade timber; lack of enforcement capacity to prevent encroachment and illegal logging in plantation areas; and widespread availability of illegal timber, which depresses log prices and reduces demand for plantation-grown wood.

In Thailand, the need to get approval from the RFD to harvest tree even though those trees were planted on private land has deterred the private sector and local communities to plant highly-economic-forest tree species on their own land in the past, although they are now able to freely harvest their planted trees with the amendment to Article 7 of the Forest Act, B.E. 2484 (1941). With this amendment, there is now also a high demand for good quality forest tree seedlings by the private sector and communities who are eager to plant highly-economic tree species which could not be fully met.

Companies in the private sector could only export teak wood products and other non-teak wood products but not teak logs as the export of teak logs is only granted exclusively to FIO. This has deterred them to embark on large-scale planting of the highly-priced teak.

The current 40% export tax imposed on logs and sawn timber exported to the international market is seen as a barrier to encourage FIO and private investors to plant teak and other tree species for the export market.

In Vietnam, households still face difficulty in accessing State's support to develop certified forest plantations for the production of sawlogs, although the government has set a target to have 300,000 ha of forest plantations certified by 2020 and 1 million ha by 2030 and has also developed policies supporting households towards this end.

The use of high-yielding Acacia seedlings in establishing forest plantation, especially in mountainous areas, is still limited because of their high cost and the unavailability in economic quantity even though the government has introduced and encouraged the use of these seedlings.

6.0 Recommendations

As the four countries are at different levels of socio-economic development, land and resource endowment, and the extent, diversity and the quality of their forest resources, as well as the ease of doing business, separate recommendations will be presented for each country, albeit that there are a few similarities among them.

Cambodia

The government should contribute more funds to the National Forestry Development Fund to include fines for forest offences and sale of confiscated wood, besides the current reforestation fee of US\$ 2.50/m³ of inventoried standing volume, the forest maintenance fee at 5% of the value of all timber and non-timber forest products, and the export tax of 1% of FOB on all timber and non-timber forest products.

An economic viability study should be conducted with a view to reducing the royalties on standing tree volume and harvested timber so as to promote investment in natural forest management by private companies.

The status of the estimated 3.3 million ha of natural forest under forest concessions that were suspended in 2002 due to poor management and which are currently under review by the FA should be resolved expeditiously so that the area could be placed under sustainable forest management.

The current restrictions that do not allow plantation companies, especially small-scale private companies and local communities, to receive any fiscal incentives if they establish teak plantations of less than 1,000 ha or develop tree plantations of mainly fast-growing species for the pulp and paper industry of less than 200 ha should be reviewed and removed.

The annual economic concession land rental fees for the establishment and development of forest plantation should be reduced by 30-50% from the current rates that range from US\$ 2.00 - US\$ 10.00/ha so as to promote the development of forest plantation.

Equipment and machinery imported for the production of seedlings, construction of access roads, bridges and buildings should be exempted of duty for the establishment and development for forest plantation.

In addition, tax exemption on profit should be given to companies engaged in forest establishment and development for a period of 12 years and for those qualified under QIPs, the tax exemption on the profit should be up to 9 years.

The government should consider providing long-term soft loans directly to private companies and/or through financial institutions with or without a government guarantee at low-interest rates to promote investment in forest plantation establishment and development.

The government should also consider providing immediate write-off of plantation costs against profits of another company within the same group as this would mean that plantation investments would be entirely free of corporate tax obligations.

Private companies conducting in-house research in developing high-yielding and disease-resistant planting stock, as well as on improved management practices should be given tax exemption on investments made in such research which is currently not available to them.

Market mechanisms should be developed to facilitate timely access to market information, especially on prices of timber and timber products in the international markets.

Procedures and guidelines should be developed to register private forest plantations in partnership with relevant authorities so that technical support and extension services, including research results and findings, could be extended to them.

A robust conflict resolution mechanism should be developed to resolve over-lapping land claims so that conflicts could be resolved in a transparent and amicable manner and all decisions made are respected by all the involved parties.

Forest plantation companies should be further supported to establish a strong industry domestically, including the required infrastructures and a competent and trained workforce, as well as adopting best practices and technologies for the development of the forest plantation industry.

Myanmar

To expeditiously establish a dedicated Forest Development Fund as recommended in the Myanmar Forest Policy Implementation Strategies that sources its funds from grants from the government, aid and donation from local and international organizations, payment of ecosystem services fee, fines collected from forest offences and sale of confiscated wood. The fund will be used to carry out silvicultural operations, community forest development, forest extraction services and training of human resources in the forestry sector.

The government should conduct a comprehensive review of the currently reduced extraction of teak by 55% and the other non-teak hardwood species by 33% below the annual allowable cut (AAC) of the natural forests as this could adversely affect the ability of MTE to undertake environmentally sound forest harvesting practices, as well as affect the supply of timber and timber products to the domestic market.

To study the possibility of using a competitive tender system to allocate management and harvest rights of natural forest areas within areas identified for plantation establishment to private companies.

The study should also include management leases involving timber harvest rights for existing government-owned plantations in combination with new plantation establishment on adjacent Reserved Forest land; and management leases involving timber harvest rights for the natural forest in Reserved Forest or VFV land in combination with new plantation establishment on adjacent Reserved Forest or VFV land.

The security deposit or performance bond paid by investors to the FD before planting could commence which is now fixed at MMK 123,450/ha (US\$ 82.30) for both teak and hardwood species and which will be returned to the investors if at the end of the planting season the survival rate achieved is 70% should be reduced by 50 % to MMK 61,725/ha (US\$ 41.15). Similarly, the lessees'

performance bonds to guarantee that they will establish crops on VFV land within 4 years that range from MMK 7,413/ha (\$4.94) to MMK 24,710/ha (\$16.47) should also be reduced by 50%.

The current ecosystem services fee paid to the FD is suggested to be reduced to a maximum of 5% of the domestic or export sale value of the forest products from the current maximum rate of 10%. It is further suggested that this fee be deposited in the Forest Development Fund as proposed above.

The government should consider providing long-term soft loans directly to private companies and/or through state-owned banks with or without a government guarantee at low-interest rates to promote investment in forest plantation establishment and development

The government should also consider providing immediate write-off of plantation costs against profits of another company within the same group as this would mean that plantation investments would be entirely free of corporate tax obligations.

Promote and develop transparent marketing mechanisms to facilitate timely access to market intelligence and information, especially on prices of plantation wood and wood products in the international markets.

The government should develop better access infrastructure, communication and sanitation facilities, electricity, etc. in the forest areas where plantation establishment is carried out which are mostly in the remote areas of the country.

Provision of training to nurture qualified and dedicated field staff to be more efficient in the establishment and management of forest plantation.

Thailand

To conclude the ongoing process in preparing the memorandum of understanding between the RFD and DNP expeditiously so as to allow the staff of the RFD to source and collect quality forest tree seeds from the protected areas that are under the jurisdiction of DNP.

The current preparation of relevant by-laws or regulations coordinated by MNRE and Environment to allow private exporters of teak to legally sell processed teak products, especially from forest plantation, in foreign markets should be expedited.

The ongoing process to reduce the 40% export tax for logs and sawn timber to 10% or waive the export tax for logs and sawn timber should be expedited so as to enable private sector enterprises to compete with the other countries which have only imposed an export tax of between 0-10%.

To review the Cabinet Resolution issued on 11 January 2000 that grant exclusive right to FIO to export teak logs abroad so that others in the private sector would not have to sell their teak logs to FIO if they wish to export them to overseas markets.

Undertake a review of the 2006 regulations of the Ministry of Commerce on rules, procedures and conditions for the export of plantation wood and teak from private plantation forests and on land that has been approved by the State so as to create competitiveness among timber exporters and opportunities for the development of high-value forest plantations by private investors.

Conduct a review on the use of wooden stamps by the private sector in view of the rapid advancement in today's technology where information on the source and movement of wood could be traced and tracked more efficiently, for example, through timber tracking systems.

Consider the exemption of royalty payment on the use of forest products by poor small-farmers who are allocated arable land in the national reserved forest areas in view of the decline in the availability of arable land.

To establish a dedicated Forest Development Fund that sources its funds from grants from the government, aid and donation from local and international organizations, and payment of ecosystem services fee. The fund will be used to carry out reforestation, silvicultural and forest rehabilitation, forest protection, community forest development, forest extension services and training of human resources in the forestry sector.

The government should also consider providing immediate write-off of plantation costs against profits of another company within the same group as this would mean that plantation investments would be entirely free of corporate tax obligations.

To develop a benefit-sharing mechanism, including law and regulations, to facilitate the payment of carbon credit in a fair and transparent manner, especially to investors that have invested in the establishment of forest plantations on their own land.

A review of the Chainsaw Act, B.E. 2545 (2002) should be conducted so as to enable the free movement of registered chainsaws in the country.

Consider the establishment of a one-stop centre to facilitate the registration of forest plantations and wood processing plants so as to simplify and reduce the need to apply to multiple agencies for approval to plant high-valued economic tree species and to undertake wood processing.

Vietnam

To extend the PFES program to cover naturally regenerating forests that have yet to be considered as forests, as currently the program is applied only to areas with forest cover.

The payment from the State budget to communities allocated natural forests in Special-use Forests or Protection Forests for their work in protecting and developing them should also be extended to those who are allocated natural Production Forest areas.

The status of the estimated 88,000 ha of natural forests managed by the four state companies and which have been FSC-certified should be resolved expeditiously so that the area could be placed under sustainable forest management.

The State forest rangers or the local authorities should provide law enforcement support to effectively protect privately-owned forest areas and those allocated through the forest contracting arrangement.

The government should establish a mechanism for Management Boards of Protection Forests to collaborate with the business sector to invest in the establishment of forest plantations for timber production in their areas. In addition, the Management Boards of Special-use Forests should be given financial support to promote ecotourism and other certification of ecosystem services which will enhance their income.

Urgent action should be taken by the government to effectively re-allocate land from state-owned forest and agricultural enterprises (SFAEs) to ethnic minority communities, especially customary land, through strengthening the legal framework for returning such land to them, as well as to empower them to effectively participate in the re-allocation process.

To conduct an in-depth study on the legal framework required to encourage households, individuals and communities to venture into establishing longer rotation forest plantations for the production of sawlogs, as well as the development of an insurance scheme to mitigate risks in developing such plantations.

The government should also consider providing immediate write-off of plantation costs against profits of another company within the same group as this would mean that plantation investments would be entirely free of corporate tax obligations.

The government should consider developing a legal framework and initiating tree out-grower schemes where households, individuals and communities are guaranteed purchase of their trees at maturity by the wood-base industry.

The government should consider the creation of a platform where smallholders, households and local communities which need capital to invest in establishing and developing certified forest plantations could meet with enterprises that produced certified timber and timber products. A legal framework should also be considered to ensure that any agreement or commitment made between the wood processing enterprises and investors in developing forest plantation is legally binding.

The government should build roads or upgrade existing poorly built roads, including other related infrastructures, to further support investors to reduce the cost incurred in forest plantations establishment and development and thus increasing their financial viability.

7.0 Conclusions

All the four countries have endeavoured to achieve sustainable forest management, but the progress has been slow. Finance has often been cited as a major constraint as financing sustainable forest management still faces a number of obstacles due to policy and market failures.

In this regard, the government could establish an investment promotion entity to mobilize and facilitate financial resources for financing sustainable forest management by identifying investment opportunities and potential investors, as well as assisting in risk mitigation, especially the structuring of financial packages in the private sector for investment in sustainable forest management.

Future financing mechanisms for sustainable forest management should encapsulate a portfolio approach which is based on a portfolio of resources, including products and services, that has the capacity to capture the differential competencies of government agencies, civil society and the private sector at different levels of involvement, as well as the flexibility to address the diverse and evolving needs of sustainable forest management.

1.0 Introduction

Forests are of key resources to the economic, ecological and social development of countries in the Mekong region. Millions of people in the region depend on forests for food, medicines, incomes, exports and employment. They also provide a wide range of critical environmental services including the protection of arable land and water resources, conservation of biological diversity and in ameliorating climate change.

At the international level, the public goods and services provided by forests are also increasingly being recognized in terms of climate change mitigation, biological diversity conservation and watershed management.

Unfortunately, the forests in the Mekong region are under increasing threat due to over-exploitation, illegal logging, destructive and over-fishing, poaching and trafficking of wild plants and animals. This is further exacerbated by a growing population, the rapid conversion of forest land for agricultural development and the high incidence of poverty.

Notwithstanding the above, the 2030 Agenda for Sustainable Development Goal 15: “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss” has called, among others, to “promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally” by 2020 under its Target 15.2. It has also underscored the need to “mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation” under its Target 15.b.

In recent years, several policy initiatives internationally and nationally have been taken by both the public and private sectors to promote demand and trade of wood and forest products from legal and sustainable supply chains (LSSC). In this context, appropriate and well-directed incentives for sustainable forest management are an essential component of establishing and implementing an LSSC platform.

While several tropical countries have experimented with fiscal, non-fiscal and other tools (taxes, subsidies, special economic zones, etc.) in trying to increase the domestic supply of wood, their effectiveness has not been systematically examined. What is better known is that many governments have used disincentives, such as the imposition of log export bans, quotas and fees, and set volume targets for domestic processing to stem the economic leakage from the sector. Results have been mixed and not always positive. Several potential risks are involved, such as a shift of log supplies to unsustainable or illegal sources, and negative unintended consequences to the condition of the forest, livelihoods of the forest-dependent communities, and the dwindling of the forest-based economy and tax revenue base.

The report will, among others, review the current incentives for sustainable natural forest management and for the establishment and development of forest plantation in Cambodia, Myanmar, Thailand, and Vietnam along with background information on such incentives in Malaysia. It will also provide recommendations of both fiscal and non-fiscal incentives, including other enabling incentives, to further enhance the sustainable management of natural forests and in the development of forest plantations to meet the ever-increasing demand of wood for the domestic market and for export in Cambodia, Myanmar, Thailand, and Vietnam.

2.0 Scope of Work

According to the Terms of Reference (ToR) as described in the Special Service Agreement (SSA) as attached in **Annex 1**, the scope of work, among others, is to undertake case studies on incentives for sustainable forest management in Cambodia, Myanmar, Thailand, and Vietnam along with background information on such incentives in Malaysia.

Among the most pertinent activities to be carried out as in Annex 2 of the ToR are, as follows:

- (i) review the current national sustainable forest management (SFM) framework, national land-use plans and identifying the existing incentives for SFM in the public policies of Cambodia, Myanmar, Thailand and Vietnam;
- (ii) analyse the land tenure and use rights legal frameworks of Cambodia, Myanmar, Thailand and Vietnam and their likely influence for forest management;
- (iii) identify what can be considered as disincentives which could be removed through changes in the regulatory or administrative framework to enhance sustainable natural forest management, including forest plantation establishment and development in Cambodia, Myanmar, Thailand and Vietnam;
- (iv) undertake a dialogue with government policy-makers, key companies in the private sector, non-governmental organizations (NGOs), and professional organizations on

what measures they consider as achievable and which kind of policy mix (introduction of incentives, removal of disincentives) would be the most appropriate, including the commitments by the private sector, e.g. zero-deforestation pledges for agricultural commodities, and certification processes; and

- (v) develop a set of proposals with respect to fiscal incentives, non-fiscal incentives, and enabling incentives that could be introduced to enhance sustainable natural forest management and the establishment and development of forest plantation in Cambodia, Myanmar, Thailand and Vietnam, as well as disincentives that could be removed.

Four local resource persons, one each in each country, were recruited in November 2019 to assist and work closely with the consultant in the collection and preparation of a paper to serve as inputs to the assignment. The four local resource persons recruited are as in **Table 1**.

Table1: Recruitment of Local Resource Persons

Name	Organization	Date of Recruitment
Mr. Hort Sothea	Deputy Director, Department of Wildlife and Biodiversity, Forestry Administration, Cambodia	20 November 2019
Mr. Baber Choo	Secretary, Myanmar Forest Certification Committee (MFCC), Myanmar	7 November 2019
Dr. Suchitra Changtragoon	Expert on Forest Conservation Research, Forest and Plant Conservation Research Office, Department of National Parks, Wildlife and Plant Conservation, Thailand	19 November 2019
Dr. Truong Quang Hoang	Director, Centre for Rural Development in Central Vietnam (CRD), Faculty of Extension and Rural Development, Hue University of Agriculture and Forestry, Vietnam	7 November 2019

In this context, the work of the consultant and the four recruited local resource persons was conducted under difficult conditions, especially when the World Health Organization (WHO) declared the spread of the SARS-CoV-2 virus (Covid-19) as a pandemic on 11 March 2020. This has led to the governments in Cambodia, Malaysia, Myanmar, Thailand and Vietnam to restrict movement, practise social distancing and close national borders. More specifically, the consultant was not able to travel and meet with the recruited local resource persons to discuss and review in-depth the information provided by them as input to the report. This is in view that the Malaysian Government had enforced the Movement Control Order (MCO)/Conditional Movement Control Order (CMCO) nation-wide from 18 March until 9 June 2020 where, among others, the national borders were closed and Malaysians were not allowed to travel abroad.

Nevertheless, a common template was prepared to guide the local resource persons to prepare the input paper as in **Annex 2** attached. In brief, it would cover the policies, laws and regulations addressing permanent reserved forests, forest land tenure and use rights arrangements; descriptions of natural forest management and forest plantation establishment and development practices; current incentives for sustainable natural forest management and those for forest plantation establishment and development; and recommendations of incentives for sustainable forest management.

In addition, a questionnaire dated 28 November 2019 was prepared to solicit from the four ITTO focal points in Cambodia, Myanmar, Thailand and Vietnam as to whether their country and/or organizations have provided incentives, including introducing new incentives, that motivate key companies to produce legal and traceable timber products, and those from sustainably managed forests, including disincentives that need to be removed to enhance sustainable forest management, as in **Annex 3**.

The questionnaire was sent by the ITTO Secretariat to the four focal points on 29 November 2019, but only Myanmar had responded on 7 February 2020 despite the deadline being extended from 31 December 2019 to 14 February 2020.

A trip was made to Yangon, Myanmar, from 8 -10 December 2019 to meet and discuss with the recruited local resource person, Mr. Baber Cho, and his colleagues at the Myanmar Forest Certification Committee (MFCC) office, on the background of the case studies on incentives for sustainable forest management in the Mekong region countries, namely, Cambodia, Myanmar, Thailand, and Vietnam, and on how the inputs from Myanmar should be prepared in accordance with the Annex 3 template.

3.0 Incentives for Sustainable Forest Management

The goal of any incentive scheme should be to ensure that investment decisions direct the economy's resources to activities that have the highest net social value. Many governments use fiscal incentives to promote sustainable forest management such as tax holiday where a firm is exempted from paying taxes on its profit during the tax holiday period; investment tax allowance that permits a firm to have its capital expenditure (access roads construction, silvicultural treatments of natural forests, including enrichment planting, land clearing and preparation of land for planting, etc.) deducted from statutory income; group relief which provides immediate write-off of plantation costs against other revenue sources, especially for a company with substantial taxable income from other sources; reduction or exemption of import tax/duty on materials and machinery used for enhancing environmentally sound forest harvesting of natural forest or for forest plantation establishment and development; reduction of obligatory taxes, fees and/or royalties for logs harvested from certified natural forests and/or forest plantations; and reduction or exemption of export tax/duty for forest products produced from certified natural forests and/or forest plantations.

Many governments also use non-fiscal incentives to promote sustainable forest management such as direct subsidies through soft loans provided by the government or through financial institutions at low-interest rates with or without government guarantee; free or subsidized seedlings; cost-sharing of silvicultural works and/or planting expenses; compensation schemes; and specific/special forest fund established by the government (usually) to support activities that enhance sustainable management of natural forest and/or forest plantation establishment and development.

Other incentives which could be considered as indirect or enabling incentives are good governance, clear land tenure arrangements, national security, research and technical assistance and well-established markets which often have greater influence than direct incentives such as free seedlings, subsidized credit or cost-sharing in managing the natural forests, including forest plantations.

Notwithstanding the above, incentives need to improve the relative comparative advantage of sustainable natural forest management and forest plantation establishment and development and thus stimulate investment in them. Incentives must also be provided in a timely, targeted and flexible manner for them to be effective in enhancing sustainable forest management.

There are also strategies adopted by governments to ensure that there is adequate financing for sustainable forest management besides the normal budget provided for their forestry agencies to undertake forest law enforcement, administration, conservation, management and development of the forest resources, especially in managing the natural forests which are government-owned. These include the establishment of forest funds to finance specific activities for forest management and development and the payment of ecosystem services (PES), such as the hydrological services provided by forests which will assist governments to generate additional public funds for SFM.

Malaysia

In the case of Malaysia, all forest lands are owned by the government, except for a few thousand hectares (ha) which is owned by the private sector. In this regard, the total forest areas in Malaysia was estimated in 2014 to be 18.28 million ha of which 17.70 million ha or 96.8 percent (%) were natural forests with the balance of 0.58 million ha being forest plantations. It was further estimated that 11.67 million ha or 63.8% were located in the Permanent Forest Estate (PFE)¹ with the balance of 6.61 million ha located outside the PFE.

In its efforts to enhance the sustainable management of natural forests, the Government of Malaysia has under Part IV, Chapter 8, Section 56 of the National Forestry Act (1984) allowed a Forest Development Fund to be established by each State Authority, especially by the State Forestry Departments in Peninsular Malaysia, which is funded through the following means:

- (i) any sums that are annually appropriated by the State Legislative Assembly for the purposes of the Fund;
- (ii) any forest development cess collected in respect of any forest produce removed from any forested area;
- (iii) any loans or grants given to the State Authority by the Federal Government for the purposes of the Fund;
- (iv) any money paid to the State Authority for carrying out into effect a reforestation plan when the forest licensee fails to implement it successfully; and
- (v) all money collected under any previous forest law by the State Authority for the purpose of financing research on forestry, silviculture works, forest surveys, inventory

¹ Permanent Forest Estate (PFE): Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forests.

and other related operations connected with forest development in the State, which remains unexpended.

In this regard, the Fund would be used for the following purposes as enunciated under Section 58 of the Act:

- (i) the preparation of the State forest management plans;
- (ii) the preparation and implementation of reforestation plans;
- (iii) the reviewing of the State forest management plans and reforestation plans;
- (iv) the preparation and implementation of programs relating to amenity forests; and
- (v) any expenses incurred by the State Authority in carrying into effect a reforestation plan when a licensee fails to implement it.

Currently in Peninsular Malaysia, among all the legally prescribed fees, royalties, and taxes payable to the authority during forest harvesting, a sum of MYR 30.00 per cubic meter (m³) (US\$ 7.06)² is collected to enable the State Forestry Departments in Peninsular Malaysia to undertake silvicultural treatments (climber cutting, enrichment planting, etc.) of logged-over natural forests in the Permanent Reserved Forests, including internal auditing according to the Malaysian Timber Certification Scheme (MTCS).

In the State of Sarawak, among the forest charges collected during forest harvesting, a fee of MYR 5.00/m³ (US\$ 1.18) is collected and paid into the Timber Premium (Rehabilitation and Development) Fund to be specifically used for the rehabilitation and development of the natural forests, while in the State of Sabah, a Forest Rehabilitation fee of MYR 6.00/m³ (US\$ 1.41) is collected based on timber harvested from its Forest Reserves.

Recognizing the potential and the need to sustain the future growth of the timber industries in the country and to reduce investment risk and uncertainty, and cash flow problems often associated with the long-term nature of forestry operations, the Government of Malaysia has also provided fiscal and non-fiscal incentives to promote investment in forest plantation establishment and development as well as to encourage greater participation of the private sector in the forestry sector.

The fiscal incentives for supporting and encouraging private sector investment in forest plantation establishment and development are through the Promotion of Investment Act (1986); Income Tax Act (1967); and the "New Strategies Towards Stimulating the Nation's Economic Growth" announced by the government on 21 May 2003.

Under Section 4A of the Promotion of Investment Act (1986), an eligible forest plantation investor is allowed to enjoy "Pioneer Status" or "Investment Tax Allowance", and "Infrastructure Allowance". In this regard, the Pioneer Status allows an eligible investor a 100% exemption of income tax for a period of 15 years which is given in two stages, namely, a first 5 years from production day and an additional 10 years after expiry of the initial 5 years of tax relief. Dividends for shareholders are also tax exempted.

Under the Investment Tax Allowance, an eligible investor is allowed deduction from statutory income at the rate of 100% of qualifying capital expenditure incurred within 10 years for land clearing and preparation, planting of timber seedlings (but not replanting), provision of plant and machinery, and construction of access roads, bridges and buildings or purchase of buildings. Dividends for shareholders are also tax exempted. Any unutilized allowance can be carried forward until fully utilized against future statutory income, and hence it is attractive for projects which are capital intensive and have long gestation periods.

Companies undertaking new plantations, existing companies with plantations which are yet to be harvested, existing companies establishing new areas as plantations under new entities or companies taking over existing plantations provided harvesting has not commenced, are eligible to apply for Pioneer Status or Investment Tax Allowance.

The Infrastructure Allowance is an alternative to "Agricultural Allowance" and "Schedule 4A of the Approved Agricultural Projects" under the Income Tax Act (1967). It allows an investor to deduct at a rate of 85% of the statutory income of 100% of capital expenditure on construction, reconstruction, extension or improvement of permanent structures, and the extension on construction and reconstruction, including bridges, jetties, ports and roads. As with the Investment Tax Allowance, any unutilized allowance can be deducted against future statutory income, and that dividends for shareholders are tax exempted. This fiscal incentive can be enjoyed with those provided under the Pioneer Status and Investment Tax Allowance.

Since a forest plantation is now recognized as an approved agriculture project under Schedule 4A of the Income Tax Act (1967), an investor could also enjoy the incentives provided under the "Agricultural Allowance" and those as stipulated under "Schedule 4A of the Approved Agricultural Projects" list. In this regard, the Agricultural Allowance allows an investor to deduct capital expenditure incurred on clearing and preparation of land; planting of crops and construction of roads at a rate of 50% per annum; for construction of buildings for the welfare of persons or as living

² Exchange rate: MYR 4.25 (Ringgit) = US\$ 1.00.

accommodation at a rate of 20% per annum; and those for the construction of the other buildings used for purposes of working the plantation at a rate of 10% per annum. A company granted this incentive can deduct the allowance as long as the expenditure is incurred. This fiscal incentive is an alternative to Infrastructure Allowance and Schedule 4A of the Approved Agricultural Projects, but companies granted Pioneer Status or Investment Tax Allowance could also enjoy this incentive.

To further encourage the private sector to establish and develop forest plantations, effective from the year of assessment of income 1999, additional incentives were granted by the Government of Malaysia to enable private companies undertaking forest plantation projects to offset qualifying capital expenditures, such as in the clearing and preparation of land, planting of timber seedlings but not replanting, provision of plant and machinery, the building of access roads and bridges, and construction or purchase of buildings, against income from other business sources of the company under Schedule 4A of the Approved Agricultural Projects. The rotation cycle for the 75 approved species as in **Annex 4** varies from a minimum of 6 years to a maximum of 50 years depending on the type of species planted, while the minimum area planted should be at least 50 ha and that it must be undertaken on a sustainable basis. This incentive is provided as an alternative to Pioneer Status, Investment Tax Allowance, Infrastructure Allowance, and Agricultural Allowance.

Notwithstanding the above, on 21 May 2003, the Government of Malaysia has also provided further incentives to encourage the establishment and development of forest plantation by the private sector through the “New Strategies Towards Stimulating the Nation’s Economic Growth”, where under the “Group Relief” a company is allowed to reduce its tax burden by offsetting its losses from the profit of another company within the same group. In addition to the qualifying capital expenditures as allowed under Schedule 4A of the Approved Agricultural Projects, companies are also allowed to include expenses incurred in pre-operating activities which include preparation of Forest Management Plans and Environmental Impact Assessment (EIA) Reports; fees related to the procurement of timber certification; surveying work; enrichment planting; silviculture treatments; pest and diseases control; and fire management. In fact, this incentive allows a company to transfer its forest plantation expenditure, in full or in a part, to another related company resident in Malaysia where the quantum of expenditure to be surrendered in each fiscal year should be based on the area planted and maintained for that year. However, a ceiling amount of group relief claim will be fixed for each plantation company and this could be formulated by using the company's forest planting area as the basis for the calculation.

Additional incentives are also provided to any eligible company that undertakes in-house research and development (R&D) to further its business where an Investment Tax Allowance of 50% of the qualifying capital expenditure incurred within 10 years is allowed. The company can offset the allowance against 70% of its statutory income for each year of assessment. Any unutilized allowances can be carried forward to subsequent years until fully utilized.

Companies in the wood-based industry that reinvest for the purposes of expansion, automation, modernization or diversification of its existing business into any related products within the same industry and on condition that such companies have been in operation for at least 36 months effective from the year of assessment 2009, are allowed to apply for “Reinvestment Allowance” under Section 4F of the Promotion of Investment Act (1986). The Reinvestment Allowance will be given for a period of 15 consecutive years beginning from the year the first reinvestment is made. Companies can only claim the Reinvestment Allowance upon the completion of the qualifying project, that is, after the building is completed or when the plant/machinery is put to operational use.

In this context, the Reinvestment Allowance is given at the rate of 60% on the qualifying capital expenditure incurred by the company, and can be offset against 70% of its statutory income for the year of assessment. Any unutilized allowance can be carried forward to subsequent years until fully utilized, while assets acquired for the reinvestment cannot be disposed off within a period of five years from the time of the reinvestment which is effective from the year of assessment 2009.

After the 15-year period of eligibility for Reinvestment Allowance, companies that reinvest in the manufacture of promoted products are eligible to apply for “Accelerated Capital Allowance”. This provides a special allowance where the capital expenditure is written off within three years, with an initial allowance of 40% and an annual allowance of 20%.

In terms of non-fiscal incentives provided by the Malaysian Government and to aggressively encourage the private sector to establish and develop more forest plantations to meet the demand of the wood-based industry and for export, the Government of Malaysia on 13 February 2006 has formed, through the Malaysian Timber Industry Board (MTIB), a Special Purpose Vehicle known as the Forest Plantation Development Sdn. Bhd., to disburse soft loans for private companies willing to establish forest plantations. Through this initiative, the Government of Malaysia plans to develop 375,000 ha of forest plantation in the next 15 years, at an annual planting target of 25,000 ha, which is expected to yield 5 million m³, and at an estimated total cost of MYR 2.2 billion (US\$ 0.52 billion). Currently, a sum of MYR 1.045 billion (US\$ 0.25 billion) has been approved.

Under this initiative, the government provides MYR 10,000.00/ha (US\$ 2,352.94) for the planting of rubber timber-latex clones in Peninsular Malaysia whereas in the States of Sabah and Sarawak this amount is increased to MYR 13,000.00/ha (US\$ 3,058.82). For companies engaged in the planting of the eight approved tree species, namely, *Acacia mangium*, *Neolamarckia cadamba*, *Paraserianthes falcataria*, *Tectona grandis*, *Octomeles sumatrana*, *Khaya ivorensis*, and *Azadirachta excels*, and the highly commercial bamboo species, a sum of MYR 8,000.00/ha (US\$ 1,882.35) and MYR 10,000.00/ha (US\$ 2,352.94) respectively will be loaned to companies irrespective of their locations in Malaysia. The maximum loan period is 20 years with a 3% annual interest rate. A grace period of 15 years is also given and companies only commence paying back the loan from year 16 and onwards.

As of 31 March 2019, the Forest Plantation Development Sdn. Bhd, has disbursed loans amounting to MYR 861.9 million (US\$ 202.8 million) or 82.4% of its approved allocation of MYR 1.045 billion (US\$ 0.25 billion) to 74 companies to establish a total of 120,213 ha of forest plantations. In this regard, a total of 114,780 ha or 95.5% of the agreed planting target of 120,213 ha has been planted, comprising five species, namely, rubber timber-latex clones, *A. mangium*, *P. falcataria*, *N. cadamba*, and *O. sumatrana*.

To reduce investment risk and uncertainty in the sustainable management of natural forests in Malaysia, enabling incentives are provided by the State Government of Sabah in 1997 through the phasing out of short-term timber harvesting licences and replaced them with Sustainable Forest Management Licence Agreements (SFMLAs) which provide long-term tenure of 100 years and cover areas that average 100,000 ha each. A total of 34 SFMLs have been awarded to private sector companies covering mostly logged-over production forest reserves. The SFMLA holders are required to carry out their forest management activities based on a 10-year Forest Management Plan which details how the area can be sustainably managed through multiple-use forest management.

In the case of Peninsular Malaysia where a total of 439,189 ha of the Permanent Reserved Forests has been approved for private sector companies to develop into forest plantations, a tenure of 30 years has been granted which could be extended for another 30 years subject to evaluation of their performance.

4.0 Cambodia

4.1 Background

The Cambodian Constitution recognizes the importance of environmental protection and sustainable management of natural resources and stipulates that the State should promote environmental protection and sustainable natural resource management. In 1996, the Law on Environmental Protection and Natural Resource Management was enacted that emphasizes on sustainable management of natural resources and anticipated the need for the establishment of a network of protected areas.

In Cambodia, the Forestry Administration (FA) manages the Permanent Forest Estate (PFE) comprising Permanent Forest Reserves and Private Forests in accordance with the National Forestry Policy Statement (2002) and the Forestry Law (2002), and in implementing the National Forest Programme (NFP), including community forestry; while the Fisheries Administration manages mangroves and inundated forests, both under the Ministry of Agriculture, Forestry and Fisheries (MAFF). Rubber plantations that are located in the PFE are managed by the General Department of Rubber Plantations, also within MAFF. Furthermore, the Ministry of Environment (MoE) manages the Protected Areas and Ramsar sites, while the Ministry of Economy and Finance (MEF) regulates the flows of finances to and from forests and the institutions that manage them. However, the jurisdiction of managing protection forests and conservation areas between MAFF and MoE was changed in early 2016. In this regard, the government had transferred 13 protected forest areas and five production forest areas, currently designated as protected areas, from MAFF jurisdiction to MoE, while 73 economic land concessions located in protected areas under MoE management were transferred to MAFF.

The total forest area in Cambodia in 2014 was estimated to be 8.52 million ha, of which the extent of natural forests and forest plantations were 8.48 million ha and 0.04 million ha respectively. Of the total natural forests, an estimated 1.60 million ha or 18.9% was located in the PFE while the balance of 6.88 million ha was located outside the PFE. Except for a few thousand hectares of forest plantations established in the PFE, all the others were established outside the PFE. In addition, of the total production forests of 3.07 million ha, an estimated 1.61 million ha or 52.4% was located in the PFE while the balance of 1.46 million ha was located outside the PFE. The details of the extent of natural forests and forest plantations in Cambodia are as in **Annex 5**.

In terms of ownership, it was estimated that 7.09 million ha or 83.2% of the total forest areas were publicly owned with the balance of 1.43 million ha or 16.8% being privately owned. Of the total publicly owned natural forest areas of 7.05 million ha, a total of 1.60 million ha or 22.7% were located in the PFE with the balance of 5.44 million ha located outside the PFE. Except for a few thousand

hectares of publicly owned forest plantations in the PFE, all the others amounting to 31.1 thousand ha were located outside the PFE as in **Annex 6**.

In its efforts to promote the development of the domestic wood processing enterprises, the Government of Cambodia has since 2006 imposed a ban on the export on roundlogs with or without bark, sawnwood and squared wood with dimension thicker than 25 cm, fuelwood and charcoal sourced from natural forests.

4.2 *Policies, Legislation and Land Tenure Arrangements*

The National Forest Policy Statement adopted in June 2002 which has been updated several times to reflect the needs and interests of different groups underscores the government's commitment to the conservation and management of the country's unique forest resources in a sustainable manner now and for the benefit of future generations; the participation of local communities in protecting and managing forest resources; and an assessment and optimal allocation of land resources. It also specifies the government's role in promoting community forestry programs. The policy is based on the following elements:

- (i) dedicating appropriate forest areas as permanent forest estates;
- (ii) promoting sustainable management with particular reference to conserving biological diversity and soil and water resources;
- (iii) assuring the traditional forest use rights and privileges of communities;
- (iv) sustaining and increasing the supply of forest products for social and economic growth;
- (v) enhancing the contribution of forestry to human welfare;
- (vi) strengthening the national economy, with special reference to equitable economic development;
- (vii) increasing the participation of local communities and the private sector in forest protection, management and improvement; and
- (viii) supporting community forestry programs.

In addition, the NFP, issued in 2009, provides the elements for a long-term forest policy for the period 2010-2029. It includes a Strategic Framework which sets an overall vision and programmatic and policy priorities. Its overall mission statement "is to advance the sustainable management and development of our forests for their contribution to poverty alleviation, enhanced livelihoods, economic growth and environmental protection, including conservation of biological diversity and our cultural heritage." It aims to make Cambodia a producer of sustainable high-valued timber and non-wood forest products (NWFPs) and a supplier to the carbon sequestration markets.

More specifically, the NFP consists of six major programs that will be implemented and monitored over 20 years, as follows:

- (i) forest demarcation, classification and registration;
- (ii) conservation and development of forest resources and biological diversity;
- (iii) forest law enforcement and governance;
- (iv) community forestry;
- (v) capacity and research development; and
- (vi) sustainable forest financing.

The regulatory frameworks for the forestry sector in Cambodia, since the end of the 1990s, have improved considerably. Various laws, decrees and sub-decrees related to forestry, land management and environmental protection have been formulated and endorsed to strengthen the forestry sector which include the preparation of a policy and legislative framework for long-term sustainable management of its forest resources. Among them are the Land Law (2001), the Forestry Law (2002), the Law on Protected Areas (2008), the Sub-decree on Community Forestry Management (2003), and the Guidelines on Community Forestry and Related Policies (2006). Other related frameworks that are of equally important include the National Forest Policy Statement (2002), the National Policy on Development of Indigenous People (2009), the Policy on the Registration and Right to Use Land of Indigenous Communities (2009), and the Sub-decree on the Procedure for Registration of Land of Indigenous Communities (2009).

In addition, there are other supporting frameworks, *inter alia*, the Rectangular Strategy for Growth, Employment, Equity and Efficiency that provides the platform for national development, the Cambodia Sustainable Development Goals Framework 2016-2030, the National Biodiversity Strategy and Action Plan (2016), and the draft Environmental Code that provides the foundation, among others, for improved land-use management practices and addresses environmental degradation. Currently, the National Environment Strategy and Action Plan (2017) is being updated.

The Land Law that was promulgated by a Royal Decree in 2001 provides the legal platform for the management of land in Cambodia. It aims to clarify previous legislation related to ownership and the use of land and other natural resources, regulates basic issues related to land management and tenure and provides the legal framework for the allocation of use rights to individuals, communes, etc..

It differentiates three types of property and ownership rights in Cambodia, namely, (i) State Public Property, (ii) State Private Property and (iii) Private Property. State Public Property is land held by the State in public trust and carries a public interest use. It includes properties of a natural origin, such as the Permanent Forest Reserves, and cannot be sold or transferred to other legal entities, though it may be subjected to rights of occupancy or use that are strictly temporary in nature. State Private Property is land owned by the State or public entities that does not have a public interest use. The main difference between State Private Property and State Public Property is that the State Private Property may be sold or transferred to other legal entities. Land concessions whether for a social or an economic purpose may only occur on State Private Property. Private Property is owned by individuals or legal entities. It may be leased, used as collateral, inherited or transferred to other individuals or entities.

All production forests are owned by the government. However, the government may grant some part of the production forests as forest concession or production forest not under concessions (annual coupe) to an individual or legal entity, including access rights to harvest the forest resources in accordance with the National Forest Policy Statement (2002), the Forestry Law (2002) and other related forestry regulations and laws in Cambodia. More specifically, the Forestry Law states that the government may grant an area of production forest that is not being used, to private companies through public bidding consistent with the National Forest Management Plan and after consultation with concerned Ministries, local authorities and communities.

Notwithstanding the above, the adopted Sub-decree on Economic Land Concession in December 2005 provides the criteria, procedures, mechanisms and institutional arrangements for initiating and granting economic land concessions (ELCs), for monitoring the performance of all economic land concession contracts, and for reviewing those that entered into force prior to the effective date of the Sub-decree for compliance with the Land Law (2001).

It stipulates that ELCs may be granted to grow food and agro-industry crops, including the development of tree plantation, animal farm and aquaculture, the establishment of enterprises and construction of factory facilities, and installation of equipment for processing of domestic raw materials. All these economic activities have to be based on the land-use plan for the area and should be within the framework of natural resource management based on appropriate ecological systems. It emphasizes the need for the ELCs to conform to the Land-use Plans adopted by the Provincial-Municipal State Land Management Committees.

In addition, according to existing legislation, and in particular the Sub-decree on Forest Concession Management (2000) and its guidelines, forest concessionaires are obliged to guarantee the traditional rights of access to the forest resources within their concession areas that are of economic, subsistence and spiritual value to local communities. Management plans should specify the community forests and related programs with communities, as well as a Social Impact Assessment report.

The Forestry Law adopted in August 2002 provides the regulatory framework for the management, harvesting, use, development and conservation of forests in Cambodia. It allows the State to grant collective ownership to indigenous communities, but they are not allowed to transfer or dispose it to a third party. It principally recognizes forest management by communities and private entities and the customary use of forests. Communities or individuals can acquire user rights in Permanent Forest Reserves based on an application to the FA at different levels³. More specifically, the Forestry Law (2002) provides a comprehensive legal foundation for:

- (i) establishing the role and power of government agencies in forestry administration and enforcement;
- (ii) classifying forest lands, including establishing a permanent forest estate;
- (iii) the rights and obligations of all parties involved in forest exploitation;
- (iv) forest revenue collection;
- (v) private and community forestry;
- (vi) conserving and protecting forests and wildlife; and
- (vii) forest crimes and their penalties.

The adopted National Strategic Development Plan, 2019-2023, serves as the 'roadmap' for implementing the Rectangular Strategy-Phase IV. It aims to support the sustainable use of all the natural resources in the country. The Plan recognizes the need for special attention to be given to the management of the environment and natural resources so as to minimize the negative impacts of climate change. It also focuses on (i) forest management and development; (ii) strengthening forest and wildlife research and development; (iii) management of wildlife rescue centres and rehabilitation; (iv) strengthening forest law enforcement; and (v) strengthening the management and supporting services of the FA.

In fact, Phase IV of the adopted Rectangular Strategy for Growth, Employment, Equity and Efficiency (2018) is to continue the management of the forest and wildlife resources by maintaining the forest

³ FA Inspectorate at the regional level, FA Cantonment at the provincial level, FA Division at the district level, and FA Triage at the commune level.

cover at more than 60% of the country land area. It includes the prevention of forest encroachment and clearing for private ownership purposes, and in promoting the contribution of the community in preventing forest fire, illegal logging and forest clearing, as well as combatting forest crimes and wildlife trafficking.

The government also recognizes the importance of community forestry for forest management and rural development. However, both the Forestry Law (2002) and Community Forestry Guidelines (2006) lack the legal frameworks to support forest-based community enterprises and the livelihoods of local people, although the latter provides practical strategies and operational guidance to further develop community forestry in the country.

Nevertheless, the adopted Sub-decree on Community Forestry Management (2003) provides the rules for the establishment, management and use of community forests. The objectives of the Sub-decree are to (i) implement the Forestry Law and other legislation regarding local community management of forest resources; (ii) establish procedures to enable communities to manage, use and benefit from the forest resources, including to preserve their culture, tradition and improve their livelihoods; and (iii) provide an effective means for a community to participate in the reforestation, rehabilitation and conservation of natural resources, including forests and wildlife. The Sub-decree also prescribes the manner in which a Community Forest Agreement is prepared between the community and the FA. This includes setting the term limit of the agreement which is for a period of 15 years. The agreement is renewable for another 15 years but is subjected to an assessment of its performance and the management of the agreement, although there is no guarantee on its extension.

The Forestry Law (2002) requires an individual and legal entity to pay royalties and premiums when harvesting timber and non-timber forest products. More specifically, Article 52 states that any individual or legal entity harvesting forest products and by-products for commercial purposes within the Permanent Forest Reserves shall pay royalties and premiums to the national budget through the FA; while Article 56 states that anyone with legal possession of a permit to harvest forest products and by-products shall pay all applicable royalties and premiums prior to transferring or selling any of these rights to a third party.

Based on durability and potential utilization, tree species in Cambodia are economically classified into four grades, namely, Luxury grade, Grade I, II and III, for which different royalties are applied. In addition, there is a number of tree species which have been temporarily classified as “non-graded” pending evaluation of their potential uses. In this regard, Luxury grade timber is wood that is very durable and is used as long-term construction materials. The extraction of this timber grade is strictly prohibited. However, in unavoidable circumstances when trees have to be cleared, special permission from MAFF may be granted to extract timber of this grade. Grade I and II are wood that is durable. They are dominated by *Dipterocarp* species where commercial exploitation is permitted; while Grade III are non-commercial trees and are used as fuelwood.

The royalties levied on timber and non-timber forest products are revised from time to time based on market demand. The Government of Cambodia had issued declarations on the royalties on timber and forest products in 2000, 2009, and 2012. However, before 1995, there were no documents which define the price of timber. It is probable that the timber royalties were based on the individual agreement negotiated between the Government of Cambodia and the forest concession company.

Currently, the list of timber royalties declared in 2009 is still being used by the FA. Based on volume, the royalties for roundlogs with a diameter larger than 30 cm range from US\$ 275.00/m³ for *Dalbergia cochinchinensis*, a Luxury grade log, to US\$ 27.50/m³ for Grade III roundlogs. In addition, tree-based royalties are also imposed according to grades and diameter at stump height. For Luxury grade trees, a US\$ 2.50/tree will be charged for trees with a diameter of less than 15 cm. For Grade I trees with a diameter of between 15-30 cm the royalty is fixed at US\$ 5.00/tree, while for Grade II and Grade III trees they are fixed at US\$ 4.25/tree and US\$ 3.75/tree respectively. A royalty at US\$ 0.50/tree for all species with a diameter of less than 15 cm will be levied, except for Luxury grade tree.

In 2012, MAFF and the Ministry of Economy and Finance issued a Joint Declaration on the Provision of Public Services related to the forestry sector. The specific fees stated in the Declaration include the service fee for the export of timber and non-timber products, and permit fees for transportation, transport quotas, reforestation, forests maintenance, the use of any type of chainsaws to harvest forest products and by-products, and export fee for all wood species. It also includes permit fees for the establishment of sawmills or processing facilities for forest products and by-products, and timber depots to distribute and sell forest products and by-products.

In this context, the export tax on all timber and non-timber forest products is fixed at 1% of FOB of the total value in the permit, while the permit fee for the transportation of timber and non-timber forest products is fixed at KHR 40,000 (US\$ 10.00)⁴ with its validity period stated in the permit and that for the transport quota permit is fixed at KHR 100,000/year (US\$ 25.00). The permit fee for establishing a

⁴ Exchange rate: KHR 4,000 (Riel) = US\$ 1.00.

timber depot or sawmill is fixed at KHR 1,000,000/year (US\$ 250.00), while the annual permit fee for the use of a chainsaw is fixed at KHR 60,000/unit (US\$ 15.00).

In addition, based on inventoried volume, a reforestation fee of US\$ 2.50/m³ is levied for all species, while a forest maintenance fee at 5% of the value of all timber and non-timber forest products are also levied by the government.

4.3 *Natural Forest Management Practices*

Before 1991, Cambodia had experienced a long civil war. There were limited forestry laws and regulations for the management of the country forest resources. Illegal logging was the main source of finance to support the survival of both the government and Khmer Rouge where part of the forest resources was controlled by the Khmer Rouge, especially in remote areas.

Forest management through the use of a forest concession system was introduced to the country in the aftermath of the 1991 Paris Peace Accords and between 1990 and 1997, the government had granted 36 commercial forest concessions covering an area of seven million ha or about 65 % of Cambodia's forests. By introducing a forest concession system, the government sought to delegate the responsibility of forest management to the private sector, while at the same time to raise the much-needed revenue for national development.

However, the system was unable to demonstrate efficient and economic timber harvesting in a sustainable manner, and hence, in January 2002, all harvesting activities were suspended. The forest concessionaires were then required to prepare operational and strategic forest management plans, incorporating environmental and social impact assessments, and the planned responses to those assessments. The current list of forest concessions remains officially suspended, and forest concession areas, including those areas that have been revoked, have been re-allocated as community forests, protected forests, ELCs, and social land concessions where the land is used specifically for rural community development, such as for small-scale agricultural production and village expansion.

Notwithstanding the above, commercial logging is strictly controlled by the government and through the enforcement of the Cambodian Code of Practice for Forest Harvesting that was prepared under a loan from the World Bank and which was passed into law on 26 July 1999. The Code is designed to ensure sustainable forest management in forest concession areas and prescribes harvesting practices that protect the environment in line with the principles of sustainable development. These practices aim to ensure resource sustainability through enhancing the capacity of the forests to regenerate, protect sites of cultural significance, improve the economic and social contributions of forestry, and ensure the health and safety of forest workers. Guidelines for implementing these practices cover the following areas:

- (i) management planning systems;
- (ii) inventories in the forest management cycle;
- (iii) conservation of biological diversity in protected forests;
- (iv) social forestry in concession areas;
- (v) management of timber theft;
- (vi) forest engineering;
- (vii) environmental impact assessment;
- (viii) special management areas; and
- (ix) selection of silvicultural systems and the management of wildlife habitats and water catchments.

To enhance the sustainability of forest management, the Code of Practice for Forest Harvesting also lays out three main phases of forest operations, namely, the pre-felling phase, the felling phase, and the post-felling phase.

During the pre-felling phase, the forest concessionaire will have to conduct an Environmental and Social Impact Assessment (ESIA) encompassing the technical, social, economic, and environmental aspects of forest harvesting. Once the ESIA report is accepted by the relevant government authorities, the forest concessionaire will have to identify the impacts of its forest operations and the mitigation and preventive measures that have to be taken to address them. The forest concessionaire will then have to conduct a forest inventory to assess the existing biological diversity resources within the concession area, including watershed and soil, wildlife and its habitats, seed sources, historical and cultural relics or sites, developed infrastructures, and general disturbance of ground vegetation and soil. The identification of special management areas within the concession area, including protected areas, and the provision for demarcation of all such areas.

A medium to long-term concession management plan together with an annual forest management plan and an operational plan will be prepared. The management plan will include objectives, specific activities, forest protection, budget, monitoring arrangements, and will be reviewed once every five years. Attached to the concession management plan are planned harvesting blocks and maps demarcating protected and management areas, as well as providing the criteria and indicators against the guidelines of the Code of Practice for Forest Harvesting and those of the ESIA report. In addition,

the harvesting plan should optimize harvesting production rates, minimize environmental impacts associated with harvesting operations, accommodate the needs of local communities and making provision for their participation in decision-making about safety and harvesting operations.

The number of trees allowed for harvesting or felling is based on the forest inventory and technical guidelines as stipulated in the Code of Practice for Forest Harvesting. It should ensure natural regeneration of the forest and protect wildlife habitats. The cutting cycle adopted is 25 years.

The demarcation of special management areas and protected areas will be carried out following the guidelines for designating, among others, cultural areas, lakes, shorelines, water storage areas, landslip areas, watercourse reserves, streams and buffer-zone requirements. Furthermore, the construction of log landings, roads and skid trails will have to follow those stipulated in the Code of Practice for Forest Harvesting so as to minimize the adverse impact on the forest environment.

During the felling phase, trees selection for felling will be done in compliance with the tree selection regulations and guidelines. It should ensure the retention and protection of adequate residual growing stock and seed trees of desirable species. MAFF regulates the minimum felling limits for tree species in accordance with the category of timber grades. For Luxury grade timber species, the minimum felling limit allowed is 45 cm diameter at breast height (dbh); for Grade I, II and III timber species, the minimum felling limits vary from 30 cm to 60 cm dbh; while that for Non-Graded timber species, the minimum felling limit is 30 cm dbh. Nevertheless, the regulation also stipulates that 15 rare timber species, 11 tree species that local communities traditionally collect resin, and 10 high-valued commercial timber species are prohibited from harvesting.

All selected trees for harvesting will be marked for felling and monitored by the FA's officers, while during logging operation, the practice is to maximize the log volume (stump height and the use of machinery), and adopt directional felling and safe felling practices. Moreover, skidding, loading, transporting, log scaling, the use of machinery and equipment, forest camp hygiene, stabilization of logged areas, training of staff, and supervision of operations have to follow the guidelines as provided in the Code of Practice for Forest Harvesting.

At the post-felling phase, a monitoring program will be developed to ensure that mitigation measures are carried out and that difficulties and impediments identified during forest harvesting operation are addressed. The monitoring which is reported to the FA will be based on the implementation of the prescriptions as set out in the annual operational plan, harvesting block plan and the Code of Practice for Forest Harvesting. In this regard, the monitoring report will assist the FA to:

- (i) maintain control over the implementation of wood harvest;
- (ii) monitor unauthorized wood harvest and other illegal activities;
- (iii) evaluate forest management programs and managerial performance of concessionaires;
- (iv) adjust the annual operational plan in the light of achievements and difficulties in plan implementation; and
- (v) provide information for the revision of the management plan and trend of forest cover condition in the long term.

During monitoring, the forest conditions at post-harvest or after felling will be assessed as to whether the forest concessionaire has complied with the plan that regulates protection, inventory, yield estimation, harvesting, silviculture, biological diversity and watershed conservation, as well as take into account the interests of local communities and the affected people. If a concessionaire fails to adhere to the standards of management and mitigation measures as elaborated in the ESIA's recommendations and the Code of Practice for Forest Harvesting, it could result in paying a fine, including the possibility of cancellation of the concession agreement.

In this context, the authorized concessionaires in ELCs areas could be allowed to harvest timber only on their own forest lands that are approved for development projects, based on the agreement signed between the companies and the relevant government agencies. Therefore, the companies could clear forest land, divided into sub-zones of the approved development area, and are allowed to collect timber and pay tax, either through standing tree taxation based on the forest inventory or on the processed wood as specified by the FA. In general, each sub-zone of the forest land that is allowed to be annually cleared is around 1,000 ha. The companies have to apply to MAFF to clear the sub-zone every year until all the sub-zones are cleared and fully planted with other crops or trees as agreed in the development agreement. Generally, there is no limitation to the volume of timber removed, but a forest inventory must be done prior to the clearing of the sub-zones. The FA is the only authority that is allowed to certify the logs or volume of timber removed within ELCs' development areas.

Currently, logging in Cambodia focuses on all commercially viable species in economic land concession areas, albeit that some of the tree species are subjected to intensive logging which include *Azizia xylocarpa*, *Pterocarpus macrocarpus*, *Dalbergia bariensis*, *Aquilaria crassna*, *Fagraea fragrans*, *Heritiera javani* and *Hopea odorata*.

4.4 Forest Plantation Establishment and Development

Cambodia's forest cover has undergone significant changes over the past several decades. Between 1965 and 2016, Cambodia had lost almost one-third of its forest cover, primarily as the result of the civil war, social dislocations, and the evolving roles of forest in national development priorities. Hence, there is a need to increase its forest cover through the establishment and development of multi-purpose tree plantations that have the potential to meet the domestic demand for timber, increase incomes of local communities, and improve the environment through watershed protection and erosion control. Species considered include *Dipterocarpus alatus*, *H. odorata*, *Azadirachta indica*, rubber trees, *Eucalyptus camaldulensis*, *Acacia auriculiformis*, *A. mangium* and *Sesbania grandiflora*.

Large-scale investment in forest plantation establishment and development on public forest land has been initially promoted through public-private partnerships. In 2017, this was further promoted through the Declaration on Tree Plantation Development that facilitates the procedure for private forest registration and encourages private sector involvement, especially on legally acquired private land.

To contribute to the achievement of the sustainable development goal where the forest cover would be maintained at 50% by 2030 as defined in the Framework for Cambodian Sustainable Development Goals, the government has promoted the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and promote afforestation and reforestation. With the most recent declaration in the Agricultural Strategic Development Plan, 2019-2023, the FA has set a target of at least 10,000 ha of forest plantations to be established annually, inclusive of 9,000 ha by the private sector. It also plans to distribute 10 million tree seedlings per year under its Conservation of Genetic Resources from Forest and Establishment of Seed Sources for Planting Program.

Reforestation has been carried out mainly on poor sites. An area of between 300 and 400 ha was planted each year between 1915 and 1972. The species planted have included *H. odorata*, *Dipterocarpus* species, *Tectona grandis*, *Pinus merkusii*, and fast-growing fuelwood species such as *Peltophorum ferrugineum* and *Combretum quadrangulare*.

From 1985 to 2013, there had been 143,586 ha of forest plantations established in Cambodia, comprising 119,170 ha of forest plantations that belong to the ELCs, public-private partnership companies, and small-scale households; 24,107 ha were planted by public institutions such as the FA and the army; and 309 ha by local NGOs.

Between 2014 and 2018, forest plantation areas amounted to 338,718 ha, inclusive of 337,046 ha planted by the ELCs, private-public partnerships, and small-scale households, and 1,672 ha by the FA. The dominant timber species planted are *A. mangium*, *A. auriculiformis*, *E. camaldulensis*, a few varieties of *Eucalyptus* hybrid derived from *E. grandis* and *T. grandis*; with the rest being native species, such as *Hopea odorata*.

With the current practices of establishment and registration of private forest plantation in compliance with forestry policies, laws and regulations, MAFF has promulgated the Declaration on the Establishment of Private Forests to promote and incentivize individuals or legal entities to plant trees on their own legally acquired land as a means of increasing timber production and fuelwood supply for both domestic consumption and export. The provisions of the regulation elaborate the procedure, legal requirements, and processes from application to harvesting of the established tree plantation. In this regard, private forests are categorized according to land sizes, as follows:

- (i) household private forest of less than 10 ha;
- (ii) small-scale private forest of between 10 ha to 100 ha;
- (iii) medium-scale private forest of more than 100 ha to 1,000 ha; and
- (iv) large-scale private forest of more than 1,000 ha.

From 2020 onwards, MAFF has allowed the FA to establish and develop state forest plantations with fast-growing tree species, such as *A. mangium*, *A. auriculiformis*, *E. camaldulensis* and a few varieties of *Eucalyptus* hybrid derived from *E. grandis*. The aim is to ensure a sustained supply of fuelwood for domestic consumption and to meet the demand for industrial processing.

Since 2005, the FA has formulated and released a Guideline for Site Selection and Tree Planting in Cambodia. The FA also provides technical support to practitioners and investors on how to prepare plans for tree planting, including sites identification, so as to ensure their success in forest plantation establishment and development.

4.5 *Incentives and Disincentives for Sustainable Natural Forest Management*

Incentives

There are only a few fiscal incentives provided in Cambodia for managing the natural forests sustainably. Article 53 of the Forestry Law (2002) allows the Minister of MAFF to reduce or waive the royalties and premiums for any forest products and by-products collected from the Permanent Forest Reserves for scientific purposes or to create an economic incentive to efficiently use forest products and by-products, as well as those collected by local communities under customary use rights or harvested in community forests under the Community Forest Agreement. The other is Article 54

which allows the Minister to approve a delay in the payment of royalties and premiums on forest products and by-products for a permit holder who the FA has recognized for practising sustainable forest management under existing legislation, although this is rare in practice.

The other fiscal incentive for sustainable forest management is the exemption from import tax for the purchase of vehicles and other equipment used in projects implemented between the FA and development partners, donors, international organizations, international financial institutions and other agencies in providing technical support in policy development and other fields in the forestry sector associated with sustainable forest management. This is granted based on Article 6 of the Law on Customs (2007) where preferential tariffs may be granted in pursuant to international commitments, agreements, treaties or conventions entered into by the Government of Cambodia.

In its efforts to further enhance sustainable forest management, the government has established a “National Forestry Development Fund” which is administered and managed by the National Forestry Development Committee and co-chaired by the Minister of the Ministry of Agriculture, Forestry and Fisheries and the Minister of the Ministry of Economy and Finance. The National Forestry Development Fund which is similar to the Forest Development Fund established by Malaysia derives its funds from the following sources:

- (i) grants from the Government of Cambodia;
- (ii) payment of premium on forest products and by-products collected from Permanent Forest Reserves;
- (iii) fees collected from wildlife conservation;
- (iv) grants given by international organizations;
- (v) donations from charitable individuals and national and international NGOs, and
- (vi) revenue derived from the other services in the forestry sector.

Currently, a reforestation fee at US\$ 2.50/m³ of inventoried standing volume and a forest maintenance fee at 5% of the value of all timber and non-timber forest products, as well as an export tax of 1% of FOB on all timber and non-timber forest products are collected and deposited in the National Forestry Development Fund.

In this context, the Fund will be used for the following activities:

- (i) reforestation, silviculture and forest rehabilitation;
- (ii) forest protection;
- (iii) scientific and technical forest research;
- (iv) forest extension services;
- (v) forest sector development;
- (vi) community forestry development; and
- (vii) training of human resources for the forest sector.

In 2020, the FA has started using the Fund to undertake agroforestry activities under its Community Forestry Program.

To encourage forest concessionaires to better manage the natural forests under sustainable management principles, the Forestry Law (2002) allows the government to enter into Forest Concession Agreements of up to 30 years with investors or any legal entity the right to manage and harvest forest products and by-products within their concession areas. This is provided that their operations do not interfere with the customary user rights on land owned by indigenous communities that are registered with the State or customary access and user rights practised by communities residing within, or adjacent to the forest concession areas.

Upon the expiration of the Forest Concession Agreement and based on an evaluation of the concessionaire's performance by MAFF, the Agreement could be extended, but such an extension could not exceed the original duration of 30 years.

Disincentives

Nevertheless, the Government of Cambodia in January 2002 had issued a logging moratorium on all natural-forest concession areas due to poor management and regulatory control. Some of the concession areas have been taken back by the Government, albeit that currently there is approximately 3.3 million ha of forest areas still under valid concession licences.

Although existing forest concession companies that still hold valid concession licences will be able to operate, based on forest management plans that are prepared in accordance with international standards that assured that the forests will be managed sustainably and upon renewal of their contract agreements with the FA, they have yet to be permitted to conduct wood extraction, even though they have submitted their sustainable forest management plans to the FA for review and assessment. Furthermore, MAFF has indicated that these areas may be re-allocated as Protected Forests and Community Forests. This has adversely affected an estimated 3.3 million ha of concession forests not being able to be placed under sustainable forest management.

After the suspension of forest concessions in 2002, the government decided to establish a small number of annual bidding coupes of the production forests that are located outside forest concession

areas in order to supply timber for domestic consumption. However, forest products and by-products extracted from the annual bidding coupes are not permitted to be exported. Nevertheless, if there is a surplus from domestic consumption then the timber could be exported but would require approval from MAFF. Besides, annual coupe operators could not compete with operators involved in clear-felling of ELCs areas for agro-industry purposes as they are not required to prepare sustainable forest management plans. The short-term nature of the operation and the inability to export products harvested have impeded the annual coupe operators from practising sustainable forest management. In addition, the export ban imposed in 2006 through a government Sub-Decree which is still enforced today, among others, on roundlogs, sawnwood, fuelwood and charcoal sourced from natural forests is seen as a disincentive for managers of natural forests to enhance efficient forest utilization in the overall context of sustainable forest management.

4.6 *Incentives and Disincentives for Forest Plantation Establishment and Development* *Incentives*

There are a number of fiscal incentives stated in the laws, sub-decrees and regulations in Cambodia for encouraging and supporting forest plantation establishment and development. The incentives include royalty exemption, export tax reduction, and other taxes and fees.

Article 52 of the Forestry Law (2002) states that the State will not require the payment of royalties or premiums for the harvesting of forest products and by-products from private forest plantation. In addition, Article 9 of the Declaration on the Development of Private Forest issued by MAFF in 2017 states that owners of private forest plantations registered with the FA are not required to pay any licence fees to harvest and use timber and non-timber forest products from their plantations, including royalty, permit fee for transportation and transport quota, except that they have to pay an export tax of 1% of FOB of the total cost in the permit that is levied on all timber and non-timber forest products.

In May 2000, a letter on the Fixation of Concession Land Rental Fee which is also applicable for land used for forest plantation establishment was issued by the Council of Ministers of Cambodia. The fee charged is based on an evaluation of the types of soil, region and geographic location. The preferential price of the land is classified into four categories in accordance with the type of soils. The 1st type is the fertile soil preferred by agricultural crops. The 2nd type is soil that is still good for agricultural crops but on higher elevation. The 3rd type of soil will need to be improved by organic and chemical fertilizers, while the 4th type of soil is relatively poor for agricultural crops. The land rental fee for the four soil types are, as follows:

- (i) 1st soil type at US\$ 5.00- US\$ 10.00 /ha/year;
- (ii) 2nd soil type at US\$ 3.00- US\$ 6.00 /ha/year;
- (iii) 3rd soil type at US\$ 2.00- US\$ 4.00 /ha/year; and
- (iv) 4th soil type is free as it is on deteriorated land.

In this context, the commencement date for collecting the concession land rental fee will be based on the type of crops planted. For seasonal and annual crop, the fee will be collected from the second year of production, while for long-term crop and permanent crop, the fee will be collected from the third or the fourth year of production, such as the planting of fast-growing tree species.

In its efforts to further promote investors to invest in forest establishment and development, a set of regulations on the reduction of export fees for products and processed products derived from forest plantation was issued by the Council of Ministers of Cambodia in November 2019. This includes a reduction of 50% of the total obligatory export fees for the export of products from forest plantation and a 100% exemption of export fees for furniture and final processed products produced from forest plantation.

Other laws related to incentives for forest plantation establishment and development include Article 12 of the Law on the Amendment to the Investment Law that states that Qualified Investment Projects (QIPs), that is, investment projects that have received a Final Registration Certificate from the Council for the Development of Cambodia which has the power to grant import duty exemptions to QIPs and for specific industries are entitled to the benefits and incentives as provided in Article 14 of the Law on the Amendment to the Investment Law. Each year, a Qualified Investment Proposal is required to obtain a Certificate of Compliance from the Council for the Development of Cambodia to enjoy the investment incentives. The Certificate of Compliance is intended to confirm that the QIP has complied with the relevant tax regulations. If a company investing in the establishment and development of forest plantation is registered and received a Final Registration Certificate, the company is entitled to receive incentives as provided for under the Investment Law, which include:

- (i) a profit tax exemption period which consists of a Trigger Period +3 years + Priority Period⁵. Priority Period shall be determined in the Financial Management Law.

⁵ Priority Period is determined within the period of 3 years, according to the type of project and investment capital. For light industries: 0 year for investment capital of below US\$ 5 million, 1 year for investment capital of between US\$ 5 million and US\$ 20 million, 2 years for investment capital of over US\$ 20 million. For heavy industries: 2 years for investment capital of

- The maximum Trigger Period is the first year of the QIP gaining profit or three years after the QIP earns its first revenue, whichever is sooner;
- (ii) an exemption of import duty on machinery and equipment;
 - (iii) a 100% tax exemption for export; and
 - (iv) an exemption of visas and work permit fees for the employment of foreign citizens as managers, technicians and skilled workers, and residency visas for their spouses and dependants.

In addition, the Sub-decree on the Implementation of the Law on the Amendment of the Investment Law which was issued in September 2005, among others, allows the production of furniture and fixtures using plantation wood, as well as in the production of paper and paper products with capital investment greater than US\$ 500,000.00, to enjoy incentives such as profit tax exemption, duty-free import of production equipment, and a 100% exemption of export tax.

The government also provides non-fiscal direct incentives through the distribution of free seedlings by the FA to the public for planting on degraded public forest land and land confiscated from illegal encroachment. Since 1989, a total of 101,145,834 seedlings was produced and distributed, with the private sector contributing 32,497,125 seedlings or 32.1% of the total. In this regard, the FA has established nine nurseries nation-wide and other smaller nurseries in the Cantonment of the FA in 25 provinces to produce the seedlings for free distribution to the general public.

The Government of Cambodia has also provided a number of enabling incentives to encourage and support individuals and companies to invest in forest plantation establishment and development. In this regard, individuals and corporate entities involved in forest plantation establishment and development could lease land from the government of up to 50 years. However, if a lease that has been granted previously after the adoption of the Land Law (2001) with a term exceeding 50 years, it will be shortened to 50 years. The lease may be renewed, but the renewed term may not exceed 50 years starting from the date of renewal. If the lessee fails to pay the stipulated rental for three years, the government may cancel the lease.

However, if a long-term lease which was created prior to the adoption of the Land Law (2001) and has a remaining period exceeding 50 years, such right will remain during the stipulated period of the agreement. This also applies to a long-term lease with a remaining period of more than 99 years where such right is deemed to remain during the full duration of the lease.

A Sub-decree on the Mortgage and Transfer of Rights over a long-term lease or an Economic Land Concession was issued on 29 August 2007 to determine the principles and terms and conditions for granting rights to investors, including those involved in forest plantation establishment and development. Among the provisions are the rights given to the investor or concessionaire to be able to mortgage or transfer his/her right over the land concession, as well as the buildings and/or other immovable properties that he/she has constructed on the land except as otherwise specified in the economic land concession agreement or as restricted by law. In all cases, the creditor cannot become the owner and has no right to claim ownership of the immovable property rented by or conceded to his debtor who has used his right over the concession as security. The creditor also has no right to dispose off any immovable property.

In 2008, a Sub-decree on Measures for Granting Right to Use public forest land for tree planting was issued by the government that aims to increase forest productivity and services, and ensure sufficient wood supply to the general public. The Sub-decree authorizes MAFF to grant part of the public forest land for tree planting as proposed by the FA.

More specifically, the Sub-decree states that tree planting on public forest land could be conducted by the FA, local community, the FA with participation from the local community and private sector, local people and an individual involved in small-scale or family-scale plantation, albeit that currently individuals have only planted trees on their own land. The granting of the right to use public forest land for tree planting by the FA in partnership with the private sector would need to be authorized by MAFF. The individual or company that has been granted the right to use public forest land for tree planting is able to develop, utilize, sell and distribute their products in accordance with the agreement with the FA and MAFF. However, the benefits derived from tree planting on public forest land will be shared between the government and the individual or company as agreed in the agreement during the duration of the agreement which could be for a period not exceeding 50 years. However, before the expiry of the agreement the individual or company has the right to propose for an extension of the agreement to the FA.

In addition, the Sub-decree on Economic Land Concessions (2005) authorizes MAFF to grant ELCs with investment capital of US\$ 2.5 million and area of more than 1,000 ha, while that by the provincial authorities are with investment capital of below US\$ 2.5 million and area of below 1,000 ha. If concessionaires hold ELCs of more than 1,000 ha, MAFF will require them to voluntarily return to the government or try to negotiate with them to return the portion of the land that exceeded

below US\$ 50 million and 3 years for investment capital of over US\$ 50 million. For agriculture and agro-industry crops: 1 year for short term agriculture crops and 2 years for long-term agriculture and agro-industry crops.

the limit of 1,000 ha. However, the Council of Ministers is authorized to exempt the reduction of the concession land of more than 1,000 ha on condition that the economic land concessions were granted before the Land Law (2001) went into effect and/or the reduction of the concession land may cause damage to existing investments. The duration of the contract is up to 99 years but on average, 70 years is contracted with concessionaires to use the land, mainly for the establishment of agro-industrial crops and rubber plantation which is also a source of wood for the furniture industry. In this regard, *A. mangium* plantation is established as an inter-crop with cassava and on a smaller scale. The duration of the economic land concession agreement was reduced to 50 years after 2012 when the government started to review the effectiveness of economic land concession agreements with the aim to strengthen the management of economic land concession areas.

Disincentives

There are land conflicts that lead to local people staging demonstrations against concession companies which resulted in damage to their properties and disruption of their operations, as well as hindering the full implementation of their master plans and annual workplans, for example, in the development of forest plantation. This is because the procedures of granting ELCs were not fully followed and implemented and there is a lack of transparency in the process. Furthermore, environmental and socio-economic assessments for granting of ELCs have been conducted with limited consultation with the local community and indigenous people which have led to the loss of local community land to concession holders without compensation or final resolution to land ownership. Nevertheless, the government claims that ELCs have had a positive impact on Cambodia in contributing to the major development of the country and have provided employment to the local community.

In May 2012, the government placed a moratorium on the granting of new ELCs and call for a review of all existing ELCs. As a result, economic land concession contracts or agreements that were not in compliance with the law, especially if the concessionaires have been involved in land grab that belongs to the community or villagers and have affected their livelihood, they could have their contracts or agreements terminated. The seizure of land concessions may have a negative impact on the implementation of existing master plans and annual operational workplans of the concessionaires.

The Sub-decree on the Implementation of the Law on the Amendment of the Investment Law in 2005 has placed undue restrictions on timber plantations. For example, teak plantation of less than 1,000 ha and tree plantation of mainly fast-growing species for the pulp and paper industry of less than 200 ha will not be eligible for incentives provided under Article 14 of the Law on the Amendment to the Investment Law, such as profit tax exemption, import duty exemption on machinery and equipment, and 100% tax exemption on export. This restrictive policy may discourage small-scale private company and the local community to participate in developing tree plantations for commercial purposes.

There is currently not enough infrastructural development by the Government of Cambodia. The majority of the ELCs areas granted is located in remote areas with limited developed infrastructures. As such, concessionaires have to prepare and develop their own basic infrastructures to facilitate their operations, including transportation of their products to the market and final destination. This will incur an additional high cost for the concessionaires in addition to their operational costs. Moreover, commercial production of plantation timber requires high initial establishment cost and it takes many years before it could achieve a positive return. This has, to a certain extent, deterred concessionaires to extensively invest in forest plantation establishment and development.

Market information is not comprehensive, timely and readily available for investors in forest plantation establishment and development in Cambodia. Consumption and the use of forest plantation wood for house construction by the local community are limited, especially those derived from fast-growing species like the eucalyptus. This coupled with fluctuation of prices in the international market has created uncertainty and thus affecting efforts to promote the private sector to substantially invest in forest plantation development.

5.0 Myanmar

5.1 Background

Myanmar is endowed with a diversity of natural resources, both renewable and non-renewable. Among them, the forests have significantly contributed to the socio-development of the country and to the national economy. Over 70% of the country population living in rural and remote areas are still dependent on the forest resources for their basic needs such as food, fodder, fuel and shelter.

The extent of forest cover in Myanmar was estimated to be 27.96 million ha or 41.32% of the country area in 2018. Of this total, an estimated 26.91 million ha or 96.2% was natural forests with the balance of 1.05 million ha being forest plantations. A total of 22.16 million ha or 79.3% was located in the PFE with the balance of 5.80 million ha located outside the PFE as in **Annex 7**. In terms of ownership, it is evident from **Annex 8** that of the total forest areas, 27.80 million ha or 96.9% were public forests with 155 thousand ha being privately owned. Of the publicly owned forests of 27.80 million ha, a total

of 22.01 million ha or 79.2% was located in the PFE with the balance of 5.80 thousand ha located outside the PFE.

Currently, five governmental institutions under the Ministry of Natural Resources and Environmental Conservation (MONREC) are responsible for the forestry sector in Myanmar, as follows:

- (i) the Forest Department (FD) is responsible for sustainable forest management, biological diversity conservation, watershed protection, restoration of degraded forest ecosystems, and research and development (R&D);
- (ii) the Myanmar Timber Enterprise (MTE) is responsible for timber harvesting, milling, downstream processing and marketing of forest products;
- (iii) the Dry Zone Greening Department (DZGD) is responsible for reforestation of degraded lands, protection and conservation of the remaining natural forests and environmental restoration in the Central Myanmar dry zone;
- (iv) the Environmental Conservation Department (ECD) is responsible for implementing the National Environmental Policy, strategy, planning and action plan for the integration of environmental conservation into the national sustainable development process; and
- (v) the University of Forestry and Environmental Sciences (UFES) which provides technical and tertiary education in forest and forest-related fields, including environmental sciences.

A trip was made to Yangon, Myanmar, from 8 -10 December 2019 to meet and discuss with the recruited local resource person, Mr. Baber Cho, and the designated Team from the Myanmar Forest Certification Committee (MFCC), headed by Mr. Shwe Kyaw, the current Advisor and former Director-General of the Forest Department, Myanmar, on the background of the case studies on incentives for sustainable forest management in the Mekong region countries, namely, Cambodia, Myanmar, Thailand, and Vietnam. Detailed elaboration on how the inputs from Myanmar should be prepared, including my write-up on natural forest management and forest plantation establishment and development practices in Myanmar, as well as institutional arrangements for the forestry sector in Myanmar.

From the response to the questionnaire sent by the ITTO Secretariat to its focal point on 29 November 2019, it was evident that the log export ban enforced since April 2014 should not be seen as a disincentive, but rather as a policy to promote the production of value-added timber products and to utilize the forest resources more efficiently, as well as to support sustainable forest management. In addition, the private sector often claimed that the need to pay the FD a performance bond to establish forest plantation is a burden or disincentive for the investors since the initial cost in plantation establishment is high, but this is deemed necessary to prevent investors from just grabbed the land without planting the agreed tree crops as was experienced in the past when such performance bond was not imposed.

5.2 *Policies, Legislation and Land Tenure Arrangements*

The history of Myanmar forest policy is one of the continued struggles between different actors, institutions and community groups. This involves whether forests should be managed for economic development and commercial gain, for local community use, or be placed under sustainable forest management.

Notwithstanding the above, the Myanmar Forest Policy was adopted in 1995, while the 1992 Forest Law was replaced by the updated Forest Law in 2018. The Protection of Biodiversity and Conservation of Natural Areas Law was also enacted in 2018 in place of the Protection of Wildlife and Wild Plants and Conservation of Natural Areas Law of 1994.

In order to promote participatory forest management, the Community Forestry Instructions (CFI) of 1995 was revised and the new CFI was issued in 2019. Other related legislation that are of equally important are the Environmental Conservation Law (2012), the Myanmar Canal Act (1992), the Myanmar Dams Act (1992), the Myanmar Freshwater Fisheries Law (1991), the Myanmar Marine Fisheries Law (1993), the Myanmar Pearl Law (1995) and the Myanmar Mines Law (2015).

More specifically, the Myanmar Forest Policy (1995) has identified six imperatives, which must be given the highest priority in order to achieve broader national goals and objectives of forest resource management, as follows:

- (i) *Protection*: to protect soil, watersheds, ecosystems, biological diversity, plant and genetic resources, and scenic and national heritage sites;
- (ii) *Sustainability*: to manage forests on a sustainable basis for the benefit of the present and future generations;
- (iii) *Basic needs*: to satisfy the basic needs, such as fuel, water, fodder, food and recreation of the people;
- (iv) *Efficiency*: to harness the full economic potential of the forest without compromising the interests of future generations;

- (v) *Participation*: to promote people's participation in all forest activities; and
- (vi) *Public awareness*: to educate the community, politicians and decision-makers about the important roles of forest in the conservation of biological diversity and the environment, and in the sustainable development of the nation.

However, there are a number of constraints impeding the implementation of the imperatives. They include inadequate information and planning, inefficient wood processing and utilization of the resource, inconsistent policies and policy conflicts, inappropriate pricing policy, inadequate budgetary resources and institutional framework.

In order to overcome the above-mentioned constraints, the Myanmar Forest Policy (1995) further identifies ten strategic objectives covering land use, protection and management, regeneration and afforestation, forest industry marketing and trade, forest research, forestry planning, intersectoral coordination, institutional strengthening, budget and finance, and people's participation and public awareness.

The Myanmar Forest Policy has stipulated that up to 30% of the total land area of the country be gazetted as Reserved Forests, including Protected Public Forests, and 5% of the total land area as the Protected Area System. The National Forest Master Plan, 2001-2031, has targeted 10% of the total land area of the country as the Protected Area System in the long term. Up until November 2019, 5.85% of the total land area has been designated as the Protected Area System.

The new Forest Law (2018) stipulates that the Law be enforced to (i) implement the forestry and environmental policies; (ii) promote public cooperation in all forestry activities and contribute to the national economy and needs of the public; (iii) observe international commitments relating to the conservation of forests and the environment; (iv) conserve biological diversity; and (v) establish forest plantation.

The Forest Law together with its Forest Rules prescribe *inter alia* the following:

- (i) procedure for creating permanent forest estate;
- (ii) function and responsibilities of the FD;
- (iii) establishment of forest plantation and the wood-based industry;
- (iv) rights and responsibilities of individuals and organizations permitted to establish plantations and/or to extract and move forest produce; and
- (v) procedure for search, arrest and administrative action against forest offences, including penalties.

The Forest Law (2018) empowers the FD to implement the forest policy and the plans relating to conservation of water, soil, biological diversity and the environment; sustainable yield of forest produces and protection of forest-covered land; as well as to manage the forest land in accordance with the provisions of the Forest Law. The establishment of the PFE, comprising Reserved Forests, Protected Public Forests and the Protected Area System, is fully protected under the Forest Law.

The following categories of Reserved Forests can be constituted by demarcation on the land at the disposal of the Government:

- (i) commercial reserved forest;
- (ii) local supply reserved forest;
- (iii) watershed or catchment protection reserved forest;
- (iv) environment and biological diversity conservation reserved forest; and
- (v) other categories of reserved forests.

The areas outside the Reserved Forests could be gazetted as Protected Public Forests for the protection of water and soil; conservation of arid-zone forests, mangrove forests, biological diversity and the environment; and for sustainable production.

While all teak trees remain formally under state ownership, the Forest Law (2018) allows the government to grant private ownership, including trees planted in private plantations established on forest land permitted by the government, and private plantations established outside forest land and community forests registered at the FD district office. More specifically, the Forest Law provides for the following categories of plantation lease:

- (i) 500 acres⁶ (202.3 ha) of a private teak plantation may be approved by the Union Government through MONREC;
- (ii) 100 acres (40.5 ha) of a private hardwood plantation may be approved by the Director-General of the FD with the consent of the Union Minister of MONREC;
- (iii) 50 acres (20.2 ha) of a private hardwood plantation may be approved by the FD Director of States/Regions; and
- (iv) 100 acres (40.5 ha) of a private industrial plantation may be approved by the Union Minister of MONREC.

The plantation land lease of 1,000 acres (404.7 ha) and more needs competitive bidding by open tender. Currently, the duration of the land lease is 30 years which can be renewed of up to two ten-

⁶ 1 acre = 0.4047 hectares (ha).

year periods. The land lease could be inherited by other individuals, while the land lease right and the planted trees can be sold or transferred to other individuals or organizations with the approval of the FD.

Within the legal framework, a new Community Forestry Instructions (CFI) was issued in 2019 by MONREC under Section 57(b) of the Forest Law to replace the earlier CFI that was issued by the FD in 1995. The CFI (2019) provides communities the commercial rights over timber and non-timber forest products and acknowledges customary and traditional land tenure rights. The CFI (2019) defines Community Forestry as "all sustainable forest management and utilization activities, in which the local community itself is involved. This expression includes establishing new plantations and managing existing forests to create employment and income opportunities from subsistence to commercial purpose to generate food, to stabilize the ecosystem and to improve the environmental conditions". In this regard, the CFI clearly demonstrates the sharing of forest management responsibilities towards the rural communities through user groups activities and efforts with in-kind and technical assistance from the FD. It also focuses on the flow of benefits to the rural poor, participating in forest management activities.

The CFI (2019) stipulates that community forests can be established on any land at the disposal of the government, Reserved Forests, Protected Public Forests, buffer zones of the Protected Area System, forest-covered lands managed by government organizations and natural forests conserved by the local communities. The land tenure is initially granted for 30 years and can be extended for the duration of 30 years at a time and as many times as appropriate, and the land tenure right is inheritable.

The new Protection of Biodiversity and Conservation of Natural Areas Law that was enacted in 2018 aims to:

- (i) implement the national policy concerning the protection of wildlife and wild plants;
- (ii) implement the national policy concerning the conservation of protected areas;
- (iii) conserve wildlife, wild plants, nature and migratory birds in accord with the standards set by international conventions acceded to by the government;
- (iv) protect and conserve endangered wildlife species and wild plants and their habitats;
- (v) contribute to research on natural sciences; and
- (vi) protect wildlife and wild plants by establishing zoological gardens and botanical gardens.

In this regard, the Protected Area System consisting of scientific reserves, national parks, marine parks, nature reserves, wildlife sanctuaries, national heritage sites, etc., as deemed necessary, is administered according to the Protection of Biodiversity and Conservation of Natural Area Law (2018). This is to conserve in perpetuity, wildlife, wild plants, scenic sites and natural areas of geo-physical or cultural significance for posterity.

Section 21 of the Forest Law (2018), among others, states that a person who has obtained permission for the extraction of forest produce will have to pay royalties, security deposits and advances due to the government, including affixing a property-mark which is registered with the FD.

The royalties are collected based on volume for logs extracted, by number and weight for pole, post and some non-timber forest products such as bamboo, rattan, barks, resin, and by *ad valorem* for other forest products. The royalty collected are paid to the national budget through the FD. The royalty rates levied on timber and non-timber forest products are revised periodically based on market demand. The FD issued the latest notifications on royalty rates for timber and non-timber forest products in 2009 and 2017.

The right to extract both teak and other hardwoods from the Reserved Forests and Protected Public Forests, including land at the disposal of the government, is only granted to MTE. As such, the royalty to be paid to the FD for timber extracted is based on the joint measurement of logs carried out by the FD and MTE personnel in the forests from where the timber is extracted. The royalty rates levied for teak and other non-teak hardwood logs extracted by MTE are categorized by *Tectona grandis* (teak) and the other five hardwood Groups from 1 to 5, based on their wood properties (durability, colour, hardness, etc.), end-uses and market prices.

In this context, the species in Group 1 are mostly heavy and durable species and are used mainly as construction timber in the domestic market. *Pterocarpus macrocapus* (Padauk) and *Dalbergia oliveri* (Tamalan) are the most valuable species as they are utilized by the furniture industry as well as facing high demand from the overseas market. Hence, the royalty rates for these two species are the same as those applied to teak.

Group 2 species are fairly durable and are utilized as indoor construction timber, whereas the species in Group 3 are less durable and are used in construction works with some kinds of treatment. The species in Group 4 are mainly softwood species and are used in the packaging industry and the lesser-used species in Group 5 are used in temporary formwork.

In brief, the royalty rate for teak, and *P. macrocapus* (Padauk) and *D. oliveri* (Tamalan) in Group 1 is fixed at MMK 16,635/m³ (US\$ 11.09)⁷, while the other hardwood species in this Group is at MMK 11,100/m³ (US\$ 7.40). For hardwood species in Group 2, the royalty rate is fixed at MMK 5,550/m³ (US\$ 3.70), while for the hardwood species in Groups 3, 4 and 5, the royalty rate is at MMK 3,330/m³ (US\$ 2.22). Royalty rates for teak posts and other hardwood post are fixed at MMK 795/piece (US\$ 0.53) and MMK 495/piece (US\$ 0.33) respectively.

The movement of forest produces for commercial purpose from one township to another within the country needs to be accompanied by a removal pass issued by the FD. The fees for issuing removal passes vary with the types of forest produce from MMK 270/m³ (US\$ 0.18) for timber from conversion forests to MMK 495/consignment (US\$ 0.33) such as a boatload of charcoal. However, the movement of MTE timber is carried out following its own procedures without having the need for a removal pass from the FD.

In this regard, MTE is responsible mainly for timber harvesting, milling, downstream processing and marketing of forest products. MTE sells mainly logs of different species, including teak, with foreign currency to the private sector through open tender. The successful companies need to pay a 5% specific goods tax and another 5% as a commercial tax of the bid price to the government through MTE. The value-added or semi-finished products made from the logs purchased from MTE are allowed to be exported to the international markets, mainly through the Yangon port.

The private sector is only allowed to extract non-timber forest produces, such as bamboo, rattan, firewood, charcoal, different kinds of bark, fibre, resin, honey, bat guano, orchid and bird nest, and requires a licence or permit issued by the FD as well as pay the required royalties to the FD. The amount or number of different kinds of non-timber forest produce that can be extracted annually at the Union, State/Region and District levels are based on the district forest management plans.

With regard to the establishment of the wood-based industry, the Forest Law (2018) states that a private entrepreneur has the right to establish any wood-based industry, including sawmills, plywood mills, veneer mills and furniture mills, after obtaining approval from the relevant government agencies.

The annual licence fee for a big sawmill is fixed at MMK 100,000 (US\$ 66.67) and for a small sawmill it is fixed at MMK 50,000 (US\$ 33.33), based on different kinds of machine and total horse-power used in the mill. The annual fee for having a hand-held chainsaw is fixed at MMK 10,000 (US\$ 6.67).

A private company which wishes to export any kinds of forest product needs to obtain a recommendation from the FD to certify that the products are legal. The fee for each recommendation for timber export is fixed at MMK 500 (US\$ 0.33), and for bamboo and rattan, it is fixed at MMK 250 (US\$ 0.17). For the other non-timber product, it is fixed at MMK 100 (US\$ 0.07).

With the recommendation from the FD, the private company needs to apply for an export licence from the Ministry of Trade, where the fee for each export licence and stamp duty to be paid is fixed at MMK 2,500 (US\$ 1.67) and MMK 600 (US\$ 0.40) respectively. The company also needs to pay for an export declaration and a security fee per shipment at MMK 30,000 (US\$ 20.00) and MMK 20,000 (US\$ 13.33) respectively. In addition, the company has to pay an income tax at 2 % of FOB of the tax and fee payable to the Customs Department. There is no commercial tax and customs duty to be paid as they are zero-rated.

Logs and timber and timber products for further processing in Myanmar are rarely imported into Myanmar. Nevertheless, the current commercial tax and customs duty are fixed at 5 % and 15 % of CIF value respectively, while specific goods tax is fixed at 5 % of CIF value and advance income tax at 2 % of CIF value plus the commercial tax, customs duty and specific goods tax. In fact, there is no clear policy or procedure on how such taxes and duties will be exempted or refunded if the imported timber is processed in the country and re-exported in the form of value-added products.

5.3 Natural Forest Management Practices

The Mixed Deciduous Forests which represent 37%⁸ of the total forest areas in Myanmar are the most important tree type as they contain teak and other valuable tree species. Almost of equally important are the Dipterocarp forests that occur extensively throughout the country. They regenerate freely and profusely forming plantation-like stands with stately clean boles and reaching towering heights. Pine forests flourish naturally in the Shan, Kayah, Chin and Kachin States where *Pinus merkusii* and *P. insularis* are indigenous to Myanmar.

Each State or Region is divided into forest districts and currently, there are a total of 68 forest districts, each being a Forest Management Unit (FMU) with a 10-year forest management plan, prepared in two parts. The first part covers, among others, baseline information on land use, forest resources, NWFPs, past management for wood and non-wood production, silvicultural and management systems, and research and development. The second part deals with policies and legislation, management goals and

⁷ Exchange rate: MMK 1,500 (Kyat) = US\$ 1.00.

⁸ Forestry in Myanmar, October 2011.

objectives, management planning covering natural production forests, planted production forests, community forests, watershed forests, NWFPs and protected areas, including the wood-based industries, and monitoring and evaluation. In this context, the revised district forest management plans which cover 2016-17 to 2025-26 are being implemented throughout the country.

The natural forest in Myanmar is principally managed under the Myanmar Selection System (MSS) which is an exploitation-cum-silvicultural system. It is designed to maintain a high yield of quality timber while enhancing the natural regeneration of commercially valuable trees. As such, the main objective of the MSS is to harvest an annual yield on a sustainable basis and to work out an estimated future yield. It is based on selection logging of mature trees while nurturing the residual forest stand for future harvest.

The MSS has adopted a felling cycle of 30 years, prescription of exploitable sizes of trees of different species, girdling/green marking of teak, selection marking of other non-teak hardwoods, enumeration of future yield trees down to a fixed girth limit and prescribing the annual allowable cut (AAC) for teak and other hardwood species. The prescribed minimum girth limit at breast height for felling of teak is now fixed at 6.5 ft⁹ (1.98 m) throughout the country, while the girth limits for the other hardwoods vary with species and locations. For example, in the Mawlaik District the prescribed minimum exploitable girth limit for *Dipterocarpus* species is 7 ft (2.13 m) and for non-teak-hardwood species in Groups 1 to 5, it is 6 ft (1.83 m).

As for silvicultural treatment, it involves the felling of the less valuable trees interfering with the growth of teak, thinning of congested teak and other commercially important species, protecting seed bearers, climber cutting, and felling of Ficus-bound trees. The repair of reserve and compartment boundaries are carried out together with the girdling/green marking of teak and during the selection marking of the other hardwood species.

In addition, Simple Coppice or Coppice with Standard System is applied in the local supply forest reserves. Natural regeneration, including planting, to enhance the quality of degraded forests, as well as enrichment planting in natural forests where natural regeneration is insufficient are carried out with available fund.

In terms of timber harvesting, Section 18 of Myanmar Forest Law (2018) states that if the extraction and sales in and outside the country are carried out by a state-owned enterprise then the FD would not be required to adopt a competitive bidding system. As such, MTE being a state-owned enterprise has the legal right to extract teak and other hardwoods, milling, downstream processing and marketing of timber in Myanmar, but is not involved in any forest plantation establishment and development.

In this context, before an area is logged by MTE, a pre-harvest enumeration is carried out by the FD in the compartment to be harvested and all trees that have reached the minimum prescribed girth limit at breast height are marked for felling. Teak trees that are to be extracted as dry teak will be girdled three years ahead of the extraction. After completion of the girdling and selection marking operations, a detailed report on the trees and species marked, together with a map showing the boundaries of the compartment and the location of the marked trees is prepared. MTE is required to sign a contract with the FD before the commencement of any timber harvesting operations.

Royalty payment on the cut logs is jointly assessed by the FD and MTE after which the logs are transported to the delivery depots outside the forest and then to the sawmills, wood-based factories and terminal depots in Yangon.

The FD will carry out a post-harvest assessment to ensure that no marketable timber is left behind or wasted, as well as no excessive damage to the residual stand due to bad logging practices or careless felling. A fine can be imposed on MTE if it does not comply with the requirements of the contract. In this regard, MTE has developed and implemented manuals, code, guidelines and instructions for systematic felling and transportation of timber. Some of these are the State Timber Board Extraction Manual (1948), the Standing Orders for Extraction Staff (1970), the Departmental Instructions (1986), the National Code for Forest Harvesting Practices in Myanmar (2000), the Reduced Impact Logging Guidelines (2008) and the Standard Operating Procedures for Timber Harvesting Operations (2020).

The silvicultural operations such as enrichment planting, felling of Ficus-bound trees, thinning, climber cutting, and improvement felling are carried out by the FD in the natural teak bearing production forests. With the directives from MONREC, MTE has now started carrying out enrichment planting since 2017 with its own budget to improve the condition of the logged-over forests.

Nevertheless, despite every endeavour of the FD to ensure the sustainable management of Myanmar's forests, deforestation and forest degradation continue as a result of over-exploitation in the past, uncontrolled shifting cultivation and illegal logging, conflict of interests between forest sustainability and the need to generate forest income, and policy inconsistency between the forest sector and the other sectors of the economy, such as agriculture, livestock breeding and mining.

Hence, in its efforts to promote the development of domestic wood processing enterprises in Myanmar, the government declared a log export ban in 2014. A nation-wide moratorium on logging

⁹ 1 ft = 0.3048 m.

for one year in 2016-17 and for the Bago Ranges for 10 years starting from 2016–2017 to 2026-2027 was also declared to allow the forests to recover. To further ensure the sustainability of future harvest, the annual extraction of teak has been reduced by 55% and that for non-teak hardwood species by 33% of the annual allowance cut.

The government, among others, has adopted two master plans related to the forestry sector, namely, the 30-year National Forest Master Plan from 2001-2002 to 2030-2031, and the 10-year Myanmar Rehabilitation and Reforestation Program (MRRP) from 2017-2018 to 2026-2027.

In this context, the long-term National Forest Master Plan was formulated and adopted in 2000-2001 for the development of the forestry sector in Myanmar by considering the economic, social and environmental aspects of sustainable forest management where at that time the private sector was not allowed to establish forest plantations. The Plan which is only available in the Myanmar language comprises 19 chapters including policies and legislation, natural forest management, forest plantation development, people participation, biological diversity conservation, and the development of the wood-based industry. Some of the pertinent targets related to natural forest management and the establishment and development of forest plantation are, as follows:

- (i) establish 30% of the land area of the country as Reserved Forests and Protected Public Forests and 10% as the Protected Area System in the long term;
- (ii) conduct management inventory covering 2.4 million ha of forest areas annually;
- (iii) select and mark 3.72 million teak trees and 20.4 million non-teak hardwood trees for felling over the 30-year period;
- (iv) undertake climber cutting and felling of Ficus-bound trees of over 2.43 million ha during the Plan period;
- (v) carry out enrichment planting and improvement felling covering 2.12 million ha and 0.29 million ha respectively over the 30-year period; and
- (vi) establish 748,987 ha of state-owned plantations by the FD and 919,000 ha of community forests during the Plan period.

More importantly is the medium-term MRRP which was formulated and is being implemented mainly to restore biological diversity and ecosystem services in areas affected by deforestation and forest degradation through the application of appropriate silvicultural operations. Within the fiscal year from 2017-2018 to 2026-2027, the estimated budget required for forestry operations, infrastructural development, vehicles, fuel and other necessities, including staff emolument, is estimated to be MMK 573,581.86 million (US\$ 382.39 million). This budget would be provided by the government in addition to the normal budget and from international support. In this regard, forestry maintenance activities under the program would account for about 85% of the total budget. The targets for the various forest operations over the 10-year period under the MRRP are as in Table 2.

Table 2: Forest Operations to be carried out between 2017-18 to 2026-27¹⁰

No.	Description of Activity	Unit	Target
1	Assisted natural regeneration (through coppicing, thinning, seeding, fire protection, etc.)	ha	331,392
2	Enrichment planting in natural forest	ha	59,623
3	Establishment of plantation	ha	142,687
4	Establishment of community forest	ha	331,875
5	Rehabilitation of old plantations	ha	45,083
6	Seedling distribution for public planting	no. (million)	97.09
7	Natural regeneration in central dry zone (DZGD)	ha	202,429
8	Establishment of seed production areas	ha	1,731
9	Reservation of forest areas	square km	16,160
10	Establishment of private plantations	ha	115,426
11	Training for staff/public	no.	38,120

In the coming years, community forestry could be a potentially powerful driver of positive change within the forestry sector of Myanmar for achieving the sustainable forest management goals. However, the progress in establishing community forests is not yet satisfactory mainly due not only to a lack of motivation of the FD field staff, but also to a lack of awareness of communities about the multiple benefits that could accrue to them. Up until November 2019, 4,931 Community Forestry User Groups (CFUGs) have established a total of 264,670 ha of community forests of which 104,949 ha are natural forests and the balance of 159,721 ha being plantation forests. The MRRP has set a target to establish 311,875 ha of community forests during its 10-year program from 2017-2018 to 2026-2027.

¹⁰ Myanmar Reforestation and Rehabilitation Programme, MONREC, 2016.

In the long term, sustainable forest management in Myanmar must ensure that the forest resource is able to maintain a continuous flow of forest goods and services from legal and sustainable sources and conserve biological diversity, including soil and water resources. It should also contribute positively to national income and in job creation in the forestry sector, in the overall context of achieving sustainable development of the country.

5.4 Forest Plantation Establishment and Development

Establishment of forest plantations in Myanmar started as early as in the late 1850s. Forest resources being abundant in those days, the policy was only to enrich the existing natural forests. Hence, before 1960, teak plantations were established to enrich the natural forests and the annual forest plantation target had never exceeded 700 ha. In this regard, at the age of about 40 years, a final heavy thinning is carried out after which it is regarded as a natural forest and is allowed to be merged with its natural surroundings. The forest is then managed according to the Myanmar Selection System.

However, the last three to four decades have seen a rapid increase in deforestation and forest degradation of the natural forests as a result of shifting cultivation, excessive fuelwood cutting and expansion of agricultural lands and infrastructural development. As a result, extensive block-wise planting schemes were implemented since the early 1970s in order to rehabilitate the degraded forests, restore the lost forest areas, supplement the yield from the natural forests and improve the environment. Nevertheless, according to the Myanmar Forest Policy (1995), forest plantations should not be substitutes for natural forests and should be established with the aim to rehabilitate degraded forest lands in the country.

Among some notable forest plantation projects undertaken by the government were the East Bago Yoma Project (EPP) and the Special Teak Plantation Program. In this regard, the EPP Project which was implemented from 1979 to 1984 with financial support from the World Bank was to establish teak and other commercial species plantations in the Bago Region to meet the local demand for timber and timber products.

The Special Teak Plantation Program which was launched by the FD in 1998 was to increase teak yield and thus reducing harvesting pressure on the natural forests. Its objective was to plant 8,090 ha each year, and based on a 40-year rotation it was envisaged that at the end of 2037 where 323,600 ha would have been planted, it would be able to yield a final harvest of about 1.8 m³ annually, besides intermediate thinning yields. However, when the program was halted in 2005-2006 due to limited budget, shortage of manpower, weak governance, etc., the FD had only managed to establish 64,777 ha of the special teak plantation over the 8-year period.

Overall, at the end of the financial year 2017-2018, the total area of forest plantations established by the FD was estimated to be 894,215 ha. Of this total, an area of 498,933 ha or 55.8% was established as commercial plantation; 182,019 ha (20.4%) as village supply plantation; 138,121 ha (15.4%) as watershed plantation; 72,519 ha (8.1%) as industrial plantation; and the balance of 2,623 ha (0.3%) as mangrove forests.

The planting spacing adopted for teak in the special teak plantation with a rotation of 40 years and for those in the commercial (normal) plantations which are planted with teak, *Xylia xylocarpa* (Pyinkado), *Pterocarpus macrocarpus* (Padauk), *Pinus insularis* (Htinyu), *Gmelina arborea* (Yemane) and *Chukrasia tabularis* (Yinma) with a rotation of 60 years is 9 x 9 ft (2.74 x 2.74 m).

For the industrial plantations which are planted with *Eucalyptus* species, *G. arborea*, *Bombax ceiba* (Letpan) and *Bombax insigne* (Didu) with a rotation of 10 years, the planting spacing adopted is 8.5 x 8.5 ft (2.59 x 2.59 m). In the case of village supply plantations which are planted with *Acacia catech* (Sha), *Cassia mimosoides* (Mezali) and *Eucalyptus* species with a rotation of 5 years, the planting spacing adopted in areas with heavy rainfall is 6 x 6 ft (1.83 x 1.83 m), while in areas with less rainfall it is 12 x 12 ft (3.66 x 3.66 m).

The special teak plantations are thinned heavily until they reach the age of about 25 years, leaving only around 40 trees per acre (98 trees/ha). Silvicultural operations are carried out until the plantations reach the age of 40 years, after which they are regarded as natural forests and are allowed to be merged with their natural surroundings. In this context, at the rotation age, the special teak plantations and commercial (normal) teak plantations will be clear-felled and replanted, while the industrial and village supply plantations will be clear-felled and coppiced. The sites for the special teak plantations are better than those for the commercial or normal teak plantations and hence it is envisaged that the planted teak in the special teak plantations will enjoy better growth. Watershed plantations established in critical catchments of dams and reservoirs will not be harvested. The major constraint faced in developing commercial forest plantations is the lack of seed supply due to poor access to quality seed sources as a result of legal/illegal over-exploitation that removes seed bearers. The FD is now formulating a more robust forest plantation policy and strategy for the country.

Under the MRRP from 2017-2018 to 2026-2027, the FD will establish a total of 134,306 ha of forest plantation or 52.0% of the target area of 258,111 ha. Of this total, an estimated 65,951 ha will be commercial plantations, while the Dry Zone Greening Department (DZGD) will establish 8,379 ha or

3.3% of the target area. The balance of 115,426 ha or 44.7% will be established by the private sector as commercial plantations.

The state-owned plantations established mainly by the FD in the Reserved Forests and Protected Public Forests are for watershed conservation, industrial wood production and fuelwood production for the local community. The Dry Zone Greening Department (DZGD) also establishes small areas of plantation forest. In addition, it also protects the forests in the Protected Public Forests and reforests the degraded lands in the arid zone of central Myanmar, as well as to supply fuelwood and small-dimension timber to the local community. Its main responsibility is the protection and conservation of the remaining natural dry forests and restoration of the environment in areas under its jurisdiction.

Taking cognizance of the extent of established state-owned forest plantations and with the decreasing availability of logs from natural forests, the government has encouraged the private sector to invest in forest plantation establishment and development since 2005.

In this context, the current annual land lease fee that an investor has to pay to the FD is fixed at MMK 2,460/ha (US\$ 1.64) for teak and MMK 1,230/ha (US\$ 0.82) for the other hardwood species. A security deposit or performance bond of MMK 123,450/ha (US\$ 82.30) has also to be paid to the FD before any work could commence. This is to ensure the successful planting in the first year for both teak and hardwood species. The security deposit will be returned to the investor if the survival rate of planting has achieved 70% at the end of the planting season. A maximum of 10% of the domestic or export value of the forest produce must be paid to the FD as an ecosystem services fee.

For acquisition of land for forest plantation development of 1,000 acres (404.7 ha) and larger that are offered through competitive bidding by open tender, the successful bidder will have to pay the land premium and land lease fee according to its bid. Evaluation of tenders is based on the land lease fees and the bid premium offered, as well as an assessment of the bidder's investment and technological capacity, its plan for local development and the per-unit costs (ha) in establishing the forest plantation. The accepted land premium in the open tender ranges from MMK 24,690/ha (US\$ 16.46) to MMK 74,100/ha (US\$ 49.40), while the land lease fees vary from MMK 4,935/ha/year (US\$ 3.29) to MMK 14,820/ha/year (US\$ 9.88).

In addition, the Virgin, Fallow and Vacant (VFV) Lands which are under the control of the Department of Agriculture, Land Management and Statistics could also be leased for forest plantation establishment and development. Under the 2018 Virgin, Fallow and Vacant Land Law, VFV land of less than 300 acres (121.4 ha) may be decided at the State or Regional level and for areas of up to 3,000 acres (1,214.1 ha) by a Union-level National Land Management Committee. The annual land rental fee for long-term species, including forest trees, is fixed at MMK 7,413/ha (US\$4.94); while for horticultural crops it is fixed at MMK 4,935/ha (US\$3.29); and that for seasonal crops at MMK 2,470/ha (US\$1.65).

In this regard, the lessees are required to post performance bonds to guarantee that they will establish the approved crops on the area granted within 4 years. These are fixed at MMK 7,413/ha (US\$4.94) for areas of less than 400 acres (161.7 ha) and MMK 24,710/ha (US\$16.47) for areas of up to 3,000 acres (1,214.1 ha). If development has not been completed within 4 years the bonds will be forfeited and the land returned to the State. Forest plantations established on the VFV land must be registered with the FD and royalties on trees harvested must be paid to the FD.

It has been reported that there is only 1,619 ha of forest plantation established by the private sector on VFV land. A total of 1.5 million ha of VFV land that had been allocated to investors and cleared of timber, but never developed had been taken back by the government. This land could potentially be used for forest plantation establishment and development by the private sector.

Notwithstanding the above, up until 2018, a total of 151,976 ha of teak and other hardwood plantations has been established by the private sector. The species planted are mainly teak, *X. xylocarpa*, *A. mangium*, *A. auriculiformis* and *G. arborea*. As mentioned earlier, under the MRRP, a total of 115,427 ha of forest plantation is planned to be established by the private sector.

During the trip to Myanmar, a discussion was also held on 8 December 2019 with Mr. Hugh Speechly who was conducting a study on "Incentivising Sustainable Private Sector Investment in Timber Plantations in Myanmar: Possible policy options" with funds provided by the Korea Green Growth Trust Fund. The focus of the discussion was not on incentives for sustainable forest management *per se*, but on possible forest plantation models that could incentivizing forest establishment and development in Myanmar, such as the use of management leases, including timber harvest rights, for the natural forest in Reserved Forest land or VFV land in combination with new plantation establishment on adjacent Reserved Forest and VFV land.

5.5 *Incentives and Disincentives for Sustainable Natural Forest Management* *Incentives*

Provisions in the Forest Law (2018) states that tree species extracted not on a commercial scale, such as for research and educational purposes, and work beneficial to the public or religious work will be exempted from paying royalties, except for reserved species that are grown on land at the disposal of

the government, and utilized within one year and within 20 miles¹¹ (32.2 km) from the area of the extraction.

There are also some fiscal incentives offered by the government in establishing community forests and utilizing and marketing forest products from these forests. They are, as follows:

- (i) exemption of land-based fee for the community forests established on forest lands;
- (ii) exemption of payment of tax for forest products harvested by CFUGs or its members for personal use; and
- (iii) exemption of payment of tax on the sale of forest products harvested from community forests and sold within the village.

To enable the CFUGs to adopt long-term approaches in managing community forests, the FD has assured that land tenure that is initially granted for 30 years will be extended for another 30 years at a time and as many times as appropriate. They have also the right to form independent legal enterprises which can harvest and commercialize wood and NWFPs, as well as to freely sell the products of the community at current market prices.

Disincentives

The log export ban imposed by the government in 2014 and which is still enforced today has to a certain extent impeded full forest resources utilization and sustainable forest management practices to be applied.

The logging moratorium enforced by the government due to over-exploitation in the past, illegal logging and uncontrolled shifting cultivation for one year in 2016-2017 throughout the country and for 10 years in the Bago Yoma region from 2016-2017 to 2026-2027 has adversely affected the sustainable forest management of natural forests.

The action that was taken by MTE to reduce its annual extraction of teak by 55% and for non-teak hardwood species by 33% of its annual allowable cut (AAC) of the natural forests would not only reduce the supply of timber for domestic consumption and export, but would also affect its financial cash flow and thus its ability to undertake environmentally sound forest harvesting practices. The extraction of wood below the AAC by MTE could also affect the development of the wood processing industries and would further encourage illegal logging of the country's natural forests.

5.6 *Incentives and Disincentives for Forest Plantation Establishment and Development*

Incentives

The Directorate of Investment and Company Administration (DICA) administers the 2016 Myanmar Investment Law, which clarifies the process for investment and offers a number of tax breaks, incentives and guarantees, and rights and protections for business ventures.

To acquire a permit, investors need to submit a proposal to the multi-agency, the Myanmar Investment Commission (MIC), if their investment activities (i) are essential to the national strategy; (ii) involve large capital intensive projects; (iii) likely to cause a large impact on the environment and local communities; (iv) use state-owned land or building; and/or (v) designated by the government to require a proposal to be submitted to MIC.

If incentives are sought for a project that requires the right to use the land, it is stipulated that for investments of between MMK 7.5 billion (US\$ 5 million) and MMK 150 billion (US\$ 100 million) where approval from a relevant ministry is needed, an endorsement from MIC headquarters is required; otherwise, endorsement by DICA State or Regional offices is sufficient. In this context, investments in private forest plantation establishment and development are most likely to be in the category requiring a MIC permit. Nevertheless, the fiscal incentives available include the following:

- (i) income and corporate tax holidays, depending on the geographic/economic zones and based on townships, as follows:
 - (a) Zone 1 - least developed: 7 years,
 - (b) Zone 2 - moderate development: 5 years, and
 - (c) Zone 3 - adequate development: 3 years.
- (ii) tax-free profit if reinvested within one year, including if invested in a similar business;
- (iii) accelerated depreciation to start from the date of commercial operation;
- (iv) income tax rates are the same as those applied to resident citizens;
- (v) right to deduct research and development costs from assessable income;
- (vi) exemption of customs duties for imports of machinery, equipment and materials that cannot be purchased locally;
- (vii) exemption from customs duties and other local taxes on raw materials and semi-finished goods for businesses which export their entire production; and
- (viii) refund of import duties and other local taxes paid on import of raw materials and semi-finished goods when the goods manufactured from those imports are exported.

¹¹ 1 mile = 1.6095 km.

In this regard, investment in forest plantation establishment and development, forest conservation and other forest businesses is regarded as a priority sector and most plantation areas are likely to be located “Zone 1”. However, the tax incentives cannot be extended to other businesses of the group which could, in fact, provide immediate write-off of plantation costs against other revenue sources, especially for a company with substantial taxable income from other sources in an investor’s group. Therefore, this fiscal incentive will only likely to be of interest for short-rotation plantations which could generate taxable income within the 7-year tax holiday period. The FD will need to assist the lessee to apply to MIC for a number of tax breaks, incentives and guarantees.

As community forestry is becoming an important contributor to sustainable forest management, the FD has provided a number of non-fiscal incentives to the CFUGs, including free seeds and seedlings required for the establishment of the first rotation forest plantation; technical assistance for managing community forests and harvesting of forest products, including the trade in such products, as well as assistance in resolving conflicts concerning community forests and in law enforcement in cases of encroachment, illegal extraction of wood, etc.

The FD has been distributing free seedlings of fast-growing species to individual farmers, school children, local communities and non-governmental and governmental organizations since the launched of the nation-wide tree planting program to green "non-forest" areas in 1977. As the program gained momentum, more than 10 million seedlings were distributed annually. According to the MRRP, over 97 million seedlings will be distributed during the 10-year period of the program.

To enable the private sector to invest in forest plantation establishment and development, the government has allowed the land to be leased for a period of 30 years which is renewable of up to two 10-year periods. In addition, the lease to establish forest plantation and the planted trees can be inherited or sold to another person or organization according to the existing laws and with the permission of the FD.

With the notification of MONREC in 2019 that allows for the export of teak and other hardwood poles, posts and logs from state-owned and private plantations according to the rules and regulations of the FD, investors of forest plantations can now sell their products, especially thinned poles and posts from their plantations to the international markets.

Disincentives

Among the disincentives faced by investors to develop private forest plantations is the current interest rate policy. As of late 2019, the Central Bank of Myanmar (CBM) has fixed the maximum lending rate by state banks at 8.5% and that of commercial banks at 13%. However, from February 2019, the CBM has allowed commercial banks to offer unsecured loans at 16% which includes a limit on lending which is fixed at 80% of a bank’s deposit base, strict collateral demands on borrowers, and the requirement that lending terms do not exceed one year. However, given the long gestation period of forest plantations before they could provide returns, this has severely limited the option of debt financing for forest plantation establishment and development in Myanmar.

Although the state-owned Myanmar Agriculture Development Bank (MADB) is mandated to provide loans for the private sector to establish and develop forest plantations, it does not accept, at present, leased state land or planted trees as collateral for loan application. Therefore, it is imperative that private investors are able to obtain soft loan financing from state-owned banks or overseas development banks routed through local state-owned banks in view that financial returns from the established forest plantations will only be realized when the crop is mature for harvest.

The majority of the forest areas granted for forest plantation establishment is located in remote areas with limited infrastructural development. As such, investors will have to prepare their own basic infrastructures to facilitate the operation of their work which will incur high cost in addition to the cost in establishing and developing the plantations. This has impeded their ability to extensively invest in forest plantation development in the country.

Marketing mechanisms for wood products from plantations by the private sector are still under-developed in Myanmar. The privately produced teak and other plantation hardwoods are now starting to produce poles and posts from thinning. It is pertinent to find markets for these products as well as for logs which will be coming into production soon. Lack of market information and the current lack of market demand for thinning products from forest plantations are affecting efforts to promote the private sector to substantially invest in forest plantation development.

Current investors have also voiced a number of constraints that have impeded increased investment in forest plantation development in Myanmar. These include (i) availability of large contiguous blocks of land within reserve forest, or lack of access to such areas; (ii) land tenure issues, especially the informal occupation of forest land for farming; (iii) complicated procedures to acquire land and to harvest, transport, process and trade timber; (iv) insufficient FD staff with training to promote forest sector investment and promotional materials; (v) lack of enforcement capacity to prevent encroachment and illegal logging in plantation areas; and (vi) widespread availability of illegal timber, which depresses log prices and reduces demand for plantation-grown wood.

6.0 Thailand

6.1 Background

The Kingdom of Thailand shares a common border with Myanmar, the Lao People's Democratic Republic, Cambodia and Malaysia. In the past, the environment and natural resources, including forests, had contributed to the economic growth of the country and in meeting the needs of the majority of the rural population. Increasing environmental awareness and continued strengthening of civil society in the 2000s led to a more stable arena for forest protection, with much reduced deforestation rates recorded and improvements in watershed conservation. Forests in Thailand still have a high potential to contribute to the long-term sustainable development of the country, provide and secure environmental services and will contribute to poverty alleviation in rural areas.

The Royal Forest Department (RFD) was founded in 1896 to consolidate the exploitation of forests. As a result, the ownership and control of all forests were transferred from the feudal chiefs to the government. The RFD, under the purview of the Ministry of Natural Resources and Environment (MNRE), is responsible for managing forest areas outside of protected areas, as well as promoting community forestry and private sector plantations. The management of protected areas in Thailand is under the jurisdiction of the Department of National Parks, Wildlife and Plant Conservation (DNP), while the Department of Marine and Coastal Resources (DMC) is responsible for the management of coastal flora and fauna, including mangrove forests, through conservation and rehabilitation. Both Departments are also under the purview of MNRE.

At the end of 2018, the extent of forest cover in Thailand was estimated to be 16.39 million ha or 31.94% of the country area. Of this total, an estimated 14.84 million ha or 90.5% was natural forests with the balance of 1.55 million ha being forest plantations. All the natural forests were located in the PFE while the forest plantations were located outside the PFE as in **Annex 9**. In terms of ownership, it is evident from **Annex 10** that all the natural forests were publicly owned, while 1.49 million ha or 96.1% of the forest plantations were privately owned with the balance of 63 thousand ha being publicly owned.

6.2 Policies, Legislation and Land Tenure Arrangements

In an attempt to consolidate sectoral policy in the country and to place forestry within the context of overall national development, a National Forest Policy was formulated in 1985. The Policy reduced the forested area target to 40% of the country area (original target was 50%), comprising 15% as protected forests for nature conservation, recreation and environmental quality protection, and 25% as production forests to produce timber and other forest products¹². Prior to this, the forest policy was expressed primarily through pieces of legislation where in the first phase, forests were brought under State ownership and management. The legal status of the permanent forest estate was established either as protected areas or forest reserves. In the latter phase, logging concessions were given to private operators and the state-owned Forest Industry Organization (FIO) which was founded in 1947. All logging concessions were subsequently cancelled when the logging ban was enforced in 1989 where all the natural forests are protected by law from commercial exploitation. FIO is now focusing on managing forest plantations, especially of *Tectona grandis* (teak), *Hevea brasiliensis* (rubber) and *Eucalyptus* species.

Under the National Forest Policy (1985), the public and private sectors would develop and manage forest areas, including reforestation and afforestation to meet the demand in both the domestic and export markets. Community forestry on public land by the private sector and the establishment of forest woodlots for household consumption would be promoted. Incentive systems will be established to promote reforestation by the private sector. The Policy identified the need for partnerships between the public and private sectors. It also urged various government agencies and the private sector to collaborate in forest management and development.

Taking cognizance of the 20-year National Strategy that was approved by the Cabinet on 30 June 2015, the RFD has developed a 20-year Royal Forest Department Strategic Plan covering the period 2017-2036 which defines the vision, mission and seven strategies of the Department.

In brief, the vision is to manage the forest sustainably and ensure its stability. Its mission, among others, is to conserve, preserve, protect and restore forest areas. It also includes enhancing forestry operations and forest land use. The seven strategies are to:

- (i) protect and preserve the remaining forest areas and ensure their sustainability;
- (ii) increase and restore forest areas efficiently taking into account the economic, social and environmental aspects of forests;
- (iii) promote forestry and economic forestry businesses in afforestation and increase urban and rural green areas;

¹² This was reversed by the Seventh National Economic and Social Development Plan (NESDP), 1992-1996, where forest areas for conservation were increased to 25% and 15% were allocated for timber production.

- (iv) resolve conflict of interests among the people on the use of forest land, both systematically and fairly;
- (v) support and promote research in the development of best management practices and the sustainable use of forest resources;
- (vi) further strengthen the integration and promotion of participation from all stakeholders in the forestry sector; and
- (vii) develop organization-management systems, including information systems, to optimize forest land management.

In implementing the Plan, the RFD envisaged to:

- (i) achieve at least 40% of the country's area under forest cover within 20 years;
- (ii) preserve forest area amounting to 8.6 million ha¹³ (53.80 million rai);
- (iii) restore forest and other plantations totalling 2.2 million ha (14.02 million rai); and
- (iv) plant economic tree species amounting to 1.4 million ha (8.68 million rai).

The Government of Thailand has established stringent laws and amended several acts towards the management, protection and conservation of its forest resources, including water and biological diversity, as well as promote the establishment and development of economic forest plantations. Overall, there are more than 20 laws and several Cabinet decisions on forest resource management. Notwithstanding this, the most significant development has been the 1997 and 2007 Thai Constitutions that recognized the rights and roles of the Thai people to participate in formulating national policy and in the management, development and conservation of natural resources. The Constitution clearly notes the rights of civil societies in managing natural resources and the roles of actors.

Currently, there are nine main forestry legislation that underpinned the forestry sector in Thailand, as follows:

- (i) the Forest Act, B.E. 2484 (1941) that addresses logging operations and NWFPs collection, transportation of timber and non-timber products and sawnwood production as well as forest clearing, while the amended Forest Act B.E. 2562 (2019) allows the private sector and public to use restricted tree species that are grown on legally acquired land and to ease the movement of forest products and strengthen industrial promotion;
- (ii) the Wildlife Conservation and Protection Act, B.E. 2535 (1992) that establishes, among others, provisions for national wildlife conservation, the establishment of special territories and the possession and trade in wildlife;
- (iii) the National Park Act, B.E. 2504 (1961) that provides for the determination, protection and maintenance of national parks land, and the establishment of a national parks committee;
- (iv) the National Forest Reserve Act, B.E. 2507 (1964) which was amended in B.E. 2522 (1979) and B.E. 2528 (1985) provides for the determination of national reserved forests and assigns responsibility for their control, management and maintenance to the RFD, while the amended National Forest Reserve Act, B.E. 2522 (1979) increases the penalties for forest offences, and that of the amended National Forest Reserve Act, B.E. 2528 (1985) allows people to use or live in the National Reserved Forests for both short and long term;
- (v) the Forest Plantation Act, B.E. 2535 (1992) which was amended in B.E. 2558 (2015) aims to provide support and encourage private sector investment in forest plantations development, as part of the RFD's goal to expand planted areas in Thailand, as well as addresses reforestation and land registration of private reforestation rights, ownership and exemption from payment of royalty on forest products from reforested areas;
- (vi) the Tambol (sub-district) Council Act and the Tambol (sub-district) Administration Organization (TAO) Act, B.E. 2537 (1994) that aim to strengthen the role of local governments in natural resources use, planning and decision making;
- (vii) The Decentralization Act, B.E. 2541 (1998) that provides guidelines for the election of community representatives to the Tambol Council where natural resource management is one of the major duties of the Tambol Administration Organization;
- (viii) the Forest Community Act, B.E. 2562 (2019) that provides the right for the local community to manage community forests which are located outside protected forest areas or other state areas that are also outside the protected forest areas; and
- (ix) the Chainsaw Act, B.E. 2545 (2002) that regulates the use and the area where the chainsaw having 1 horsepower and above and with chainsaw plates larger than 30.5 cm is permitted to be used, including its movement outside the permitted area.

¹³ 1 ha = 6.25 rai.

In Thailand, all the natural forests regardless of their status as protected areas or National Forest Reserves are owned by the State and controlled and managed by the RFD, DNP or the DMC, whereas all trees established on private lands are private property. In this context, the National Forest Reserves are into classified into three categories, as follows:

- (i) *Conservation Forest (C-Zone)* which consists of areas formerly designated as protected forests and natural forests where human activities are minimal. Nevertheless, some of these areas are still being used for agriculture and shifting cultivation. Different forest management activities are also taking place in this zone, including the establishment of protected areas, such as class 1 watershed areas¹⁴, national parks, wildlife sanctuaries, forest parks, non-hunting areas, biosphere reserves, botanical gardens and arboreta. By law, people are not allowed to live in, cultivate or utilize these gazetted areas. However, a significant number of people have been occupying these areas prior to their gazette and their eviction is widely controversial at both the local and national levels. In this regard, it has been reported that more than one million households still live in national parks, wildlife sanctuaries and national reserved forest land that, by law, are illegal. As a compromise, the government has introduced community forestry in an attempt to motivate those living in or adjacent to such areas to become involved in resource management.
- (ii) *Economic Forest (E-Zone)* is designated for commercial plantation and reserved area for landless farmers. The forest is absent, scarce or in poor condition, with cattle grazing in the open fields. Various stakeholders are looking to this zone to expand production forest, establish community forest, or use it for agriculture or agroforestry.
- (iii) *Agricultural Uses (A-Zone)* is designated as suitable for agriculture and for allocation to landless farmers by the Agricultural Land Reform Office (ALRO). In fact, in 1993, the jurisdiction over some of the smallholder agricultural land located within National Forest Reserves was transferred to ALRO.

More specifically, local villagers have the use rights to collect free of charge dry and dead wood for use as fuelwood and construction timber in National Forest Reserves, but the felling of any living tree species in natural forests or clearing of land for new agriculture is legally prohibited. In plantation forests, felling of reserved tree species, such as teak, for household use or for village development activities may be allowed, but requires a permit from the RFD. In protected areas, the local communities are allowed to collect free of charge some basic forest products, such as dry fuelwood and some NWFPs, for example, mushrooms, rattan, bamboo and bamboo shoots, and medicinal plants, for household consumption and sales, but they have no formal use rights. All decisions related to the use of protected areas are made by the DNP authorities.

Different policies have also been developed to address the situation of smallholder farmers and villagers living within National Forest Reserves. First, in 1975 a Cabinet decision was taken to provide recognition to farmer's agricultural holdings made previous to that year. Secondly, a 'Forest Village' program was also launched in 1975 to enlist farmers living in National Forest Reserves into planned settlements as a way of limiting forest clearance and to be involved in reforestation programs in exchange for use rights to 2.4 ha or 15 rai of agricultural land. Thirdly, in 1982, a Cultivation Rights Project was implemented (*khrongkan sithi thamkin* - the STK project) that provided partial legal use rights (through STK certificates) to farmers cultivating up to 2.4 ha in National Forest Reserves.

According to the Cabinet Resolution 2018 issued on 11 January 2000, forest-dependent people who are granted permission to live in class 1 and class 2¹⁵ watershed areas as defined by the National Land Policy Committee before 30 June 1998 will have to plant forest trees of at least 20% of any occupied land. This could save the government the cost for undertaking forest rehabilitation (reforestation) which usually amounts to THB 24,375/ha (US\$ 761.72)¹⁶ or THB 3,900/rai (US\$ 121.88). The government will provide free seedlings to the forest-dependent people for meeting their obligation to reforest their occupied land. Based on the forest survey, there are about 336,000 ha (2.1 million rai) that could be reforested using this approach.

Regarding the poor forest-dependent people who live in watershed areas after 30 June 1998 but before 2014, they could enter into an agreement with the government to allow them to stay in the forest reserves, but they will have to plant at least 200 forest trees for every 0.16 ha land they occupied.

¹⁴ Area that is specifically reserved as a watershed because it may have an adverse effect on the environment from changes in land use, including area where the forest conditions have been destroyed, modified or changed for development or other forms of land use before 1982.

¹⁵ Area suitable for watershed at a secondary level from class 1 watershed. The area can be used for other important benefits such as for forestry and mining activities, but with strict land use practices and its use for agricultural activities is absolutely not permitted.

¹⁶ Exchange rate: THB 32 (Baht) = US\$ 1.00.

They can decide the tree species they choose to plant on the occupied land, such as teak, *Pterocarpus macrocarpus*, *Hopea odorata*, *Azadirachta excelsa* and *Aquilaria malaccensis*, and the government will provide them with the free seedlings. They can harvest the planted trees and NWFPs, such as leaves and fruits as food or medicinal products, from the tree-planted areas in their occupied land. The rest of the occupied land could be planted with any agricultural plants or crops of their choice.

In addition, a local community of more than 50 people has the right to submit a request to establish a community forest in forest areas that are outside conservation areas to the governor under the Community Forest Act (2019). The request must have explicit objectives regarding forest resource conservation, environmental protection and biological diversity conservation; restoration of forest areas in the community forest areas by reforestation; enhancing cooperation from all sectors in the management of the community forest; and a balanced and sustainable use of the natural resources in the community forest. It should include a list of the members of the community forest management committee, a map of the area, and a community forest management plan.

The request is then processed by the Local Forest Resources Management Office assigned by the Director-General of the RFD, including soliciting views from government agencies, state enterprises and the public, with regard to its establishment. The outcome is submitted to the provincial community committee for its consideration and approval, as well as to propose to the Director-General of the RFD for the requested community forest to be gazetted.

In this context, the Director-General of RFD has the power to order the revocation of the established community forest in whole or in part through the publication in the Government Gazette based on (i) upon the request of the community forest management committee; (ii) if the community forest management committee neglects to not manage the restoration of the community forest; (iii) the community forest management committee does not comply with the rules or regulations as stipulated in the Community Forest Act (2019); and (iv) when the area is needed for national security interest and with the approval of the Council of Ministers.

Under the Community Forest Act (2019), the community forest management committee and members of the community forest have the right to use the community forest to (i) promote education and raise awareness about conservation and restoration of natural resources and the environment in the community forest; (ii) enhance recreational activities and tourism; (iii) search for forest products; (iv) use wood from designated use zones by members of households of the community forest or by the community for developing common facilities within the community; and (v) utilize natural resources and biological diversity in the community forest for consumption by households and members of the community forest.

However, the Act prohibits any person involved in the community forest to (i) possess or use the place or land for cultivation; (ii) construct, clear and burn forests; (iii) dig for minerals; (iv) hunt protected wildlife; and (v) carry out activities which are detrimental to the condition of the community forest; except when it is an act carried out by a competent official for the purpose of maintenance and prevention or reducing damage to the community forest or an act carried out by the community forest management committee.

Under the Forest Act (2019), anyone transporting wood must pay fees as stipulated by the Minister of MNRE, except for wood transported for personal use within the area of the province where the wood was processed or if the wood is sourced from trees planted on land that has been licensed by the relevant government agencies. Nevertheless, a transport permit issued by the RFD is required for any movement of timber or forest products for the purpose of trade. In addition, a certificate of origin is also required for trade in the domestic market and for export of logs, wood products and wood charcoal to the international market where the certificate is issued by the RFD.

In this regard, based on the RFD's regulations, the transport permit fee for teak is fixed at THB 50 (US\$ 1.56), while wood from the other species is fixed at THB 20 (US\$ 0.62), and for forest products, it is fixed at THB 10 (US\$ 0.31). In addition, the registration fee for the wooden stamp that is used to mark and trace the origin of the log to its stump is fixed at THB 20 (US\$ 0.62).

The fee imposed by the RFD for issuing the certificate of origin for logs, wood products, and charcoal for trade in the domestic market or export to overseas market is based primarily on a combination of volume, weight and maximum round-trip distance. It ranges from THB 35,200 (US\$ 1,100.00) for product volume greater than 80 m³ and weighs more than 60,000 kg and with a maximum round-trip distance of 500 km to THB 1,400 (US\$ 43.75) for product volume of less than 27 m³ and weighs less than 20,000 kg and with a maximum round-trip distance of less than 200 km.

Before commercial logging in reserved forest areas could commence, a person needs to obtain permission from the RFD for its approval which costs THB 20 (US\$ 0.62). Upon its approval, a permit granted by the RFD is required to extract logs from reserved forest areas where the fee is fixed at THB 15,000 (US\$ 468.75) for teak wood and THB 7,500 (US\$ 234.38) for wood from the other tree species. In this regard, no fee will be charged for the permit to extract logs from trees planted on privately owned land.

Based on market prices, an export tax of 40% is imposed for the export of logs and sawn timber to the international market, except for those belonging to *Casuarina junhuniiana*, *C. equisetifolia*, *Dendrocalamus asper*, *Bambusa multiplex*, *B. blumeana*, *Anacardium occidentale*, *Acacia auriculiformis*, *Leucaena leucocephala*, *Azadirachta excels*, *Pinus caribaea*, *P. ocarpa* and *Eucalyptus* species, while that for veneer is fixed at 10%.

6.3 National Forest Management Practices

Historically, from the mid-1890s to the early 1930s, commercial logging was undertaken to meet the domestic and export demand for teak, especially the teak forests of the North. From the 1930s to the early 1960s, logging became an important economic sector generating foreign exchange and providing capital for national development and revenue to the government, as well as making land available for agriculture. The RFD attempted to bring forest exploitation under management by enacting forest laws, staff training and enforcement efforts. From the 1960s to the mid-1980s, logging peaked, export-oriented agriculture expanded and national economic development gained momentum. But, as a result of ineffective control and excessive logging, often illegal, the forest areas continued to decline at an alarming rate. Desperate measures were introduced to rationalize sustainable forest management but were not successful. This led to a logging ban of the natural forests from 1989 onwards as a result of widespread awareness of the adverse effects of excessive forest exploitation on the well-being of the nation.

In this regard, before the logging ban in 1989, the annual timber production was about 2 million m³, sufficient for national consumption and export. However, as a result of rapid economic development in the 1990s, the supply of hardwood and other industrial wood products, such as sawn timber, plywood, veneer sheets, wood panels and particleboard, could not meet domestic demand. By 2009, Thai traders imported 4 million m³ of logs and sawn timber from more than 50 countries to satisfy domestic demand, mainly from the Republic of Congo, Malaysia and Papua New Guinea, although some timber is available from forests that are cleared for infrastructural development, confiscated illegal logs, and from forest plantations, including old rubber plantations due to replanting.

There are no management plans for the National Reserved Forest areas. The annual operational plan of the reserved forests covers activities such as protection, reforestation, nursery activity and land allocation. There are no provisions for silvicultural treatments and aided natural regeneration. The emphasis in forest management is on patrol, recreation and other services. In fact, Thailand has never had a long-term silvicultural-management system as compared to its neighbouring countries with similar forest types, such as in Myanmar. There are no records of national-level forest inventory and during the logging peak period, inventories were regional or local in scale and they only contain data on teak.

Nevertheless, three forest restoration approaches were adopted in Thailand to reforest forest area, especially in the area which will take a very long time for the forest to regenerate by itself. These approaches will require the area to be easily accessible as newly planted seedlings would need constant monitoring, including the use of fertilizers, watering, eradication of weeds and wildfire protection. The approaches are, as follows:

- (i) reforestation with additional tree planting in the area where natural regeneration exists, but does not cover the area evenly or in the area where the preferred species of natural regeneration are inadequate or even not present at all;
- (ii) reforestation through natural regeneration in the area where there is adequate natural regeneration, but does not grow well due to, among others, an abundance of weeds and annual wildfire, and thus requires intervention including wildfire prevention and weeds eradication; and
- (iii) natural rehabilitation where trees and plants are left to grow naturally, especially along cliffs.

Although the current National Forestry Policy states that efficiency in timber production should be increased through appropriate forest management techniques using both selection and clear-felling systems, with the logging ban in force, this provision has become irrelevant. Silvicultural treatments, such as thinning, are not allowed because of the logging ban and only the production of NWFPs is allowed which is mainly being carried out by local people in addition of being employed by the RFD to carry out forest rehabilitation and reforestation work when funds are available.

Notwithstanding the above, as early as the 1970s, the RFD has recognized community-based forest management involving local villagers as a strategy for sustainable management of the nation's forest resources. The RFD provincial and district offices assist local communities to demarcate community forest areas and prepare operational plans. The RFD also provides free planting materials, such as seeds and seedlings (mainly eucalyptus), to the villagers, as well as impart basic forestry skills in nursery establishment, planting and maintenance, including enrichment planting and fire protection. Currently, with the promulgation of the Community Forest Act in 2019, the local community is given the right to manage its forest and this has strengthened and incentivized the local community to

conserve and utilize the community forest sustainably. In addition, field implementation of community forestry in Thailand has also been strengthened and the community forest is better managed through the five-year community forest management plan which is reviewed and updated regularly. Currently, the overall management approach is directed towards the expansion of the forest resource base by developing forest plantations to supplement wood supplies from natural forests, expansion of designated protected areas, and the development of community forestry.

6.4 *Forest Plantation Establishment and Development*

The establishment and development of forest plantations in Thailand is undertaken by government agencies such as the RFD and FIO, corporate companies on purchased or leased land, medium-scale landowners and smallholder farmers. Businesses also support tree planting through their corporate social responsibility programs. In fact, teak planting in Thailand started in 1906 by applying the taungya system with modifications to suit the surrounding areas, both economically and socially, where small areas were planted annually until 1960.

However, since the 1980s, Thailand has embarked in developing commercial forest plantations that now produce large quantities of timber for both the domestic and export markets. It has been reported that teak trees grown in plantations on good soils may reach an average of 60 cm dbh and 30 m in height in about 50 years. Typically, 1,200 to 1,600 stems per hectare are planted and canopy closure takes place between the third and fourth year of planting and this suppresses the development of weeds. Pruning is carried out near the time of canopy closure. This will also reduce the chance of ground fires reaching the crowns and facilitate access to the stand. The first thinning generally takes place when the dominant height reaches about 9 m or 10 m and the second when the dominant height reaches 17 m to 18 m. The final felling is at year 50 with a stand of about 62 trees/ha or 10 trees/rai.

In response to the deteriorated wood supply situation, the Ministry of Agriculture and Cooperatives, upon the initiative of the RFD, launched the Private Tree Farm Incentive Plantation Promotion that was implemented from 1994 to 2002 (except 2001) with a planting target of 1.28 million ha. The program encouraged the private sector and farmers to plant specified economic tree species on their lands at 1,250 seedlings/ha. The purpose was to make use of all unutilized marginal farmland and areas for environmental benefit, and to reduce rural poverty, as well as to meet the increasing demand for wood by the wood-based industries. Planting was subsidized by the government at THB 15,008/ha (US\$ 469.00) and the farmers were free to manage the standing stock and harvest the timber at the beginning of year six of planting when the contract ends.

An estimated 80,126 farmers joined the program and a total of 169,400 ha or 1,058,750 rai was planted which represents 13.2% of the target. The program is still ongoing even though it was officially planned to end in 2002.

During 1994-1996, a national reforestation program was also launched with a planting target of 800,000 ha. It involved the planting in degraded forest areas, parks, recreation areas, dams, reservoirs, roadsides, riverbanks, premises of schools, government offices and religious places.

Corporate companies such as Double A (1991) Public Company Limited and the Siam Cement Group (SCG) (Thailand) Company Limited have also engaged farmers to plant eucalypts where they sell their wood chips during thinning at year four of planting to the companies at THB 100,000/ha (US\$ 3,125.00) or THB 16,000/rai (US\$ 500.00). These companies use wood chips as fibre for paper production. Other companies such as the Charoen Pokphand (CP) Group, Thailand, has planted 32,000 ha or 200,000 rai of forest trees on their own land, while the Thai petroleum company, PTT Public Company Limited, has planted an estimated 160,000 ha or 1,000,000 rai on degraded forest lands as well as on their own land. Both companies expect to receive carbon credit payment on their investments.

In conjunction with a seminar held in Thailand on 7 June 2018, a campaign was launched to further encourage and motivate stakeholders to plant 3,000 million trees in five years or at a rate of 600 million trees a year. At present, the campaign is still ongoing. This low-cost investment would also help to mitigate climate change.

The main impediment to forest plantation development in Thailand has been the poor and often indebted farmers who often need quick financial returns than what timber tree species could offer. As such, they are more interested in planting agricultural crops or short-rotation tree species. For slower-growing timber species, only the medium to larger-scale farmers who have the financial capability to wait for returns will be able to undertake the planting of these species because of their long gestation periods, for example, 50 years for teak.

Both the private and public sectors (e.g., the RFD and FIO) have been involved in forest plantation promotional schemes. Although teak is the highest-demand timber species, especially for the furniture and boat industries, its long gestation period has dampened the extent of the area planted. In this regard, the RFD has assisted the private sector to establish teak plantations of about 100,000 ha from 1994 to 2000. Planting spacing adopted are typically at 2×4 m or 4×4 m whereas the mean annual increment (MAI) is reported to reach 13.52 m³/ha.

The three primary industrial species planted are rubber, *Eucalyptus camaldulensis* and teak, with smaller plantations of *Acacia* species, *Albizia lebbek*, *Leucaena leucocephala*, *Gmelina arborea* and pine species such as *Pinus merkusii*. Other broadleaved species, such as *Pterocarpus macrocarpus*, *Dipterocarpus* species, *Swietenia macrophylla* and *Hopea odorata*, are also planted on a small scale.

6.5 *Incentives and Disincentives for Sustainable Natural Forest Management* *Incentives*

There are only a few fiscal incentives provided in Thailand for managing the natural forests sustainably. In this regard, local villagers living in National Forest Reserves have the use rights to collect free of charge dry and dead wood for use as fuelwood and construction timber. In the case of protected areas, the local communities are allowed to collect free of charge dry fuelwood and some NWFPs, such as mushrooms, rattan, bamboo and bamboo shoots, and medicinal plants, for household consumption and for sales.

According to the collaboration between the RFD and the Revenue Department, a private company could waive tax of 10% of its profit if the company provides support to the forest community on forest conservation of up to THB 100,000 per year (US\$ 3,125.00). In this regard, there are about 11,700 registered forest communities in Thailand, and any forest communities that were established before 25 November 2019 were automatically registered. However, their registration needs to be extended once every 10 years. A private company could also waive tax of up to 2% of its profit if the company supports forest community projects to mitigate climate change.

To enable the poor forest-dependent people who are permitted to live in reserved forest areas to reforest their occupied land, the government through the RFD has been providing free seedlings for them to meet their obligation to reforest their occupied land. Based on a forest survey, it was estimated that 336,000 ha or 2.1 million rai could be reforested through this approach.

The amended National Forest Reserve Act, B.E. 2507 (1964) in 1985 has enabled people, especially the poor forest-dependent people, to use or live in the National Forest Reserves for both short and long term. The Cabinet Resolution 2018 has also enabled forest-dependent people to legally live in class 1 and class 2 watershed areas as defined by the National Land Policy Committee, while the Forest Community Act, 2562 (2019) has enabled community forest management committees and community forest members to have the right to search for forest products and utilize the natural resources and biological diversity for households' consumption.

Disincentives

The logging ban enforced since 1989 has impeded the attainment of sustainable management of natural forests in Thailand. This is in view that timber harvesting from natural forests for domestic and international trade is not allowed which would have provided the resources required to further enhance sustainable forest management. The logging ban has also impeded the application of silvicultural treatments of logged-over forests, such as canopy opening to provide sunlight for the many seedlings under the big mature trees in moist evergreen or pine forests, including new seedlings, to grow as natural regeneration.

The National Park Act, B.E. 2504 (1961) does not allow the harvesting of NWFPs in protected areas for commercial use which would have provided additional income to the poor forest-dependent people permitted to live there to improve their livelihoods. It also disallows the RFD to collect seeds from protected areas to produce the seedlings for free distribution to forest communities to undertake reforestation, unless the RFD has a memorandum of understanding with the DNP.

Private companies could not receive carbon credit from the trees that they have planted in degraded areas of some national parks under the various reforestation programs launched by the government, including on their own land. This is in view that currently there are no laws and regulations on carbon credit and benefit-sharing mechanisms in Thailand which could emanate from REDD+¹⁷ activities, especially in the enhancement of forest carbon stocks.

Even though there are many studies conducted in Thailand which show that there are a number of ecosystem services provided by natural forests to the environment, social and economic development of the country, there is no mechanism and/or legal framework to implement and incentivize the payment for ecosystem services (PES) from natural forests.

6.6 *Incentives and Disincentives for Forest Plantation Establishment and Development* *Incentives*

In terms of fiscal incentive, any person extracting logs from trees planted on privately owned land is not required to pay for a transport permit issued by the RFD under its forest rules. In addition, any person transporting wood for personal use within the area of the province where the wood was

¹⁷ Reducing emissions from deforestation and forest degradation, conservation of existing forest carbon stocks, sustainable forest management and enhancement of forest carbon stocks.

processed or if the wood is sourced from trees planted on land that has been licensed by the relevant government agencies is also exempted from paying any fee to the authorities.

Action is currently being taken to amend relevant laws and regulations to allow private sector companies which are only allowed to trade in non-teak logs to be able to export teak logs to the international market, which is presently the exclusive right of FIO. This is envisaged to be completed by the end of 2020.

Action is also currently being taken to review and to abolish the 40% export tax for logs and sawn timber which is also envisaged to be resolved at the end of 2020. This would further motivate the private sector to plant forest trees and further develop the wood-based industries to produce more value-added forest products for export to overseas market.

There are a number of non-fiscal incentives provided in Thailand to encourage and support forest plantation establishment and development. The incentives include subsidies for tree planting, free planting materials and soft loans provided by the cooperative bank.

In the past and until today, the RFD has been providing subsidy for the local community to plant forest trees. Each farmer who is registered with the RFD would be provided THB 18,750/ha (US\$ 585.94) or THB 3,000/rai for establishing fast-growing tree plantation within three years and THB 31,250/ha (US\$ 976.56) or THB 5,000/rai for slow-growing tree species within five years for areas ranging from 0.1-8 ha (1-50 rai). The registration of individual farmer and household with the RFD could be done online.

The FIO has provided incentives to poor local communities to plant trees on FIO's land where they are also allowed to plant agricultural crops for additional income. In this regard, the total amount provided by FIO to the local community to carry out (i) seedlings planting, (ii) weeding and fire prevention, (iii) tree thinning, and (iv) silvicultural management for teak plantation is estimated to be THB 84,194/ha (US\$ 2,631.01), while that for the establishment of *Eucalyptus* plantation amounts to THB 40,700/ha (US\$ 1,271.88).

The Renewable Energy Department under the Ministry of Commerce has been promoting private biofuel plants to motivate farmers to plant trees and sell wood chips as biofuel for their plants where a farmer could receive THB 1,000 (US\$ 31.25) for a metric ton of wood chips from the biofuel company. In this regard, fast-growing trees such as *Eucalyptus*, *Acacia auriculiformis* and *A. mangium* could be used as 12,000 metric tons of raw wood chips would be able to produce one megawatt of electricity.

The RFD, through its established nurseries in the provinces and regions throughout the country, provides an estimated 6 million free seedlings each year to local and poor people to plant trees in their own land or on degraded forest land in forest reserves and protected areas that are legally occupied by them. There is a plan to double the number of seedlings of up to 12 million seedlings by next year. The species provided include *Dipterocarpus alatus*, *Dalbergia cochinchinensis* (Siamese rosewood), *Azelia xylocarpa*, *Xylia xylocarpa*, *T. grandis*, *P. macrocarpus*, *H. odorata*, *Sindora siamensis* and *Shorea roxburghii*.

The Bank for Agriculture and Agricultural Cooperatives (BAAC), a state enterprise established under the Bank of Agriculture and Agricultural Cooperatives Act, provides low-interest rate loans to farmers, farmer groups and agricultural cooperatives through its Tree Bank Project.

The first type of loan which started in early 2009 and had just ended on 31 March 2020 used trees and land as collateral for the loan. The maximum loan amount was THB 125,000 (US\$ 3,906.25) per applicant subject to the valuation of the land which did not exceed 50% of the land value while that for trees did not exceed 25% of the value of the trees.

The second type of loan which started on 1 April 2020 and is still ongoing uses only trees as collateral for the loan where the evaluated trees must be registered with the Department of Business Development under the Ministry of Commerce. The maximum loan amount is THB 125,000 (US\$ 3,906.25) per applicant subject to the valuation of the trees which should not exceed 50% of the value of the trees, similar to the first type of loan.

In this regard, the annual interest rate charged for the loan is 10% for the first year and for the second year it is charged at 9.25%, while for the third year the interest rate charged is at 8.50%, subject to the discretion of the bank and the repayment history of the borrower. When the loan enters the 4-5 years, the interest rates charged is between 6% and 7%. The payback period for the loan is between 15-20 years from the date of the loan. The grace period that the bank could give would not be more than 18 months to 1 year and 6 months, subject to, among others, the creditworthiness of the borrower. These loan conditions were also applicable to the first type of loan which had just ended on 31 March 2020.

The trees used as collateral for the bank loan must be those planted on own land or approved community land, and the trees must be the property of the loan applicant. The assessed tree must be older than 1 year and have a height of 130 cm and a girth of not less than 3 cm. The benchmark used for tree valuation is classified according to four groups of trees according to their rates of growth and the expected values of the wood, as follows:

- (i) Group 1: Trees with fast growth rates, short rotation and the wood is low in value, such as *Acacia* species and *Azadirachta* species. At the age of 1 year, on average, the tree will have a girth of 15.40 cm at a height of 130 cm with an estimated value of THB 6/tree (US\$ 0.19), and after 25 years, the average girth will increase to 139.54 cm with an expected value of THB 6,877/tree (US\$ 214.91).
- (ii) Group 2: Trees with medium growth rates, long rotation and the wood is quite high in value, such as *Pterocarpus macrocarpa*, *D. alatus* and *H. odorata*. At the age of 3 years, on average, the tree will have a girth of 3.14 cm at a height of about 130 cm with a value of THB 1/tree (US\$ 0.03), and after 25 years, the girth is expected to increase to 115.66 cm and with a value of THB 4,212/tree (US\$ 131.63). If the tree is allowed to grow to 50 years, the value will increase to THB 8,787/tree (US\$ 274.59).
- (iii) Group 3: Trees with medium growth rates, long rotation and the wood is of high value, such as *T. grandis*. At the age of 1 year, on average, the tree will have a girth of 8.80 cm at a height of 130 cm with a value of THB 17/tree (US\$ 0.53), and after 25 years, the girth is expected to increase to 97.11 cm and with a value of THB 5,838/tree (US\$ 182.44). If the tree is allowed to grow to 50 years, the value will increase to THB 37,360/tree (US\$ 1,167.50).
- (iv) Group 4: Trees with slow growth rates, long rotation and the wood is very high in value, such as *D. cochinchinensis* and *A. xylocarpa*. At the age of 3 years, on average, the tree will have a girth of 3.08 cm at a height of 130 cm with a value of THB 0.3/tree (US\$ 0.01), and after 25 years, the girth is expected to increase to 71.97 cm and with a value of THB 7,766/tree (US\$ 242.69), while at the age of 50 years, the value of the tree is expected to increase to THB 23,000/tree (US\$ 718.75).

Currently, there are 6,804 communities with 115,217 members participating in the Tree Bank Project of the BAAC. They have planted an estimated 11.7 million trees.

The BAAC also provides loans through its Green Credit Project to farmers, farmer groups, community enterprises, organizations and agricultural cooperatives. The project started on 1 January 2018 and is expected to end on 31 March 2021. Based on the feasibility study of the project and the expected returns, the maximum loan that can be given to a borrower would not be more than 80% of the project cost and not more than 50% of the collateral value, such as land, guarantors, etc..

Under the Green Credit Project, the current annual interest rate charged to farmers or individuals is at 6% or at MRR¹⁸-1, while that for entrepreneurs, community enterprises, organizations, farmer groups and agricultural cooperatives it is at 4.5% or at MLR¹⁹-0.5. The payback period should not exceed 15 years from the date of the loan. The grace period that the bank could give would not be more than 1 year, subject to, among others, the capability of the borrower to repay the loan.

In addition to the Tree Bank Project and the Green Credit Project, the BAAC also provides loans to farmers who are in debt and wish to have a career change through its Reforestation to Generate Income Loans scheme. In this regard, the criteria used to assess the loan applicant are whether (i) the farmer is in debt and wishes to change its career; (ii) the applicant is a professional; and (iii) the area is located in the upstream forest area of the 11 provinces. The provinces are Chiang Mai, Chiang Rai, Nan, Phayao, Phrae, Mae Hong Son, Lamphun, Lampang, Phetchabun, Phitsanulok and Loei. The scheme started in early 2019 and is expected to end on 31 July 2021.

Under the Reforestation to Generate Income Loans scheme, the maximum loan that can be given to an applicant should not exceed THB 100,000 (US\$ 3,125.00). The annual interest rate charged is at 3.875% or at MRR-3 for the first 3 years, while the interest rate charged for year 4 to 6 is at 4.875% or at MRR-2, and for year 7 to 9, the interest rate charged is at 5.875% or to MRR-1. From year 10 and onwards, the annual interest rate charged is at MRR or 6.875%. The repayment of the loan is by instalments based on the capability of the borrower to service the loan but should not be more than 15 years. In this regard, the repayment of the principal of the loan could be waived for the first 5 years and the borrower only needs to pay the interest on the loan.

In view of the current Covid-19 pandemic, BAAC has reduced the annual interest rate charged on loans given to farmers and individuals from 6.625% to 6.50%. In this context, during the Covid-19 pandemic the government has also provided financial relief of THB 15,000 (US\$ 468.87) to registered farmers involved in developing economic forest plantations or planting trees covering areas of 1 rai or 0.16 ha and with 15 trees or more.

It has also been reported that the BAAC has been developing the methodology, procedures, and the legal framework to issue reforestation and afforestation bonds later in 2020 once the current Covid-19 pandemic in Thailand stabilizes and economic activities return to normal. This would provide further economic instruments for financing the establishment and development of forest plantations in Thailand.

¹⁸ MRR (Minimum Retail Rate) refers to the minimum interest rate that the bank charges on loan given to its retail customers.

¹⁹ MLR (Minimum Loan Rate) refers to the minimum interest rate that the bank charges on loan given to its premier customers.

The amended Article 7 of the Forest Act, B.E. 2484 (1941) in 2019 has enabled the private sector and local communities to plant highly-economic-forest tree species, such as *T. grandis*, *X. xylocarpa*, *A. xylocarpa*, *Chukrasia velutina*, *Toona ciliata*, *Shorea obtusa*, *Shorea siamensis*, *D. alatus*, *D. cochinchinensis* and *Dalbergia oliveri*, on their own land and could harvest the trees without having to apply and obtain approval from the RFD as was required in the past. This is based on the decision of the National Land Policy Committee and the RFD. In addition, since 2015, the private sector, local communities and farmers who are approved to cultivate on reserved forest areas are not required to pay the annual land rent of THB 94/ha (US\$ 2.94) or THB 15 per rai (US\$ 0.47) which they used to pay before 2015, although they will still need to pay royalties on the use of forest products. This will motivate the private sector, local communities and farmers to plant forest trees on their own land. It has also the potential to reverse the establishment of rubber plantations to teak plantations as there is a high demand of the latter.

Disincentives

The need to get approval from the RFD to harvest tree even though the trees were planted on private land has deterred the private sector and local communities to plant highly-economic-forest tree species on their own land, resulting in many teak plantations being replaced with rubber plantations. This is in view that it took over 23 years for the Forest Plantation Cooperatives to have the government agreed to amend Article 7 of the Forest Act, B.E. 2484 (1941) that allows the private sector and local communities to harvest trees planted on their own land without the need to obtain approval from the RFD.

With the amendment to Article 7 of the Forest Act, B.E. 2484 (1941), there is now also a high demand for good quality forest tree seedlings by the private sector and communities who are eager to plant highly-economic tree species which could not be fully met.

Currently, only FIO is allowed to export teak logs and teak wood products, as well as other wood species to the international market, while companies in the private sector could only export teak wood products and other non-teak wood products but not teak logs. This has deterred them to embark on large-scale planting of the highly-priced teak.

The current 40% export tax imposed on logs and sawn timber exported to the international market that FIO and the private sector have to pay to the Ministry of industry is seen as a barrier to encourage them to plant teak and other tree species for the export market.

7.0 Vietnam

7.1 Background

The Government of Vietnam considers forests as an important renewal resource, valuable for the socio-economic development and well-being of communities throughout the country. Currently, the forests in Vietnam contribute up to 20% to 40% of yearly household income of about 25 million Vietnamese and directly provide livelihood resource to around 10 million people.

In this regard, following the establishment of the Democratic Republic of Vietnam in 1945, the Ministry of Agriculture was established and 10 years later in February 1955, the Ministry became the Ministry of Agriculture and Forestry, including the Department of Forestry. By July 1976, the Ministry of Forestry was established and in November 1995, three ministries, namely, the Ministry of Agriculture and Food Industries, the Ministry of Forestry, and the Ministry of Hydrology were merged under the Ministry of Agriculture and Rural Development (MARD). In 2007, the Ministry of Fisheries was merged with MARD which is responsible to the government, among others, for nation-wide forest management, protection and development.

The government regulates organizational structure, tasks and authorities of professional forestry agencies from the central to the district level and forestry officers working in communes and towns. Under MARD, the Vietnam Administration of Forestry (VNFOREST) is responsible for managing the natural forest resources and forest products, as well as in implementing the law to protect forests. It also has the authority to establish, manage, develop and exploit products from forest plantations.

Over the last two decades, the government in general and the forestry sector, in particular, has focused on sustainable forest management. In 1991, the then Ministry of Forestry launched four development strategies to reform the forestry sector, namely:

- (i) realign forestry from focusing on the harvest of forest resources to forest resource establishment and sustainable development;
- (ii) restructure forestry from state and public management to multi-sector economic management involving households, individuals, communities, the private sector and others;
- (iii) refocus the forestry sector from timber harvest in natural forests and wood plantations to an economic sector with a variety of products developed and enhance exports; and

- (iv) develop from investment in extensive plantations with limited application of science and technology to intensive plantations with greater scientific and technical application.

To support the development of the forestry sector in Vietnam, the Forest Science Institute of Vietnam, the main forestry research institute, was established in 1961 with departments specializing in forest resources and vegetation, silviculture, forestry economics, forest restoration, forest protection and forest product processing. In 1964, the National University of Forestry in Xuân Mai that specializes in forestry education was also established. There are other similar establishments including the University of Agriculture and Forestry in Thu Duc, the Highland University, the University of Agriculture and Forestry in Thai Nguyen, and the University for Agriculture and Forestry in Hue. There are also centres for the study of seeds, biotechnology, ecology, special forest products and the forest environment, as well as centres for the study and transfer of forest technologies and application of silviculture.

At the end of 2018, the extent of forest cover in Vietnam was estimated to be 14.49 million ha or 43.74% of the country area. Of this total, an estimated 10.25 million ha or 70.7% was natural forests with the balance of 4.24 million ha being forest plantations. Of the natural forests, a total of 4.25 million ha or 41.5 % was production forests, while 3.49 million ha or 82.3% of the forest plantations were production forests. An estimated 11 million ha or 75.9% of the total forest areas was located in the PFE with the balance of 3.50 million ha located outside the PFE as in **Annex 11**. In terms of ownership, it is evident from **Annex 12** that of the total forest areas, 12.01 million ha or 82.9% were public forests with 2.48 million ha being privately owned. Of the publicly owned forests, a total of 7.12 million ha or 59.3% was located in the PFE with the balance of 4.89 million ha located outside the PFE.

7.2 Policies, Legislation and Land Tenure Arrangements

In pursuit of State decisions and instructions, the forestry sector has promulgated various policies and regulations that provide guidance on sustainable forest management, including the 2006-2020 Vietnam Forestry Development Strategy (VFDS) which focuses on sustainable forest management and development. The most pertinent forest and forestry objectives in the Strategy to 2020 are to:

- (i) establish, manage, protect, develop and use 16.24 million ha of land planned for forestry to increase the forested cover to 42-43% by 2010 and 47% by 2020;
- (ii) manage, protect, develop and sustainably use 8.4 million ha of production forest comprising 4.15 million ha of plantation forest, 3.63 million ha of natural production forest and 0.62 million ha of rehabilitating natural forest for agroforestry;
- (iii) afforest 1 million ha by 2010 and 1.5 million ha from 2010-2020, as well as to conduct reforestation after harvest of 0.3 million ha per year, and plant 200 million scattered trees per year; and
- (iv) certify at least 30% of production forest areas as being sustainably managed by 2020.

The Forestry Development Strategy has also included a number of programs to be implemented to 2020, including the sustainable forest management and development program which aims to:

- (i) allocate or lease all forests and forest land to forest owners by 2020;
- (ii) improve the quality of 0.5 million ha of poor natural forests by enrichment and planting 200 million scattered trees annually to meet fuelwood demand in rural areas;
- (iii) establish 1 million ha of plantation forest by 2010, including 0.75 million ha of production forests and 0.25 million ha of protection forests; and
- (iv) supply 3.7 million m³ of large diameter timber to the wood processing industry from forest plantation forests by 2010 and increase it to 10 million m³ by 2020.

Since 1992, the government has promulgated policies to encourage investment and development of forests. Accordingly, forest owners may borrow capital with preferential interest rates if they include NWFPs management. In addition, the government has tax reduction policies related to activities such as forest plantation establishment and tree planting on bare land and denuded hills.

A number of legal documents addressing, among others, sustainable forest management and protection have been issued, as follows:

- (i) the Forest Protection and Development Law in 1991 (amended in 2004 and 2016);
- (ii) the Land Law in 1993 (amended in 1998, 2003 and 2013);
- (iii) the Water Resource Law in 1998;
- (iv) the Environmental Protection Law in 2005 (amended in 2014);
- (v) the Biodiversity Law in 2008; and
- (vi) the Forestry Law in 2017.

According to the Forestry Law (2017) and Circular No. 33/2018/TT-BNNPTNT dealing with forest survey and monitoring, forests and forest land in Vietnam are categorized by function, origin, geographical condition, tree species, timber reserve, and forest land without forests planned for forestry.

In terms of forest functions, the forests are classified into three types, namely:

- (i) *Protection Forests* which are mainly used to protect water streams and soils, prevent soil erosion and mitigate natural disasters, combat desertification, regulate climate and protect the environment;
- (ii) *Special-use Forests* which are mainly used for nature preservation, protect historical and cultural relics and places of scenic beauty, tourism, and to some extent the environment, as well as to conserve forest biological diversity; and
- (iii) *Production Forests* which are mainly used to produce, supply and trade in timber and NWFPs and protect the environment.

By the origin, the forests are classified into (i) *natural forests* which exist in nature or are restored through natural regeneration, including primary and secondary forests; and (ii) *forest plantations* that include, forest plantations on land without forests, forest plantations on land after exploitation of existing forest plantations, and forests naturally regenerated after exploitation of forest plantations.

In terms of geographical conditions, the forests are classified into (i) *soil mountain forests* that grow on soils in hills and mountains; (ii) *rocky mountain forests* that grow on rocky mountains or rocky areas with or without a sparse soil surface; (iii) *floodplain forests* that grow on regularly or periodically flooded areas; and (iv) *dune forests* that grow on sand dunes or sandbanks.

The forests in Vietnam are also classified by species, namely, (i) *timber forests* which comprise mainly timber trees; (ii) *bamboo forests* that consist of bamboos; (iii) *palm forests* where the major component are palms from many families; and (iv) *mixed forests* which comprise timber trees and bamboos.

In terms of timber reserves, the forests are classified into five types, namely, (i) *rich forests* with a growing stock of 200 m³/ha; (ii) *average forests* with a growing stock of between 100 to 200 m³/ha; (iii) *poor forests* with a growing stock of between 50 to 100 m³/ha; (iv) *extremely poor forests* with a growing stock of between 10 to 50 m³/ha; and (v) *non-stock forests* with a growing stock of less than 10 m³/ha and with trees of less than 8 cm in diameter.

On forest land without forests planned for forestry, it is classified into four groups, as follows:

- (i) *land with forest plantations not yet constituting forests* where the forest plantations only reach an average height of less than 1.5 m for slow-growing trees or 3 m for fast-growing trees, and a density of fewer than 1,000 trees/ha;
- (ii) *bare land with regenerated timber trees* where they cover brushy plants, grass expanses, canebrakes and regenerated timber trees with a height of at least 0.5 m and a density of at least 500 trees/ha which are planned for forestry purposes;
- (iii) *bare land without regenerated timber trees* which are planned for forest use, such as afforestation, protection for nature rehabilitation, and forestry research and experimentation, including bare land and land with brushy plants, grass expanses, canebrakes, red flower banana, tiger grass and silver grass; and
- (iv) *rocky mountain without trees* which are mainly located in areas of bare rocky mountain with trees that fail to meet the criteria for being considered as forests.

The functions of the forest could be changed among Special-use Forests, Production Forests and Protection Forests, but should be done in accordance with forestry and land-use planning at the national level. This will be decided by the Prime Minister or Provincial People's Committee.

In accordance with the Enterprise Law 68/2014/QH13, enterprises that carry out business in the forest sector in Vietnam will have to pay six types of tax, namely, (i) licence tax; (ii) corporate income tax; (iii) value-added tax; (iv) import tax; (v) export tax; and (vi) natural resource consumption tax.

Forest licensee who harvests timber from the natural forest will have to pay a natural resource consumption tax in accordance with the guidance on severance tax in the Circular No. 152/2015/TT-BTC. The tax rates which are based on timber values are stipulated in the severance tax schedule of Resolution No. 1084/2015/UBTVQH13 dated 10 December 2015. In this context, timber species are grouped into eight Groups, from Group I to Group VIII based on physical properties, durability, end-uses and economic values. The highest value being Group I and the lowest being Group VIII where the tax rate is based on the timber price at the forest gate. For timber in Group I, it is fixed at 35%; for timber in Group II, it is fixed at 30%; while timber in Group III and Group IV, they are fixed at 20% and 18% respectively. For the other timber in Groups V to VIII, it is fixed at 12%.

More specifically, Group I timber species are woods with decorative and beautiful grain and colour, and with high durability and economic values. Group II timber species are woods that are heavy and hard, and with high density and load-bearing capacity. Group III timber species are woods that are lighter and softer than the ones in Group I and II but have high durability and load-bearing capacity. Group IV timber species are woods with fine grain and are relatively durable and easy to process. Group V timber species are woods with moderate density and are widely used in construction and formwork. Group VI timber species are woods which are light, easy to process, and are resistant to insect infestation and decay. Group VII timber species are woods with low load-bearing capacity,

light, and are susceptible to decay and insect infestation. Group VIII timber species are woods with low load-bearing capacity, light, and are highly susceptible to decay and insect infestation.

In Vietnam, land, including forest land, belongs to the people with the State acting as the owner's representative and uniformly manage the land. The State will hand over land use rights to land users in accordance with the Land Law (2013).

Nevertheless, for a long time, forests in Vietnam belonged to state-owned entities for management and utilization. These entities included state forest enterprises, the Special-use Forest Management Board, the Protection Forest Management Board and cooperatives.

In this regard, when the Vietnamese government decided to shift away from a centrally-planned economy to a market-oriented one in the late 1980s, a number of major reforms occurred, including the promulgation of the Forest Protection and Development Law in 1991 (amended in 2004 and 2016), the Land Law in 1993 (amended in 1998, 2003 and 2013) and the Forestry Law in 2017. These laws govern forest resource ownership and use. The Land Law covers issues related to land and the Forestry Law, including the Forest Protection and Development Law, covers forest-related areas.

The amended Land Law in 2003 stipulates that land is under public ownership with the State acting as the representative. The State may allocate, lease and recognize land use rights to organizations, households and individuals who use land in a stable manner for long-term forestry use. In this regard, the natural forest is under public ownership but organizations, households and individuals may be allocated or leased natural forest for 50 years with possible extension for stable long-term forestry use with entitlement to utilization, but without private ownership. As such, they cannot transfer, mortgage, and inherit the user rights.

The State may also allocate, lease and recognize forest use rights to forest owners and rights or ownership rights over planted production forests in forest plantations with ownership rights remaining with the forest owners. In this context, the Land Law allows renewable long-term forest-use titles, typically 50 years or more. This transferred to the titleholder five basic property rights to exchange, transfer, inherit, mortgage and lease of the allocated forest land. Hence, the government must provide appropriate compensation to the legitimate tenure holders in the case of expropriation of allocated forest land for public purposes.

According to the Forestry Law (2017), the State will be the owner representative of public forests including natural forests; planted forests invested by the State; and planted forests appropriated by or given to, or whose forest ownership is transferred to the State. Meanwhile, organizations, households, individuals and communities are allowed to own planted production forests established on their land and forests that they received from transfer, gifts or inherited from other owners.

The transfer of forest tenure to individual households, and to much lesser extent entire village communities, has been achieved through a nation-wide program of forest land allocation. In this regard, the State also leases forest and forest land to other economic sectors for business and production purposes.

More specifically, the tenure of forest can be divided into four types, namely, (i) private tenure; (ii) state tenure; (iii) common tenure; and (iv) forest contracting. For private tenure, households, enterprises or companies are allocated forest up to 50 years through the issuance of Land Use Certificate (LUC). The LUC is a legal document to recognize the responsibility and the use rights of the private entities. Different from private tenure, state tenure involves forest allocated to and/or managed by State entities, people's committee, army units, state companies and state forest management units, such as the Special-use Forest Management Boards and the Protection Forest Management Boards. The forests tenured to the State entities include Special-use Forests and Protection Forests. In contrast, common tenure involves forest being allocated to and/or managed by groups of individuals who have the same rights and responsibilities. This type of tenure became very common when the government promulgated a policy to allocate forests for communities to protect and manage. The last type of tenure arrangement is through forest contracting where an arrangement is made between Special-use Forest Management Boards, Protection Forest Management Boards, state forest companies, or commune's people committees that manage natural forests signing contracts with groups of household or villagers to protect the forest.

According to the Forestry Law (2017), forest owners, in general, include Special-use Forest Management Boards; Protection Forest Management Boards; economic organizations including enterprises, cooperatives and unions of cooperatives; units of the People's Armed Forces (armed units); science and technology institutions; vocational education and training centres in forestry; households and individuals in the country; and enterprises with foreign investment which the State leases land for forest plantation development and production.

They have rights to enjoy (i) the forest products from natural/planted Special-use Forest areas and Protection Forest areas that they have invested in; (ii) the benefit arising from the environmental services provided by forests; and (iii) the benefit arising from the construction works serving forest protection and development invested by the State. They are also entitled to receive (i) guidance in implementing technical prescriptions for the protection and development of forests, and in the

conservation of forest biological diversity; (ii) compensation provided by the State for the forest value or assets that they have invested in or developed legally from the day the decision on forest expropriation is given; and (iii) funding provided by the State if their production forests are damaged by natural disasters.

Notwithstanding the above, for the Special-use Forests which are mostly held by the Special-use Forest Management Boards, the Boards have the right to be granted with the State budget for the protection and development of the Special-use Forests; harvest dead wood, fallen trees and other forest products in permitted forest areas; contract local households, individuals and local communities to protect and develop the forests; and lease out the aesthetic values of the forest, such as the beautiful forest landscape or waterfalls for recreational use and in the development of ecotourism products.

For the Protection Forests which are largely held by the Protection Forest Management Boards, the Boards have the right to harvest the planted forest invested by the State and enjoy the benefit arising from them; have ownership of the inter-cropped plants, livestock and other assets on protection forest land; and the right to harvest forest products produced through their own investment. This is in addition to the rights enjoyed by those allocated with Special-use Forests. For households and individuals who are allocated Protection Forests, they can exchange the allocated forest areas with others in the same locality and transfer the forest user rights to their heirs.

For the Production Forests which are primarily allocated to households, individuals and communities, although some of these areas are also allocated to Forest Management Boards and armed units, they have the right to harvest timber and forest products from the natural production forests, receive benefits from afforestation undertaken by the State and have ownership of the plants, animals and other assets associated with the planted forests invested by them. They also have the right to transfer the allocated forest area to another household or individual in the same commune or town or transfer the forest use rights to an heir if the forest owner is an individual. However, the community does not have the right to divide the allocated forest areas to its members or to assign, lease, mortgage and transfer the forest use rights, including using the forest as collateral in loans application. However, business entities, household and individuals whose production forest land is allocated or leased by the State to establish forest plantation with their own investment will have the right to transfer and lease the planted production forest, use the forest as collateral in loans application and transfer the forest ownership to an heir if the forest owner is an individual. The State also allows enterprises, cooperatives, unions of cooperatives, households and individuals to lease production forest land to undertake agroforestry production and ecotourism activities.

Although a policy of decentralizing management to the grassroots level has been implemented where large areas of production forest have been allocated to individual households, state forest enterprise and local communities, many of them have not been granted LUCs and thus their legal status to the land has not been formalized. This has constrained them from entering into economic transactions related to their land.

7.3 *Natural Forest Management Practices*

The forest management practices adopted in Vietnam were aimed to achieve the objectives of managing the three forest functions, namely, the Protection Forests, the Special-use Forests, and the Production Forests. In this regard, the natural forest was the dominant source of forest products produced before 1960 as the established forest plantation was young and the areas planted were small. By the 1990s, degradation and loss of natural production forest had become serious and in 1997 the government began limiting natural forest exploitation.

In 2016, a logging ban on the natural forest was imposed by the Prime Minister in view of significant deforestation and forest degradation and that uncontrolled forest exploitation had become rampant. There was also a need to restore the poor natural forest and strengthen biological diversity conservation, as well as the protective function of forests. Notwithstanding this, timber harvesting activities in Production Forests were clearly regulated through the Circular No. 35/2011/TT-BNNPTNT dated 20 May 2011 issued by MARD on guidance on logging and full exploitation of timber and non-timber forest products, as well as Decree No. 32/ND-CP dated 30 March 2006 issued by the Prime Minister on the management of endangered, rare and valuable forest plants and animals species. The main prescriptions to ensure that the natural forests are managed sustainably are, as follows:

- (i) the approval to harvest timber in natural forest is given to forest licensee who has a project on sustainable forest management and is permitted by the Prime Minister;
- (ii) at the time of harvest, the natural forest that has never been harvested before, or has recovered from one harvesting cycle with a minimum timber volume of (a) 150 m³/ha for the evergreen broadleaved forest, (b) 130 m³/ha for the semi-deciduous broadleaf forest and coniferous forest, (c) 110 m³/ha for the dipterocarp forest, and (d) 80 m³/ha for the mixed forest of timber with bamboo;

- (iii) the minimum diameter prescribed for harvestable trees is 45 cm dbh for trees in Timber Groups I and II, 40 cm dbh for trees in Timber Group III to Group VI, and 35 cm dbh for trees in Timber Groups VII and VIII, as well as for the Dipterocarp forest; and
- (iv) the number of marked trees that meet the minimum dbh for felling should not be greater than 30% of all harvestable trees in the licensed area.

Before the commencement of forest harvesting, the forest licensee needs to submit the proposed logging plan, tree marking record and relevant maps of the area to be logged to the provincial-level Department of Agriculture and Rural Development (DARD). If the logging area is larger than 200 ha, the licensee must undertake an assessment of the socio-economic and environmental impact of the logging activities which has to be approved by DARD and only then forest harvesting operations could be initiated.

The felled logs are transported to a log landing where they are marked, measured and the volume calculated, and all logging activities must be completed 15 days before the expiry of the logging licence. In this regard, the total volume of harvested timber for the entire logging area should not exceed 15% as compared with the estimated volume of timber before harvesting. In the event that it exceeds 15%, the forest licensee must report the matter to DARD for an inspection to be carried out to resolve the discrepancy.

Upon completion or expiry of the logging licence, the licensee must report to DARD for a field inspection and evaluation to be conducted. Based on the inspection results and the remedial actions taken to address any shortcomings, if any, the State authority will close the forest. When the decision to close the forest is made, the licensee must take measures to manage, protect and regenerate the forest as regulated in the Decision No. 186/2006/QĐ-TTg dated 14 August 2006.

The Circular No. 35/2011/TT-BNNPTNT provides guidelines for conducting salvage logging in Special-use Forests, Protection Forests and Production Forests where dry dead trees or burnt trees are felled. It also includes felling of trees in areas needed for permanent non-forestry use, such as for infrastructural development.

7.4 Forest Plantation Establishment and Development

Vietnam is known for its attempts to increase the forest cover through rehabilitation of natural forest and developing forest plantation. In this context, the development of forest plantation began in earnest in 1976 when the then Ministry of Forestry conducted five national programs, including a national afforestation program funded through the national budget. The program had increased areas of forest plantation from 219,000 ha in 1975 to an estimated 1 million ha in 1985.

After the successful national afforestation program, the government launched two mega plantation projects, namely, (i) Program 327 from 1993-1998, following the Decision No. 327/QĐ-CT dated 15 September 1992; and (ii) Program 661 or the Five Million Hectare Reforestation Program from 1998-2010, based on the Decision No. 661/QĐ-TTg dated 29 July 1998.

Under Program 327, forests had been well protected and deforestation from slash and burn cultivation and illegal and uncontrolled logging had been reduced. Through contracts, investment and lending to households, the program had enabled the establishment of mixed forests and planted large native tree species and fruit trees to meet economic needs and alleviate poverty. This included the establishment of new Protection Forests and Special-use Forests. It had assisted in protecting 1.69 million ha and restoring 700,000 ha of natural forest, as well as afforested 640,000 ha of degraded forest land. These efforts had increased the forest cover from 28% in 1995 to 33.2% in 1999, based on the Report 145/BC-CP dated 3 November 2006.

Program 661 that began in 1998 had contributed greatly to the restoration of forests throughout the country through the establishment of new Protection Forests, Special-use Forests, and industrial wood plantations; the planting in many bare areas to control erosion, floods and natural disasters and to mitigate climate change; as well as restored and increased natural forests for watershed protection. In fact, many nurseries, forest roads, guard stations and fire-fighting stations had been built through the program.

More specifically, Program 661, the successor to Program 327, had almost achieved its target in establishing a total of 4.7 million ha of forests. Of this total, Protection Forests and Special-use Forests had increased 2.2 million ha comprising 900,000 ha of new plantations and 1.3 million ha of natural regeneration; as well as 2.5 million ha of forest plantations consisting of 1.6 million ha of timber plantations and 900,000 ha of planted industrial trees, such as rubber trees, cashew-nut and other fruit trees, as reported in the Report 143/BC-CP dated 26 October 2011.

As of 2018, the total planted forest is 4.24 million ha with 3.50 million ha or 80.5% located in the Production Forests which are available for harvesting, while 740 ha located in Special-use Forests and Protection Forests are restricted and/or not permitted to be harvested. In fact, the forest plantation in Vietnam had increased from 3,886 thousand ha in 2015 to 4,235 thousand ha in 2018, or at an average

annual rate of 116,333 ha. Plantation forests are mainly established in the Northeast, Central North and Central South Coast of the country.

The dominant tree species planted in plantations are *Acacia mangium* x *A. auriculiformis*, *Eucalyptus* species, mixed-stand of *Acacia* and *Eucalyptus* species, mixed-stand of *Acacia* and other species, mixed-stand of *Eucalyptus* and other species, and rubber trees. Most of the commercial plantations are planted with the fast-growing *A. mangium* x *A. auriculiformis*, *Eucalyptus camaldulensis* and *E. urophylla* with a rotation of 5-7 years, which are then harvested to produce wood chips, pulpwood and poles for the construction industry. In contrast, large-scale enterprises may adopt a longer rotation of 10-12 years to produce small sawlogs.

Acacia species, which is planted in monoculture stands and/or in mixed-forest stands, mainly by an estimated 250,000 small growers, is the main species used in forest plantation establishment and development in Vietnam because of its short gestation period and relative ease in management. In fact, *Acacia* plantations recorded the highest percentage increase of established forest plantations in Vietnam from 1,500 thousand ha in 2015 to 1,920 thousand ha in 2018, a percentage increase of 28% during the period 2015-2018. The data from MARD reveal that 1.5 million ha of the total forest plantations established in Vietnam were of *Acacia* species. In this regard, individuals and households accounted for 46% of the established *Acacia* plantations, while management boards and state enterprises accounted for 17% and 15% respectively. A small percentage of the *Acacia* plantations of approximately 12% were managed by people's committees.

The second and third highest forest species used in plantation establishment in Vietnam are rubber trees and native tree species comprising, among others, *Hopea pierrei* (Merawan giazza), *Talauma gioi* (Menghundor), *Erythrophloeum fordii* (Ironwood), *Fokiania hodginsii* (Vietnam Hinoki), *Quercus* species (Oak), *Shorea roxburghii* (Lauan meranti) and *Azelia xylocarpa* (Redwood), covering 23% and 24% respectively of the total areas planted in 2015. Other species planted include *Pinus merkusii*, *P. massoniana*, *P. khasya*, *P. dalatensis*, *P. krempfii*, *Dacrycarpus imbricatus*, *Glyptostrobus pensilis*, and *Podocarpus neriifolius*. In recent years, the area of planted eucalypts has decreased due to the change in land-use planning. In 2001, the area of planted eucalypts stood at 348 thousand ha which was reduced to 210 thousand ha in 2015 and to 150 thousand ha in 2018.

Technological developments in relation to high yielding clone species, cutting and tissue culture and intensive plantation establishment practices have also led to increased plantation growth rates. *Eucalyptus* plantations using cutting and tissue culture have increased productivity from 8-10 m³/ha/year to 20-25 m³/ha/year while *Acacia* plantations (*A. mangium* and *Acacia* hybrids) could reach productivity levels of 15-20 m³/ha/year and more. Many of these high yielding varieties have been put into production and this has greatly increased the productivity of the forest plantations in Vietnam.

7.5 *Incentives and Disincentives for Sustainable Natural Forest Management* *Incentives*

In recent years, the State has implemented a range of policies to attract investments in the forestry sector and for sustainable forest management. These policies are mainly on incentives for enterprises investing in the agriculture (including forestry) and rural development sectors and in the development of timber and NWFPs processing industry as enunciated in the Decree No. 57/2018/ND-CP and Directive No. 08/CT-TTG respectively, as well as the promotion of forest plantation development as in the Decision No. 38/2016/QD TTg.

For households who are contracted by the State to protect the Production Forests and Protection Forests, they will receive a payment of VND 400,000/ha/year (US\$ 20.00)²⁰ which is another source of income to improve their economic livelihoods. If these households are contracted to also undertake planting or replanting of forest trees in the forest areas, they will be able to receive a grant valued at VND 1.6 million/ha/year (US\$ 80.00) during the first three years and VND 600,000/ha/year (US\$ 30.00) for the next three years for the purchase of seedlings and fertilizers, and in managing the planted areas as stipulated in the Decree No. 75/2015/ND-CP. The grant contributes to households' investment in undertaking forest tree planting and in supporting them to overcome any cash flow difficulties.

Households, individuals and communities who are contracted to protect and manage the Special-use Forests and Protection Forests are also funded by the State through money collected from Payment for Forestry Environmental Services (PFES). Currently, the environmental users such as hydropower plants have to pay VND 36/kilowatt-hour (kwh) for using water to produce electricity, while water companies have to pay VND 52/m³ of the water they sell. The provincial Forestry Protection and Development Fund (FPDF) which is managed by the Vietnam Forest Protection and Development Fund (VNFF),²¹ but under the control of the Provincial People Committee will collect the money and

²⁰ Exchange rate: VND 20,000 (Dong) = US\$ 1.00.

²¹ A state financial institution established under the Ministry of Agriculture and Rural Development (MARD) on 28 November 2008 through the Decision No.114/2008/QD-BNN.

then pay to the environmental service providers who are the forest owners to assist them to improve their forests. In 2018, the PFES collection amounted to VND 1,804,543 million (US\$ 90.23 million), representing 22% of the total budget for the forestry sector, and 6,398,772 ha of forests were protected using the funds from the VNFF. These funds not only contribute to the improvement of households' incomes and in meeting their financial needs so that they can protect the forests more effectively, but have also reduced the financial burden of the State to protect and manage its forests.

The VNFF also mobilizes and utilizes the financial resources of society to conduct training programs and supports capacity building for local people who are involved in forest protection and development. These capacity-building programs provide knowledge and skills to communities and households on forest resource management so that they can better protect and develop their forest land. Moreover, as a State financial institution, the VNFF also conducts livelihood development program for the local people so as to reduce their dependence on harvesting the forest, and hence, increase and diversify their households' incomes.

The State provides grant at VND 40 million/year (US\$ 2,000.00) to communities and villagers who live in the buffer zone of Special-use Forests. The grant will be used for investing in improving the production capacity of the forest land, such as in undertaking work involving agricultural extension, forestry extension, improved plant varieties and animal husbandry, as well as in purchasing small-scale agroforestry processing equipment and construction materials for villagers to undertake public works of the community, including clean water, electric lighting, communication, village roads and traditional houses. The grant will also support improvement to the communities' living condition, create the condition to increase household incomes, as well as to encourage protection and management of the Special-use Forests as encapsulated in the investment policy on the development of Special-use Forests in the Decision No. 24/2012/QĐ-TTg.

Poor households could access loans at the Vietnam Bank for Social Policies (VBSP), a government bank, while other households who could not access loans from the VBSP could access them from the Agriculture and Rural Development Bank (Agri-bank). Both banks provide loans of up to VND 50 million (US\$ 2,500.00) for 10 years at a preferential low-interest rate of 1.2% per annum in accordance with Article No. 8 in the Decree No. 75/2015/ND-CP. The loan is used, among others, to develop animal husbandry so that households could increase their income and be less dependent on harvesting the forest.

Since the introduction of the REDD²² initiative to Vietnam in 2010, many activities were undertaken to build the capacity of stakeholders, including forest owners, involved in sustainable forest management. In this regard, based on the national REDD program, the government has developed and implemented a mega program on emission reduction from forests in northern and central Vietnam. Through this program the government has facilitated forest owners to manage natural forests to meet the REDD requirements for payment from the World Bank since it has committed to pay for 40 million ton of carbon from emission reduction.

The allocation of production forest land to households, individuals and enterprises by the government for 50 years will enable them to invest with a longer perspective in forest protection and development. In addition, the LUC granted to them could be used as collateral in their application for bank loans which could then be used to enhance the management, protection and development of the forest land.

The transfer by state forest enterprises to households and communities through contracts to protect Special-use Forests and Protection Forests should create benefits and encourage them to protect the natural forests located in these forest land, albeit that they receive very little benefits as they are prohibited from harvesting the forests.

In the past, local people living around Special-use Forests were not allowed access to the forests and without direct benefit from the forests, the people do not protect the forests and even went against the forest management boards. However, in recent years, co-management scheme has been introduced in Special-use Forests where local people and communities have been involved in forest management. This has enabled them to benefit from protecting the forests as they are given certain rights, such as the right to collect some NWFPs as provided for in the Decision No. 07/2012/QĐ-TTg on policies to enhance forest protection.

The government has also provided public extension services, including free training and technical assistance, as well as conducted forestry experiments or demonstrations to introduce new tree and seedling varieties, and new technical protocols for nursery and seedlings management to forest owners. This has facilitated and enabled them to adopt the latest protocols and techniques in forest management, protection and development, and thus contributing to sustainable forest management.

Disincentives

The logging ban on natural forests in 2016 which aims to protect the natural forests has resulted in four state companies that managed 88,000 ha of natural forests in a sustainable manner and which

²² Reducing Emissions from Deforestation and Forest Degradation.

have been awarded the Forest Stewardship Council (FSC) certificates to cease all forest operations. This has led to more illegal logging activities and the companies are facing difficulties in their financial cash flow as they have invested substantially to enable their forests to be certified.

The current allocation of natural forests to local communities has focused on forest tenure arrangements and without much emphasis on operational support. For the private and forest contracting tenure, local people receive the tenure over forests, but they do not receive any law enforcement support to effectively protect their forests from encroachment or illegal logging. Without appropriate support from State forest rangers or the local authorities, the local people could hardly prevent illegal logging and encroachment into their forest areas since they do not have the authority to enforce sanction or mete out punishment.

Communities who are allocated natural forests in Special-use Forests or Protection Forests are entitled to payment from the State budget for their work in protecting and developing the allocated natural forest areas. However, communities who are allocated natural Production Forest areas do not receive any payment from the government for their efforts in protecting the forests. As most of the forests allocated to them are so poor that they could not derive any benefits from protecting them, they have yet to undertake any significant measures to protect their allocated natural Production Forest areas.

There have been several policies on restructuring state-owned forest and agricultural enterprises (SFAEs) such as the Communist Party's Resolution No. 30/NQ-TW issued on 12 March 2014, the Government's Decree No. 118/2014/ND-CP issued on 17 December 2014, and the National Assembly's Resolution No. 112/NQ-QH issued on 27 November 2015. According to these policies, SFAEs should re-allocate their forest and forest land that have been poorly managed or ineffectively used to local households and communities, especially customary land. However, the allocation process has been very slow. As of 2018, a total of 402,612 ha or 85% of the identified area for re-allocation was still held 'temporarily' by SFAEs or by local authorities. Consequently, local people still lack land for production, while forests are still being poorly managed and forest land ineffectively used or even left abundant.

7.6 *Incentives and Disincentives for Forest Plantation Establishment and Development* *Incentives*

The Vietnamese government provides location-based incentives for regions based on the levels of development and investment. The most common incentives are those available for investments made in specialized locations, industries, or investment zones in the country.

In this regard, Vietnam's Law on Investment specifies three forms of incentives that are available to companies operating within the country, as follows:

- (i) application of a lower rate of corporate income tax for a certain period or throughout the project execution or corporate income tax exemption;
- (ii) exemption or reduction of import tax on goods imported as fixed assets on raw materials, supplies, and parts used for the project; and
- (iii) an exemption or reduction of land rents and land levy.

More specifically, the State exempts land rent for the first 15 years and halve the rent for the next 7 years for enterprises and companies that are involved in afforestation, forest protection and in the planting of medicinal plants and/or NWFPs in extremely poor communes and/or poor regions. If those enterprises and companies' businesses are not located in poor regions or areas, the State will only exempt land rent for the first 11 years and reduce it to 50% for the next 5 years. In the case where enterprises and companies have rented land from households, individuals or communities, the State will provide funding which is equal to 20% of the land rent for the first 5 years. In addition, enterprises are also exempted from paying rents on land used to build worker/labourers' accommodation or dormitory, constructing factories, warehouses, drying yards and roads, based on the Decree No 57/2018/ND-CP that addresses policies for enterprises investing in the agriculture and rural development sectors. The money saved from the exemption of paying land rent could be used to invest in upgrading the enterprises and companies' facilities and other internal infrastructures and re-invest in forest plantation establishment and development.

For small and medium enterprises (SMEs) which are engaged in forest plantation, the State will exempt them from paying land rent for the first 5 years and reduces it to 50% for the next 10 years. This will allow the SMEs to better manage their investments.

The Decree No. 218/2013/ND-CP dated 26 December 2013 that addresses the implementation of the law on corporate income tax and Circular No. 96/2015/TT-BTC on guidelines for corporate income tax state that the government will only collect 10% of corporate income tax from agriculture-forestry enterprises and companies that undertake forest plantation activities, including those involved in forest nursery establishment and development. Furthermore, the Decree also states that for agricultural cooperatives involved in forest plantation or forest nursery activities they are fully exempted from paying any tax.

Enterprises and companies which are involved in afforestation and forest plantation projects in difficult socio-economic areas will be given preferential corporate tax rate of 10%. This preferential corporate tax rate is also applicable to enterprises that conduct socialization activities in the fields of education and vocational training, including cultural and environmental activities, related to Special-use Forests and Production Forests.

In addition, enterprises and companies starting new investment in difficult socio-economic areas and are involved in, among others, the production of energy-saving products, machines and equipment for agriculture, forestry and fishery, as well as in developing traditional industries will enjoy a corporate income tax rate of 17% for 10 years from the first year of income generation.

The Prime Minister Decision No. 24/2012/QĐ-TTg on investment policies for the development of Special-use Forests for the period 2011-2020 has allowed enterprises and companies which rent Special-use Forest areas for ecotourism development to be exempted from paying corporate income tax for the first 5 years and will only need to pay 50% of the corporate income tax for next 5 years. After these periods, the enterprises and companies will need to pay corporate income tax at 10%.

The State also provides fiscal incentives such as land rent exemption and reduction for foreign direct investment (FDI) enterprises and companies that are engaged in afforestation, forest development and protection. To receive these incentives, the FDI enterprises need to meet one of the following requirements, namely, (i) setting up the business in extremely poor areas; (ii) the capital investment is more than VND 6,000 billion (US\$ 300 million); or (iii) have more than 500 local employees. According to the Decree No. 210/2013/ND-CP on incentive policies for enterprises investing in agriculture and in rural areas, the investment law in 2014 and the Decree No. 118/2015/ND-CP, the FDI enterprises that meet one of the above requirements are exempted from paying land rent for 11 years. After 11 years, the State will just collect 30% of the land rent. This incentive encourages FDI enterprises to invest in forest plantation development in Vietnam.

In addition, FDI enterprises that are involved in forest plantation establishment and development, the State will exempt them from paying corporate income tax for the first two years and they only need to

pay at 50% for the next four years. After these periods, the FDI enterprises will have to pay corporate income tax at 20% to the government according to the Amendment of Taxation Law No. 32/2013/QH13 and the Decree No. 92/2013/ND-CP dated 13 August 2013, together with its implementation guidance in the Circular No. 141/2013/TT-BTC. The FDI enterprises will also receive an import tax exemption on, among others, equipment and supplies needed to execute their investment projects in Vietnam.

To encourage enterprises to employ a large number of ethnic minority labourers, they are allowed a reduction of the enterprise income tax equal to the additional expenses incurred in employing ethnic minority labourers. Business entities in Vietnam are also allowed to set up a tax-deductible research and development (R&D) fund where they can appropriate up to 10% of annual profits before tax to the fund.

Notwithstanding the above households who are allocated forest land for planting forest are provided loans of up to VND 15 million/ha (US\$ 750.00) from the Vietnam Bank for Social Policies (VBSP) or the Agriculture and Rural Development Bank (Agri-bank) at an annual preferential low-interest rate of 1.2%. The payback period of the loan should not exceed 20 years. This is in accordance with the Decree No. 75/2015/ND-CP and Decision No. 38/2016/QD-TTg on mechanism and policy on sustainable and rapid poverty reduction and assistance to ethnic minorities.

For households, individuals and communities that have forest plantations established on bare land and/or bare hills, the State will provide a grant of up to VND 8 million/ha (US\$ 400.00) for planting large timber tree species with a rotation of more than 10 years, such as *E. urophylla*, *E. camaldulensis*, *A. mangium* x *A. auriculiformis* and *Aquilaria crassna*; and native tree species, such as *Syzygium aromaticum*, *Madhuca pasquieri*, *Prunus arborea* and *Manglietia conifera*. For small timber tree species with less than 10 years rotation, such as *Hopea odorata* var. *flavescens*, *P. kesiya*, and *Melaleuca cajuputi*, this grant is VND 5 million/ha (US\$ 250.00). If these forest plantations are located in the frontier regions in Son La, Lai Chau and Dien Bien provinces, and the Central Highlands of Vietnam, the households, individuals and communities would be granted a further VND 2 million/ha (US\$ 100.00).

For households that are allocated Production Forest areas for forest plantation development and depending on the tree species planted and the rotation adopted, the State will provide grants ranging from VND 5 million/ha (US\$ 250.00) to VND 10 million/ha (US\$ 500.00) for the purchase of high-quality seedlings to increase the productivity of their forests.

If households, individuals and communities use newly developed forest seedlings in planting and/or conduct experimental trials on them in forest land allocated to them for forest plantation development, the State will provide support amounting to 60% of the total cost of production so to reduce the risk they might face in planting the newly developed seedlings.

To overcome the difficulties faced by households, individuals and communities in accessing to quality forest seedlings for plantation establishment, the State provides support at VND 50 million/ha (US\$ 2,500.00) for newly established nurseries by state-owned organizations and VND 300,000/ha/year (US\$ 15.00) for 5 years for them to manage and protect existing nurseries. In addition, the State also grants VND 5 billion (US\$ 250,000.00) to develop tissue culture facilities. For communes which have at least 1,000 ha of Forest Production areas, the State will grant VND 300 million (US\$ 15,000.00) for the development of their nurseries. Furthermore, to overcome the lack of knowledge among the households in producing seedlings and managing forest trees, the State provides VND 500,000/ha (US\$ 25.00) for 4 years for extension workers to render their services to the communes.

In its efforts to overcome the shortage of experienced and skilled workers faced by forestry enterprises and companies which have forest plantations, the State provides tuition fee for employees at VND 2 million/month/employee (US\$ 100.00) for three months according to the Decree No. 57/2018/ND-CP. The trained employees should then be able to apply their knowledge to increase the efficiency and effectiveness in forest plantation management through good management practices.

To improve wood and sawnwood consumption, the State provides grants ranging from VND 5 billion (US\$ 250,000.00) to VND10 billion (US\$ 500,000.00) for investors to establish wood processing factories with an annual production capacity of at least 20,000 m³ in the Northwest, Central Highlands and in the extremely poor provinces of Vietnam. This grant is mostly used to upgrade and build infrastructures and other facilities such as blade sawing machine, panel sawing machine, etc.. With increased efficiency and cost-effectiveness in their production, it would enable them to purchase wood from forest plantation owners at higher prices.

The State also provides financial support of up to 50% of the marketing cost incurred by forest enterprises to develop their markets both domestically and internationally, as well as 50% of the cost for their personnel to attend trade fairs or exhibitions as provided for in the Decree No. 57/2018/ND-CP.

Disincentives

The government has set a target to have 300,000 ha of forest plantations certified by 2020 and 1 million ha by 2030. Towards this end, it has developed policies supporting households to develop certified forest plantations for the production of sawlogs which require a longer rotation. However, households still prefer to establish forest plantations for the production of wood chips and pulp materials which require short rotation of only 4 to 5 years than venture into establishing forest plantations for the production of sawlogs as they face difficulty in accessing State's support.

Although the government has introduced high-yielding Acacia seedlings, for example, produced through tissue culture, the use of these seedlings in establishing forest plantation, especially in mountainous areas is still limited because of their high cost and the unavailability in economic quantity. As such, the productivity of forest plantations is still quite low, averaging about 7-10 m³/ha/year as reported in Decision No. 774/QD-BNN-TCLN.

Roads to forest land where forest plantation could be established and developed are often poorly built or not built at all. This has resulted in a higher cost to establish forest plantation and thus discourages those who wish to invest in establishing forest plantation.

8.0 Discussion

All the four countries have promulgated policies and stringent laws, including decrees and regulations in Cambodia and Vietnam, to manage, protect and conserve their forest resources, including water and biological diversity, as well as in the establishment and development of forest plantations. They have also developed and implemented forestry programs to enhance the sustainable use of all the natural resources in the country.

The four countries have also promulgated specific legislation to promote community forestry. In Cambodia, the Community Forestry Guidelines (2006) and the Sub-decree on Community Forestry Management (2003); in Myanmar, the Community Forestry Instructions (CFI) (2019); in Thailand, the Forest Community Act, B.E. 2562 (2019); and in Vietnam, the Forest Protection and Development Law (1991), the Land Law (1993) and the Forestry Law (2017). This is in view that they recognized the important role played by local communities in contributing towards the attainment of sustainable forest management through their efforts to restore, protect and manage the forest land allocated to them, as well as in improving their livelihoods and in rural development.

In terms of land tenure, all the natural forests in Myanmar, Thailand and Vietnam are owned by the governments, except in Cambodia. However, they do provide long-term leases for forest plantation establishment and development. In Cambodia, forest land could be leased through forest concession agreements of up to 30 years which could be extended for another 30 years, while in Myanmar, the land lease is also for 30 years which could be renewed of up to two ten-year periods. In addition, the land lease could be inherited by other individuals, while the land lease right and the planted trees can be sold or transferred to other individuals or organizations. In Vietnam, long-term forest-use titles are typically for 50 years or more. This transferred to the titleholder five basic property rights to exchange, transfer, inherit, mortgage and lease of the allocated forest land.

This is pertinent as insecurity of land tenure could inevitably lead to premature liquidation of the established forest plantations, while constraints on the transferability of tenure rights would reduce the value of the standing timber and anticipated rates of return on the investment. With longer-term land tenure, investors will be encouraged to plant long-term plantation for the production of sawlogs instead of short-term rotation of only four to five years to produce small-dimension logs and wood chips.

In Cambodia, a logging moratorium was imposed on all natural-forest concession areas since 2002 due to poor management and regulatory control, while Myanmar has imposed a nation-wide moratorium on logging for one year in 2016-17 and for the Bago Ranges for 10 years starting from 2016–2017 to 2026-2027. In the case of Thailand and Vietnam, the governments have imposed a nation-wide logging ban on the natural forests since 1989 and 2016 respectively. This is due to ineffective control and over-exploitation in the past, often illegal, as well as the continued decline and degradation of the forest areas.

In this regard, the imposed logging moratorium on all natural-forest concession areas in Cambodia has adversely affected an estimated 3.3 million ha of concession forests not being able to be placed under sustainable forest management even though the existing forest concession companies still hold valid concession licences.

The logging ban in Thailand has rendered forest management techniques using both selection and clear-felling systems become irrelevant. Silvicultural treatments, such as thinning, and canopy opening to provide sunlight for the many seedlings under the big mature trees in moist evergreen or pine forests, including new seedlings, to grow as natural regeneration are not allowed; while that in the Bago Ranges in Myanmar has impeded sustainable forest management being practised in the area.

In the case of Vietnam, the logging ban has resulted in four state companies that managed 88,000 ha of natural forests and have been awarded the Forest Stewardship Council (FSC) certificates to cease all forest operations.

The log export ban imposed in Myanmar since 2014 and the export ban on roundlogs, sawnwood, fuelwood and charcoal sourced from natural forests in Cambodia, as well as the high export tax of 40% on logs and sawn timber in Thailand, have to a certain extent impeded the full utilization of the forest resources and the application of sustainable forest management practices. This would also limit market opportunities and cause artificial under-pricing of timber in the market which would discourage private investments in forest plantation development, as well as the funds needed to practise sustainable forest management.

There are only a few fiscal incentives provided for managing the natural forests sustainably in the four countries. In this regard, the governments generally waive the payment of royalties for any forest produce collected for scientific and educational work and those that are collected by local communities for personal use or used for the benefit of the community.

Notwithstanding the above, in Cambodia, the reforestation fee at US\$ 2.50/m³ of inventoried standing volume and a forest maintenance fee at 5% of the value of all timber and non-timber forest products, as well as an export tax of 1% of FOB on all timber and non-timber forest products collected are deposited in the established National Forestry Development Fund, similar to the Forest Development Fund established in Malaysia. The Fund is to undertake, among others, reforestation; silviculture and forest rehabilitation; forest protection; community forestry development and forest extension services. Although establishing such a fund provides a ready source of financing, it is often being criticized that this impedes optimal allocation of public funds as well as making the public financing system inflexible and resource allocation inefficient.

In Myanmar, a maximum of 10% of the domestic or export value of the forest produce must be paid to the FD as an ecosystem services fee. In the case of Vietnam, the government, through the Vietnam Forest Protection and Development Fund (VNFF), collect Payment for Forestry Environmental Services (PFES) from environmental users, such as hydropower plants and water companies, to fund households, individuals and communities who are contracted to protect and manage the Special-use Forests and Protection Forests. In 2018, the PFES collection amounted to VND 1,804,543 million (US\$ 90.23 million), representing 22% of the total budget for the forestry sector, and 6,398,772 ha of forests were protected. The use of this market-based instrument should be replicated in the other three countries, especially in Thailand where many studies have been conducted but have yet to be operationalized.

In Vietnam, households who are contracted by the State to protect the Production Forests and Protection Forests will receive a payment of VND 400,000/ha/year (US\$ 20.00). If they are contracted to undertake the planting of forest trees to reforest the areas, they will also receive a grant of VND 1.6 million/ha/year (US\$ 80.00) during the first three years and VND 600,000/ha/year (US\$ 30.00) for the next three years for the purchase of seedlings and fertilizers, and in managing the planted areas.

All the four countries have embarked on large-scale forest plantation establishment and development to supplement wood supply from the natural forests and to meet the demand of the wood-based industry, as well as for the export markets. They have provided a number of fiscal incentives to encourage and support forest plantation establishment and development which include royalty exemption, reduction of export tax, reduction or even free land rental fee, and other taxes and fees. Non-fiscal incentives provided are often in the form of subsidies, preferential low-interest bank loans as those provided in Thailand and Vietnam, and free seedlings provided by forestry agencies to farmers, households and local communities to establish forest plantations or plant trees on their own land or on legally allocated land by the governments.

More specifically, in Cambodia, owners of private forest plantations are not required to pay any licence fees to harvest and use timber and non-timber forest products from their plantations, including royalty, permit fee for transportation and transport quota, as well as a reduction of 50% of the total obligatory export fees for export of products from forest plantation, and a 100% exemption of export fees for furniture and final processed products produced from forest plantation. It also provides preferential land rental fees ranging from US\$ 5.00 - US\$ 10.00 /ha/year for the best soil type to being free for deteriorated land.

In addition, if a company investing in forest plantation establishment has received a Final Registration Certificate, the company is entitled to a profit tax exemption period which consists of a Trigger Period +3 years + Priority Period where the maximum Trigger Period is the first year of the company gaining profit or three years after the company earns its first revenue, whichever is sooner. The company is also entitled to an import duty exemption on machinery and equipment; a 100% tax exemption for export; and an exemption of visas and work permit fees for its foreign employees and their dependants.

In Myanmar, the fiscal incentives available include income and corporate tax holidays ranging from 7 years in Zone 1 which is classified as least developed and where the establishment of forest plantations is likely to occur to 3 years for Zone 3 which is with adequate development. As such, this

incentive will only likely to be of interest for short-rotation plantations which could generate taxable income within the 7-year tax holiday period.

In addition, the government in Myanmar also provides an exemption of land-based fee for community forests established on forest lands, payment of tax for forest products harvested by CFUGs or its members for personal use, and the payment of tax on the sale of forest products harvested from community forests and sold within the village.

A private company in Thailand could waive tax of 10% of its profit if the company provides support to the forest community on forest conservation of up to THB 100,000 per year (US\$ 3,125.00). A company could also waive tax of up to 2% of its profit if it supports forest community projects to mitigate climate change.

Since 2015, the private sector, local communities and farmers who are approved to cultivate on reserved forest areas are not required to pay the annual land rent of THB 94/ha (US\$ 2.94) or THB 15 per rai (US\$ 0.47) which they used to pay before.

In Vietnam, a preferential corporate tax rate of 10% is given to enterprises and companies which are involved in afforestation and forest plantation projects in difficult socio-economic areas. For the period 2011-2020, the government has also allowed enterprises and companies which rent Special-use Forest areas for ecotourism development to be exempted from paying corporate income tax for the first 5 years, and will only need to pay 50% of the corporate income tax for next 5 years, and thereafter at 10%.

The State also exempts land rent for the first 15 years and halve the rent for the next 7 years for enterprises and companies that are involved in afforestation, forest protection and in the planting of medicinal plants and/or NWFPs in extremely poor communes and/or poor regions. If those enterprises and companies' businesses are not located in poor regions or areas, the State will only exempt land rent for the first 11 years and reduce it to 50% for the next 5 years.

In the case where enterprises and companies have rented land from households, individuals or communities, the State will provide funding which is equal to 20% of the land rent for the first 5 years. In addition, enterprises are also exempted from paying rents on land used to build worker/labourers' accommodation or dormitory, constructing factories, warehouses, drying yards and roads.

For the period 2011-2020, the government has allowed enterprises and companies which rent Special-use Forest areas for ecotourism development to be exempted from paying corporate income tax for the first 5 years and will only need to pay 50% of the corporate income tax for next 5 years. After these periods, the enterprises and companies will need to pay corporate income tax at 10%.

For foreign direct investment (FDI) enterprises that are involved in forest plantation establishment and development, the State will exempt them from paying corporate income tax for the first two years and they only need to pay at 50% for the next four years. After these periods, the FDI enterprises will have to pay corporate income tax at 20%. They will also receive an import tax exemption on, among others, equipment and supplies needed to execute their investment projects in Vietnam.

To encourage enterprises to employ ethnic minority labourers, enterprises are allowed a reduction of their income tax equal to the additional expenses incurred in employing ethnic minority labourers. Business entities in Vietnam are also allowed to set up a tax-deductible research and development (R&D) fund where they can appropriate up to 10% of annual profits before tax to the fund.

The granting of corporate tax reduction will only benefit enterprise that has taxable incomes which in the case of establishing and developing forest plantation it will take a couple of years at least before any taxable income could be realized even with fast-growing species. Hence, it is pertinent for the countries to consider providing immediate write-off of plantation costs against other revenue sources, especially for large investors with substantial taxable income from other sources as this would mean in effect that plantation investments would be entirely free of corporate tax obligations. A case in point is the Group Relief provided in Malaysia which allows a company to reduce its tax burden by offsetting its losses from the profit of another company within the same group.

In addition, the granting of the tax holiday, for example in Myanmar, will not allow an enterprise to carry forward any tax losses that accrue during the tax holiday period, and thus, an enterprise without any taxable profits during the tax holiday period gains no benefits from the tax holiday. In fact, by losing the opportunity to carry forward any losses and depreciation allowance incurred during the tax holiday period, it might well suffer a net loss as a result of the tax holiday. As such, the enterprise will not benefit from growing long gestation tree crops if the tax holiday is just granted for a couple of years.

In Thailand, farmers who are registered with the RFD will be provided with THB 18,750/ha (US\$ 585.94) or THB 3,000/rai for establishing fast-growing tree plantation within three years or THB 31,250/ha (US\$ 976.56) or THB 5,000/rai for slow-growing tree species within five years for areas ranging from 0.1-8 ha (1-50 rai). FIO also provides THB 84,194/ha (US\$ 2,631.01) for poor local communities to plant teak on its land or THB 40,700/ha (US\$ 1,271.88) for the establishment of *Eucalyptus* plantation.

Households, individuals and communities in Vietnam that have forest plantations established on bare land and/or bare hills, the State will provide a grant of up to VND 8 million/ha (US\$ 400.00) for planting large timber tree species with a rotation of more than 10 years, while for small timber tree species with a rotation of less than 10 years, this grant is VND 5 million/ha (US\$ 250.00). If these forest plantations are located in the frontier regions the households, individuals and communities would be granted a further VND 2 million/ha (US\$ 100.00).

Depending on the tree species planted and the rotation adopted, the State will provide to households that are allocated Production Forest areas for forest plantation development grants ranging from VND 5 million/ha (US\$ 250.00) to VND 10 million/ha (US\$ 500.00) for the purchase of high-quality seedlings to increase the productivity of their forests.

If households, individuals and communities use newly developed high-yielding forest seedlings in planting on their allocated land for forest plantation development, the State will provide support amounting to 60% of the total cost of production so to reduce the risk they might face in planting the newly developed seedlings.

To ensure an adequate supply of quality forest seedlings for plantation establishment, the State provides support at VND 50 million/ha (US\$ 2,500.00) for newly established nurseries by state-owned organizations and VND 300,000/ha/year (US\$ 15.00) for 5 years for them to manage and protect existing nurseries. A sum of VND 300 million (US\$ 15,000.00) will also be granted to communes having at least 1,000 ha of Forest Production areas for the development of their nurseries.

In this context, Cambodia, Myanmar and Thailand through their forestry agencies have been providing free seedlings to farmers and communities to establish forest plantations, as well as to reforest degraded forest land. For example, the FD of Myanmar and the RFD of Thailand have been providing annually an estimated 10 million and 6 million free seedlings respectively.

The Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand provides preferential loans to farmers, farmer groups and agricultural cooperatives through its Tree Bank Project for the establishment of forest plantations. The first type of loan which started in early 2009 and had just ended on 31 March 2020 used trees and land as collateral for the loan. The second type of loan uses only trees as collateral for the loan which started on 1 April 2020 is still ongoing where the maximum loan amount is THB 125,000 (US\$ 3,906.25) per applicant and the annual interest rates charged for the first, second and third year are 10%, 9.25%, and 8.50% respectively. When the loan enters the 4-5 years, the interest rates charged is between 6% and 7%. These loan conditions were also applicable to the first type of loan that had just ended on 31 March 2020.

The BAAC also provides loans through its Green Credit Project where the maximum loan would not be more than 80% of the project cost and not more than 50% of the collateral value, such as land, guarantors, etc.. The current annual interest rate charged to farmers or individuals is at 6%, while that for entrepreneurs, community enterprises, organizations, farmer groups and agricultural cooperatives it is at 4.5%.

Through its Reforestation to Generate Income Loans scheme, the BAAC provides loans to farmers who are in debt and wish to have a career change. The maximum loan that can be given to an applicant would not exceed THB 100,000 (US\$ 3,125.00). The annual interest rate charged is at 3.875% for the first 3 years, 4.875% for year 4 to 6, 5.875% for year 7 to 9, and 6.875% for year 10 and onwards.

In Vietnam, households who are allocated forest land for planting forest could access to loans of up to VND 15 million/ha (US\$ 750.00) at a preferential low-interest rate of 1.2% from the Vietnam Bank for Social Policies (VBSP) or the Agriculture and Rural Development Bank (Agri-bank), similar to the Bank for Agriculture and Agricultural Cooperatives (BAAC) of Thailand.

In the case of Myanmar, although the Myanmar Agriculture Development Bank (MADB) is mandated to provide loans for the private sector to establish and develop forest plantations, it does not accept, at present, leased state land or planted trees as collateral for loan application.

To further encourage the private sector to embark on large-scale forest plantation establishment and development in the four countries, the governments should consider providing soft loans directly to private companies which are willing to establish forest plantations with favourable interest rates and payback period, including grace period for paying back the loan, similar to loans provided by the Forest Plantation Development Sdn. Bhd. that was established in Malaysia in 2006.

In Vietnam, business entities are allowed to set up a tax-deductible research and development (R&D) fund where they can appropriate up to 10% of annual profits before tax to the fund. The government also provides VND 500,000/ha (US\$ 25.00) for four years for extension workers to render their services to communes and tuition fee at VND 2 million/month/employee (US\$ 100.00) for three months to upgrade the skills of forest plantation workers. In terms of market promotion, the government supports up to 50% of the marketing cost incurred by forest enterprises to develop their markets both domestically and internationally, as well as 50% of the cost for their personnel to attend trade fairs or exhibitions. These types of indirect subsidies can greatly improve the attractiveness of plantation investments.

Achieving sustainable management of forest is the ultimate goal of any forest managers. All forest organizations and forest owners, especially those directly involved in the management, conservation and development of forest resources, are responsible to ensure that the forests are sustainably managed. In this context, given that the four countries are at different levels of socio-economic development, land and resource endowment, and the extent, diversity and the quality of their forest resources, as well as the ease of doing business, separate recommendations will be presented for each country, albeit that there are a few similarities among them.

In this regard, the World Bank's ease of doing business scores that measure the processes for business incorporation, getting a building permit, obtaining an electricity connection, transferring property, getting access to credit, protecting minority investors, paying taxes, engaging in international trade, enforcing contracts, and resolving insolvency which was published in 2020²³ show huge differences between the four countries studied. Among the 190 countries assessed by the World Bank, Myanmar was ranked 165th with a score of 46.8, Cambodia at 144th with a score of 53.8, Vietnam at 70th with a score of 69.8 and Thailand at 21st with a score of 80.1, as compared with New Zealand which was ranked first with a score of 86.8.

9.0 Recommendations

9.1 Cambodia

To further manage and develop the natural forests sustainably, the Government of Cambodia should contribute more funds to the National Forestry Development Fund to include fines for forest offences and sale of confiscated wood, besides the current reforestation fee of US\$ 2.50/m³ of inventoried standing volume, the forest maintenance fee at 5% of the value of all timber and non-timber forest products, and the export tax of 1% of FOB on all timber and non-timber forest products.

An economic viability study should be conducted with a view to reducing the royalties on standing tree volume and harvested timber so as to promote investment in natural forest management by private companies, especially in using environmentally sound technology in forest harvesting that significantly reduces damage to the residual stand and the forest environment and thus promoting natural regeneration of the logged-over forest.

The status of the estimated 3.3 million ha of natural forest under forest concessions that were suspended in 2002 due to poor management and which are currently under review by the FA should be resolved expeditiously so that the area could be placed under sustainable forest management. Nevertheless, it has been reported that a large part of the forest concession areas has been allocated as community forests, protected areas, and social and economic land concessions.

The current restrictions that do not allow plantation companies, especially small-scale private companies and local communities, to receive any fiscal incentives under Article 14 of the Law on the Amendment to the Investment Law if they establish teak plantations of less than 1,000 ha or develop tree plantations of mainly fast-growing species for the pulp and paper industry of less than 200 ha should be reviewed and removed so as to further encourage them to participate in developing tree plantations for commercial purposes.

In view of the long gestation period involved in forest plantation investment, the annual economic concession land rental fees for the establishment and development of forest plantation should be reduced by 30-50% from the current rates that range from US\$ 2.00 - US\$ 10.00/ha. This is to further promote the development of forest plantation to supply wood and wood products to meet both the national and international markets and to reduce pressure from over-harvesting the natural forests.

Equipment and machinery imported for the production of seedlings, construction of access roads, bridges and buildings should be exempted of duty for the establishment and development for forest plantation.

In addition, tax exemption on profit should be given to companies engaged in forest establishment and development for a period of 12 years and for those qualified under QIPs, the tax exemption on profit should be up to 9 years. This is in view that the current maximum tax holiday of up to 6 years together with the trigger period could only result in the possibility of a tax exemption on the profit of up to 9 years.

The government should consider providing long-term soft loans directly to private companies and/or through financial institutions with or without a government guarantee at low-interest rates to promote investment in forest plantation establishment and development.

The government should also consider providing immediate write-off of plantation costs against revenue of another company within the same group, especially for a company with substantial taxable income from other sources, due to the long gestation of the planted trees. For large investors with substantial taxable incomes from other sources, this would mean in effect that plantation investments would be entirely free of income tax obligations.

²³ World Bank. 2020. *Doing Business 2020*. Washington, DC: World Bank. DOI:10.1596/978-1-4648-1440-2. License: Creative Commons Attribution CC.BY 3.0 IGO.

Private companies conducting in-house research in developing high-yielding and disease-resistant planting stock, as well as on improved management practices should be given tax exemption on investments made in such research which is currently not available to them.

Market mechanisms should be developed to facilitate timely access to market information, especially on prices of timber and timber products in the international markets.

Procedures and guidelines should be developed to register private forest plantations in partnership with relevant authorities so that technical support and extension services, including research results and findings, could be extended to them.

A robust conflict resolution mechanism should be developed to resolve over-lapping land claims, especially those involving the local community, indigenous people and forest-dependent people so that conflicts could be resolved in a transparent and amicable manner and all decisions made are respected by all the involved parties.

Forest plantation companies should be further encouraged and supported to establish a strong industry domestically, including the required infrastructures and a competent and trained workforce, as well as adopting best practices and technologies for the development of the forest plantation industry.

9.2 Myanmar

To expeditiously establish a dedicated Forest Development Fund as recommended in the Myanmar Forest Policy Implementation Strategies that sources its funds from grants from the government, aid and donation from local and international organizations, payment of ecosystem services fee which is currently fixed at a maximum of 10% of the domestic or export value of the forest produce, fines collected from forest offences and sale of confiscated wood. The fund will be used to carry out silvicultural operations, community forest development, forest extraction services and training of human resources in the forestry sector.

The government should conduct a comprehensive review of the currently reduced extraction of teak by 55% and the other non-teak hardwood species by 33% below the annual allowable cut (AAC) of the natural forests as this could adversely affect the ability of MTE to undertake environmentally sound forest harvesting practices, as well as affect the supply of timber and timber products to the domestic market. Consequently, this might also lead to increased illegal logging of the natural forests in Myanmar.

To study the possibility of using a competitive tender system to allocate management and harvest rights of natural forest areas within areas identified for plantation establishment to private companies. The advantage of this approach is the establishment of smaller discrete forest management units involving a combination of natural forest and forest plantation management leases.

The study should also include management leases involving timber harvest rights for existing government-owned plantations, including degraded or failed plantations, in combination with new plantation establishment on adjacent Reserved Forest land; and management leases involving timber harvest rights for the natural forest in Reserved Forest or VFV land in combination with new plantation establishment on adjacent Reserved Forest or VFV land.

The security deposit or performance bond paid by investors to the FD before planting could commence which is now fixed at MMK 123,450/ha (US\$ 82.30) for both teak and hardwood species and which will be returned to the investors if at the end of the planting season the survival rate achieved is 70% should be reduced by 50 % to MMK 61,725/ha (US\$ 41.15). This will reduce the initial cost in undertaking forest plantation establishment by the private sector and in making the plantation more economically viable. Similarly, the lessees' performance bonds to guarantee that they will establish crops on VFV land within 4 years that range from MMK 7,413/ha (\$4.94) to MMK 24,710/ha (\$16.47) should also be reduced by 50%.

The current ecosystem services fee paid to the FD is suggested to be reduced to a maximum of 5% of the domestic or export sale value of the forest produce from the current maximum rate of 10%. It is further suggested that this fee be deposited in the Forest Development Fund as proposed above.

The government should consider providing long-term soft loans directly to private companies and/or through state-owned banks with or without a government guarantee at low-interest rates to promote investment in forest plantation establishment and development.

The government should also consider providing immediate write-off of plantation costs against other revenue sources, especially for a company with substantial taxable income from other sources, due to the long gestation of the planted trees which incur a high initial cost in the establishment and only be able to harvest the final crop in year 7 or 15 for fast-growing tree species, for example. For large investors with substantial taxable incomes from other sources, this would mean in effect that plantation investments would be entirely free of income tax obligations.

Promote and develop transparent marketing mechanisms to facilitate timely access to market intelligence and information for wood products from both thinnings and final harvests from forest plantations, especially on prices in the international markets. This will further promote the

marketability of timber and timber products and thus reduce wastage of harvested materials, especially small-dimension logs.

The government should develop better access infrastructure, communication and sanitation facilities, electricity, etc. in the forest areas where plantation establishment is carried out which are mostly in the remote areas of the country.

Provision of training to nurture qualified and dedicated field staff to be more efficient in the establishment and management of forest plantation with funds and cooperation from national and international NGOs.

9.3 *Thailand*

To conclude the ongoing process in preparing the memorandum of understanding between the RFD and DNP expeditiously so as to allow the staff of the RFD to source and collect quality forest tree seeds from the protected areas that are under the jurisdiction of DNP. This will enable the RFD to produce sufficient high-yielding seedlings for distribution to members of the Forest Plantation Cooperatives and the public.

The current preparation of relevant by-laws or regulations coordinated by MNRE together with other relevant departments to allow private exporters of teak to legally sell processed teak products, especially from forest plantation, in foreign markets should be expedited. This is in view that teak products processed from forest plantation have varied quality wood, size and anatomy as compared with processed teak products in the past from natural forest, both in terms of wood features and external physical characteristics, such as heartwood, sapwood and wood colours. This will be an added incentive for them to further develop teak plantation and thus increasing the forest area of the country.

The ongoing process to reduce the 40% export tax for logs and sawn timber to 10% or waive the export tax for logs and sawn timber should also be expedited. This will further motivate private sector enterprises to invest in forest plantation establishment and development, as well as to enable them to compete with the other countries which have only imposed an export tax of between 0-10%.

To review the Cabinet Resolution issued on 11 January 2000 that grant exclusive right to FIO to export teak logs abroad so that others in the private sector would not have to sell their teak logs to FIO if they wish to export them to overseas markets.

Undertake a review of the 2006 regulations of the Ministry of Commerce on rules, procedures and conditions for the export of plantation wood, such as sawn timber, as well as the export of teak from private plantation forests and on land that has been approved by the State. This is to create competitiveness among timber exporters and opportunities for the development of high-value forest plantations, especially by private investors.

Conduct a review on the use of wooden stamps by the private sector as stipulated under Section 35 of the Forest Act B.E. 2562 (2019) where "Private wooden stamp" will be used only when the owner of the stamp has been registered and licensed. This is in view of the rapid advancement in today's technology where information on the source and movement of wood could be traced and tracked more efficiency, for example, through timber tracking systems developed using Radio Frequency Identification (RFID) or Quick Response code (QR code), than in using wooden stamps and documents to monitor the movement of wood.

Consider the exemption of royalty payment to the RFD on the use of forest products by poor small-farmers who are allocated arable land in the national reserved forest areas in view of the decline in the availability of arable land.

To establish a dedicated Forest Development Fund that sources its funds from grants from the government, aid and donation from local and international organizations, and payment of ecosystem services fee. The fund will be used to carry out reforestation, silvicultural and forest rehabilitation, forest protection, community forest development, forest extension services and training of human resources in the forestry sector.

The government should also consider providing immediate write-off of plantation costs against revenue of another company within the same group, especially for a company with substantial taxable income from other sources, due to the long gestation of the planted trees. For large investors with substantial taxable incomes from other sources, this would mean in effect that plantation investments would be entirely free of income tax obligations.

To develop a benefit-sharing mechanism, including law and regulations, to facilitate the payment of carbon credit in a fair and transparent manner, especially to investors that have invested in the establishment of forest plantations on their own land, as well as forest-dependent people who are allowed to live in watershed areas and reserved forest areas where they are required to plant forest trees of at least 20% of any occupied land in the former and 200 forest trees for every 0.16 ha land they occupied in the latter.

To facilitate and permit logging service providers who are registered with chainsaws to provide their services to tree growers across licensed areas and regions, a review of the Chainsaw Act, B.E. 2545 (2002) should be conducted so as to enable the free movement of registered chainsaws in the country.

Consider the establishment of a one-stop centre to facilitate the registration of forest plantations and wood processing plants in accordance with the Forest Plantation Act, B.E. 2535 (1992) and its amendment in 2015. This is to simplify and reduce the need to apply to multiple agencies for approval to plant high-valued economic tree species and to undertake wood processing.

9.4 Vietnam

Currently, the payment under the PFES program is applied only to areas with forest cover. This should be extended to naturally regenerating forests that have yet to be considered as forests. This is to encourage forest owners to invest in forest areas having the potential to regenerate naturally.

The payment from the State budget to communities allocated natural forests in Special-use Forests or Protection Forests for their work in protecting and developing the allocated natural forest areas should also be extended to those who are allocated natural Production Forest areas. This is in view that they currently do not enjoy such support for their efforts in protecting the forest areas. Furthermore, most of the forests are so poor that the people could not derive any benefits from protecting them.

The status of the estimated 88,000 ha of natural forests managed by the four state companies and which have been FSC-certified should be resolved expeditiously so that the area could be placed under sustainable forest management, taking cognizance that the logging ban on natural forests in 2016 is still enforced.

The State forest rangers or the local authorities should not only provide law enforcement support but should also strengthen their support to effectively protect privately-owned forest areas and those allocated through the forest contracting arrangement. This is in view that the local people could not prevent any illegal logging or encroachment into their forest areas since they do not have the authority to enforce sanction or mete out punishment.

The government should establish a mechanism for Management Boards of Protection Forests to collaborate with the business sector, especially the furniture companies, to invest in the establishment of forest plantations for timber production in their areas. In addition, the Management Boards of Special-use Forests should be given financial support to promote ecotourism and other certification of ecosystem services which will enhance their income.

Urgent action should be taken by the government to effectively re-allocate land from state-owned forest and agricultural enterprises (SFAEs) to ethnic minority communities, especially customary land. To support this action, the legal framework for returning such land to ethnic minority communities should be strengthened with clear technical guidelines on the process of returning the land to them. At the same time, support should also be given to ethnic minority communities to empower them to effectively participate in the re-allocation process.

To encourage households, individuals and communities to venture into establishing longer rotation forest plantations for the production of sawlogs and taking cognizance of the inherently higher risk involved, such as (i) tropical cyclones, (ii) the lack of income between planting and first harvest, and (iii) pests and diseases, as compared with establishing short-rotation plantations for the production of wood chips and pulp materials, an in-depth study should be conducted to examine the legal framework as well as the development of an insurance scheme to mitigate such risks. This will encourage smallholders and enterprises to establish longer-rotation forest plantation.

The government should also consider providing immediate write-off of plantation costs against revenue of another company within the same group, especially for a company with substantial taxable income from other sources, due to the long gestation of the planted trees, for example, for the production of sawlogs. For large investors with substantial taxable incomes from other sources, this would mean in effect that plantation investments would be entirely free of income tax obligations.

The government should consider developing a legal framework and initiating tree out-grower schemes where households, individuals and communities are guaranteed purchase of their trees at maturity by the wood-base industry, especially the furniture industry. This approach has been employed by paper companies in Thailand, where in 2012 some 60,000 contracted and independent farmers were growing 336,000 ha of eucalypts.

In view of the increasing demand by the wood processing enterprises to ensure that their supply chains are both legal and sustainable, it is opportune for the government to consider creating a platform where smallholders, households and local communities which need capital to invest in establishing and developing certified forest plantations could meet with enterprises that produced certified timber and timber products, especially for the export market. A legal framework should also be considered to ensure that any agreement or commitment made between the wood processing enterprises and investors in developing forest plantation is legally binding.

The government should build roads or upgrade existing poorly built roads, including other related infrastructures, to further support investors to reduce the cost incurred in forest plantations establishment and development and thus increasing their financial viability.

10.0 Conclusions

All the four countries have endeavoured to achieve sustainable forest management, but the progress has been slow. Finance has often been cited as a major constraint as financing sustainable forest management still faces a number of obstacles due to policy and market failures as unsustainable forest practices seem to be more profitable.

In addition, current market prices of timber and timber products do not reflect the full values of forest goods and the services provided by forests, while the public goods and benefits of sustainable forest management do not generate income for the private investor. As such, they do not provide incentives for investment in the forestry sector to the investors, including the perceived low returns and higher risk in natural forest management as compared to the development and management of plantation forests.

Nevertheless, the goal of any incentive scheme should be to ensure that private investment decisions direct the economy's resources to activities where they have the highest net environmental and social value, besides being economically viable. It needs to improve the relative attractiveness of sustainable natural forest management and forest plantation development.

However, it would be unwise indeed to create incentives for plantation forests that have the effect of detracting from necessary and even more socially beneficial investments in natural forests. At the very least, some incentives should be provided to investors who engage in improving harvesting practices and silvicultural management of natural forests. For many degraded areas, this might be a much more effective and socially beneficial way of achieving the government's goal of reducing and recovering from the massive amount of deforestation that has already occurred.

Governments should further enhance the environment for forestry investment, especially by the private sector, by ensuring stability and consistency of policies and laws, streamlining bureaucratic processes, and improving forest governance and transparency in the forestry sector. This could include establishing an investment promotion entity to mobilize and facilitate financial resources for financing sustainable forest management by identifying investment opportunities and potential investors, as well as assisting in risk mitigation, especially the structuring of financial packages in the private sector for investment in sustainable forest management.

Future financing mechanisms for sustainable forest management should encapsulate a portfolio approach which is based on a portfolio of resources, including products and services, that has the capacity to capture the differential competencies of government agencies, civil society and the private sector at different levels of involvement, as well as the flexibility to address the diverse and evolving needs of sustainable forest management. Funds should be disbursed based on results-based management framework, using the funding as a catalyst to address the additional incremental costs required by the four countries to achieve sustainable forest management.

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Special Service Agreement

As part of the work program activity “Incentives for green-growth value chain incentives in tropical forests” facilitated by funding from the Government of Germany, the consultant will:

1. Undertake case studies on incentives for sustainable forest management in Mekong region countries (Cambodia, Myanmar, Thailand, Vietnam) along with background information on such incentives in Malaysia as per the attached Terms of Reference;
2. Contribute to a timber supply-demand gap study to be carried out independently under the overall activity, in particular by reviewing findings relevant to Mekong region countries;
3. Submit a progress report to the ITTO Secretariat by 15 January 2020;
4. Submit a draft report to the ITTO Secretariat by 1 May 2020; and
5. Taking account of comments received, submit a final report to ITTO by 15 May 2020.

TERMS OF REFERENCE**INCENTIVES FOR GREEN-GROWTH VALUE CHAIN INVESTMENTS IN TROPICAL FORESTS****CASE STUDIES: MEKONG REGION (CAMBODIA, MYANMAR, THAILAND, VIETNAM) AND REFERENCE INFORMATION ON MALAYSIA****Description of the activity:**

The activity will:

1. Review the current national SFM framework, national land-use plans and identifying the existing incentives for SFM and deforestation-free commodities in the public policies of the Mekong region countries which are significant timber producers and members of ITTO (Cambodia, Myanmar, Thailand and Vietnam).
2. Identify what can be considered as disincentives for the “complying economic actors”, which could be removed through changes in the regulatory or administrative framework.
3. Consider, describe and simulate the costs and the potential impact of fiscal incentives (multiple scenarios) for “sustainable timber” and deforestation-free commodities in the Mekong region.
4. Consider, describe and assess the potential impact of non-fiscal incentives that could be foreseen (e.g. concessions duration length, fast track lanes for export, etc.) for these countries.
5. Undertake a dialogue with government policy-makers, with NGOs and with professional organizations on what measure they consider as achievable and which kind of policy mix (introduction of incentives, removal of disincentives) would be the most appropriate.
6. Liaise with and assist overall activity coordinator (Alain Karsenty; alain.karsenty@cirad.fr) to allow him to prepare a comprehensive report on incentives for fostering SFM and deforestation-free commodities for all three tropical regions.

Expected Outputs:

A final report will be produced, including:

1. A review and a comparative analysis of national SFM frameworks for the targeted countries.
2. Analysis of the land tenure legal frameworks for the targeted countries and their likely influence for forest management.
3. Analysis of national land-use planning processes, including procedures for creating permanent forest estates (gazetting, registration...), national REDD+ strategies and development policies in the two countries.
4. An analysis of the forest taxation structure, revenues collected and declared (transparency).
5. An analysis of the existing incentives/disincentives for SFM and deforestation-free commodities.
6. A summary of the commitments by the private sector (e.g. zero-deforestation pledges for agricultural commodities, certification processes, etc.). Needs and motivations of key companies will be explored, along with their expectations on incentives that could be introduced and disincentives to be removed.
7. A set of proposals with respect to fiscal and non-fiscal incentives that could be introduced and disincentives that could be removed. Fiscal measures will be quantified and their impact on national budget discussed.
8. Recommendations for desirable and realistic mixes of measures (fiscal and non-fiscal, incentives vs disincentives) proposed for the Mekong region countries.

Duration and timing:

The study will take place during the period November 2019 – May 2020 with the following tentative timetable.

1. November 2019: Discussions with ITTO, A. Karsenty and Unique (consultants carrying out supply-demand timber gap analysis described in Annex 1) to prepare detailed work plan
2. November/December 2019: Visits to gather data and establish contacts for the case study of Mekong region countries
3. January 2019: Submission of progress report
4. January 2020: Examination of preliminary results of the supply-demand timber gap analysis to be undertaken as part of the larger overall activity and its impact for Mekong region countries
5. February 2020: Second visit to Mekong region (as necessary) for gathering required data for case study of Mekong region countries
6. March-April 2020: Preparation and submission of draft report
7. May 2020: Submission of final report
8. Follow up work with ITTO 2020: Facilitate dialogue with Mekong region country governments on the recommendations of report

**Template for Preparing Input Paper by Resource Person
“Incentives for Sustainable Management of Natural Forest and
Forest Plantation Establishment and Development”**

- 1.0 Extent and Categories of Forest Resources
 - the policies, laws and regulations for constituting/gazetting/registration of permanent reserved forests, and for the establishment and development of forest plantations, etc. in the overall context of sound land-use planning
 - the policies, laws and regulations governing forest land tenure and use rights arrangements
 - description of all statutory charges related to timber harvesting and timber trade, that is, payment of all applicable and legally prescribed fees, royalties, taxes and other charges to the appropriate authority
 - complete “Table 1: Extent of Natural Forests and Forest Plantations” and “Table 2: Extent of Forest Land Ownership” as attached
- 2.0 Natural Forest Management Practices
 - description of natural forest management practices in the overall context of sustainable forest management (pre-felling activities, prescribed felling/cutting diameter limits, felling/cutting cycle, area and/or volume control, post-felling silvicultural activities, etc.)
- 3.0 Forest Plantation Establishment and Development
 - rationale for embarking on forest plantation establishment and development
 - current practices of forest plantation establishment and development for commercial purposes, watershed protection, coastal protection (mangroves) supply of firewood/fuelwood, etc. (main tree species planted, rotation length/cutting cycle, etc.)
- 4.0 Incentives and Disincentives for Sustainable Forest Management
 - detailed description of the economic instruments and the type of fiscal and non-fiscal incentives that are currently provided by the government to attain the sustainable management of the natural forests, take cognizance that they are mainly owned by the government
 - detailed description of other economic instruments and enabling incentives that enhance sustainable management of natural forests
 - detailed description of disincentives that impede the attainment of sustainable management of natural forests
- 5.0 Incentives and Disincentives for Forest Plantation Establishment and Development
 - detailed description of the economic instruments and the type of fiscal and non-fiscal incentives that are currently available to encourage and strengthen efforts in the establishment and development of forest plantations
 - detailed description of other economic instruments and enabling incentives that are currently available to encourage and strengthen efforts in the establishment and development of forest plantations
 - detailed description of disincentives that impede efforts in the establishment and development of forest plantations
- 6.0 Recommendations
 - 6.1 Incentives for Sustainable Natural Forest Management
 - detailed description of a set of proposed fiscal and non-fiscal incentives that could be introduced and disincentives that could be removed to enhance sustainable management of natural forests
 - 6.2 Incentives for Forest Plantation Establishment and Development
 - detailed description of a set of proposed fiscal and non-fiscal incentives that could be introduced and disincentives that could be removed to encourage and strengthen efforts in the establishment and development of forest plantations

Table 1: Extent of Natural Forests and Forest Plantations

(31.12 2018)

(1,000 ha)

Natural Forests				Forest Plantations				Sub-Total				Total
PFE		Non-PFE		PFE		Non-PFE		PFE		Non-PFE		
Production Forests	Protection Forests											

Source: (provide the source)

Note:

1. **PFE (Permanent Forest Estate):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forest in the PFE.
2. **Plantation Forests:** Include short-rotation plantation for wood, fibre and energy, and forest planted for protection of soil and water or ecosystem restoration.
3. **Production Forests:** Natural forests (including natural regeneration forests and protected areas in production forests) or plantation forests managed for the production of wood, fibre and energy.
4. **Protection Forests:** Include natural forests or plantation forests managed for the protection/conservation of soil, water and biological diversity.

Table 2: Extent of Forest Land Ownership

(31.12 2018)

(1,000 ha)

Natural Forests						Forest Plantations						Total		
PFE			Non-PFE			PFE			Non-PFE					
Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned

Source: (provide the source)

Note:

1. **Publicly owned:** National, state and regional governments (including subnational states or provinces, where applicable) or government-owned corporations, including share designated as leasehold; and municipalities, cities, communes or public associations.
2. **Privately owned:** Private forestry or wood-processing industries, private corporations, cooperatives or institutions (religious, educational, pension or investment funds, nature conservation societies, etc.), foundations, private associations of smallholders, individuals and families.
3. **Indigenous-owned:** Indigenous and tribal peoples whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partly by their own customs or traditions or by special laws and regulations.
4. Private-owned plantation does not include rubber plantation.

Annex 3**Questionnaire****Survey on Incentives for Sustainable Management of Natural Forests and the Establishment and Development of Forest Plantations**

The International Tropical Timber Organization (ITTO) is undertaking a survey of fiscal, non-fiscal and other incentives for sustainable management of natural forests and the establishment and development of forest plantations in the Mekong region countries. The objectives of the survey, among others, are to (i) identify the incentives that enhance sustainable natural forest management and forest plantation establishment and development that government policy-makers, non-governmental organizations (NGOs) and professional organizations consider achievable, and disincentives that need to be removed which impede the achievement of sustainable forest management; and (ii) identify the incentives that motivate key companies to produce legal and traceable timber and timber products, including those from sustainably managed forests, for example through legal and/or sustainable forest management certification schemes, and disincentives that need to be removed.

The rationale for this survey is that while several tropical countries have experimented with fiscal, non-fiscal and other tools (taxes, subsidies, etc.) trying to increase domestic supply of wood, their effectiveness and impact have not been systematically examined. What is better known is that many governments have used disincentives, that is, imposed log export bans, quotas and fees, and set volume targets for domestic processing to stem the economic leakage from the sector. Results have been mixed and not always positive. In the long term, with the right mix of incentives it will lead to improved forest management leading to healthier forests and improved habitat for forest biodiversity; and contribute positively to employment and incomes, especially of people living in or near forests.

For answering the questions, please use check boxes and fill in text fields . Please note that:

- Examples of fiscal incentives that deal with [taxes](#) or [tax cuts](#) and [expenditure](#) are (i) tax holiday where a firm is exempted from paying taxes on its profit during the tax holiday period; (ii) investment tax allowance that permits a firm to have its capital expenditure (access roads construction, silvicultural treatments of natural forests, including enrichment planting, land clearing and preparation of land for planting, etc) deducted from statutory income; (iii) group relief which provides immediate write-off of plantation costs against other revenue sources, especially for a company with substantial taxable income from other sources; (iv) reduction or exemption of import tax/duty on materials and machinery used for enhancing environmentally sound harvesting of natural forests or for forest plantation establishment and development; (v) reduction of obligatory taxes, fees and/or royalties for logs harvested from certified natural forests and/or forest plantations; and (vi) reduction or exemption of export tax/duty for forest products produced from certified natural forests and/or forest plantations; etc.
- Examples of direct non-fiscal incentives include (i) direct subsidies through soft loans provided by the government or through financial institutions at low-interest rates with or without government guarantee; (ii) free or subsidized seedlings; (iii) cost-sharing of silvicultural treatments and/or planting expenses; (iv) compensation schemes; and (v) specific/special forest funds established by the government (usually) to support activities that enhance sustainable management of natural forest and/or forest plantation establishment and development.
- Examples of indirect non-fiscal incentives (enabling incentives) are (i) clear tenure arrangements; (ii) resource security; (iii) transferrable management rights through long-term leases or management agreements; (iv) research and technical assistance; (v) concession duration length; and (vi) well-established markets.
- Examples of disincentives are (i) log export bans; (ii) strict quotas and fees; and (iii) set volume targets for domestic processing. Most of these disincentives could be removed through changes in the regulatory and/or administrative framework.

I. Incentives that enhance sustainable natural forest management
<p>1. Does your country/organization provide incentives, including introducing new incentives, which enhance sustainable natural forest management? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide information on the type of incentives that government policy-makers, non-governmental organizations (NGOs) and professional organizations</p>

consider achievable.

2. Are there disincentives that impede the achievement of sustainable natural forest management that need to be removed? Yes No If yes, please provide information on the type of disincentives that government policy-makers, non-governmental organizations (NGOs) and professional organizations consider achievable.

Comments and further information:

II. Incentives that support forest plantation establishment and development

3. Does your country/organization provide incentives, including introducing new incentives, that encourage and support forest plantation establishment and development? Yes No If yes, please provide information on the type of incentives that government policy-makers, non-governmental organizations (NGOs) and professional organizations consider achievable.

4. Are there disincentives that impede the establishment and development of forest plantations that need to be removed? Yes No If yes, please provide information on the type of disincentives that government policy-makers, non-governmental organizations (NGOs) and professional organizations consider achievable.

Comments and further information:

III. Incentives that motivate companies to produce legal/sustainable timber products

5. Does your country/organization provide incentives, including introducing new incentives, that motivate key companies to produce legal and traceable timber products, and those from sustainably managed forests? Yes No If yes, please provide information on the type of incentives that motivate key companies to produce legal and traceable timber, as well as those from sustainably managed forests, for example through legal and/or sustainable forest management certification schemes.

6. Are there disincentives that impede key companies to produce legal and traceable timber products, and those from sustainably managed forests that need to be removed? Yes No If yes, please provide information on the type of disincentives that need to be removed.

Comments and further information:

IV. Background and personal information

Name:	
Position:	
Organization:	
Country:	
Telephone:	
E-mail:	

Annex 4**List of Species for Forest Plantation Establishment under the Approved Agricultural Projects in Malaysia (GP - gestation period in years)**

No.	Species	GP	No.	Species	GP
1	<i>Gigantochola levis</i> (Bamboo poring)	6	45	<i>Anisoptera</i> (Mersawa)	50
2	<i>Calamus</i> (Rotan)	8	46	<i>Cylophyllum</i> (Bintangor)	50
3	Acacia (Acacia)	15	47	Cananga (Kenanga)	50
4	<i>Anthocephalus</i> (Kelempayan)	15	48	<i>Canarium</i> (Kedondong)	50
5	<i>Ceiba</i> (Kapok)	15	49	<i>Casuarina</i> (Ru)	50
6	<i>Duabanga</i> (Sawih)	15	50	<i>Chukrasia</i> (Surian Batu)	50
7	Endospermum (Sesendok)	15	51	<i>Caelastegia</i> (Punggai)	50
8	<i>Macaranga</i> (Mahang)	15	52	<i>Dactyloctenium</i> (Jongkong)	50
9	<i>Mallotus</i> (Balik angin)	15	53	<i>Dipterocarpus</i> (Keruing)	50
10	<i>Octomales</i> (Binuang)	15	54	<i>Dryobalanops</i> (Kapur)	50
11	<i>Paraserianthes [Albizia]</i> (Batai/Kayu Macis)	15	55	<i>Durio</i> (Durian)	50
12	<i>Peronema canescens</i> (Sungkai)	15	56	<i>Eusideroxylon zwageri</i> (Belian)	50
13	<i>Pterospermum strafianum</i> (Bayor)	15	57	<i>Gonystylus</i> (Ramin)	50
14	<i>Agathis</i> (Damar minyak/Bindang)	25	58	<i>Heritiera</i> (Mengkulang)	50
15	<i>Alstonia</i> (Pulai)	25	59	<i>Hopea</i> (Merawan)	50
16	<i>Araucaria</i> (Hoop pine/Klinki Pine)	25	60	<i>Instia</i> (Merbau)	50
17	<i>Artocarpus</i> (Cempedak Terap)	25	61	<i>Kokoqna</i> (Mata Ulat)	50
18	<i>Azadirachta</i> (Sentang/Ranggu)	25	62	<i>Koompassia</i> (Kempas)	50
19	<i>Bischofia</i> (Javan Cedar)	25	63	<i>Neobalanocarpus</i> (Chengal)	50
20	<i>Camnosperma</i> (Terentang)	25	64	<i>Parashorea</i> (Urat Mata/Gerutu)	50
21	<i>Cinnamomum</i> (Pokok Teja)	25	65	<i>Pentace</i> (Melunak)	50
22	<i>Cratoxylon</i> (Geronggang)	25	66	<i>Pentaspadon</i> (Pejon)	50
23	<i>Dacrydium</i> (Sempilor)	25	67	<i>Pithecellobium</i> (Kungkur)	50
24	<i>Dillenia</i> (Simpoh)	25	68	<i>Pterocymbium javanicum</i> (Teluto)	50
25	<i>Dyera</i> (Jelutong)	25	69	<i>Sandoricum</i> (Sentul)	50
26	Endospermum (Terbulan)	25	70	<i>Scapium</i> (Kembang Semangkok)	50
27	<i>Eucalyptus</i> (Eucalyptus)	25	71	<i>Scapium sindora</i> (Sepetir)	50
28	<i>Gmelina</i> (Yemane)	25	72	<i>Shorea</i> (Meranti/Engkabang/Majau)	50
29	<i>Hevea</i> (Rubber)	25	73	<i>Tetramerista</i> (Punah)	50
30	<i>Kharya</i> (Khaya)	25	74	<i>Toona</i> (Surian)	50
31	<i>Ilex</i> (Kordam)	25	75	<i>Vatica</i> (Resak)	50
32	<i>Mangifera</i> (Machang)	25			
33	<i>Palaquium</i> (Nyatoh)	25			
34	<i>Parkia</i> (Petai)	25			
35	<i>Pinus</i> (Pine)	25			
36	<i>Pterocarpus</i> (Angsana)	25			
37	<i>Pterocymbium</i> (Melembu)	25			
38	<i>Petrospermum javanicum</i> (Bayor Batu)	25			
39	<i>Santiria</i> (Kedondong)	25			
40	<i>Schima</i> (Gegatal)	25			
41	<i>Sandoricum</i> (Kelampu)	25			
42	<i>Swietenia</i> (Mahogany)	25			
43	<i>Tectona</i> (Teak/Kayu Jati)	25			
44	<i>Terminalia</i> (Talisai)	25			

Extent of Natural Forests and Forest Plantations in Cambodia**2014****(1,000 ha)**

Natural Forests				Forest Plantations				Sub-Total				Total
PFE		Non-PFE		PFE		Non-PFE		PFE		Non-PFE		
Production Forests	Protection Forests											
1,602	2	1,433	5,442	8	0	29	2	1,610	2	1,462	5,444	8,518

Source: All the forest areas are based on forest cover 2014 which was published in 2016.

Note:

1. **PFE (Permanent Forest Estate):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forest in the PFE.
2. **Plantation Forests:** Include short-rotation plantation for wood, fibre and energy, and forest planted for protection of soil and water or ecosystem restoration.
3. **Production Forests:** Natural forests (including natural regeneration forests and protected areas in production forests) or plantation forests managed for the production of wood, fibre and energy.
4. **Protection Forests:** Include natural forests or plantation forests managed for the protection/conservation of soil, water and biological diversity.

Annex 6**Extent of Forest Land Ownership in Cambodia****2014****(1,000 ha)**

Natural Forests						Forest Plantations						Total		
PFE			Non-PFE			PFE			Non-PFE					
Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned
1,604	0	0	5,442	1,433	0	8	0	0	31	0	0	7,085	1,433	0

Source: All the forest areas are based on forest cover 2014 which was published in 2016.

Note:

1. **Publicly owned:** National, state and regional governments (including subnational states or provinces, where applicable) or government-owned corporations, including share designated as leasehold; and municipalities, cities, communes or public associations.
2. **Privately owned:** Private forestry or wood-processing industries, private corporations, cooperatives or institutions (religious, educational, pension or investment funds, nature conservation societies, etc.), foundations, private associations of smallholders, individuals and families.
3. **Indigenous-owned:** Indigenous and tribal peoples whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partly by their own customs or traditions or by special laws and regulations.

Extent of Natural Forests and Forest Plantations in Myanmar**2018****(1,000 ha)**

Natural Forests				Forest Plantations				Sub-Total				Total
PFE		Non-PFE		PFE		Non-PFE		PFE		Non-PFE		
Production Forests	Protection Forests											
17,194	3,917	5,797	0	1,045	0	4	0	18,239	3,917	5,801	0	27,957

Source: Myanmar Statistical Yearbook, 2018.

Note:

1. **PFE (Permanent Forest Estate):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forest in the PFE.
2. **Plantation Forests:** Include short-rotation plantation for wood, fibre and energy, and forest planted for protection of soil and water or ecosystem restoration.
3. **Production Forests:** Natural forests (including natural regeneration forests and protected areas in production forests) or plantation forests managed for the production of wood, fibre and energy.
4. **Protection Forests:** Include natural forests or plantation forests managed for the protection/conservation of soil, water and biological diversity.

Annex 8**Extent of Forest Land Ownership in Myanmar****2018****(1,000 ha)**

Natural Forests						Forest Plantations						Total		
PFE			Non-PFE			PFE			Non-PFE					
Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned
21,111	0	0	5,797	0	0	894	151	0	0	4	0	27,802	155	0

Source: Myanmar Statistical Yearbook, 2018.

Note:

1. **Publicly owned:** National, state and regional governments (including subnational states or provinces, where applicable) or government-owned corporations, including share designated as leasehold; and municipalities, cities, communes or public associations.
2. **Privately owned:** Private forestry or wood-processing industries, private corporations, cooperatives or institutions (religious, educational, pension or investment funds, nature conservation societies, etc.), foundations, private associations of smallholders, individuals and families.
3. **Indigenous-owned:** Indigenous and tribal peoples whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partly by their own customs or traditions or by special laws and regulations.
4. Private-owned plantation does not include rubber plantation.

Extent of Natural Forests and Forest Plantations in Thailand**2018****(1,000 ha)**

Natural Forests				Forest Plantations				Sub-Total				Total
PFE		Non-PFE		PFE		Non-PFE		PFE		Non-PFE		
Production Forests	Protection Forests											
0	14,846	0	0	0	0	1,552	0	0	14,846	1,552	0	16,398

Source: Primarily from the Forest Land Management in Forest statistics, RFD (Royal Forest Department), 2018.

Note:

1. **PFE (Permanent Forest Estate):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forest in the PFE.
2. **Plantation Forests:** Include short-rotation plantation for wood, fibre and energy, and forest planted for protection of soil and water or ecosystem restoration.
3. **Production Forests:** Natural forests (including natural regeneration forests and protected areas in production forests) or plantation forests managed for the production of wood, fibre and energy.
4. **Protection Forests:** Include natural forests or plantation forests managed for the protection/conservation of soil, water and biological diversity.

Annex 10**Extent of Forest Land Ownership in Thailand****2018****(1,000 ha)**

Natural Forests						Forest Plantations						Total		
PFE			Non-PFE			PFE			Non-PFE					
Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned
14,846	0	0	0	0	0	0	0	0	63	1,489	0	14,909	1,489	0

Source: Primarily from the Forest Land Management in Forest statistics, RFD (Royal Forest Department), 2018.

Note:

- Publicly owned:** National, state and regional governments (including subnational states or provinces, where applicable) or government-owned corporations, including share designated as leasehold; and municipalities, cities, communes or public associations.
- Privately owned:** Private forestry or wood-processing industries, private corporations, cooperatives or institutions (religious, educational, pension or investment funds, nature conservation societies, etc.), foundations, private associations of smallholders, individuals and families.
- Indigenous-owned:** Indigenous and tribal peoples whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partly by their own customs or traditions or by special laws and regulations.
- Private-owned plantation does not include rubber plantation.

Extent of Natural Forests and Forest Plantations in Vietnam**2018****(1,000 ha)**

Natural Forests				Forest Plantations				Sub-Total				Total
PFE		Non-PFE		PFE		Non-PFE		PFE		Non-PFE		
Production Forests	Protection Forests											
4,252	2,130	0	3,874	0	740	3,495	0	4,252	6,744	3,495	0	14,491

Source: Adapted from data in Decision No. 911/QĐ-BNN-TCLN on Public announcement of the forest status in 2018 dated 19.03.2019 by the Minister of Ministry of Agriculture and Rural Development of Vietnam.

Note:

1. **PFE (Permanent Forest Estate):** Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions, including privately held forest in the PFE.
2. **Plantation Forests:** Include short-rotation plantation for wood, fibre and energy, and forest planted for protection of soil and water or ecosystem restoration.
3. **Production Forests:** Natural forests (including natural regeneration forests and protected areas in production forests) or plantation forests managed for the production of wood, fibre and energy.
4. **Protection Forests:** Include natural forests or plantation forests managed for the protection/conservation of soil, water and biological diversity.

Annex 12**Extent of Forest Land Ownership in Vietnam****2018****(1,000 ha)**

Natural Forests						Forest Plantations						Total		
PFE			Non-PFE			PFE			Non-PFE					
Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned	Publicly owned	Privately owned	Indigenous-owned
6,382	0	0	3,874	0	0	740	0	0	1,013	2,482	0	12,009	2,482	0

Source: Adapted from data in Decision No. 911/QĐ-BNN-TCLN on Public announcement of the forest status in 2018 dated 19.03.2019 by the Minister of Ministry of Agriculture and Rural Development of Vietnam.

Note:

1. **Publicly owned:** National, state and regional governments (including subnational states or provinces, where applicable) or government-owned corporations, including share designated as leasehold; and municipalities, cities, communes or public associations.
2. **Privately owned:** Private forestry or wood-processing industries, private corporations, cooperatives or institutions (religious, educational, pension or investment funds, nature conservation societies, etc.), foundations, private associations of smallholders, individuals and families.
3. **Indigenous-owned:** Indigenous and tribal peoples whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partly by their own customs or traditions or by special laws and regulations.
4. Private-owned plantation does not include rubber plantation.

**INCENTIVES FOR GREEN-GROWTH VALUE CHAIN INVESTMENTS IN
TROPICAL FORESTS
CASE STUDY: BRAZIL AND PERU**

**COUNTRY FINAL REPORT
BRAZIL**

By Ivan Tomaselli

CURITIBA – BRAZIL

JUNE 2020

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List of Symbols

Art.	Article
%	Percentage
CO ₂	carbon dioxide
e.g.	for example
Ha	Hectare
Kg	Kilograms
MM	Million
M ³	Cubic meter
N°	Number
R\$	Brazilian Reais
USD	American Dollar

List of Acronyms

ABIMCI	Brazilian Association for Mechanically Processed Timber Industry (Associação Brasileira das Indústrias de Madeira Processada)
ANA	National Water Agency (Agência Nacional de Águas)
APP	Permanent Preservation Areas (Áreas de Preservação Permanente)
ARPA	Amazon Protected Areas Program (Programa Áreas Protegidas as Amazônia)
ASV	Suppression Vegetation Authorization (Autorização de Supressão Vegetal)
AUR	Restricted Use Areas (Áreas de Uso Restrito)
AUTEF	Forest Harvesting Authorization (Autorização para Exploração Florestal)
AUTEX	Forest Harvesting Authorization (Autorização para Exploração)
BMEL	Federal Ministry of Food and Agriculture of Germany
BNDES	Brazilian Social and Economic Development Bank (Banco Nacional de Desenvolvimento Econômico e Social)
CAFIR	Rural Property Registry (Cadastro de Imóveis Rurais)
CAR	Rural Environmental Registry (Cadastro Ambiental Rural)
CBRN	Biodiversity and Natural Resources Coordination (Coordenadoria de Biodiversidade e Recursos Naturais)
CCS	Chain of Custody System (Sistema de Cadeia de Custódia)
CCZEE	Coordinating Commission for the Ecological-Economic Zoning of the National Territory (Comissão Coordenadora do Zoneamento Ecológico-Econômico do Território Nacional)
CDM	Clean Development Mechanisms
CDZ	Zero Deforestation Commitments (Compromisso Desmatamento Zero)
CER	Certified Emission Reductions
CERFLOR	Brazilian Forest Certification Program (Programa de Certificação Florestal Brasileira)
CETESB	Environmental Company of the State of São Paulo (Companhia Ambiental do Estado de São Paulo)
CGF	Consumer Goods Forum
CGFLOP	Public Forest Management Commission (Comissão Pública de Manejo Florestal)
CIFOR	Center for International Forestry Research
CIPEM	Center for Timber Producers and Exporters of Mato Grosso State (Centro das Indústrias Produtoras e Exportadoras de Madeira do Estado de Mato Grosso)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLT	Cross Laminated Timber
CNAE	National Classification of Economic Activities (Classificação Nacional de Atividades Econômicas)
CNI	National Industry Confederation (Confederação Nacional da Indústria)
CNFP	National Public Forest Registry (Cadastro Nacional de Florestas Públicas)
CNT	National Confederation of Transport (Confederação Nacional do Transporte)
COFINS	Contribution for the Financing of Social Security (Contribuição para o Financiamento da Seguridade Social)
CRA	Environmental Reserve Quota (Cota de Reserva Ambiental)
CSLL	Social Contribution on the Corporate Net Income (Contribuição Social sobre o Lucro Líquido das Pessoas Jurídicas)
CTF	Federal Technical Registry (Cadastro Técnico Federal)
CTF/APP	Federal Technical Register of Potentially Polluting Activities (Cadastro Técnico Federal de Atividades Potencialmente Poluidoras)
DANFE	Auxiliary Document of the Electronic Invoice (Documento Auxiliar da Nota Fiscal Eletrônica)
DAS	Collection Document Guide of Simples Nacional (Documento de Arrecadação do Simples Nacional)
DF	Deforestation-Free
DI	Import Declaration (Declaração de Importação)
DOF	Document of Forest Origin (Documento de Origem Florestal)
DV	Other Values (Demais Valores)
EIA	Environmental Impact Assessment (Estudo de Impacto Ambiental)
EMBRAPA	Brazilian Agricultural Research Company (Empresa Brasileira de Pesquisa Agropecuária)
ENREDD	National Strategy for REDD

FAO	Food and Agriculture Organization
FCO	Constitutional Fund of the Midwest (Fundo Constitucional do Centro-Oeste)
FCP	Palmares Cultural Foundation (Fundação Cultural Palmares)
FEAP	Fund for Expansion of Agribusiness in São Paulo
FECOP	State Fund for Pollution Prevention and Control
FEHIDRO	State Fund for Water Resources
FID	State Fund for the Defense of Diffuse Interests
FLONAs	National Forests (Florestas Nacionais)
FMCG	Fast Moving Consumer Goods
FNDF	National Forest Development Fund (Fundo Nacional de Desenvolvimento Florestal)
FNE	Constitutional Fund of the Northeast (Fundo Constitucional do Nordeste)
FNMA	National Environment Fund (Fundo Nacional do Meio Ambiente)
FNO	Constitutional Fund of the Northeast (Fundo Constitucional do Norte)
FSC	Forest Stewardship Council
FTI	Fund for the Promotion of Tourism, Infrastructure, Services and Interiorization of the Development of Amazonas
FUNAI	National Indian Foundation (Fundação Nacional do Índio)
GCF	Green Climate Fund
GEF	Green Climate Fund
GF	Forest Guide (Guia Florestal)
GHG	Greenhouse Gases (Gases de Efeito Estufa)
GLULAM	Glued Laminated Timber
GOB	Government of Brazil
HWP	Harvested Wood Products
IADB	Inter American Development Bank
IBÁ	Brazilian Tree Industry (Indústria Brasileira de Árvores)
IBAMA	Brazilian Institute of the Environment and Renewable Natural Resources (Instituto Brasileiro de Meio Ambiente e Recursos Naturais Renováveis)
IBGE	Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatísticas)
ICMBio	Institute Chico Mendes of Conservation and Biodiversity (Instituto Chico Mendes de Conservação e Biodiversidade)
ICMS	Tax on Operations Related to the Circulation of Goods and on Services Provision of Interstate, Intermunicipal Transportation and Communication Services (Imposto sobre Operações relativas à Circulação de Mercadorias e Prestação de Serviços de Transporte Interestadual e Intermunicipal e de Comunicação)
IDAM	Agricultural Development and Sustainable Forestry of the State of Amazonas (Instituto de Desenvolvimento Agropecuário e Florestal Sustentável do Estado do Amazonas)
Ideflor-bio	Pará State Forestry and Biodiversity Development Institute (Instituto de Desenvolvimento Florestal e da Biodiversidade do Estado do Pará)
IEF	Forest State Institute (Instituto Estadual de Florestas)
II	Importation Tax (Imposto de Importação)
IMAFLORA	Instituto de Manejo e Certificação Florestal e Agrícola
IN	Normative Instruction (Instrução Normativa)
INCRA	National Institute of Colonization and Land Reform (Instituto Nacional da Colonização e Reforma Agrária)
INMETRO	National Institute of Metrology, Quality and Technology (Instituto Nacional de Metrologia, Qualidade e Tecnologia)
INPE	National Institute for Spatial Research (Instituto Nacional de Pesquisas Espaciais)
INSS	National Social Security Institute (Instituto Nacional de Seguridade Social)
IPEA	Institute of Applied Economic Research (Instituto de Pesquisa Econômica Aplicada)
IPI	Tax on Industrialized Products (Imposto sobre Produtos Industrializados)
IPTU	Land and Urban Tax (Imposto Predial e Territorial Urbano)
IRPJ	Corporate Income Tax (Imposto de Renda sobre Pessoa Jurídica)
ISS	Tax on Services (Imposto Sobre Serviço)
IT	Information Technology
ITR	Rural Territorial Property Tax (Imposto Territorial Rural)
ITTO	International Tropical Timber Organization
KfW	Kreditanstalt für Wiederaufbau (Credit Institute for Reconstruction)
LAIR	Profit Before Income Tax (Lucro Antes do Imposto de Renda)

LO	Operational License (Licença Operacional)
LSSC	Legal and Sustainable Supply Chains
MAPA	Ministry of Agriculture, Livestock and Supply (Ministério da Agricultura, Pecuária e Abastecimento)
MDIC	Ministry of Development, Industry and Foreign Trade
MERCOSUL	Southern Common Market (Mercado Comum do Sul)
MMA	Ministry of the Environment (Ministério do Meio Ambiente)
MP	Provisional Measure (Medida Provisória)
MT	Mato Grosso State
MTE	Ministry of Labour and Employment (Ministério do Trabalho e Emprego)
MWG	Mahogany Working Group
NCM	Common Nomenclature of Mercosul (Nomenclatura Comum do Mercosul)
NDC	Nationally Determined Contribution
NDF	Non Detriment Findings
NGO	Non-Governmental Organization
OECD	Organization for Economic Co-operation and Development
PA	Pará State
PAOF	Annual Forest Grant Plan (Plano Annual de Outorga Florestal)
PASEP	Civil Servant Heritage Formation Program (Programa de Formação do Patrimônio do Servidor Público)
PDFS	Mato Grosso State Forest Development Program (Programa de Desenvolvimento Florestal do Mato Grosso)
PDSA	Sustainable Development Program of the State of Acre (Programa de Desenvolvimento Florestal do Estado do Acre)
PEFC	Program for the Endorsement of Forest Certification Schemes
PIS	Integration Program (Programa de Integração Social)
PEMC	Climate Change State Policy (Política Estadual de Mudanças Climáticas)
PES	Payment for Environmental Services
PMFC	Community and Family Forest Management Program (Plano de Manejo Florestal Comunitário)
PMFS	Sustainable Forest Management Plan (Plano De Manejo Florestal Sustentável)
PNMC	National Policy on Climate Change (Política Nacional de Mudança do Clima)
PNPSA	National Policy for Payment for Environmental Services (Política Nacional de Pagamento por Serviços Ambientais)
POA	Annual Operational Plan (Plano Operacional Annual)
PPA	Pluriannual Plan (Plano Plurianual)
PPCS	Action Plan for Sustainable Production and Consumption (Plano de Ação para Produção e Consumo Sustentáveis)
PPCDA	Plan of Action for the Prevention and Control of Deforestation in the Amazon
PPG-7	Pilot Program for the Protection of Tropical Forests
PPGU	Polluting Potential and User of Natural Resources
PRA	Environmental Regularization Program (Programa de Regularização Ambiental)
PRADA	Project to Regularize Degraded Areas (Projeto de Regularização de Áreas Degradadas)
PRODEIC	Industrial and Commercial Development Program of Mato Grosso (Programa de Desenvolvimento Industrial e Comercial de Mato Grosso)
PRODES	Amazon Deforestation Calculation Program (Programa de Cálculo do Desflorestamento da Amazônia)
PSA	Pagamento por Serviços Ambientais
RADAR	Registration and Tracking of the Performance
RAPP	Annual Report of Potentially Polluting Activities (Relatório Annual de Atividades Potencialmente Poluidoras)
REDD	Reducing Emissions from Deforestation and Forest Degradation
REI	Registration of Exporters and Importers
RFB	Brazilian Federal Revenue (Receita Federal do Brasil)
RGI	Real Estate Registry (Registro Geral de Imóveis)
RL	Legal Reserve (Reserva Legal)
RO	Rondônia State
RPPN	Private Reserve of Natural Heritage (Reserva Particular do Patrimônio Natural)
SDG	Sustainable Development Goals
SECEX	Secretariat of Foreign Trade
SEDEST	Secretary of State for Sustainable Development and Tourism
SEMA	State Secretary for the Environment (Secretaria de Estado do Meio Ambiente)

SENAR	National Rural Learning Service (Serviço Nacional de Aprendizagem Rural)
SEPROR	State Secretariat for Rural Production
SFB	Brazilian Forest Service (Serviço Florestal Brasileiro)
SFM	Sustainable Forest Management
SFMP	Sustainable Forest Management Plan
SH	Harmonized System (Sistema Harmonizado)
SICAR	National Rural Environmental Registry System (Sistema Nacional de Cadastro Ambiental Rural)
SINAFLOR	National System of Control of the Origin of Forest Products (Sistema Nacional de Controle de Origem de Produtos Florestais)
SINMETRO	National System of Metrology, Standardization and Industrial Quality
SMA/SP	Secretariat of Environment of São Paulo (Secretaria de Meio Ambiente de São Paulo)
SISA	State System of Incentives for Environmental Services (Sistema Estadual de Incentivos por Serviços Ambientais)
SISCOMEX	Integrated Foreign Trade System (Sistema Integrado de Comércio Exterior)
SISFLORA	System of Forest Products Commercialization and Transport (Sistema de Comercialização e Transporte de Produtos Florestais)
SISNAMA	National Environment System (Sistema Nacional do Meio Ambiente)
SNIF	National System of Forest Information (Sistema Nacional de Informações Florestais)
SNUC	National System of Conservation Units (Sistema Nacional de Unidades de Conservação)
SP	Strategic Priorities
SPP	Sustainable Procurement Policy
SPU	Union Heritage Secretariat (Secretaria Pública da União)
STCP	STCP Engenharia de Projetos Ltda
SW4SW	Sustainable Wood for a Sustainable World
TAC	Conduct Adjustment Terms (Termos de Ajustamento de Conduta)
TCFA	Environmental Control and Inspection Fee (Taxa de Controle e Fiscalização Ambiental)
TEC	Common External Tariff (Tarifa Externa Comum)
TCRA	Environmental Recovery Commitment Terms (Termos de Compromisso de Recuperação Ambiental)
TFA	Tropical Forest Alliance
TIPI	Table of Incidence of the Tax on Industrialized Products (Tabela de Incidência de Imposto sobre Produtos Industrializados)
TNC	The Nature Conservancy
TOR	Terms of Reference
UC	Conservation Units (Unidades de Conservação)
UFEMG	Fiscal Unit of the State of Minas Gerais (Unidade Fiscal do Estado de Minas Gerais)
UNCDB	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention on Climate Change
VMA	Annual Minimum Value (Valor Mínimo Anual)
VRC	Contract Reference Value (Valor de Referência do Contrato)
WWF	World Wildlife Foundation
ZEE	Ecological-Economic Zoning (Zoneamento Ecológico Econômico)

1. BACKGROUND

1.1 Project Context

The "Sustainable Wood for a Sustainable World" (SW4SW), adopted in 2018, is a joint initiative of the Collaborative Partnership on Forests by FAO together with the International Tropical Timber Organization (ITTO), World Bank, Center for International Forestry Research (CIFOR) and World Wildlife Foundation (WWF).

This initiative aims at strengthening sustainable wood value chains to enhance their social, economic and environmental benefits from production to consumption. ITTO members have identified production forests and harvested wood products (HWP thereof) as a promising sector contributing to Sustainable Development Goals (SDG) and Nationally Determined Contributions (NDC) under the Paris Climate Agreement.

In this context, as part of the work program, the activity "Incentives for green-growth value chain investments in tropical forests" is facilitated by funding from the Government of Germany. BMEL (Federal Ministry of Food and Agriculture) of Germany has granted project financing to ITTO for further promotion and operationalization of legal and sustainable supply chains (LSSC). This activity is the next step towards assessing, formulating and proposing fiscal, non-fiscal and taxation incentives, subsidies and other macroeconomic tools for enhancing investments in tropical production forests for meeting the growing challenges in wood demand and supply in the future.

By proposing and carrying out this action, ITTO assists its producer countries to formulate and implement effective and efficient incentives for the sustainable development of their forests. Moreover, it facilitates the countries to find channels to, and participate in, legal and sustainable supply chains which are gaining more importance from the proliferation of deforestation-free (DF) initiatives by major corporate and public entities.

This activity is in conformity with objectives and priorities of the ITTA 2006 and with the ITTO Strategic Action Plan, which mandate to promote legal and sustainable trade in tropical forest products. It is relevant to the Strategic Priorities (SP) 1, 2, 3 and 4 of the ITTO Strategic Action Plan and SDG 10, 13, 15 and 17, as follows:

- SP 1 – Promote Good Governance and Enabling Policy Frameworks for Strengthening SFM and Related Trade, and Enhancing SFM Financing and Investment;
- SP 2 – Increase the Contribution of Tropical Forests to National and Local Economies, Including through International Trade;
- SP 3 – Enhance the Conservation and Sustainable Use of Biodiversity in Tropical Timber Producing Forests;
- SP 4 – Reduce Tropical Deforestation and Forest Degradation and Enhance the Provision of Environmental Services;
- SDG 10 – Reduced Inequalities;
- SDG 13 – Climate Action;
- SDG 15 – Life on Land;
- SDG 17 – Partnership for the Goals.

Similarly, this activity is also relevant to all other ITTO members providing an up-to-date analysis and recommendations on fiscal, non-fiscal incentives and other tools such as taxes and subsidies that are proven effective to the members' adoption with national adjustments. Therefore, this will be a relevant tool in suggesting the scope and type of incentives which is also beneficial to all ITTO members.

1.2 Objectives of the ITTO Study and Strategic Approach

The major objectives of the study are:

- i. *To create improved capacities and collaborative mechanisms in ITTO producer countries to plan, analyze and deploy fiscal, non-fiscal and other incentives and tools in an effective and fair manner for creating a supply change in tropical timber/wood products; and,*
- ii. *To establish a future vision on foreseeable demand-supply gap for sustainable tropical wood products in global markets, which will convince producers of the market scale and concrete terms of access through Legal and Sustainable Supply Chains (LSSC).*

The specific objective of the study is *to assess, model and propose templates of fiscal and non-fiscal incentives and other effective means to promote sustainable forestry practices in tropical countries, taking into account the likely shortfall between timber supply and demand that many tropical countries are likely to face over the next 30 years.*

The strategic approach is to stimulate forest sector stakeholders through strengthened analytical skills and exemplary cases that can be emulated in a national re-thinking process on incentives.

Innovative incentives should be perceived as a key tool to attract new forest investments that would help attaining progress in SFM and supply change through LSSCs into growing markets that are increasingly deficient of wood.

The ITTO Project Outputs includes:

- i. Review of fiscal, non-fiscal and other incentives for SFM of two existing case studies in major tropical producer countries;
- ii. A study to establish global demand-supply gap for sustainable tropical timber in the next 30 years;
- iii. Six new case studies on models / templates of fiscal and other incentives for promoting SFM and LSSCs.

1.3 Case Studies

In order to facilitate ITTO's Dialogue with participating countries and to help engage producers with ITTO's work, case studies of producer countries were selected in the three tropical regions to give a geographical depth to the analysis. Case studies covers, basically:

- A cost-benefit analysis and an assessment grid (template) of technical aspects of current fiscal incentives to conclude on their effectiveness;
- Feasibility of other (non-fiscal, taxes, subsidies) incentives given individual country situation/policies/timber sector characteristics;
- Narratives on pilot implementation of most promising incentive(s) in case countries or forests concessions in conjunction with other anti-deforestation policies in place.

As the executing agency and organizational structure, ITTO Secretariat assumed the leadership in refining the TORs, overseeing the achievement of the expected objectives and outcomes, quality assurance and liaising with the donor and the partners such as the World Bank and KfW.

ITTO Secretariat and donor made the final choice of case study countries (Brazil and Peru for Latin America Region) in consultation with the partners and Project Coordinator. The Coordinator was responsible to prepare reports regularly, and to present to the ITTO Project Manager on agreed milestone. Sub-contractors for analytical report part, case studies and demand-supply gap analysis reported to the Coordinator.

Finally, in order to collect relevant information on Brazil and Peru, ITTO hired the Consultant STCP Engenharia de Projetos Ltda. to undertake case studies on fiscal and non-fiscal incentives for fostering sustainable forest management (SFM) and deforestation-free commodities in these Latin American countries. Based on the TOR, the Consultant was requested to prepare a report, covering information on the current national SFM framework, land tenure legal framework, land use planning process, forest taxation structure, incentives and disincentives for SFM, commitments by the private sector, undertaking a dialogue with relevant stakeholders in both countries, and other related aspects. Furthermore, aside from collecting above-mentioned data/information, the report also includes interviews with representatives of government institutions, wood industry, environmental NGOs and other relevant organizations to support the collected information (See Annex 1).

This document is the Final Report for Brazil prepared by the Consultant, Dr. Ivan Tomaselli, with the support of Dr. Sofia Hirakuri.

2. NATIONAL SFM FRAMEWORK

2.1 Forest Resources

Brazil has a total of 488.1 million hectares of natural forests and 9.9 million hectares of planted forests (SFB-SNIF, 2019). The natural forests in Brazil is divided into 6 biomes: Amazon (Amazônia), "Caatinga", Savannah (Cerrado), Atlantic Forest (Mata Atlântica), "Pampa" and Wetland (Pantanal). The biomes of Amazônia, Caatinga and Cerrado are responsible for 94% of the total forest covered area.

Table 1 presents the biomes and their corresponding area in hectares and Figure 1 presents a map of the distribution of biomes in Brazil.

Table 1 – Forest area by biome (2018)

Biome	Area (Ha)	%
Amazônia	334,611,999	68.6
Caatinga	36,268,803	7.4
Cerrado	90,207,755	18.5
Mata Atlântica	19,260,873	3.9
Pampa	2,271,969	0.5
Pantanal	5,445,547	1.1
Total	488,066,946	100

Source: SFB – SNIF (2019), compiled by STCP.

In Brazil, natural forests are most predominant in northern region such as Acre, Rondônia, Pará, Amazônia, Mato Grosso and Roraima states. On the other hand, planted forests are mostly found on southeast (Minas Gerais and São Paulo), northeast (Bahia), centerwest (Mato Grosso do Sul) and southern regions (Paraná and Santa Catarina).

Figure 1 – Map of the distribution of Biomes in Brazil



Source: Prepared by STCP (2020).

Figure 2 illustrates commonly traded wood species in the country. Brazil has a long history of forest plantations using exotic species, such as Eucalyptus and Pine trees for commercial purposes. Most of the industrial timber supply, around 90%, is currently from plantations. According to SNIF, based on IBÁ (2018). Eucalyptus plantations (7.5 million ha) are located mainly in the states of Minas Gerais, São Paulo and Mato Grosso do Sul, while pine plantations (2.4 million ha) are mostly located in the states of Paraná, Santa Catarina and Rio Grande do Sul. In recent years, the country has made efforts on investing in plantation of native timber species like Paricá (*Schizolobium amazonicum*) and rubber wood (*Hevea brasiliensis*). Investments have also been made in plantations of Teak (*Tectona grandis*), as well as other valuable species such as African Mahogany (*Kaya spp*), aiming to replace the industrial timber supply from natural forests.

Figure 2 – Commonly traded wood species in Brazil (native and planted)

NATIVE TIMBER SPECIES		PLANTED SPECIES	
Common species: <ul style="list-style-type: none"> Maçaranduba (<i>Manikara huberi</i>); Angelim (<i>Dinizia excelsa</i>); Cupiúba (<i>Goupia coubaril</i>); Jatobá (<i>Hymenea coubaril</i>); Cedrinho (<i>Erisma uncinatum</i>); Amapá (<i>Brosimum utile</i>); Cumaru (<i>Dipteryx odorata</i>); Faveira (<i>Parkia spp.</i>); Garapa (<i>Apuleia leiocarpa</i>). 	High – value species: <ul style="list-style-type: none"> Yellow Ipe (<i>Handroanthus serratifolia</i>); Ipe Roxo (<i>Handroanthus impetiginosus</i>); Red cedar (<i>Cedrela odorata</i>); - This species is listed at CITES Appendix III. 	Common commercial species: <ul style="list-style-type: none"> Pine tree (<i>Pine spp.</i>); Eucalyptus (<i>Eucalyptus spp.</i>). 	Other species: <ul style="list-style-type: none"> Acacia (<i>Acacia spp.</i>); Teak (<i>Tectona spp.</i>); Parica (<i>Schizolobium amazonicum</i>); Rubber wood (<i>Hevea brasiliensis</i>).

Source: Data bank STCP (2020).

2.2 Overview of SFM Regulation

The main law involving land use and forests management in Brazil is the Brazilian Forest Code (Law N°. 12.651/2012). Article 31 of the Forest Code sets out that harvesting in natural forests, on public or private land, requires a permit issued by the competent authority, upon prior approval of a Sustainable Forest Management Plan (SFMP). The Plan defines techniques for harvesting, forest replacement and management compatible with diverse ecosystems.

Table 2 presents a summary of the laws and other legal instruments applied to management of natural forest, harvesting permits and other forestry-related activities.

Table 2 – Laws and regulations related to forest management

Laws and Regulations	Year	Description
Law N°. 6.938	1981	Provides for the National Environmental Policy Act, its purposes and formulation and application mechanisms, and provides for other matters.
Law N° 7.804	1989	Changes Law N° 6.938/1981, which provides for the National Environmental Policy Act.
Law N°. 11.284	2006	Deals with the management of public forests with the objective of sustainable production and establishes principles for the administration of public forests, relating forest management and sustainable management.
Normative Instruction MMA N°. 05	2006	Regulates technical procedures for the preparation, presentation, execution and technical evaluation of Sustainable Forest Management Plan – PMFS, among other measures such as succession on the Legal Amazon.
Decree N°. 6.063	2007	Regulates provisions of Law N° 11.284/2006, which deals with the management of public forests for sustainable production (forest concessions).
Law N°. 12.187	2009	Establishes the National Policy on Climate Change - PNMC and makes other provisions, such as carbon markets for Climate change mitigation. It includes Forest Carbon for International and National Market.
Decree N° 6.874	2009	Establishes the Federal Community and Family Forest Management Program – PMCF, whose objective is to promote sustainable management in forests that are used by family farmers, land reform settlers and traditional peoples and communities.
Normative Instruction ICMBio N° 16	2011	Regulates the guidelines and administrative procedures for the approval of the Community Sustainable Forest Management Plan (PMFS) for logging within the Extractive Reserve, Sustainable Development Reserve and National Forest.
Law N°. 12.651	2012	It is the Brazilian Forest Code. It establishes general rules on the protection of vegetation, Permanent Preservation areas and Legal Reserve areas; forest

Laws and Regulations	Year	Description
		harvesting, the supply of forest raw material, the control of the origin of forest products and the control and prevention of forest fires, and provides for economic and financial instruments to achieve its objectives.
Normative Instruction IBAMA N° 21	2014	It establishes the National Forest Products Origin Control System - SINAFLOR, with the purpose of controlling the origin of wood, charcoal and other forest products and by-products and integrating the respective data of the different federative entities.
Normative Instruction IBAMA N° 21	2014	It deals with the Forest Origin Document - DOF for the control of origin, transport and storage of forest product and by-product
Decree N°. 8.375	2014	Deals with the Agricultural Policy for planted forest, among other measures.

Source: Compiled by STCP (2020).

According to the Forest Code and complementary legal instruments, harvesting in natural forest requires:

- Preparation of a SFM;
- Forest Census and georeferencing of each commercial tree;
- Preparation of an Annual Operational Plan (POA);
- Issuance of the forest harvesting /logging permits (AUTEF¹/AUTEX).

AUTEF and AUTEX show the volumes allowed to be harvested by species, based on the POA. Because of the nature of jurisdiction in Brazil, individual States might consider particularities in their legislation regarding forest management and the issuance of permits. Documents/control systems involve:

- **DOF (Document of Forest Origin)**

DOF is a document created by Normative Instruction N° 21/2014, by IBAMA, applies only to native timber from natural forests. It is issued based on information on timber volumes defined in the AUTEX, which is based on information of SFMPs and Census/POA of natural forests (private natural forests and public forest concession). The DOF can also be based on permits of land use change or vegetation suppression authorization². It is noteworthy that indigenous people are not allowed to commercialize logs from their lands, however, other traditional communities are allowed to sell logs from their forests.³ Yet, this activity is practically inexistent⁴.

- **SINAFLOR System (National System for Control of the Origin of Forest Products)**

This system integrates the control of the origin of wood and forest products, under the coordination of IBAMA. SINAFLOR was established by Normative Instruction N° 21/2014 in compliance with Art. 35 and Art. 36 of Law N° 12.651/12 and is being gradually implemented across Brazil. SINAFLOR⁵ controls and report volumes from Sustainable Forest Management Plans (private and public land), land use changes, vegetation suppression permits, forest repositions⁶ and isolated trees cut. Forest management projects authorized prior to the implementation of SINAFLOR will be managed under the DOF. According to IBAMA (2018), twenty-one states are ready to operate the system, with the exception of the states of Bahia, Pará, Mato Grosso, Espírito Santo, São Paulo and Santa Catarina, which are still completing the stages of training for its implementation.

¹ Logging permit in Pará and Mato Grosso States use the terminology AUTEF (Autorização de Exploração Florestal) instead of AUTEX.

² Vegetation Suppression Authorization (Autorização de Supressão Vegetal - ASV) refers to the suppression of native vegetation in undertakings of public or social interest subject to environmental licensing by IBAMA. It seeks to guarantee the control of exploitation and commercialization of the forest raw material actually exploited in the undertakings licensed by IBAMA and the control of flora specimens.

³ In Brazil, indigenous people fall within the category of traditional communities, which are represented by indigenous people, quilombola communities, extractivists/rubber tappers, “ribeirinhos”, nomads and others who develop activities such as Brazilian nut collection, handicrafts, etc. Nonetheless, there are specific regulations for some categories, such as “rubber tappers”, “indigenous people”, and others. In case of indigenous people, they are under the administration of FUNAI.

⁴ Interviews held in Brazil with several experts/ stakeholders (Project 05ITT0118).

⁵ Planted trees (native and exotic) do not need authorization, according to Art 35 of Law N° 12.651/2012; however, a prior notice is required by registering at SINAFLOR system.

⁶ The forest reposition is the compensation of the volume of raw material extracted from natural forests by the volume of raw material resulting from forest planting for recovery of forest cover. (<https://www.ibama.gov.br/flora-e-madeira/reposicao-florestal/o-que-e-reposicao-florestal>)

- **SISFLORA System (System of Forest Products Commercialization and Transport)**

SISFLORA is the State System of Commercialization and Transport of Forest Products, exclusively used in the States of Pará and Mato Grosso for monitoring and control. Those States have decentralized system due to the high volumes harvested from natural forests, being responsible for the supply of over 70% of tropical timber produced in the country. SISFLORA covers volume from SFMP (private and public land), land use changes, vegetation suppression authorizations, forest repositions and isolated trees cut.

2.3 Institutions involved in forests

The Brazilian Forest Code (Law N° 12.651/12) sets out the responsibilities of agencies/institutions in charge for forest-related activities. The management of forests in Brazil involves, in some cases, different institutions at three levels of government (federal, state, and municipality).

The main institutions are federal and state, including:

- **Federal Level**

At the federal level, forest management is under the responsibility of Ministry of Agriculture, Livestock and Supply (MAPA) and the Ministry of the Environment (MMA). The main governmental institutions involved with natural forest management are the Brazilian Forest Service (SFB), Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) and Institute Chico Mendes of Conservation and Biodiversity (ICMBio). These organizations issue permits, control and supervise operations.

There are other institutions, at federal level that influence the forest sector. Examples are the National Institute of Colonization and Land Reform (INCRA) and the Ministry of Labor and Employment (MTE).

In addition, some institutions that promote forest research and development can be underscored. For instance, the Brazilian Agricultural Research Corporation (EMBRAPA) is linked to MAPA and is characterized as a technological innovation company, focused on generating knowledge and technology for Brazilian agriculture, including research for the forestry sector (EMBRAPA FLORESTAS).

- **State Level**

At State level the responsibility is generally under the State Secretariat for Environment (SEMA). Major responsibilities of these organizations, involving the forest sector, include: establishing regulations and monitoring forest management, issuance of logging permits, carrying out timber and timber products inspections, varying according to each State.

At some states there are State Forestry Institutes (IEFs), which are usually linked to the SEMA and play major role in the forest sector. The main objective of these institutions is developing activities related to forest development and conservation, encouraging scientific research related to biodiversity conservation and management of protected areas and state conservation units. Only a few Brazilian states have IEF, such as Minas Gerais, Amapá and São Paulo.

The role of the municipalities involving forests is generally less important, but in some cases might be important, for instance to issue of specific permits. Table 3 shows relevant federal and state governmental institutions identified regulating forest management, timber processing and related trade activities.

Table 3 – Major institutions and their role on forest management, timber processing and trade

Organization	Government Level	Roles and Responsibilities
Ministry of Environment MMA	Federal	Formulate and implement national environmental public policies, having as its area of competence the National Environmental Policy and its instruments, among others.
Ministry of Agriculture MAPA	Federal	Responsible for the management of public policies to promote agriculture, the promotion of agribusiness and regulation of services related to the agricultural sector, also involving the forest sector.
Brazilian Forest Service – SFB	Federal	Currently under MAPA, it is responsible for managing federal public forests, generating knowledge, promoting sustainable use and expansion of forest cover and sustainable production of goods and services, making the forest agenda strategic for the country's economy.
Brazilian Institute of the Environment and Renewable	Federal	Responsible for environmental control and inspection, and licensing. It has the following areas of competence: national environmental policy; policy for the preservation, conservation and sustainable use of ecosystems, biodiversity

Organization	Government Level	Roles and Responsibilities
Natural Resources (IBAMA)		and forests, sustainable use of natural resources, international strategies and instruments to promote environmental policies, among others.
Institute Chico Mendes of Conservation and Biodiversity (ICMbio)	Federal	Responsible for proposing, implementing, managing, protecting, inspecting, and monitoring the Conservation Units; principally when involving sustainable forest management in extractive reserves, national forests and others.
National Institute of Colonization and Land Reform (INCRA)	Federal	Its major role is to implement land reform and carry out national land planning.
State Secretariat of the Environment (SEMA)	State	Promote integrated, shared and efficient environmental management compatible with sustainable development, ensuring the preservation, conservation of the environment and improvement of the quality of life.

Source: Compiled by STCP (2020).

2.4 Managing and Harvesting Tropical Forests

In Brazil, as already mentioned, timber harvesting can occur in public lands (Forest Concession) or private lands. Legal requirements for forest managing and harvesting are laid out in the Brazilian Forest Code (Law N° 12.651/12), complemented by the Forest Concession Law N° 11.284/06, in the case of public lands, and their regulations.

In terms of **forest concession**, commercial harvesting requires the Annual Forest Concession Plan (PAOF)⁷, prepared and proposed by SFB and approved by the Ministry of Environment. At State level (state public forests), PAOF is prepared and proposed and approved by the state government authorities, generally by the State Environment Secretariat (SEMA).

In Brazil, 311 MM hectares of public forests are currently registered in the National Public Forest Registry (CNP). Every year, SFB publishes the PAOF (Annual Forest Concession Plan), which contains information on the areas subject to forest concession in that year. For example, the 2019 PAOF published areas eligible for forest concession, equivalent to 2.6 million hectares as a net area available for forest concession. On the other hand, the areas currently under forest concession contract represent 1.05 MM hectares (See Table 4).

Table 4 – Areas under forest concession contracts in Brazil's FLONAS (2019)

FLONA	Area under concession (ha)
Jamari (RO)	95,656
Jacundá (RO)	87,772
<i>Subtotal Rondônia State</i>	183,428
Saracá-taquera (PA)	48,703
Saracá-taquera / Lote Sul (PA)	86,306
Crepori (PA)	194,012
Altamira (PA)	361,917
Caxiuanã (PA)	176,600
<i>Subtotal Pará State</i>	867,539
TOTAL	1,050,967

Source: Brazilian Forest Service (2019).

⁷ The PAOF establishes the criteria for access to forest concessions by small, medium-sized organizations, as a way to promote equity in the management policy of Public Forests in Brazil. It considers initiatives of great value such as the Plan of Action for the Prevention and Control of Deforestation in the Amazon Legal (PPCDA) and the Ecological-Economic Macro zoning of the Legal Amazon.

All concessionaires should be registered at the IBAMA's Technical Register System (Cadastro Técnico Federal). Moreover, in order to be granted the legal right to harvest from concessions in natural public forests, concessionaires should hold a concession contract.

To harvest in **private natural forest lands**, timber companies should hold, first of all, a land title documents or a land lease contract. With this document in hands harvesting in natural forests⁸ requires additionally:

- An approved Sustainable Forest Management Plan – SFMP;
- An approved Annual Operational Plan – POA; and
- A logging permit (generally called Autorização de Exploração – AUTEX, except in the State of Pará, which it is called AUTEF).

It is important to notice that the forest management plan and POA are supporting documents to authorize harvesting, as the issuance of AUTEX/AUTEF is based on these documents. Public federal forest under concession requires an authorization from IBAMA, while private and state forest requires an authorization from SEMA.

A harvesting permit⁹ is not required for forest plantations (native and exotic species). In some States companies/ plantation owners need to inform the competent authorities (normally the local State Environmental Secretariat – SEMA) the final purpose of the plantation (when establishing), and some other specific information. The rules established in the Forest Code (Law N° 12.651/12) related to land use, also has to be followed.

Permit for native forest clear-cutting, involving smaller areas (under 250 ha) is relatively simple. Based on the land owner request and after submission of required documents, the State Environment Secretariat (SEMA) issues Land Use Change Authorization and Vegetation Suppression Authorization. They analyse the request and if approved the permit is issued. Among the documents to be presented by the land owner to obtain the clear-cut permit there is a forest inventory pointing out the species and volume of timber that will be available from the suppression operation in the area. Clear-cutting larger natural forests areas requires an Environmental Impact Assessment – EIA.

2.5 Processing, Transport and Trading Tropical Timber

2.5.1 Legal Procedures on Wood Processing

In Brazil, the timber processing industries must hold, to operate, a regulatory pre-installation and operation permit. Art 31 of Law N° 592/2017 sets out the required licenses. The licenses are issued by IBAMA or by the respective State Environment Authorities – SEMAs, which includes:

- **Prior License**

Granted in the preliminary phase of planning, approving location and design, certifying the environmental requirements and conditions to be met in the next phases of the implementation;

- **Installation License**

Authorizes the installation in accordance with the specifications contained in the approved plans, programs and projects, including environmental control measures and other constraints, which are a determining factor; and

- **Operation License**

Authorizes the operation after verification of the effective compliance with the prior licenses procedure, with the environmental control measures and conditions determined for the operation.

Furthermore, all timber processing companies, despite of its type of operation should hold an Alvara License, issued by the Municipal Authorities, which indicates location and operation of different types of activities, and should be registered at SEMA. All primary processing companies of the forest sector should be enrolled in the DOF system (or in the case of the States of Pará and Mato Grosso, they must be enrolled in SISFLORA).

2.5.2 Transportation of Timber and Forest Products

The legal documents required for transportation of wood and wood products in Brazil are:

- **Bill of Sale (Nota Fiscal)**

The bill of sale is an invoice. It is the evidence of any monetary transaction of a good sale. This document also serves to collect taxes. The failure in use or request a bill of sale is considered tax evasion. Currently, most States use the electronic bill of sale called DANFE – Document of the Electronic Bill of Sale. This document should follow the transportation of wood and wood product in the domestic market, and applies to all timber products, in natura or processed, from natural forests and from plantations.

⁸ It does not include land use change permit.

⁹ In case of specific native threatened timber species, such as araucaria or mahogany need harvesting permit, but other species do not need harvesting permit.

- **Document of Forest Origin (DOF)**

DOF contains information related to the type of operation (SFMP, Land Use Change and Vegetation Suppression Authorization), including timber species, volume, company name, address, route planned, and authorization number according to the forest management plan and among other important information. DOF is issued online by IBAMA or SEMA. This document, applied to timber coming from natural forests, must accompany logs and the primary wood products (including sawnwood, veneer, wood residues, wood chips, charcoal, railway ties, posts and others) throughout the route and it might be requested/ inspected by the authorities. The purpose of DOF is to control the origin of forest products.

The Forest Guide GF1/GF3 (Guia Florestal), in the case of Pará and Mato Grosso States, replaces the DOF. The GF1 is used only to the transport of logs from the forest of origin to the processing facilities. The GF3 is used to transport primary processed timber products to the final consumer or reprocessing facility. It is noteworthy that GF1 is not a requirement for GF3. Information contained in both transport documents GF1 and GF3 refers to POA; therefore, it is possible to trace back the wood origin. All state systems are interconnected among them and with IBAMA, so that SEMA is able to crosscheck the information in the documents. These documents are issued by SEMA and should accompany the bill of sale.

Figure 3 presents a summary of the flow of required documents on the transportation of wood and wood products, from natural forests, considering the trade in the domestic market.

Figure 3 – Required documents for transportation of wood and wood products from natural forests in Brazil through the supply chain



Source: IBAMA, compiled by STCP (2019).

2.5.3 Legality on Wood Transporting and Processing

The Forest Code establishes that the control of the origin of primary wood products from natural forests is done through DOF (Art. 35 and Art. 36). Therefore, anyone who receives or purchases primary wood from natural forests should ask for the presentation of the DOF and a copy must accompany the material/products until the final processing. The DOF should contain the specification of the material, its volume, information on its origin and destination.

In case of natural forest concessions, SFB has made efforts on monitoring all stages of harvesting, using technology in the process by creating the Chain of Custody System- CCS¹⁰. The CCS considers:

- Records the location of all trees in the forest, pointing out those that will be harvested;
- Each harvested tree is registered in the system;
- Each transport of timber to the primary processing industry is also registered in the system, which generates a QR Code for each document;
- Upon arriving at the industry the logs are converted into primary products and packages recorded;
- Each product package also receives a QR Code generated by the CCS.

Thus, when querying the generated codes, the system automatically shows which trees gave origin to the consulted wood product and generates a map with the geographical coordinates of these trees, ensuring a full traceability of the timber.

The application makes it possible to:

¹⁰ The CCS is a set of procedures adopted for the tracking of timber forest products harvested in forest concessions, ranging from tree felling, logging and transportation of logs until their transformation into the first processing, controlled through a computerized system.

- Verify the legality and origin of timber coming from sustainable management in a public forest;
- To trace, using QR Code, the log or sawnwood origin from concession areas;
- Access production reports of the concessions with production data per year, by species, per state; and
- Consult the list of forest dealers who produce selected timber.

Since the beginning of SFMP implementation, concessionaires should include all activities in the CCS data, which allows SFB to control the production and transportation of wood products in public land areas under forest concession. According to interviews¹¹, forest concession timber production and trade in Brazil is an operation of low risks of illegality.

As for forest management in private lands, the control system is the DOF, SINAFLORE and SISFLORA. Government has the responsibility to audit the operations and only in a few cases there is an independent forest auditor involved.

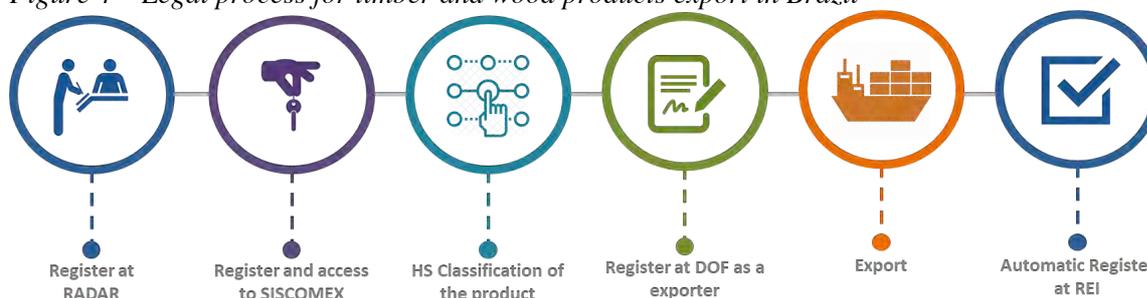
There are sufficient measures to control and verify wood and wood products transportation activity. It is important for the buyer to require official documents (basically bill of sale accompanied by DOF) and seek for trusted suppliers, verifying with forest certifiers (FSC and CERFLOR), Government Agencies (IBAMA) and even information of regional private timber associations, such as CIPEM.

2.5.4 Trading Woods and Wood Products

In Brazil, international trade of all products is fully controlled by a system called the Integrated Foreign Trade System (SISCOMEX), established by Decree N° 660/92. This ensures the legality of the process.

For the access to SISCOMEX, it is necessary to register in the Registration and Tracking of the Performance (RADAR) of the Brazilian Federal Revenue-RFB, according to Normative Instruction N° 1.603/2015, which establishes procedures for the authorization of importers and exporters. Moreover, exporters are registered at the Registration of Exporters and Importers (REI) of SECEX¹², the registration is carried out at the time of the first export operation at any point connected with SISCOMEX. Figure 4 presents a summary of the legal process to export timber and wood products.

Figure 4 – Legal process for timber and wood products export in Brazil



Source: RFB (2015), prepared by STCP.

3. LAND TENURE LEGAL FRAMEWORK

3.1 Land Tenure Categories

Lands in Brazil can be either private or public owned. Public forests lands are mainly natural, only a very small portion is planted. The public forest lands belong mainly to the federal government, but there are also areas that belong to states and a smaller portion to municipalities.

Large part of the public forest areas for production is under the control of the Brazilian Forest Service, according to Law N° 11.284/2006, with the assistance of the Public Forest Management Commission (CGFLOP), to advise, evaluate and propose guidelines for public forest management. Brazilian public forests are registered at the National Register of Public Forests (CNFP), an instrument for planning forest management, with georeferenced data on public forests.

The forest concession is one of the public forest management modalities provided by Law N° 11.284/2006, which allows the government, through public bidding, to grant a legal entity the right to manage public forests in a sustainable manner, for a fee, to obtain products and services. The public forest concession contract gives the right of sustainable forest management to private companies.

Private land ownership is based on a land title certified by the public notary. The land title is required for the approval of a forest management plan by the authorities, which ensure the rights to harvest forest products.

¹¹ Interview with different experts at SFB, IBAMA and WWF Brazil, on September 27th, 2018 in Brasília, Brazil.

¹² SECEX regulates, supervises, guides, plans, controls and evaluates foreign trade activities.

There are 7 categories of public and private land tenure: settlements (*assentamentos*), indigenous land, vacant land, possession (*posse*), protected areas, private property and *quilombolas* land. The Brazilian Federal Constitution (1988) assures those land rights.

Table 5 presents a summary description of land occupation types in Brazil, according to the different ownership.

Table 5 – Recognized categories of land occupation in Brazil

Types	Ownership	Description
Settlements (Assentamentos)	Public	Rural settlements created by the Brazilian Government for land reform. The land reform was established by Law N° 8.629/93.
Indigenous Land	Public	Land designated to Indigenous people and used for their livelihoods. Guaranteed by Art. 231 of the Brazilian Constitution. According to INCRA, Indigenous people have secure land rights of 13,8% of Brazil's land area.
Vacant Land Possession (Posse)	Public/Private	Public land not designated to any specific use. Land Possession refers to temporary use of land by a third part as referred in Chapter IV of Law N° 4.505/64. It can be either private or public: <ul style="list-style-type: none"> • In public lands: can be individual or collective. When collective it refers to traditional communities; and • In private lands: includes tenancy agreements such as lease, but also include informal occupation of private land.
Protected Areas	Public/Private	Land, either private or public, designated to achieve conservation and preservation of biodiversity. Levels of use differ according to different classes of protected areas as established by the Forest Code Law N° 12.561/12 and the National System of Conservation Units.
Private Property	Private	Land owned/ titled by legal entities (private) or individuals.
Quilombolas	Public	Land recognized as belonging to <i>quilombos</i> remnant peoples (descendants of Afro-Brazilian slaves). The Brazilian Constitution secures the ownership rights of <i>quilombolas</i> communities (which accounts for 0,2% of the Brazilian territory).

Source: Climate Policy Initiative (2017), compiled by STCP.

3.2 Specific Land Tenure Rights for Protected Areas

The Brazilian Forest Code (Law N° 12.651/12), Article 12, establishes parameters for land use at property level. The most relevant are:

- **Legal Reserves - RL**

A percentage of private land must be kept under native vegetation, called “Legal Reserves”¹³ with function to protect vegetation and ensure the sustainable economic use of natural resources. These forested areas may be used for sustainable forest management. The percentage of legal reserve established by the Forest Code depends on the biome in which the property is located:

- 80% of rural property located in forest areas in the Legal Amazon¹⁴;
- 35% of rural property located in “cerrado/savannah” area in the Legal Amazon;
- 20% of rural property located in other regions/biome of the country.

- **Permanent Preservation Areas - APP**

In addition to the Legal Reserves land owners have to consider the Permanent Preservation Areas¹⁵. These areas must be maintained by the owners, along river or water streams, and slopes, to protect soil and ensure water quality.

Moreover, Brazil's land tenure laws recognize Conservation Units (UC - Unidades de Conservação) as a land use as assured by Law N° 9.985/00 that establishes the National System of Conservation Units (SNUC), and can be either public or private.

¹³ Law N° 12.651/12, article 3 defines “legal reserve as an area located inside a property with the function of ensuring sustainable economic use of natural resources of the rural property to help in conservation and rehabilitation of ecological processes and to promote biodiversity conservation, as well as protection of wildlife fauna and native flora” (Item III).

¹⁴ Legal Amazon was set by law (Federal Law N° 5.173/66) for economic planning of the region, which comprises all seven states of the North Region (Acre, Amapá, Amazonas, Pará, Rondônia, Roraima and Tocantins), and part of Mato Grosso in the Center-West Region and most of Maranhão in the Northeast Region, corresponding to 59% of Brazilian territory.

¹⁵ Law N° 12.651/12, article 3 defines “Permanent Preservation Areas (APP) areas that are physically and ecologically fragile, such as riparian areas, springs, hilltops, mountain slopes, and mangroves, and are characterized by the important environmental services they provide at a landscape level, such as preservation of water resources, biodiversity, soil protection, geological stability, and facilitation of gene flows of fauna and native flora (item II)”.

The SNUC is divided into two groups with specific characteristics: i) Conservation Units of Integral Protection; and ii) Conservation Units of Sustainable Use. Table 6 presents the conservation units categories and its tenure types according to Law N° 9.985/00.

Table 6 – Conservation Units Categories according to Law N° 9.985/00 and its tenure types

Conservation Units Categories		Tenure Type	
Integral Protection	Ecological Station (Estação ecológica)	Public	-
	Biological Reserve (Reserva biológica)	Public	-
	National Parks (Parques Nacionais)	Public	-
	Natural Monument (Monumento Natural)	Public	Private
	Wildlife Refuge (Refúgio da vida Silvestre)	Public	Private
Sustainable Use	Environmental protection areas (Áreas de proteção ambiental)	Public	Private
	Areas of Relevant Ecological Interest (Áreas de Relevante Interesse Ecológico)	Public	Private
	National Forest (FLONA – Floresta Nacional)	Public	-
	Extractive Reserves (Reservas Extrativistas)	Public	-
	Wildlife Reserve (Reserva de Fauna)	Public	-
	Sustainable Development Reserves (Reserva de Desenvolvimento Sustentável)	Public	-
	Private Reserve of Natural Heritage (Reserva Particular do Patrimônio Natural)	-	Private

Source: Law N° 9.985/00 (Art. 7 –Art. 21), compiled by STCP (2020).

3.3 Legal Authorities / Institutions Involved in Land Tenure

There are a number of institutions involved in land tenure related issues at the federal, state and municipal level.

At the federal level, MMA is the highest body in the formulation and implementation of public environmental policies, including land management, forest concessions and territorial planning. The National Institute of Colonization and Land Reform (INCRA) is responsible for land reform, managing public/federal lands, and land regularization, among others. The Federal Revenue Service is responsible for collecting the Rural Territorial Property Tax (ITR).

At the state level, state land institutions and environmental agencies play major roles in rural settlements and licensing of rural activities, respectively. At the municipal level, a deed of sale should be authorized by a public notary and then registered at the Real Estate Registry (RGI) offices.

Table 7 presents the main institutions involved in land tenure issues at Federal and State levels.

Table 7 – Main institution involved in land tenures issues at Federal and State levels in Brazil

Legal Authority	Level	Competences
MMA- Ministry of Environment	Federal	Institution responsible for formulation and implementation of public environmental policies, including land management, forest concessions and land use planning.
MAPA- Ministry of Agriculture	Federal	Responsible for formulating and implementing policies on agribusiness in general, the ministry comprises the Brazilian Forest Service, which is responsible for the management of public, management of CAR and the National Registry of Public Forests (CNFP).
CGFLOP - Commission of Management for Public Forests	Federal	Advisory institution to the Brazilian Forest Service, proposing guidelines for the management of public forests and the Annual Forest Grant Plan (PAOF).
ICMBio	Federal	Responsible to protect natural heritage and promote socio-environmental development in protected areas, responsible for proposing, implementing, managing, protecting, inspecting and monitoring federal protected areas, such as national parks and extractive reserves, being the executing body of SNUC - National System of Conservation Units .
INCRA - National Institute of Colonization and Land Reform	Federal	Responsible for agrarian reform, establishment of rural settlements, maintenance of the National Rural Registry System (SNCR), management of public / federal lands, regularization and titling of quilombola people.
FUNAI - National Indian Foundation	Federal	Responsible for mapping and protecting the lands traditionally inhabited and used by indigenous peoples.
FCP - Palmares Cultural Foundation	Federal	Responsible for recognizing and certifying quilombola communities.
SPU - Union Heritage Secretariat	Federal	Responsible for the incorporation and regularization of real estate into the assets of the federal government, its proper destination, in addition to the control, inspection and maintenance of properties used in public services (Art. 31, Decree N° 9.035, 2017).
Federal Revenue Service	Federal	Responsible for collecting the rural land tax (ITR) and maintaining the Rural Property Registry (CAFIR).
State Land Institutions	State	Responsible for establishing state rural settlements, managing public/state lands, regularization and titling of quilombolas.
State Environmental Agencies	State	Responsible for proposing, implementing, managing protecting, inspecting, and monitoring state protected areas. Also, responsible for the environmental control, law enforcement, and licensing of rural activities.

Source: Compiled by STCP (2020).

4. LAND USE PLANNING PROCESS

4.1 Land Use Categories in Brazil

According to the Brazilian Institute of Geography and Statistics (IBGE – Instituto Brasileiro de Geografia e Estatística) there are 12 categories of land use in Brazil. Table 8 describes the land use classification in Brazil.

Figure 5 illustrates the share of land in each category of use based on Rural Environmental Register, published by EMBRAPA (2018). The data indicate that the areas destined to the preservation,

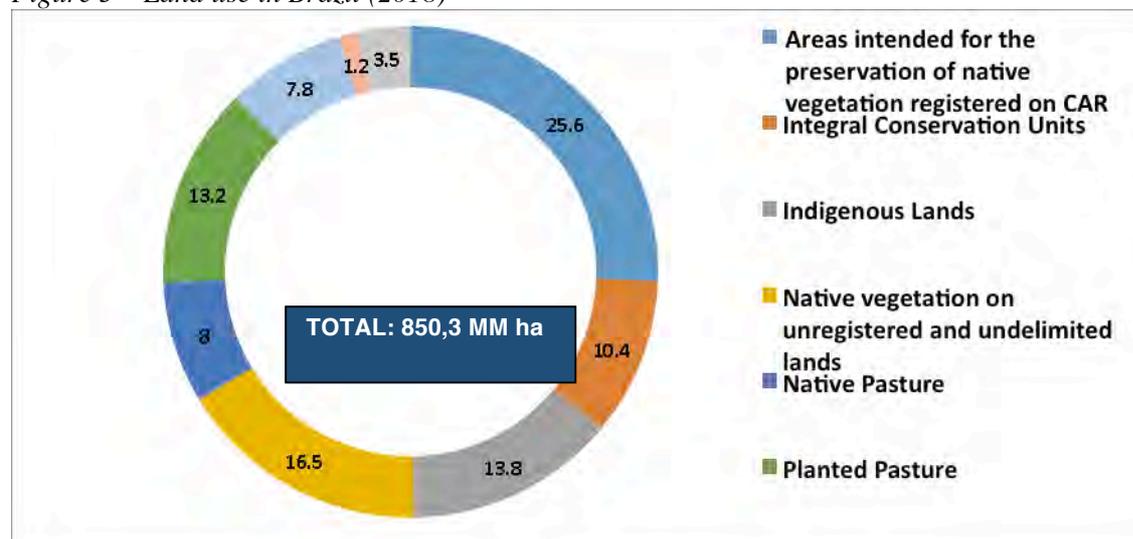
maintenance and protection of native vegetation total 632 MM hectares, equivalent to 66.3% of the national territory, with 30.2% used for agriculture and pasture.¹⁶

Table 8 – Land use classification in Brazil (2017)

Category	Description
Forest	Land covered by natural forests;
Planted Forests	Land covered by planted forest;
Mosaic of forest vegetation with agricultural activity	Land covered by forests with temporary/ parcial farming or pasture activity;
Grassy field vegetation	Land with vegetation formation such as savannahs, steppes, pioneering formations and ecological refuges;
Natural Pastures	Pastureland with natural vegetation with low anthropogenic interference for livestock grazing;
Managed Pasture	Area with perennial pasture for livestock grazing;
Agricultural land	Land used for production of food, fiber and agribusiness commodities;
Mosaic of Agricultural Area with forest remnants	Agricultural land with significant presence of natural forests;
Mosaic of Agricultural Area with remnants of grassy field vegetation	Land with agriculture, pasture and / or forestry and remnants of grassy vegetation may occur, to a lesser extent, tree plant formations;
Wetland	Land classified as puddles, swamps, wetlands;
Artificial area	Lands used for urban infrastructure;
Open area	This category includes rock outcrops, cliffs, reefs and erosion-eroded lands.

Source: IBGE (2017), compiled by STCP.

Figure 5 – Land use in Brazil (2018)



Source: EMBRAPA (2018), compiled by STCP.

4.2 Ecological-Economic Zoning- ZEE

The Ecological-Economic Zoning – ZEE¹⁷ is an instrument for planning and ordering the use of the Brazilian territory, having as main objective the sustainable economic use of natural resources and the balance of existing ecosystems. This environmental management mechanism consists of delimiting environmental zones and assigning suitable uses and activities according to the characteristics (potential and restrictions) of each ecosystem.

The ZEE was initially planned for the Legal Amazon region, and later on became a program of the Pluriannual Plan - PPA for the country as a whole. PPA establishes long-term projects and programs, defining objectives and goals of public action for a period of four years.

The ZEE Brazil Program is an integral part of the Pluriannual Plan, for the so called 2029 Program, entitled the "Regional and Territorial Development", and comprises eight objectives, among which is

¹⁶ EMBRAPA (2018). Síntese Ocupação e Uso das Terras no Brasil. Available at: <https://www.embrapa.br/car/sintese>

¹⁷ Decree N° 4.297/2002 regulates Art. N° 9, item II of Law N° 6.938/1981 (National Environmental Policy), which establishes criteria for Brazil's ZEE.

to promote regional development and the organization of the Brazilian territory taking sustainability into account.

The highest technical body of the ZEE Brazil Program is the Permanent Working Group for the Implementation of Ecological-Economic Zoning, called the ZEE Brazil Consortium, composed of fifteen public institutions (such as IBGE, EMBRAPA, INCRA, IBAMA and INPE) that operates in cooperation with the States and in the actions of ZEE in charge of the federal government.

The Coordinating Commission for the Ecological-Economic Zoning of the National Territory (CCZEE)¹⁸ is responsible for monitoring and evaluating the implementation of the ZEE program. In addition, states, municipalities and civil society are also mobilized and involved throughout the project implementation process.

Some federal ZEE initiatives have been completed, such as: ZEE Project for the Lower Rio Parnaíba, Macro ZEE Project for the Legal Amazon, Macro ZEE Project for the Cerrado Biome and MacroZEE Project for the São Francisco River Basin. Among the states that concluded ZEE are: Acre, Amazonas, Tocantins, São Paulo, Roraima, Rondônia, Rio Grande do Norte, Pernambuco, Pará, Minas Gerais, Mato Grosso do Sul and Maranhão.

4.3 Land Use in the Forest Code

The Brazilian Forest Code (Forest Law N° 12.651/2012¹⁹) deals with land use and the conservation of natural resources of the country. In general terms, the Forest Law establishes rules on the protection of natural vegetation, including Permanent Preservation Areas (APPs), Legal Reserve Areas (RL) and Restricted Use Areas (AUR), forest harvesting, forest raw material supply, control of the origin of forest products, control and prevention of forest fires, and the provision of economic and financial instruments to achieve its objectives.

This Law introduces the concept of consolidated rural areas, which means a rural property area with pre-existing human occupation prior to July 22, 2008, in APPs, RL or AUR. Thus, it brings rules so that rural properties with consolidated areas by that date can make adjustments of deforested areas through forest regeneration, compensation or other legal instruments provided for. It indicates criteria for the adoption of such measures for reforestation/ restoration and defines the cases and conditions of natural forests that can be harvested or managed in rural properties.

The Forest Code also addresses important issues such as the Rural Environmental Registry (CAR), Environmental Regularization Program (PRA), harvesting of natural forests (SFM), control and origin of forest products, among others.

4.4 Environmental Rural Registry – CAR (Cadastro Ambiental Rural)

In 2012, with the goal to assist the Brazilian Public Administration in the process of environmental regularization of rural properties and possessions, the Brazilian Government established the Environmental Rural Registry (CAR) by Law N° 12.651/12.

MMA Normative Instruction N° 02/2014 regulates the CAR. It is an important instrument for spatial planning in Brazil, integrating environmental information on rural properties and possessions, including APP and RL, restricted areas, consolidated areas, forest remnants and other forms of native vegetation, in addition to providing information on main land use of the referenced property.

CAR system is a national electronic public declaratory registry system, mandatory for all rural properties in the country, with the purpose of integrating the environmental information of rural properties. It comprises a database for control, monitoring, environmental and economic planning and combating deforestation. According to SFB, until November 2019, a total of 6.4 MM rural properties were registered in the CAR system.

The registration of rural property in the CAR is a requirement for access to programs, financing, benefits and authorizations, including Environmental Regularization Programs (PRA), obtaining agricultural credit and access to financing lines, tax credits, and access to exemption of taxes for the main inputs and equipment. It is a prerequisite for calculating the Permanent Preservation areas, the Legal Reserve areas, among others.

The National Rural Environmental Registry System (SICAR), established by Decree N° 7.830/2012, is a nationwide electronic system for the integration and management of environmental information on rural properties across the country. Such information is intended to subsidize policies, programs, projects and activities for control, monitoring, environmental and economic planning and combating illegal deforestation.

SICAR is responsible for issuing the Rural Property Registration Receipt in the CAR, which confirms the completion of the registration and the sending of the required documentation to analyze the

¹⁸ CCZEE was created by Decree N° 99.540/1990, as amended by Decrees of December 28, 2001, December 12, 2004 and September 14, 2006. The Forest Code (Law N° 12.651/2012) establishes a period of five years (art. 13, paragraph 2) for all States to prepare and approve their ZEEs, according to a unified methodology established in a federal guideline.

¹⁹ The original text was modified in some points by Law N° 12.727 of October 17, 2012. Some regulations were given by Decree N° 7.830 of October 17, 2012.

location of the Legal Reserves – RL and Permanent Protection Areas – APP in the property, and can, for instance, be used to present to the financial institutions for granting agricultural credit.

It is the responsibility of the state environmental agencies to provide the electronic systems necessary for the registration of properties in the CAR and to make environmental regularization feasible. Currently, five states have their own electronic systems: Bahia, Espírito Santo, Mato Grosso do Sul, São Paulo and Tocantins.

Other six states use applications (SICAR sub-modules) developed by the federal government, which has been installed in State IT infrastructures, within their own databases. They are States of Acre, Mato Grosso, Minas Gerais, Pará, Rio Grande do Sul and Rondônia.

4.5 Environmental Regularization Program (PRA)

The Environmental Regularization Program (PRA), one of the instruments of the Forest Code, is regulated through Federal Decree N° 7.830/2012. This instrument is a set of measures to be developed by rural landowners to make adjustments and promote the environmental regularization of their rural properties.

According to the Forest Code, States should approve their PRAs to guide the regularization of rural properties considering PPAs and LRs areas, including consolidated areas, converted before July 22, 2008, as well as areas that were deforested after that date.

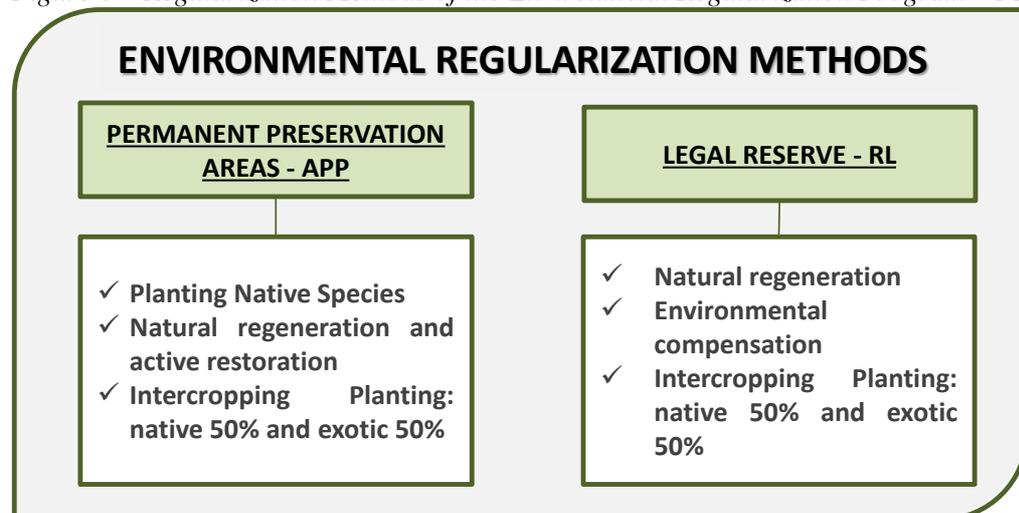
In other words, regularization through the PRA is directed at the environmental liability related to illegal suppression of natural vegetation, which occurred prior to July 22, 2008, in APP, RL and other areas of restricted use (AUR).²⁰

To join PRA it is necessary:

- To be registered in the CAR system;
- To choose to join PRA at the moment of registration;
- Propose a Project to Regularize Degraded Areas (PRADA);
- Signature of the Term of Commitment with the regularization obligations.

In general, the Forest Code is more restrictive as regards the regularization of the Legal Reserve areas compared to PPA. Figure 6 presents some recovery methods considered in the PRA.

Figure 6 – Regularization Methods of the Environmental Regularization Program – PRA



Source: Input / Agroicone, 2016 (adapted).

For the RL regularization, the Forest Code establishes a time limit of 20 years (1/10 of the area every two years). The States can establish the same deadline or establish a shorter period for regularization. In the case of deadline for both the restoration of consolidated APP and for APP environmental liabilities after 2008, federal legislation is silent, so States should establish deadlines on the subject.

4.6 National REDD+ Strategies

The REDD concept in Brazil was introduced in 1992, when Brazil hosted, in Rio de Janeiro, the first United Nations Conference on Environment and Development, twenty years after the First World Conference on Man and the Environment (EULER, 2016).

²⁰ The Forest Code portal contains the list of states with PRA regulated until 2019: Acre, Amazonas, Roraima, Pará, Maranhão, Tocantins, Piauí, Pernambuco, São Paulo, Mato Grosso do Sul, Mato Grosso, Bahia, Paraná, Rondônia, Goiás, Santa Catarina, Rio de Janeiro and the Federal District. The other states have the PRA under construction.

Brazil had a prominent role in the negotiations on the Climate Convention, mainly from 2009, when it presented its National Policy on Climate Change (PNMC, Law N° 12.187/2009) to the UNFCCC and subsequently the National Plan on Climate Change (Decree N° 9.578/2018). These regulatory frameworks defined the Brazilian strategy for voluntary reduction of GHG emissions (between 36.1 and 38.9% in relation to projected emissions until 2020) and the sectorial action plans to achieve these goals.

In 2015, the National Strategy for REDD+ (ENREDD+) was established, defined by Ordinance MMA N° 370/2015. ENREDD+ aims to contribute to the mitigation of climate change through the elimination of illegal deforestation, the conservation and recovery of forest ecosystems and the development of a sustainable low carbon forest economy, generating economic, social and environmental benefits.

The strategy also provides for three specific objectives:

- Improve the monitoring and analysis of public policies impact to achieve REDD+ results, seeking to maximize their contribution to the mitigation of global climate change, observing the socio-economic and environmental safeguards agreed at the UNFCCC;
- Integrate policy management structures for climate change, forests and biodiversity, seeking to promote convergence and complementarity between them at the federal, state and municipal levels;
- Contribute to the mobilization of resources on a scale compatible with the voluntary national commitment to mitigate GHG emissions in Brazilian biomes by 2020, established in the National Policy on Climate Change.

5 FOREST TAXATION STRUCTURE

5.1 General Taxation Structure

The taxation structure in Brazil is complex. The main general taxes applied in Brazil, covering all activities involving production and trade of products and services, include labor and social security contributions, PIS/PASEP/COFINS, IPI, import taxes, ICMS, ISS, IRPJ and CSLL. These general taxes are detailed below, considering when applicable the details applied to the rural/ forest-related activities.

5.1.1 Rural Social Security Contribution

The rural producer, as an individual, has a “Special Insured Status”, according to Law N° 8.212/1991, amended by Law N° 10.256/2001. Accordingly, taxes are levied on its gross revenue, composed as follows:

- 1.2% of gross revenue from the sale of production going to Social Security (Law N° 13.606/ 2018);
- 0.1% of gross revenue for the financing of benefits for workplace accidents (RAT);
- 0.2% of gross revenue for SENAR - National Rural Learning Service (Law N°10.256/2001).

The rural tax is cumulative. In the case of sale, the agroindustry that collects the social security contribution on the revenue does not collect contribution for the rural social security.

5.1.2 PIS/PASEP and COFINS

The Social Integration Program (PIS) and the Contribution for the Financing of Social Security (COFINS)²¹ are federal tax contributions based on the calculation of the corporate revenue (there is no incidence of these taxes on individuals).

The objective of PIS is to finance the unemployment insurance system and salary allowances for workers earning up to two minimum wages, and COFINS to fund the social security system. The rates may vary according to the tax option of the company (real profit, presumed profit or small companies that opted for the Simplified Nacional tax method), and are presented in Table 9.

Table 9 – PIS and COFINS Rates in Brazil

Tax option	Rate (%)		
	PIS	COFINS	Total
Presumed profit ¹	0.65	3	3.65
Real profit ²	1.65	7.6	9.25

¹ Based on Law N° 10.637/2002 and Law N° 9.718/1998.

² Based on Law N° 10.637/2002 and Law N° 10.833/2003.

²¹ PIS and COFINS are not levied on export revenue (art. 149, § 2, I of the Federal Constitution).

Source: Brazilian Forest Service (2013).

5.1.3 Tax on Industrialized Products – IPI

The Tax on Industrialized Products (IPI) is a federal tax, charged for the production and import of manufactured products and goods.²²

The specifications and rates corresponding to each product or manufactured product, are established in the Table of Incidence of the Tax on Industrialized Products (TIPI). Thus, TIPI presents a specific rate for each product, based on the Harmonized Commodity Description and Coding System (Table NCM / SH).

The main forest products are described in the chapters:

- 44 - Wood, charcoal and wooden works;
- 47 - Pulpwood or other pulp fiber material; paper or cardboard for recycling;
- 48 - Paper and cardboard, other products of pulp, paper or cardboard.

Table 10 shows the incidence of IPI on the main forest products traded in the domestic market in Brazil.

²² IPI was established in Article 153 of the 1998 Federal Constitution and is currently regulated by Presidential Decree N° 7.212/2010, which regulates the charging, inspection, collection and administration of the IPI.

Table 10 – IPI Tax Rates Applied on the Main Forest Products in Brazil

Product	NCM Code	IPI (%)
Fuelwood	44.01	0
Charcoal	44.02	0
Sawnwood	44.07	0
Profiled wood	44.09	10
Particle panels (OSB)	44.10	5
Fiber panels (MDF)	44.11	5
Plywood	44.12	5
Pulpwood or other pulp fiber materials	47	0
Paper and cardboard	48.02	5

Source: Table of Incidence of Tax on Industrialized Products – TIPI (2017).

5.1.4 Taxes on Import

The process of importing products into the Brazilian market is relatively complex, and involves different taxes. The main federal, state and municipal taxes currently applied on imports are: i) II- Import Tax; ii) IPI - Tax on Industrialized Products; iii) PIS / Import²³, COFINS / Import; and, iv) ICMS State tax. In the case of services, ISS, a municipal tax, can be applied.

The Import Tax (II) is a federal tax with a variable rate, considered an extra-fiscal tax, with the main purpose to protect national products from competition from foreign products. The II rate can vary from zero to 35%, depending on the type of imported goods. To identify the merchandise, the NCM - Mercosul Common Nomenclature are used, and the rates per product are indicated in the TEC - Common External Tariff.

As previously mentioned, the IPI has its rate variable per product, listed in the TIPI. The calculation base, which should be multiplied by the rate to calculate the IPI import, is the sum of the customs value of the good and the value of the II. The PIS rate for imported products is 2.1%, and COFINS 9.65%. However, there are cases of specific products that may have different charges. The ICMS is a State tax, so that each state is free to define its rate.

In addition, the Siscomex Fee is due upon registration of the Import Declaration (DI) as specified in Law N° 9.716/1998. The Siscomex Fee is R\$ 185 per DI and R\$ 29.50 for each addition of merchandise to the DI.

The Additional Freight for the Merchant Navy Renewal, or Merchant Navy Fee, is a contribution to the development of the national merchant navy and the Brazilian shipbuilding and repair industry. It is due at the entrance to the unloading port and is calculated on the value of sea freight. The rate imposed varies between 10% (coastal shipping), 25% (long-distance shipping) and 40% (river and lake shipping, when transporting liquid bulk cargo in the North and Northeast regions).

5.1.5 Tax on Operations Related to the Circulation of Goods and on Services Provision of Interstate, Intermunicipal Transportation and Communication Services (ICMS)

ICMS²⁴ is levied on the circulation of goods or provision of services, varying according to the type of product/ service and the location of the seller/buyer, trading products within the same State or between States.

As a tax regulated by the State Government law, there are a number of particularities established by each State in an attempt to protect its economy. For instance, in most States there is no ICMS tax for trading logs within the State, but ICMS is applied when logs cross a State border.

When the company is included in Simples Nacional (Simplified Tax Regime), this rate is standardized by Complementary Law 123/2006 and will be included in DAS, along with other taxes.

However, if the company is not included in the Simples Nacional, it is noteworthy that the ICMS varies according to goods and services, from state to state, as well as in internal operations, within the same state.

²³ MP N° 164/2004, later converted into Law N° 10.865/2004, established the Contribution to PIS/PASEP and COFINS levied on the import of goods and services called, respectively, Contribution to the Social Integration and Social Integration Programs and Formation of the Equity of Public Servants Incident in the Import of Foreign Products or Services (Contribution to PIS/Pasep - Imports) and Social Contribution for the Financing of Social Security Due by the Importer of Foreign Goods or Services from Abroad (COFINS - Imports).

²⁴ ICMS is governed by Complementary Law N° 87/1996, called the “Kandir Law”.

According to Resolution SF N° 22/1989, the ICMS rates on interstate transactions are defined, generally, as follows:

- When paid by taxpayers in the North, Northeast or Central West region or in the state of Espírito Santo, 12% are applied, regardless of the region in which the recipient is located;
- When paid by taxpayers who are located in the Southeast and South regions 12% rate is applied if the recipient is located in the Southeast or South region, and 7% rate is applied when the recipient is located in the North, Northeast or Central West region or in the state of Espírito Santo.

It should be noted that for internal operations, the rate is different for each state. For instance: Alagoas, Amazonas, Amapá, Bahia, Ceará, Federal District, Maranhão, Minas Gerais, Paraíba, Paraná and other states, currently apply 18% in the circulation of goods and services internally. In the states of Acre, Espírito Santo, Goiás, Pará and others, the rate is 17%. Rio de Janeiro is the state with the highest rate on domestic operations, 20%. For imported products, the rate is 4%, as a rule.

The ICMS is not levied on export operations, nor on services provided to recipients abroad, ensuring the maintenance and use of the amount of tax charged in previous operations and installments.

5.1.6 Tax on Services (Imposto Sobre Serviço – ISS)

The Tax on Services (ISS) is levied on storage, technical assistance, leasing, municipal transport services, technical administrative, legal, consulting, accounting services and other services. It is considered a cumulative tax, which is the competence of the municipalities. Its rate varies between 2% and 5%, according to Complementary Law 116/2003.

5.1.7 Corporate Income Tax (IRPJ)

The IRPJ is a tax that is levied on legal entities, individual companies, constituted entrepreneurs or individuals that exploit economic activity of a civil or commercial nature through the sale of goods or services to third parties. This tax can be declared quarterly (in March, June, September and December) or annually, being an option of the company.

IRPJ is calculated differently according to the company's revenue and its taxation model²⁵, and considers:

- Real profit: companies under the real profit regime, the rate is 15% on the company's real profit;
- Presumed profit: taxable profit based on the percentage of its revenue, that is, the government presumes the percentage of profit according to a table that varies from 1.6% to 32% of the revenue (as an example, in the case of rural activity the percentage on revenue is 8%). Of this amount, 15% corresponds to the IRPJ;
- Arbitrated profit: adopted by companies that do not meet the conditions required for taxation under the real profit or presumed profit regimes;
- Simples Nacional (Simplified Tax Regime): in this case, the IRPJ is already within the document -DAS, paid by the company at the issuance of invoices, with a variable rate depending on the revenue range.

If the company falls under the Real Profit, and has a monthly profit of more than R\$ 20 thousand, it should be added 10% on the amount that exceeds the IRPJ.

5.1.8 Social Contribution on Net Income - CSLL

The Social Contribution on the Corporate Net Income (Contribuição Social sobre o Lucro Líquido das Pessoas Jurídicas – CSLL) was established by Law N° 7.689/1988, aimed at financing social security. The CSLL rate is 15% in the case of private insurance companies, capitalization companies and those referred to in items I to VII, IX and X of § 1 of art. 1 of Complementary Law N° 105/2001, and 9% in the case of other legal entities.

The calculation basis for this tax is the company's profits depending on the tax regimes: Real Profit or Presumed Profit.

Companies with a presumed profit have a rate applied to the company's gross revenue, based on sales or services provided. This rate is known as the presumption rate. This rate varies according to the activity: 12% of revenues from sales; 32% of revenues from services provided. Of this total, 9% or 15% for CSLL is applied.

²⁵ There are three taxation models: IRPJ - Real Profit, IRPJ - Presumed Profit and Simples Nacional (Simplified Tax Regime). In the Actual Profit taxation model, IRPJ is calculated on the company's profit, this regime is mandatory for companies with revenues greater than R\$ 78 MM and/or companies focused on the financial sector. In the presumed profit, IRPJ and CSLL are levied on a rate defined by the Federal Revenue Service; the annual revenue should be less than R\$ 78 MM. Simplified Tax Regime (Simples Nacional) is a simplified form of taxation that encompasses eight taxes in a single rate, with reduced amounts, being applicable only to micro and small-sized businesses.

In the case of Real Profit companies, the calculation of the CSLL to be paid is made from the Income Statement for the Year, after calculating all revenues and subtracting expenses and costs for the period. With the values of the company's profits calculated, the CSLL of 9% or 15% is applied to the profit before income tax (LAIR).

5.1.9 Tax on Rural Land Property (ITR)

The ITR is a mandatory tax, for all individuals or legal entities that own rural properties, established by Law N° 9.393/1996. The charge for ITR on rural properties varies from 0.03% to 20%, depending on the degree of land use and the total taxable area of the property. Thus, the higher the productivity of the land, the lower the amount of tax charged.

The tax calculation is based on the proportion of bare taxable land of the market value of the rural property, without counting values related to buildings, facilities, improvements/ infrastructure planted forests, among others.

The rate is charged from the amount declared to the Federal Revenue Service. The following rural properties are exempt from ITR (Law N° 9.393/1996, Art. 10, Art. 17):

- Properties of the federal, state and local government;
- Governmental Foundations Non-profit education and social assistance institutions;
- Small rural plots, as long as they are utilized and the owner has no other property;
- Rural property that has restricted land use and maintains a preserved watersource, such as rivers and springs;
- Areas of ecological interest for the ecosystems protection;
- Areas under environmental easement;
- Areas covered by natural, primary or secondary forests in a medium or advanced stage of regeneration;
- RPPN, RL and APPs.

5.2 Specific Forest Related Taxes

Besides the general taxes presented above, there are specific forest taxes that apply in the case of concessions in public forests and other forest related activities. Taxes applied in the case of concessions involve the SFB, and are based on the estimated annual production and the price set in the winning proposal.

5.2.1 Payment in forest concession contracts

Prior to the publication of the forest concession bidding notice, the SFB should hold a public hearing in the region where the forest concession will take place. At this hearing, SFB presents the proposal of the bidding notice and the participants from different sectors of society and public agencies can present their questions, suggestions and positions. Public hearings should be made widely available so that all interested parties can participate and submit their comments.

The selection of the company that will manage and harvest a certain area through the forest concession occurs through a public bidding process. SFB presents the "Bidding Notice", a document that defines areas to be granted, products and services to be exploited, concession period, the criteria for the selection of concessionaires and their rights and duties.

Companies interested in participating in the bidding process should submit a set of documents that prove their technical capacity and their compliance with environmental, labor and fiscal laws and prove their legal and financial regularity.

Then, the interested companies should submit two proposals:

- Price proposal: amount to be paid for products and services to be harvested in the forest concession area. For example, the value in R\$ (reais) does the bidder intends to pay for each cubic meter (m³) of wood to be harvested;
- Technical proposal: document that presents goals and commitments related to social benefits, impact on the environment, greater efficiency and greater local added value to the product or service to be exploited. For example, the number of jobs that will be generated and the amount that will be invested annually in infrastructure, goods and services for the benefit of local communities.

The bidding company that achieves the best score, defined according to the price and technical proposals presented, wins the bid and signs a contract with the Brazilian Forest Service (SFB), thus becoming the area's concessionaire.

In exchange for the right to carry out forest management in the concession areas, concessionaires should pay fees to the federal government in accordance with the price proposal presented in the bidding process.

At the signing the contract, the Contract Reference Value (Valor de Referência do Contrato - VRC) is calculated, which is an estimate of the annual production value for the contracted area, based on the price of the winning proposal. VRC is used as a reference for calculating the Annual Minimum Value (Valor Mínimo Anual - VMA), a proportional value according to the volume of wood harvested, paid to SFB by the concessionaire. The VMA represents the minimum amount to be paid annually by the concessionaire, regardless of its production. This amount is stipulated to 30% of the VRC. As an example, the Reference Value of the Concession Contract for the Jamari (RO) National Forest of the company Amata is shown in the table 11.

Table 11 - Contract Reference Values (VRC) of FLONA Jamari - Amata Company (2019)

Species group	Annual Minimum Production (m ³ /ano)	Price (US\$/m ³) ¹	Contract Value - VRC (US\$)	Annual Minimum Value (VMA)
Group 1	1,780	23.54	41,893	12,568
Group 2	6,909	14.12	97,562	29,269
Group 3	13,086	9.45	123,686	37,106
Group 4	4,397	4.93	21,706	6,512
Total			284,847	85,454

¹ Conversion rate was R\$ 5.22/USD (on June 2, 2020).
Source: Brazilian Forest Service (2019).

In addition, the concessionaire pays the Other Values (Demais Valores - DV) proportional to its production. This fee is calculated by the harvesting actually carried out, multiplied by the price established in the contract of the product harvested, subtracting VMA.

5.2.2 Environmental Control and Inspection Fee (TCFA)

According to Law N° 6.938/1981, companies that carry out activities subject to environmental control / potentially polluting, have a legal obligation to enroll in the Federal Technical Register of Potentially Polluting Activities (CTF/APP), according to the Activities Table and Art. 2 and 10-B of IN IBAMA N° 06/2013.

The CTF/APP aims to identify these entrepreneurs before SISNAMA, generating relevant information for environmental management in Brazil.

As an obligation arising from enrollment in CTF/APP, there is the payment of the Environmental Control and Inspection Fee (TCFA) when performing the activities in categories 1 to 20, in addition to the delivery of the Annual Report of Potentially Polluting Activities (RAPP).

The system calculates and generates the amount due from the data declared in the CTF/APP system. The TCFA value is defined according to the economic condition of the company and the Polluting Potential and User of Natural Resources (PPGU).

According to Law N° 10.165/2000, the taxpayer of the TCFA is required to submit by March 31 of each year, a report on the activities carried out in the previous year, whose model will be defined by IBAMA. Information on the value is presented in Table 12.

Table 12 – TCFA according to PPGU and Entrepreneur Size (R\$)

PPGU Scale	Entrepreneurship Size				
	Individual	Micro enterprise	Small-sized	Medium-sized	Large-sized
Small	Exempt	Exempt	289.84	579.67	1,159.35
Medium			463.74	927.48	2,318.69
High		128.80	579.67	1,159.35	5,796.73

Source: IBAMA (2020).

The timber industry, transportation, terminals, warehouses, use of natural resources (silviculture, economical exploitation of wood or fuelwood and forest by-products, among others) are potentially polluting activities, according to Law N° 10.156/2000, therefore, it directly affects SFM.

5.2.3 Forest Tax

There are other specific taxes applied to forest products by some states. In the state of Minas Gerais, for example, the Forest Tax is regulated by Decree N° 47.580/2018, levied on the activities of harvesting,

production, trade, storage, transport and consumption of forest products and by-products, which include²⁶:

- Products: fuelwood, wood, roots and non-wood forest products;
- By-products: charcoal and those resulting from the processing of some forest product.

The Forest Tax is based on the amount of the product or by-product extracted or consumed, expressed in the corresponding unit of measure. The Forest Tax rates are defined in Decree N° 47.580/2018, Annex II, expressed by the amount and/or fraction of the value of the Fiscal Unit of the State of Minas Gerais (Ufemg). Its value results from the application of the rates presented in Table 13 on the quantity of forest product or by- Annex II product, as the case may be, in kilograms or cubic meters,.

5.3 National Forest Taxes Collected / Revenues Declared

The destination of resources collected in forestry concessions is not limited to the Federal Government. The Public Forest Management Law establishes the destination as follows:

- **Concession is located within a FLONA - National Forest:**
 - VMA: 100% for SFB
 - Other values (DV): 40% for ICMBio, 20% for states, 20% for municipalities and 20% for the National Forest Development Fund (FNDF)
- **Concession is located outside a FLONA:**
 - VMA: 70% for SFB and 30% for IBAMA
 - Other values (DV): 30% for states, 30% for municipalities and 40% for FNDF.

In 2019, the tax collected from the federal forest concessions was R\$ 16 million (equivalent to USD 4.1 million). Table 14 shows the tax collection and table 15 the distribution of other values (DVs) in the last five years.

²⁶ Art. 3 of Decree N° 47.580/2018 establishes that in case the extraction of fuelwood or wood (planted or native) destined for the production of charcoal, the Forest Tax is exempt.

Table 13 - Table for the Forest Tax Collection

Product	Unit	Ufem g	USD ¹
Planted forest woodfuel	m ³	0.28	0.20
Native forest woodfuel under sustainable management	m ³	0.28	0.20
Native forest woodfuel	m ³	1.4	1.00
Planted forest wood	m ³	0.54	0.38
Native forest wood under sustainable management	m ³	0.54	0.38
Native forest wood	m ³	9.35	6.65
Planted forest charcoal	m ³	0.56	0.40
Charcoal from native forest under sustainable management	m ³	0.56	0.40
Native forest charcoal	m ³	2.8	1.99
Non-timber products from planted forests	kg	0.07	0.05
Non-wood products from native forest under sustainable management	kg	0.07	0.05
Native forest non-wood products	kg	0.37	0.26

¹ Resolution N° 5.320 /2019 published that the value of the Fiscal Unit of the State of Minas Gerais (UFEMG) for the year 2020 is R\$ 3.71 (conversion rate R\$ 5.22/USD).

Source: Decree N° 47.580/2018.

Table 14 – Collection of Forest Concessions Taxes in Brazil (R\$)

Year	VMA	Other Values (DV)	Total
2015	1,348,791	5,383,485	6,732,277
2016	4,115,238	4,634,650	8,749,888
2017	731,391	5,267,635	5,999,026
2018	6,161,707	8,716,969	14,878,676
2019	6,946,139	9,532,700	16,478,839

Source: Serviço Florestal Brasileiro (2020).

Table 15 – Distribution of Other Values collected in Forest Concessions (R\$)

Year	ICMBio	FNDF	States	Municipalities
2015	2,153,394	1,076,697	1,076,697	1,076,697
2016	1,853,860	926,930	926,930	926,930
2017	2,107,054	1,053,527	1,053,527	1,053,527
2018	3,486,788	1,743,394	1,743,394	1,743,394
2019	3,813,080	1,906,540	1,906,540	1,906,540

Source: Serviço Florestal Brasileiro (2020).

6 INCENTIVES AND DISINCENTIVES FOR SFM

6.1 Existing Incentives

The first large scale initiative of incentive for the forest sector in Brazil was proposed to promote afforestation/reforestation, and was established by Law N° 5.106/1966. The law created incentives, based on the income tax. This fiscal incentive remained until 1988.

Currently tax incentives in the forestry sector are scarce, most of them at State level. Government of Brazil (GOB) has defined some mechanisms of incentives for forest management and conservation, harvesting, processing and trade forest products. A general assesment points out that they are relatively limited.

Exemples of current incentive mechanisms to promote SFM and promote the development of the forest sector, identified by the consultant, divided into fiscal, non-fiscal and other mechanisms, are presented below.

6.1.1 Fiscal Incentives

This section deals with tax incentives identified in Brazil. Most of them are incentives, at the state / municipal level, which normally occur through exemption or reduction in the payment of taxes.

- **“Mais Verde” (More Green) Program – Paragominas /PA**

The “Mais Verde” Program was created, by Municipal Law N° 746/2011, of Paragominas local government. Paragominas is a municipality located in an important region for timber production, located in the Amazon region. It is an incentive program for good environmental practices of commercial establishments and industrial plants in the municipality.

The benefits included in the program are as follows:

- 50-70% discount on urban land taxes – IPTU (called Green IPTU);
- Reduction of up to 50% of services taxes – ISS (called Green ISS);
- 50-70% discount on the payment of commercial operations permits fees or use of public services.

All commercial and industrial establishments that adopt the following practices may apply for benefits:

- Significant reduction in the generation of solid waste;
- Exclusive use of raw materials or products from renewable sources;
- Efficient management of water resources;
- Adequate control of atmospheric emissions and investment in air quality programs;
- Investment in environmental education projects;
- Investment in projects for environmental restoration or care for the environment;
- Significant reduction in noise, visual or light pollution.

- **Incentives on timber products – Amazonas State**

The Government of Amazonas State, through Law N° 3.970/2013, grants the benefit of exemption of ICMS tax on internal operations (within the state) dealing with wood products from natural forests, originating from the small-scale Sustainable Forest Management Plan and a Sustainable Forest Management Plan of Low Impact logging.

Eligible management plans should be registered at the Federal Technical Registry of IBAMA to prove the origin. This exemption was a major success for the viability of small-scale companies as this means 17% exemption of ICMS on the sale of wood from small-scale management plans.

Law N° 2.826/2003 published by the Government of the State of Amazonas regulates the State Policy for Fiscal and Non-Fiscal Incentives. Article 1 establishes that fiscal and non-fiscal incentives aim at the integration, expansion, modernization and consolidation of the industrial, agro-industrial, forest, agricultural and related sectors for the development of the State. Tax incentives will be granted to products resulting from activities considered fundamental for the State development, including forestry companies that contribute to:

- The intensification of the production chain to integrate and consolidate the forestry-based industries in the State;
- Increase in the volume of forest production in the State;
- Sustainable use of forest raw material;
- Increase of forestry production in the State.

The Fund for the Promotion of Tourism, Infrastructure, Services and Interiorization of the Development of Amazonas (FTI) provide financial contribution to the forestry companies that meet the above requirements (Law N° 4.110/2014, Art. 1, II) .

The FTI also provides resources to support investment programs or projects in the areas of inland development, with 5% of the Fund's resources earmarked for the development and funding of technical assistance and rural and forestry extension activities. Additionally, FTI resources are invested in programs in the rural production area, with up to 25% of the initial allocation referring to FTI resources, allocated in the agencies that make up the SEPROR System²⁷, to meet current operating expenses.²⁸

In the case of forestry activities, the FTI is carried out through the Profloresta Program. This program is aimed at micro, small and medium-sized forest producers and forest companies that are members of segments of the forest production chain of the primary, secondary and tertiary sectors.

- **PRODEIC – Industrial and Commercial Development Program of Mato Grosso**

²⁷ The Institute of Agricultural Development and Sustainable Forestry of the State of Amazonas (IDAM) is part of the SEPROR System (State Secretariat for Rural Production).

²⁸ See Law N° 4.791/2019, § 2° and Law N° 4.110/2014, item II.

PRODEIC is a Mato Grosso State Program created by Law N° 7.958/2003²⁹, which grants tax benefits for 10 years on products related to the manufacturing industry, according to the National Classification of Economic Activities (CNAE).

One of the sub-modules of this program is the PRODEIC Wood Invest (PRODEIC Investe Madeira), created with the objective for promoting industrial development, adding value to raw materials from the wood production chain of Mato Grosso State.

The Program offers two types of incentives:

- Partial benefit: when the company is in the establishment phase, a deferral of ICMS tax is granted in the acquisition of goods/raw materials for the permanent assets;
- Integral benefit: when the company is already in operation and enjoys a reduction in the calculation base of the ICMS in its own internal operations, and / or presumed credit in interstate operations.

The incentives represent a reduction of up to 90% on the ICMS tax of the commercialized products and this percentage is calculated according to a series of factors such as the place of installation, type of products that benefit, purchase of local inputs, expected investment and jobs to be offered.

The reduction in the ICMS calculation base is variable and depends on the segment. For instance, in the case of sawmill products the incentive percentages will be 65% for operations within the state and 80% for interstate operations. Forest products classified as veneer, plywood and woodframes, the percentages will be 80% for operations within the state and 85% for interstate operations.

In 2018, the State government enacted Law N° 10.741/2018, which established new rules for PRODEIC. The “New PRODEIC” started to grant tax benefits and percentages similar for 12 production chains, including the wood industry. According to the Government of Mato Grosso, in 2020, of the total companies currently included in Prodeic, most (85%) are from the secondary sector, predominantly agribusiness (57%).

- **Ecological ICMS**

Ecological ICMS (ICMS Ecológico) is a tax incentive at the state level, initially implemented by the Government of Paraná State, created by Complementary Law N° 59/1991. It is a transfer of financial resources to the municipalities that hold Conservation Units, protected areas or water sources to supply neighboring municipalities.

The 1988 Federal Constitution established in its article 158, item IV, that 25% of the ICMS collection should be transferred to the municipalities. Of this amount, 75% should be distributed according to criteria established in the Constitution and 25% can be distributed according to criteria established according to the State Law. This made possible the adoption of these environmental criteria in the distribution of the remaining 25% of ICMS tax.

In the State of Paraná, the distribution of the Ecological ICMS is based on the criteria proportionally to the Conservation Units in terms of size, importance, investment level in the area, water catchment source and other factors.

The Secretary of State for Sustainable Development and Tourism - SEDEST, through the Water and Land Institute (Instituto Água e Terra) is responsible for Ecological ICMS for Biodiversity Program. The amounts transferred to the municipalities in 2019 correspond to R\$ 193 million (equivalent to USD 49.0 million). This value was distributed to 216 municipalities of the State of Paraná (SEDEST, 2019).

Similarly, the state of São Paulo also has adopted the Ecological ICMS (Lei Estadual N° 8.510/1993), under the São Paulo State Secretariat for the Environment. The estimation of values transferred to São Paulo municipalities in 2019, corresponds to R\$ 150 million (equivalent to USD 38.1 million), distributed to 196 municipalities (SMA, 2019).

- **Simplified Tax Regime (Simples Nacional)**

The Simplified Tax Regime, called “Simples Nacional” (Complementary Law N° 123/2006) is a regime for the tax collection, charging and inspection, with benefits provided only for micro and small-sized companies.

The Simplified Tax regime has the following main benefits for the entrepreneur:

- Unification of taxes (IRPJ, CSLL, PIS/PASEP, COFINS, IPI, ICMS, ISS, Social Security Contribution) in a single pay slip, known as DAS - Simplified Tax Collection Document;
- Reduction of labor costs on the payroll, including in the DAS the Employer's Social Security Contribution
- Less bureaucracy as taxes are calculated through the Federal Revenue Portal, reducing the risk of mistaken calculations;
- Export regime with simplified procedures for authorization, licensing, customs clearance and exchange (Complementary Law N° 123/2006, Art. 49-A).

In order to enroll in the Simplified Tax Regime, the following conditions must be met:

²⁹ Regulated by Decree N° 1.432/2003, changed by Law N° 10.741/2018.

- A company should suit the definition of a micro or small-scale enterprise;
- Comply with the requirements of the legislation (Complementary Law N° 123/2006);
- Formalize the option for the Simplified Tax Regime.

It is noteworthy that this regime will affect the forestry sector for those companies that fall under this taxation regime, as it simplifies the tax payment process for those companies (sawmills, transporters, timber trade) that choose the simplified tax regime.

- **Exemption of Income Tax**

Decree N° 9.580/2018 regulates the taxation, collection and administration of Income Tax in Brazil. It establishes income tax deductions for companies that carry out rural activities. For tax purposes, extraction and vegetation exploitation, forest plantations that are destined to be harvested for commercialization, consumption or industrialization, among other activities, are considered rural activities (Article 51).

The amounts spent on rural activity goods and services subject to income tax deduction include those related to the operation of the company and the maintenance of the company's main activity, which are:

- Vehicle rental, use and maintenance expenses, provided that the expenses are incurred with vehicles used directly in rural activities;
- Cost of expenditure including the provision of services for rural activity considered, for deduction purposes, as a cost of expenditure, those which is necessary for getting income and the maintenance of the source of production, which is normally carried out in rural production. This includes, for example, harvesting, sowing and planting operations, tree pruning and other forestry services;
- Investment expenses (Art. 55) including expenditures (amounts corresponding to financing or loans) with formation and maintenance of rural activity, considered as expenses or investments, such as funding or capital investment. Includes financial charges actually paid as a result of loans taken to finance the cost and investments of rural activity;
- Fines can be deducted from the gross revenue of rural activity, considering the following conditions: i) The late fines resulting from the late payment of deductible expenses of rural activity have the same treatment of these expenses; ii) fines resulting from non-compliance with ancillary obligations, which do not result in failure or insufficient payment of taxes; iii) fines resulting from non-compliance with contractual obligations that represent rural activity deductible expenses.

Regarding forest resources, the Decree also considers the depreciation, amortization or depletion in the value of the asset, establishing that it is subject to the deduction of income tax as well. Thus, the company's assets, represented by forest resources, can be attributed to depreciation, amortization or depletion, according to the following rules:

- Depreciation of assets (Art. 319) - The deductible depreciation share in the calculation of income tax will be determined by applying the annual depreciation rate on the acquisition cost of the asset. The depreciation share of the assets applied exclusively in the exploitation of forests, whose total exploitation period is less than the useful life of these assets, may be optionally determined according to the term of the concession or the exploitation contract or, the volume of production for each period of calculation and its relationship with the area of the forest harvested (Art. 319, § 3);
- Amortization (Art. 331) of Capital - Capital invested in the acquisition of contractual rights to exploit forests may be amortized, for a specified period. In this case, the acquisition cost of these rights is amortized over the period of the contract;
- Depletion of forest resources (Art. 337) - The amount corresponding to the decrease in the value of forest resources, resulting from their exploitation, may be computed as a cost or charge in each income tax calculation period. In case the forest or planted forests provide the owner with the possibility of a second or even a third cutting rotation, the cost of acquisition or plantation establishment should be recovered through the depletion calculated according to the volume harvested in each period, compared with the total expected production, encompassing the various cuts/harvests.

- **Mato Grosso State Forest Development Program (PDFS-MT)**

The PDFS/MT aims at the sustainable development of the natural forests and planted forest sector in Mato Grosso State, based on two main axes:

- Expansion of the supply of sustainable forest raw materials;
- Adding value to forest production.

Resolution N°14/2014, the legal instrument that establishes the PDFS/ MT, contains the following strategic actions:

- Review of Legal and Institutional Instruments comprising mainly: simplification of the licensing processes, facilitation of the land tenure regularization, fiscal and tax adjustments, facilitation and decentralization;
- Promotion and Technical Assistance including, support for Management Plans and access to financing;
- Technological development of raw materials, products and productivity (Forest / Industrial);
- Market Promotion comprising mainly: the dissemination of information, promotion and attraction of investments, and market intelligence;
- Creation / adjustment of fiscal and tax incentives;
- Infrastructure and Logistics comprising, mainly, the analysis of alternative logistics and needs to the sector.

6.1.2 Non-Fiscal Incentives

This section examines the existing non-tax incentives in Brazil, at federal and state levels, for the promotion of SFM and forest sector development.

- **Bonus in forest concession contracts**

The bonus in forest concession contracts is provided for in Art. 30, item XIX of Law N° 11.284/2006 and regulated by SFB Resolution N° 04/2011. This bonus is characterized by percentage discounts on the roundwood charge, established in the contract. In contracts that provide differentiated prices for groups of species, the application of the bonus is done through a percentage discount on the price agreed in the contract for each group of species.

Every forest concession public notice and concession contract has technical indicators that will provide for the bonus percentages. The forest concession notices establish the parameters for the application of the bonus, the verification method and the discount percentages.

The discount percentages vary among the different criteria. For instance, table 16 shows the discount percentage according to the indicators established in the Paru State Forest Concession Notice, in the state of Pará. The discount can be cumulative.

Table 16 – Bonus Indicators in the Paru State Forest Concession Notice

Indicator	Bonus Limit on roundwood m ³
Reducing damage to the forest during logging	5%
Generation of jobs by forest concession	5%
Degree of local product processing	5%
Support and participation in research projects	3%
Implementation and maintenance of socio-environmental quality management and performance systems	5%
Employee capacity building	3%
Harnessing local labor	5%
Product diversity	5%

Source: Ideflor-bio (2017).

There is no obligation provided in the legislation indicating that concessions need to be certified. However, the public notices for the forest concession have shown in case of certification discounts of up to 5% in the amount paid to SFB for forest products extracted from public forests (IMAFLOA, 2010). Thus, certification (FSC/CERFLOR) becomes an incentive to forest management in concession areas.

- **Water Springs Program – SP**

The Water Springs Program³⁰ (Programa Nascentes – SP) is a non-fiscal incentives program for environmental restoration in the State of São Paulo, established by State Decree N° 60.521/2014. The incentives provided for in this Decree promote, indirectly, sustainable forest management. They are:

³⁰ The main objectives are: to expand the protection and conservation of water resources and biodiversity, through the optimization and targeting public and private investments for protection and recovery of riparian forests, water springs; protection of aquifer recharge areas; expansion of native vegetation cover by water sources, especially upstream catchment for public water supply; planting native tree species and improving the management of production systems in water basins.

- Technical support for the elaboration of a Legal Reserve Restoration Project, including the recommendation of models using native timber species and species of economic interest suitable for the region;
- Priority for participation in projects to encourage the recovery of riparian forests, including Payment for Environmental Services Projects;
- Priority in accessing lines of credit for restoration of the Legal Reserve Areas.

The Program has already promoted the restoration of 18 thousand hectares of degraded areas in São Paulo. Some sources of financing for the Program are: State Fund for the Prevention and Control of Pollution - FECOP, Fund for the Expansion of Agribusiness in São Paulo-FEAP, State Fund for Water Resources - FEHIDRO and State Fund for the Defense of Diffuse Interests - FID, of the Secretariat of Justice and the Defense of Citizenship. The Program also has indirect compensation resources (Environmental Recovery Commitment Terms - TCRA, conversion of fines and Conduct Adjustment Terms - TACs)

Some lines of action of the program are:

- Common Projects: Individuals or companies that need to make environmental compensations and institutions that wish to voluntarily contribute to the environment can participate in the Program by developing Restoration Projects. The projects carried out may, after being approved by a commission made up of members of SMA (Cabinet, CBRN and CFA), and CETESB, be made available on the “Project Shelf” known as “*Prateleira de Projetos*”, requiring the financial contribution for the immediate start;
- Available Area for Retoration: The areas available for restoration called “Area Bank” has more than 105 thousand hectares registered throughout the State, available for restoration. They are APPs without vegetation on rural properties that indicated in the Rural Environmental Registry that they would like to receive restoration projects from third parties;
- Matching the need for environmental regularization with those who have areas available for recovery: i) with the offer of pre-approved projects; and, ii) with the availability of an area available for restoration (for entrepreneurs who have a technical staff to conduct their own projects, but did not have a location).

The program's arrangement serves as a platform for the restoration, that is, it connects the ends (those who need or want to restore with those who have possess an area and / or technical capacity). The owner should also expressly consent to the use of his area, which is formalized with a Term of Agreement and Commitment, through which he also undertakes not to carry out activities that may cause damage to the vegetation in the project area, and to ensure its constant preservation, even after the conclusion of the project.

- **Funding Mechanisms**

In Brazil, several national and international funds operate credit and financing lines, which work as an incentive to rural producers. Some apply to small and medium-sized producers, offering long payment terms, lower interest rates, and other advantages. The most relevant are presented below.

- International Funds
 - i. GEF – Global Environmental Facility

GEF operates as a partner with governmental, non-governmental or private institutions for global environmental actions. It is the official financial mechanism involving environment agreements, such as UNFCCC (United Nations Framework Convention on Climate Change), UNCBD (United Nations Convention on Biological Diversity) and UNCCD (United Nations Convention to Combat Desertification). The mechanism finances projects in a non-refundable manner. Developing countries and economies in transition are the main beneficiaries of GEF funds.

- ii. GCF – Green Climate Fund

The GCF is a global initiative that works as a financing mechanism to support developing countries in complying with the Paris Climate Agreement. The potential areas for developing proposals with refundable resources are energy efficiency, renewable energy, green bonds (guarantees for bonds issued by the private sector) and sustainable transport. Non-reimbursable funds involve the payment for results in REDD⁺ and the support actions to implement the commitment to reforestation and restoration of 12 million hectares of natural vegetation.

- National Federal Funds
 - i. National Forest Development Fund – FNDF

The FNDF is a fund created by the Public Forest Management Law (Law N° 11.284/2006) and regulated by Decree N° 10.062/2019³¹. Its main purpose is to promote the development of sustainable forest-based activities in Brazil.

Among the priority areas for the allocation of resources from the Fund are research and technological development in forest management, recovery of degraded areas with native species, rational and

³¹ First regulated by Decree N° 7.167/ 2010 and revoked by Decree N° 10.224/2020.

sustainable economic use of forest resources, control and monitoring of forestry activities and deforestation, training in forest management and training of multiplying agents in forest activities, environmental education and protection of the environment and conservation of natural resources.

The origin of the resources is due to forest concessions, including resources from the budget of the SFB, parliamentary amendments, resources made available by other agencies, and donations made by national or international organizations, public or private.

Since 2010, FNDF has raised approximately R\$ 30 million for the direct implementation of forestry projects, from different budget sources. Altogether, there were 147 projects, among those closed and those in implementation.

The FNDF resources can be accessed by public agencies (federal, state and municipal), private non-profit entities (NGOs, Associations) in their own interest or from indigenous communities, local communities and other beneficiaries. The Fund supports projects through voluntary transfers of resources (agreements, terms of partnership and others), and also directly contracts, after bidding, suppliers of goods and services for the beneficiaries selected in the public notices.

ii. National Environment Fund – FNMA

The National Environment Fund (FNMA), created by Law N° 7.797/1989 and regulated by Decree N° 10.224/2020³², is intended to support projects in different modalities. The projects should aim at the rational and sustainable use of natural resources, in accordance with the priorities of the National Environment Policy, including the maintenance, improvement and recovery of environmental quality.

The application of FNMA's financial resources in projects in the following areas is considered a priority: conservation unit, technological research and development, environmental education, forest management and extension, institutional development, environmental control, and sustainable economic use of native flora and fauna.

The projects³³ developed are related to the topics, such as: urban environment, water & forest, territorial planning and management, biodiversity conservation and management, environmental quality, sustainable societies and others.

The FNMA resources come from the National Treasury, a loan agreement with the Inter-American Development Bank (IADB), international agreements such as the Brazil-Netherlands Technical Cooperation Project, donations under the Pilot Program for the Protection of Tropical Forests (PPG - 7), and funds raised by the application of the Environmental Crimes Law (Law N° 9.605/1998).

Since its establishment, FNMA has promoted more than 1,440 projects, including 176 onlending contracts and 61 letters of agreement, with investments in the order of R\$ 278 million.

iii. National Climate Change Fund

The National Fund on Climate Change (Fundo Clima) was created by Law N° 12.114/2009 and regulated by Decree N° 9.578/2018. The Climate Fund is an instrument of the National Policy on Climate Change (PNMC). Its purpose is to finance projects, studies and undertakings aimed at mitigating/reducing the impacts of climate change.

The resources of the Climate Fund can be used for: education (capacity building, training and mobilization in the area of climate change), climate science (Impact Analysis and Vulnerability), adaptation to the impacts of climate change, projects to reduce greenhouse gas emissions (GHG and REDD⁺), development and dissemination of technology to mitigate GHG emissions, formulation of public policies to solve problems related to the emission and mitigation of GHG emissions, support for sustainable production chains, payments for environmental services in activities that contribute to carbon storage linked to other environmental services, agroforestry systems, recovery of degraded areas and environmental restoration.

iv. Amazon Fund- Fundo Amazônia

The Amazon Fund aims to provide non-refundable financing for actions to prevent, monitor and combat deforestation, and to promote the conservation and sustainable use of forests in the Legal Amazon region.

Federal Decree N° 6.527/2008 authorizes the Brazilian Development Bank (BNDES) to allocate the value of donations received, in cash, and the proceeds from financial investments of the balances not yet disbursed, to the Fund.

The projects should be aimed at carrying out actions to prevent, monitor and combat deforestation and promote the conservation and sustainable use of the Amazon biome. It involves the following areas: management of public forests and protected areas, environmental control, monitoring and inspection, sustainable forest management, economic activities developed from the sustainable use of the forest, ecological and economic zoning, land use and land regularization, conservation and sustainable use of biodiversity and recovery of deforested areas.

³² First regulated by Decree N° 3.524/2000 and Decree N° 6.985/2009 and revoked by Decree N° 10.224/2020.

³³ The projects already developed with the support of FNMA can be accessed at: https://www.mma.gov.br/images/arquivos/apoio_a_projetos/Fundo_Nacional_do_Meio_Ambiente/Projetos_Apoiados/Convencios_FNMA_1990_A_2019-SITE.pdf

v. Constitutional Financing Funds

The Constitutional Financing Funds include the Constitutional Fund of the North - FNO, the Constitutional Fund of the Northeast - FNE and the Constitutional Fund of the Midwest – FCO. They were established by Federal Law N° 7.827/1989, with the objective of contributing to the economic and social development of the regions through federal financial institutions. To this end, they implement financing programs for the production sectors, in line with the respective regional development plans.

The resources destined to investment financing contemplate the following purposes: regularization and environmental adequacy of rural establishments, reforestation, recovery or regeneration of degraded areas or formation or improvement of ecological corridors between priority areas for biodiversity conservation, implementation of water infrastructure and productive activities, payment of technical assistance and rural extension services and remuneration of family labor and other activities to be defined by the National Monetary Council.

The FNO, FNE and FCO finance long-term investments and, in addition, working capital or expenses. In addition to the agricultural, industrial and agro-industrial sectors, including forest industry, the tourism, trade, services, cultural and other sectors are also covered.

- **Payment for Environmental Services – PES**

The PES's main objective is to provide economic incentives to owners of rural properties that have natural areas capable of providing environmental services.

The regulation of the National Policy for Payment for Environmental Services (PNPSA) has not yet been approved in Brazil.³⁴ However, some states³⁵ have already established their State PES Programs. Table 17 presents PES legal frameworks identified at State level.

Table 17 – PES Regulation at the State Level

State	Legal Framework	Brief Description
Mato Grosso do Sul	Law N° 5.235/2018	Provides for the State Policy of Environmental Services Preservation, creates the State Program of Payment for Environmental Services (PESA), and establishes a Management System for this Program
Rio de Janeiro	State Decree N° 42.029/2011	Regulates the State Program for Conservation and Revitalization of Water Resources / PROHIDRO, and establishes the mechanism for Payment for Environmental Services / PRO-PSA
Santa Catarina	Law N° 15.133/ 2010	Establishes the State Policy for Environmental Services and regulates the State Program of Payment for Environmental Services in the State of Santa Catarina
Acre	Law N° 2.308/2010	Creates the State System of Incentives for Environmental Services - SISA, the Incentive Program for Environmental Services - ISA Carbon and other Programs of Environmental Services and Ecosystem Products
Espírito Santo	Law N° 9.864/2012	Provides for the reformulation of the Payment Program for Environmental Services - PSA in the State
Amazonas	Law N° 4.266/2015	Establishes Amazonas State Policy on Environmental Services and the Environmental Services Management System, creates the State Climate Change Fund
Bahia	Law N° 13.223/2015	Establishes the State Policy of Payment for Environmental Services and the State Program of Payment for Environmental Services
Paraná	Law N° 17.134/2012	Establishes Payment for Environmental Services - Bioclimate Paraná Program
Pernambuco	Law N° 15.809/2016	Establishes State Policy of Payment for Environmental Services; creates State Program of Payment for Environmental Services and Pernambuco State Fund of Payment for Environmental Services

Source: Compiled by STCP (2020).

³⁴ The approval is pending in the Senate, with Draft Bill N° 3.791/2019.

³⁵ Some State Climate Change Policies have PSA instruments in their scope, such as the case of São Paulo's PEMC, established by State Law N° 13.798/2009, and regulated by State Decree N° 55.947/2010. PEMC/SP is in line with UNFCCC and the National Policy on Climate Change.

In the context, the Water Producer Program - PPA, an initiative of the National Water Agency (ANA), focused on the conservation of water resources, integrated with the National Water Resources Policy (Law 9.433/1997). The PPA is based on the PES concept as a way of compensating rural property owners for the environmental services generated on their properties, thus inducing them to adopt proper management actions in their productive and conservation areas.

There is no general rule regarding how Payments for Environmental Services are made. It depends on the program, the regulation, the region, etc. When analyzing the PES legal instruments listed in table 17, the incentives can be economic, tax reduction, commercialization platforms for certified credits from environmental services, differentiated credit lines, donation of seedlings and technical assistance, among others.

As can be observed, currently in Brazil, PES programs are mostly coordinated by State Environmental Agencies. Payment resources can come from: public funds, bilateral or multilateral agreements, budget resources, or even the creation of a specific fund (State Fund for PES Resources).

- **Rural Environmental Registry – CAR**

The Rural Environmental Registry was created by Law N° 12.651/2012, and regulated by Normative Instruction MMA N° 2/2014. It is an electronic declaratory public register of national scope, mandatory for all rural properties.

The Registry integrates in a single system the environmental information of rural properties, considering Permanent Protection Areas – APPs, Legal Reserve Areas- RL, forest remnants and other forms of native vegetation, and the consolidated areas. The database is used to control, monitoring, environmental and economic planning and combating deforestation. In the Amazon region, for example, 80% of the property land has to remain with natural forests, and in the case a property has less than this percentage, an alternative to legalize land use is compensation.

Legal Reserve compensation is a mechanism that links landowners who have forested areas in excess of those provided for in the Forest Law (Law N° 12.651/2012), and landowners whose Legal Reserve areas are less than required. It is noteworthy that the required RL percentage varies among different biomes in Brazil.

This is a mechanism by which the owner who does not have enough RL can regularize his RL by acquiring equivalent areas in another rural property, instead of allocating areas of productive use for natural regeneration or restoration. In sum, the owner who does not have the percentage of RL required by law, may, among alternatives, choose the compensation mechanism, provided that it is in the same biome and the property held, on July 22, 2008, an area suitable for RL in less than the percentage required by the legislation in force.

The Forest Law provides for several forms of compensation for the Legal Reserve, however, the most usual are:

- Leasing of area under environmental easement regime: in this case, a property that has coverage of native vegetation is leased by the owner to compensate their respective Legal Reserve. This situation usually occurs when there is no remnant, or when the land occupation type does not allow changes in use.
- Acquisition of Environmental Reserve Quota (CRA): in this case, the owner who does not have enough Legal Reserve area in his property can acquire a Quota in another property. However, it should be noted that a second owner, can only have part of the Legal Reserve of his property to constitute a CRA, if he has more remaining than it is necessary for his property.

Currently, there are online platforms that allow CRA trading, as it is the case of BVRio, but this process is controlled by a competent federal agency of the National Environment System – SISNAMA.

In sum, the environmental compensation mechanism can be a business opportunity for rural owners who have a surplus of RL, but it is important to observe the various restrictions established in the legislation.

The value involved in the transaction depends on the market, still in development, and varies mainly on the demand of area for compensation in the region. In any case, initial transactions indicate that the negotiation involving compensation can have a significant financial impact, and can be an incentive to manage tropical forests, or simply maintain forest cover, especially in the Brazilian Amazon region.

- **Carbon Sequestration Projects / Carbon trade**

Considering that forests store and sequester carbon³⁶ from the atmosphere, forest management can be seen as an important environmental service, helping to mitigate the effects of climate

³⁶ The carbon market emerged at UNFCCC, and the 1997 Kyoto Protocol decided that the signatory countries should make stricter commitments to reduce GHG emissions. In this context, the concept of a Clean Development Mechanism – CDM is included, which allows projects to reduce emissions in developing countries, which do not have emission reduction targets under the Kyoto Protocol.

change. Therefore, forest management plans could be an option for the private sector forest operators, to have a source of revenue by selling carbon credits from projects that reduce GHG emissions. Carbon sequestration (or CDM) projects³⁷ are a way to produce carbon credits, in this case called certified emission reductions (CERs), which represent a ton of CO₂- equivalent, negotiated with countries that have emission reduction targets under the Kyoto Protocol. CDM projects can be implemented in the energy, transport and forestry sectors.

Carbon trade is, therefore, an environmental service that can work as an incentive to sustainable forest management, particularly in the Amazon region. In Brazil there are only a few cases involving carbon trade and management of tropical forests. One case identified involves a major timber company (Manoia) managing a natural tropical forest in Rondonia State. The company was able to negotiate carbon in the market. Current annual revenue generated is between 5 and 10% of the total revenue generated from forest harvesting operation.

Another case is Precious Woods, a timber company located in the Amazonas State. The company holds a 40% share in a biomass power plant allowing selling certified emission reductions (CERs) by utilizing residual wood from production. The aim of all activities is a high level of customer value while preventing deforestation of tropical forests through sustainable forest management and the associated added value.

Precious Wood has a contract with BK Energia that not only produces electricity but also steam for the industry. The activities resulted in a total of 29,868 tons of CO₂ equivalents in 2018 and 34,651 tons in 2019, which can be counted towards carbon reduction and thus contribute to the global effort to mitigate climate change.

The sale of carbon involves quite a lot of expertise, requires time and efforts to assess the potential, for certification, negotiation and other activities. There are specialized organization/ companies offering services to support this initiative. In spite of the bureaucracy involved, it seems to be a viable route to be explored, as it is a form to create an important market incentive to manage tropical forest for timber production, especially considering the perspective of increase in the market carbon prices.

6.1.3 Other Incentive Mechanisms

In addition to the fiscal and non-fiscal mechanisms to promote SFM and development of the forest sector, other mechanisms developed in Brazil, that directly or indirectly create incentives to the forest sector, were identified. These other mechanisms are presented below.

- **Paraná Climate Seal**

The Paraná Climate Seal (Selo Clima Paraná) is an award for companies, located in the State of Paraná, that decide to measure, disclose and voluntarily reduce their carbon footprint, which shows carbon dioxide (CO₂) emissions.

The rules of the Paraná Climate Seal were improved through Resolution N° 47/2019. The company's recognition through the seal is essential to make entrepreneurs aware of the need to reduce GHG emissions. In addition, the participating³⁸ companies can have a competitive advantage, based on a positive market image.

- **Bilateral/International Cooperation Programs/ Projects**

International cooperation is contributing to promote SFM of Brazilian tropical forests. Several organizations have financed forest related programs and projects, covering different areas. Among the relevant programs and projects supported by the international cooperation identified by the Consultant, that directly or indirectly, creates incentives to develop the forest sector, are:

- PPG7 World Bank Project

PPG7 was a program financed by the World Bank Group, involving US\$ 428 MM, to implement four components that resulted in 28 projects. The first of these components was the creation of a national policy for the management of natural resources.

Based on this program areas for the conservation and management of natural resources were established in order to strengthen regulation on land use in forest areas. This allowed the demarcation of 2.1 MM hectares of forest, monitored by a system capable of detecting deforestation and degradation in the nine states of the Amazon region.

³⁷ Some CDM projects identified in Brazil: i. Feasibility Study for the Project for the establishment of Carbon Fixing Forests: Case Study in the South of the State of Paraná; ii. Action against Global Warming Project in Guaraqueçaba - project to recover 7,000 ha of degraded areas; iii. Atlantic Forest Restoration Project - Morro Azul - project to recover 12,000 ha of degraded areas; iv. Pilot Project for Reforestation in Antonina - project to recover 1,000 ha of degraded area, forest recovery and protection of the area, and maintenance of the water supply; Ilha do Bananal Project – it is a 25-year project, which is estimated the preservation of a carbon stock of 25,110,000 t/C will be sequestered and guaranteed at the end of the project.

³⁸ Some companies linked to the forest production chain have already participated in the award, e.g. Klabin, a company dedicated to the pulp and paper production. Klabin reduced fuel oil consumption, prioritizing biomass (renewable fuels) for energy generation.

PPG7 also included a science and technology component, which financed important research centers (e.g. Museu Paraense Emílio Goeldi) and over 110 studies on Brazilian forest ecosystems.

The fourth component encouraged the creation of innovative projects to promote sustainable development in communities in the Amazon. As a result, 30 thousand families and 70 thousand local producers received support in their economic activities.

PPG7 also generated knowledge that later led to the creation of laws and other environmental initiatives in Brazil. One of them was the ARPA Program (Amazon Protected Areas Program).

- Inter American Development Bank - IADB

The IADB has developed several projects in the area of infrastructure, environment, institutional strengthening and poverty reduction in Brazil.

One of these projects is, involving forests, the Serra do Mar Social and Environmental Recovery Program, a cooperation project between the Government of the State of São Paulo and IADB. The Serra do Mar Program was a socio-environmental recovery initiative, which aimed to relocate residents located in areas of environmental preservation or risk areas on the slopes of the mountain. About 5,600 families benefited from new housing and redevelopment.

Another example of a successful IADB project is the Sustainable Development Program of the State of Acre - PDSA (State Law N° 1.420/2001) which aimed to promote sustainable economic development and the production diversification of the state, based on the forest economy and the preservation of the natural heritage. The IADB financing was US\$ 64.8 MM, added to the US\$ 43.2 MM of counterpart from the Acre State.

- ITTO projects

Several ITTO-funded projects implemented over the last three decades have contributed to promote the sustainable forest management. Examples of relevant ITTO projects in Brazil are the followings:

i. Development of a Forest Management Project Model – Antimari State Forest

This was the first ITTO Project in Brazil, launched in 1989, in the Antimari State Forest, in the Acre State. It aimed to work out a multiple-use model of forest development, taking into account the socio-economic context and environmental impact. Antimari is a State forest reserve in which the hydrological, botanical, edaphic, social and economic effects of development have been monitored and controlled. The project operations included harvesting of rubber, Brazil nuts and wood that employed local labour and involved considerable efforts by the National Council of Rubber Tappers.

ii. Introduction of Lesser Known Species in the Plywood Industry

This project supported by ITTO in Brazil aimed to increase the use of less known species, using a multidisciplinary approach. The main objective was to select and introduce lesser-known species in the plywood industry. At that period (1990's), only about 20 species were used for veneer and plywood production. Based on wood properties and related research, it was estimated that 100 species were potentially usable for veneer and plywood production.

The main outputs were: listing of lesser-known wood species, which can serve for veneer in the Amazon plywood industry, industrial testing, properties of mixed species plywood determined, relationship between, increase the number of usable species and logging cost and plywood production was established.

The ultimate goal of the project was that plywood production would become more competitive. The project had a significant impact in the plywood industry of the region, and therefore to promote sustainable forest management.

iii. Strengthening the IBAMA Forest Products Laboratory

The project was implemented by the Forest Products Laboratory of IBAMA. The main objective was to support national efforts for the achievement of the sustainable development of the forestry industry through the development and dissemination of appropriated technologies needed to promote the rational utilization of the tropical forest resources.

The direct beneficiaries were those involved in the production and trading chain of tropical timber products. Private companies and forest communities could have a better access to new and appropriated technologies, which increased competitiveness, improve the utilization of resources and rationalize production in small, medium and large scales.

Government agencies, particularly IBAMA and Ministry of Environment, also benefit from the project. Information provided, among other things, facilitated control and monitoring of forest operations, including for instance improvements and facilitation of the identification of timber species. This had a positive effect on the implementation of sustainable forest management.

iv. Training Program in Pará State

ITTO supported the training program of the technical base for the expansion of certification in the State of Para and a strategy for the dissemination of the reduced impact logging (RIL) technology, introduced by the Tropical Forest Foundation - TFF, during the period 1996-2000.

Activities included: courses on EIR, in situ training, with the demonstration of RIL technology directly in the areas of the timber companies, internships for high school and college students, field days, a traditional extension practice tool for technology transfer processes.

ITTO through Project PD 45/97 VER.1 (F) contributed to the accomplishment of these extension activities and training in sustainable forest management in the field.

v. ITTO/ CITES Project

In 2008, an ITTO-CITES global program was launched to ensure that international trade of wood species included in CITES Annex is consistent with its sustainable management. Brazil was part of the program and several projects were implemented having as the focus on the improvement of mahogany (*Swietenia Macrophylla*) management, harvest and trade.

It was a collaborative project, between ITTO and CITES, with financial support of the European Union through the European Commission together with other ITTO donor countries.

The project provided specific assistance to countries throughout the tropics to design forest management plans, forest inventories, provide guidelines and case studies for making “Non Detriment Findings” (NDFs) for CITES listed tree species, and to develop and disseminate tools for timber identification. This project, played an important role in implementing the recommendations of the CITES Mahogany Working Group (MWG) and CITES Plants Committee on mahogany and other tropical tree species such as ramin and afrormosia listed in CITES Appendix II.

- **Forest Concessions**

Forest concessions are a relatively new option in Brazil for the private sector to access forest resources. Due to several reasons, including lack of experience on the forest concession model, discussions and negotiations involving settlements in the areas selected for concessions, the total federal concession area is still relatively small. In any case, the plan is to gradually enlarge the area.

Some states, such as Pará, have also created forest concessions. In spite of the fact that the concessions were initially considered as a good alternative to make available a sustainable supply to the timber industry, being an incentive to promote sustainable forest management, area under concession is still limited and the impact on the timber supply is not significant.

- **New Market Developments**

Timber construction in Brazil is becoming more than just a niche construction; it is becoming a new market development option. Mass timber including engineered wood such as wood frame constructions, CLT (cross laminated timber), laminated beam – GLULAM (glued laminated timber) are gaining importance.

In Brazil, over the past 10 years, the use of wood as the main material in buildings, using these innovative techniques has developed rapidly. It is becoming competitive and it is a sustainable and environmentally friendly construction alternative. New wooden construction projects makes possible to reduce more than 80% of carbon dioxide emissions in constructions and reduce waste. Furthermore, water consumption during construction can be reduced by more than 90%.

Consequently, the use of wood in construction can play a significant role in national GHG emissions. In 2014, the first condominium of the governmental Program “My Home, My Life (Minha Casa, Minha Vida)” built with wood frame system was delivered; and, in late 2016 the first three-story building was built using mass timber based technology.

Therefore, the construction sector plays a fundamental role, since the increase in the use of timber products open new opportunities for the forest industry and should stimulate SFM. It should be noted that the timber used can come from both native and planted forests. However, in the case of use of wood for the wood frame construction system as well as for engineered wood technologies, mainly wood from planted forests is currently used, e.g. pinus.

6.2 Identified Disincentives

The complexity of the National Tax System combined with the lack of a national integrated development strategy, including existing fiscal and economic incentive programs, associated with the instability of the foreign exchange, market fluctuations and the absence of adequate infrastructure for the flow of production, have been considered as the main difficulties faced by the forestry sector (INFLOR, 2019).

Several disincentives create limitations to implement SFM of tropical forests and to develop the tropical timber industry in Brazil. The main disincentives, identified mainly in meetings held with different stakeholders, described below.

- **Access to Forest Resources and Associated Risks**

In Brazil access to natural tropical timber resources is based mainly on Sustainable Management Plans, and involves predominantly private lands. In recent years, the Government open public lands to be managed based on concession agreements. There is also the alternative of timber from areas converted to agriculture. Management of private lands forests or managing concessions involves a series of risks associated with invasions, including illegal harvesting, illegal mining, forest fire and

deforestation. Private security services are frequently used to ensure the integrity of the private land forests, but in spite of this fact, invasions are frequent. On the other side concessions involve public land, and there are legal questions involving the use of private security services in this case. Therefore, risks associated with illegal invasions causing forest degradation are higher in concession areas. Private land owners managing forests and also concessionaires are responsible for the proper management of the forests, and can be demanded to compensate for the forest degradation caused by third parties. These illegal operations resulted from invasions either in private lands or in concessions, are therefore potential sources of liabilities.

- **Market Access**

In addition to tariffs, there are a number of non-tariff impediments that affect access to international markets. Import quotas and others requirements (such as environmental, quality and structural certifications), imposed by importing countries are frequent. Quite frequently, these requirements are a strong disincentive to sustainable management of tropical forests and investments in the tropical timber industry, as they limit market access. The diversification of criteria and standards, involving different country certification processes, create high transaction costs. There are cases involving legal disputes, particularly in the case of anti-dumping actions, that lead to the need for hiring technical and legal support in importing countries, involving extremely high costs and long lasting processes. In spite of efforts, in most cases involving anti-dumping process, it culminates with the creation of new tariffs and quotas applied to imported wood products. The bilateral agreements are one alternative to reduce these impediments and facilitate market access, but Brazil has only a few signed.

- **Institutional Limitations**

Several institutional limitations for the promotion of SFM and the development of the tropical timber industry were identified. The main are the followings:

- Poor command and control system

The current system for the control and monitoring of timber activity is complex and ineffective. The complexity creates high transaction costs and inefficiency of the command and control instruments normally result in low probability of detecting predatory activities and small fines effectively imposed on offenders. This is a favorable environment for illegal logging, resulting in a low cost of illegality, favouring illegal operations.

- Lack of human and financial resources

Limited budget and the lack of human resources limits the capacity of environmental agencies to carry out the necessary forest inspections on the spot (in the field), swift approval of management plans and affects the smooth running of SFM.

- Lack of articulation between the institutions involving the forestry sector

There are difficulties of intra and inter-institutional articulations of environmental agencies in the identification of competences and joint action. There is no national strategy or a negotiated plan, involving the public and private stakeholders, aiming to promote the sustainable development of the forest sector.

- **Financing/Funding Priority Development Programs**

Agriculture development is a strategy priority in Brazil and this has an implication on land use. Credit policy is mostly directed towards the expansion and modernization of the agriculture sector. It is a national strategy to support the agriculture sector development, reduce production costs, and increase its efficiency and profitability. The agricultural is an important sector supporting the national development and expanding exports. To some extent this promotes deforestation, but mainly it can be a source of supply of unsustainable timber. Lands converted to agriculture make available timber at a lower cost than those coming from sustainable management plans.

- **Bureaucracy and Transaction Costs**

Forest management of tropical forests and timber processing operations in Brazil, as already mentioned, are highly regulated. Companies invest quite a lot of time and money to have available all legal required updated documents, involving, for instance, land titles, an approved management plan and POA, harvesting permits, certification, monitoring and control involving harvesting, transportation and industrial operations, constant measurement of conversion factors, forest and industry inventory control, issuing fiscal and trading documents.

The control and monitoring involve each single harvested tree and has to be done by species, from the forest to the final market. To have in hands all documents, properly prepared, requires knowledge and time. This is particularly difficult for small and medium size companies, the large majority of the forest operators in the Brazilian Amazon region.

In view of the complexite involved, risks involved are huge, and even companies fully committed with sustainable management and that adopts a rigorous compliance policy, can face difficulties resulting from several factors, such as discrepancies in measurement methodology, identification of species, interpretation of regulations and others.

These create high transaction costs, but most important creates high risks for investors. The risks associated to difficulties to ensure or demonstrate full compliance, involving a list of legal instruments and complexity has been one of the main factors reducing investments in the tropical forest management and industrial operations in the Brazilian Amazon. As a result, most of the large timber companies that were operating in the region were deactivated along the last two decades.

Bureaucracy, transaction costs and associated risks are also a limitation in dealing with concessions. To start government has not been efficient in the process of structuring concessions. Most of concessionaires already involved in managing concessions are small or medium size companies, and have limited investment capacity. Concession contracts impose several restrictions and generate even higher transaction costs. Besides that, a concession contract is not accepted as a guarantee by financial institutions and this limits access to credits.

Furthermore, as previously mentioned, risks involved in managing a concession can be greater than in the case of private lands. For instance, in the case of concessions it is legally more difficult to control invasions, deforestation and forest degradations, involving illegal logging or illegal mining. Those illegal activities might affect the management plan, degrade the forests, affect permanent protection areas or have other impacts. The conservation of the resources and the full implementation of the management plan are contractual responsibility of the concessioner, and in spite of the degradation being caused illegally by a third party, he can be prosecuted. These aspects have reduced the interest of large and capitalized industrial players in concessions.

The bureaucracy created by the system of command and control in place has been mentioned as the main factor that limits SFM in Brazil (CNI, 2018). Even with the creation of the DOF System and SINAFLOR, there is still a lack of state and federal databases integration. In addition, the delay in the analysis and approval of FMPs by SEMAs makes forest management time-consuming, discouraging the producers.

- **Illegalities**

Illegal harvesting is still a practice, especially in the Brazilian Amazon region. Most of the illegal harvesting is done by small holders and involve public lands, including in National Forests, Indian Reserves and other protected areas. Some of the illegal timber also comes from private lands, harvested mainly in invasions or, a minor share, a result of illegal deforestation on lands undergoing conversion to agriculture. Illegal harvesting does not require a management plan, documents, monitoring and control, and payment of taxes. As a result, illegal timber, in spite of associated risks, implies in lower cost and products are traded in the market at a lower price. This is an unfair competition and a disincentive to companies operating formally.

- **Infrastructure Limitations**

Currently most natural tropical forests available to be manage and harvest in Brazil, particularly the new public concessions, are located in remote areas. The managing/ harvesting company frequently establishes the local infrastructure, and this increases investments. Regional infrastructure is generally poor, which affects forest and industrial operational costs, mainly transportation costs, and affect the competitiveness of tropical timber products in the market. In Brazil, every year part of forestland areas are converted to agriculture and new forest lands available to be sustainable managed and harvested are, every year, located in even more remote areas, with poor infrastructure reducing the competitiveness of the tropical timber industry. Generally tropical timber business, an already risky business, is losing competitiveness every year, and investments to on sustainable forest management plans, to ensure a sustainable supply of tropical timber, are shrinking.

The difficulty in timber transporting could be considered as one of the major obstacles to SFM. A survey by IPEA (2015) underscored the main problems in infrastructure and logistics in Brazil:

- Deficient road/rail network to meet the need of the producing regions, as well as the lack of maintenance;
- Low use of intermodal transportation;
- Low efficiency of Brazilian ports.

According to the National Confederation of Transport - CNT (2019), 61% of the volume of cargo transported in Brazil is by road, 21% by railways, the rest is divided among air, pipeline and waterways.

Even though it is the most widely used modal, highways in Brazil have as major bottlenecks the high accident rate that is directly related to poor road conditions, high costs, including maintenance of roads and vehicles, high fuel prices, in addition to be highly polluting.

- **Lack of Public Procurement Policy**

In Brazil, general socio-environmental criteria are established in regulatory frameworks for sustainable public procurement. The Ministry of the Environment (MMA) published in 2010 an Action Plan for Sustainable Production and Consumption (PPCS), where Sustainable Public Procurement (SPP) is one of the main topics addressed. However, there is no sustainable public procurement policy, per se, aimed at using timber products from SFM. In addition to the Federal Government, some states such as

São Paulo and Minas Gerais have developed specific programs and legislation for the practice of SPPs.

In the state of São Paulo, Decree N° 49.674/2005 establishes environmental control procedures for the use of products and by-products of wood from natural forests in engineering works and services contracted by the state of São Paulo. For instance, it controls the acquisition of timber products from the Amazon region to guarantee the entry of "legal" wood into the state. Decree N° 45.958/2005 establishes that the contracting of works and services by the Municipality of São Paulo that use products and by-products of wood from natural forests must obey environmental control procedures, with a view to proving their legal origin, including forest management with transport authorization issued by IBAMA.

In 2008, the State of Minas Gerais regulated a relevant topic on sustainable public procurement, namely the use of wood from natural forests in purchases and contracts carried out by state agencies.³⁹

The Federal Senate also adopts sustainability criteria in its tenders. The Directorate-General Act N° 23/2014 establishes the inclusion of sustainability criteria and practices in basic contracting projects. For example, for paper purchasing is required that it come from wood of certified legal origin. To ensure that the wood origin is legal, registration with IBAMA is required. Moreover, the Authorization for Transport of Forest Products issued by IBAMA is required for wood used for the furniture manufacturing, in addition to the certificate of wood origin.

In reality, there are already several legal provisions that support SPP in Brazil, but there is no public policy forcing the Public Administration to insert environmental criteria in public procurement, considering the valuation of activities resulting from sustainable forest management.

- **Land Regularization and Land Tenure Insecurity**

Brazil faces some obstacles that influence the land regularization process, among them are lack of financial resources and technical staff, weakness of knowledge and information on the land-related issues, complexity of the Brazilian public notary system, legal insecurity and complexity of irregular/informal settlements among others (CARVALHO, 2019).

According to the Federal Public Ministry, Brazil is the leader in Latin America in deaths from agrarian conflicts. The conflict over land combined with the growing number of land invasions and land grabbing becomes a risk for forestry activities, discouraging investments in forest management, especially in natural forests.

According to IBGE agricultural census (2006), there were 300 million of hectares without proper land title, mainly in the northern region of the country, with an estimated 53% of land in the Legal Amazon has uncertain property rights. A number of social and environmental problems, such as land dispute and inadequate use of natural resources take place because land rights regularization process in Brazil is still incomplete.

The increasing rate of invasions of properties with high forest cover, seen as unproductive, increases the risk of deforestation and works as a disincentive for long-term investments in sustainable forest management.

- **Forest Fires**

In 2019, according to INPE, 52 thousand fire spots were identified in Brazil, of which almost 40 thousand in the Legal Amazon. Culturally, rural producers to open new areas and clear land for agriculture and pastures use fire. However, in some cases the fires end up taking proportions that are out of control, invading the natural forest areas.

The occurrence of fires increases the mortality of trees, reducing the productivity of the forest, especially in regions with severe dry season. Consequently, forest fires increase the investment risk of the private sector, becoming a barrier to promote SFM. The growing rate of forest fires increases the risk of forest activities and works as a disincentive for long-term investments that characterize forest activity.

- **Difficulty in obtaining credit lines**

Although there are several lines of credit/financing aimed at subsidizing agricultural and forestry activities, there are several obstacles in accessing the existing credit lines or incentives. The main problems faced especially by small/medium-sized forest/ industrial producers, to access credit lines, according to BNDES (2016), are:

- Obtaining technical assistance;
- Compliance with environmental legislation;
- Compliance with land requirements;
- Preparation of required documentation;
- Lack of knowledge of available credit lines;

³⁹ State Decree N° 44.903/2008 - provides for procedures when contracting works and services involving the direct acquisition and use of products and by-products of native wood, such as those from the Amazon and those originating from the Atlantic Forest. Available at: https://repositorio.cepal.org/bitstream/handle/11362/41009/1/S1601328_pt.pdf

- Delay/slowness in the credit approval process.

7 SUMMARY OF COMMITMENTS BY THE PRIVATE SECTOR

7.1 Zero Deforestation Pledges for Agricultural commodities

Companies and countries that trade commodities with a risk of environmental impact have been under increasing public pressure to eliminate deforestation and forest degradation in their production chains. As a result, an increasing number of companies have made public commitments against deforestation and forest degradation. These commitments are generally called Zero Deforestation Commitments – CDZ⁴⁰. The most relevant initiatives in Brazil are presented below.

- **Tropical Forest Alliance - TFA**

TFA is a global public-private partnership focused on business, government and civil society. TFA 2020 is committed to reducing tropical deforestation related to the main global commodities by 2020, such as soy, beef, palm oil, and pulp and paper.

In Brazil, the TFA 2020 strategy was built through consultations and discussions with stakeholders, initiated at a meeting on regional strategy in Brazil in June 2015. At that time, an agreement was signed among several companies associated with the Consumer Goods Forum (CGF) and representatives of civil society to support the development of an approach to guide the implementation of corporate commitments aimed at eliminating the deforestation associated with commodity production chains in Brazil, in conjunction with existing laws (in particular the Forest Code), agreements and incentives. As result, TFA 2020 could help partners in the transition to the sustainable production of key forest risk commodities.

- **Soy Moratorium**

The Soy Moratorium is a pact signed by soybeans industries and exporters, which aims to hinder soy planting in areas of deforestation in the Amazon biome. In this pact, companies made a commitment not to purchase soybeans from areas deforested after July 24, 2006. This Soy Moratorium was renewed in 2008. Satellite images are used to identify and map the soybean fields contained in the polygons mapped by the Amazon Deforestation Calculation Program (PRODES), on private rural properties outside rural settlements. The main limitation of this agreement is the fact that it covers only the Amazon region, given that soybeans production is massively concentrated in the Cerrado region (savanna land region).

- **Cerrado Manifesto**

The commitment called the Cerrado Manifesto (Cerrado Manifest) is endorsed by approximately 140 global Fast Moving Consumer Goods (FMCG) companies (as of August 2018), institutional investors, and over 70 environmental organizations, including WWF-Brazil, The Nature Conservancy (TNC), Conservation International Brazil (CI), and others. In addition, some major companies, such as IKEA, Mondelez, McDonald's, Nestlé, Walmart, among others, have joined the Cerrado Manifest.

The document pledges for immediate measures in defense of the Cerrado biome to be taken by companies that buy soybeans and meat produced in this region. The support of companies that sign the Cerrado Manifest aims to promote more resilient agriculture and land use planning for sustainable development practices in the region. Those companies declare that they are committed to working with local and international stakeholders to stop deforestation and loss of vegetation in the Cerrado region.

7.2 Certification Process

There are two forest certification schemes applied in Brazil, the FSC (Forest Stewardship Council), and the CERFLOR (Brazilian Forest Certification Program), endorsed by the Pan European Forest Certification (PEFC).

FSC is an independent, non-governmental, non-profit organization established to promote responsible forest management worldwide. It has national representative such as FSC Brasil - Brazilian Forest Management Council, whose main objective is to disseminate and facilitate good management of Brazilian forests through established Principles and Criteria.

CERFLOR is the Brazilian Forest Certification Program, which was developed within the framework of the National System of Metrology, Standardization and Industrial Quality - SINMETRO.

⁴⁰ At the UNFCCC COP21, an agreement was adopted for countries to commit reducing their GHG emissions and reducing the impact of climate change. The Paris Agreement was approved by the 195 countries of the UNFCCC, with a commitment to keep the global average temperature rise below 2 °C above pre-industrial levels and to limit the temperature rise to 1.5 °C above pre-industrial levels. In 2016, Brazil established the Nationally Determined Contribution (NDC), with a commitment to reduce GHG emissions by 37% below the 2005 levels, by 2025, reducing GHG emissions by 43% below the 2005 levels, by 2030. To this end, the country pledged to increase the share of sustainable bioenergy in its energy matrix to approximately 18% by 2030, to restore and reforest 12 million hectares of forests, as well as how to achieve an estimated 45% share of renewable energy in the composition of the energy matrix by 2030.

CERFLOR, as the FSC, is a voluntary program developed together with representatives from different stakeholders at the national level, which has been operational since January 2003.⁴¹

In Brazil a large part of the private sector, mainly large forest companies, is committed with good forest management practices and have adopted certification. Table 18 presents forest certified areas and number of certificates in Brazil. The country has a large portion of the certified area, 7.1 MM hectares, with FSC. The areas with CERFLOR certification represent 3.1 MM hectares, totaling 10.2 MM ha in certified forests. Most of the certified forests are plantations.

Table 18 – Forest Management Certified areas and Certificates in Brazil

Certification Type	Certified Areas (ha)	Number of Certificates
FSC	7,133,440 ¹	1,055
CERFLOR	3,072,628 ²	58
TOTAL	10,206,068	1,113

¹ 2020 data.

² 2018 data

Source: SFB (2018), FSC (2020), compiled by STCP

7.3 Needs and Motivation of Key Companies

As discussed in the previous sections, the high tax burden coupled with the bottlenecks that affect the sector, such as the complexity of the legal framework and associated bureaucracy, land tenure insecurity, deficient logistical infrastructure and others, including the lack of effective incentives/motivation mechanisms, end up weakening SFM and the forest sector development in Brazil, especially regarding natural forests.

The general perception of private investors and forest companies is that the limitations involving the tropical forest industry could be overcome based on a consistent strategy to improve business climate and attract investments from the private sector, to promote sustainable management and the development of the tropical timber industry. Tropical forests represent a tremendous opportunity to promote social and economic development in Brazil, but there is no strategy to reduce risks, remove limitations and create incentives to attract investment from the private sector.

The development and implementation of a sustainable development strategy should consider the involvement of a team of experts, a broad consultation of stakeholders and have a high-level political support and commitment.

Brazil has already adopted such approach when implementing the forest plantation program, around 50 years ago. The forest plantation program was successful, mostly based on fiscal incentives, but was also able to attract direct investments and created a new and competitive business structure. Brazil is nowadays the first world exporter of pulp and this was mainly a result of the strategy adopted to expand forest plantations.

On the other side, along the last three decades, investments in the tropical forest business in Brazil declined. The initial development of the tropical timber industry in Brazil, mainly between 1970 and 1980, was based on the large availability of logs, from land conversion operations, at low cost. No sustainable forest development strategy was adopted.

As the supply of logs from land conversion operations reduced, and requirements to manage the forests were established, log costs increased and the industry was affected. With no development strategy in place, lack of incentives and support, and growing investment risks, tropical timber business declined. Along the last 20 years, practically all large timber companies from the Amazon region were closed. Currently most companies are small and medium size, many operating in the informal sector and generally with limited investment capacity.

Government concession program was one alternative proposed to develop tropical timber industry in the Brazilian Amazon region. Making available public forest to be managed it was expected to increase the offer of raw material from sustainable sources, and promote social and economic development in remote areas. The option was also expected to help private sector to overcome land tenure limitations and reduce the demand of capital required for the acquisition of forestlands.

⁴¹ The main certifiers that operate in Brazil are: APCER; Bureau Veritas Certification; Control Union Certifications - Skal International; DIN CERTCO Gesellschaft für Konformitätsbewertung GmbH; DNV Business Assurance; GFA Certification GmbH (GFA); IMO Swiss AG. (IMO); Forest and Agricultural Management and Certification Institute - IMAFLORA; QMI - SAI Global Assurance Services; Rainforest Alliance - RA & SW - Representative: IMAFLORA; RINA Services S.p.A; SCS - Scientific Certification System / Sysflor; SGS ICS Certificadora Ltda; Soil Association Certification Limited (SA); SysFlor Certifications of Manejo e Produtos Florestais Ltda; Paraná Institute of Technology - TEPCAR; TÜV Nord Cert GmbH - TUEV).

Contracts of concession of public forests consider some incentives, such as a bonus to those that adopt proper management practices. Nevertheless, the incentives have not been sufficient to attract larger stakeholders, as the risks of the business as a whole are high. Most of the concessioners are medium or small size companies with limited investment capacity, and after almost twenty years, the area under concession is still very limited. A review of the concessions agreement, to create motivation and attract larger players and accelerate the process is fundamental.

Among the most relevant alternatives to motivate and facilitate the implementation of sustainable forest management in the Amazon region is the compensation of Legal Reserve. The Rural Environmental Registry – CRA, created by Law N° 12.651/2012, and regulated by Normative Instruction MMA N° 2/2014, defines that in the Amazon region properties that have a coverage of less than 80% of native forest can legalize the over occupied area based on compensation.

As already mentioned, forest management plans areas can serve for compensation, and this opened a new opportunity to land owners managing forest. Those having excess legal reserve in their properties, such as in the case of management plans, can sell or lease forest areas for compensation. It is an important incentive as it can have a significant positive financial impact for forest managers.

It can also be considered alternative mechanisms, such as payment for environmental services- PSA and the carbon credit/CDM. There are some successful experiences with such projects, but these mechanisms are still poorly developed in Brazil. Further studies and greater engagement by the public and private sectors is still required to adopt and implement such alternatives in a larger scale to support financing sustainable forest management plans.

8. ASSESSMENT OF EXISTING INCENTIVES AND DISINCENTIVES

A large number of incentives and disincentives affecting the forest sector was identified. Most incentives identified are state or municipal, and federal incentives are scarce. On the other side, the list of disincentives is quite extensive. A general assessment, involving the most relevant incentives/disincentives identified, is presented below.

- **Fiscal incentives**

State programs such as “Mais Verde” (More Green) Program”, “ICMS Exemption – AM”, “PRODEIC – MT” are underscored. The incentives offered by these programs are the kind of motivation that forest entrepreneurs need to invest in the forest sector, that is, to relieve the tax burden on the operations of production or trade of forest products. However, their impact on the forest sector has been marginal. In the case of PRODEIC from Mato Grosso State, for example, companies that made the option for the Simplified Tax Regime, have no benefits. These are the majority of the Mato Grosso State timber companies. On the other hand, larger companies are mostly trading their products in the international market and do not pay state taxes. Therefore, the tax reduction program has no effect for them. In any case, the concept is positive and the fiscal incentives developed by the states could serve as an example, to be adjusted, adopted and expanded, and considered at the federal level.

- **Non-fiscal incentives**

The bonus in forest concession contracts is an economic incentive for the concessionaire who adopts good practices in forest management, in addition to Forest Certification. The bonus has a limited financial impact for the concessioners, but it is an economic incentive that could also be adapted and extended to areas outside the public forest concessions.

- **Payment for Environmental Services**

There are a few examples of Payment for Environmental Services – PES, involving forest management plans in Brasil. This issue has not yet matured in the country, as there is still no clear regulation at the national level, although some states already have their own PES Programs. PES can be considered an efficient incentive mechanism for SFM, if managed effectively by the environmental agencies and responsible public institutions. CDM projects, on the other hand, can be interesting from an economic point of view. However, there is a need for the private sector’s engagement and motivation, and mostly important, to further develop the market PES is a mechanism that can generate economic benefits; however, it is not yet mature in Brazil. There is also a need for regulation at the national level and a standardization of programs, which actually offer economic incentives involving SFM, with defined resource funds and an efficient management committee.

- **Compensation of Legal Reserve**

Owners who have areas with a Legal Reserve less than required by the Forest Law can legalize land use, using a compensation mechanism. On the other hand, surplus areas in the Management Plans can be used as a compensation area. This is a market that is on the rise, and may become, in the near future, a relevant incentive to promote sustainable forest management, especially in the Amazon, where the RL requirement is 80% of the total area.

- **International and Domestic Funding**

International bilateral and multilateral cooperation has been important to support and fund projects in Brazil. The World Bank made available in the late 1990 more than US\$400 million to implement the

PPG7, involving several projects to promote sustainable management of tropical forests and social development in the Amazon region. Also IDB supported environmental projects in that region, and ITTO funded projects to improve sustainable forest management and develop the timber industry. Other international alternatives are the Global Environmental Fund- GEF, and from the Green Climate Fund- GCF. Nevertheless, these funds have apparently, have other priorities, and invested very little on SFM and forest sector development projects.

There are several domestic funds that can be considered to finance SFM and promote forest development, including the National Forest Development Fund – FNDF, the National Environmental Fund – FNMA, the Amazon Fund and the Constitutional Financing Fund. Most of these funds were only regulated recently, and this probably explains their still limited contribution to promote SFM.

- **The bureaucracy and red tape**

Entrepreneurs of the forestry sector consider that bureaucracy and red tape is the biggest obstacle for the development of the forest sector. For instance, the excess of licenses requirement, forest surveys, delay in the SFMPs approval process, reporting and others are intrinsic bottlenecks of the Brazilian forest sector. The list of requirements demands the involvement of several professionals, increase costs and creates an incentive for informality. This which can be improved gradually, but it requires institutional reforms and political will.

- **Public Procurement Policy**

There are good examples in Brazil of public procurement practices at State level. This practice should be expanded, involving federal and states procurement of forest products as it can stimulate competition and innovation, and corroborate to improve sustainable practices.

- **International Trade and Market Access**

Tariffs, non-tariff barriers and other impediments, imposed by importing countries, have limited market access, reduce the competitiveness of tropical timber exporters, increase risks and is an investment limitation. Examples are import quotas, such as tariff quota at EU gate,⁴² environmental requirements, proving that timber and timber products come from managed forests demonstrating their origin, such as US Lacey Act, EU Timber Regulation, quality and structural certifications. Anti-dumping measure is another important example. Anti-dumping measures normally culminate with the creation of new tariffs and quotas applied to imported products. Government support is required, involving the negotiation of bilateral and multilateral trade agreements, negotiations in international fora and even legal support involving disputes.

- **Investment Climate**

Lack of investment has been the main limitation for the sustainable development of the tropical forest sector in Brazil. Most large tropical timber companies/operators have disappeared. The remaining tropical forest/timber companies are mostly small or medium-sized, and the large majority operates in the informal market and has limited investment capacity. The problem is associated to a poor investment climate. There is no strategy to promote investments in sustainable forest management and development of a sustainable and competitive tropical forest industry. There is a lack of political will, and several intrinsic and extrinsic limitations to be overcome, including those related to logistics and infrastructure, land tenure insecurity, capacity building and technical assistance, technology/products development, fiscal and non-fiscal incentives and other aspects.

9. RECOMMENDATIONS AND PROPOSALS

The discussions presented above illustrate the general features of incentives and disincentives for promoting SFM and the development of a sustainable forest industry. This section presents strategic, specific, and desirable and realistic mixes of measures recommended to improve tropical forest management and promote sustainable development in Brazil.

9.1 Strategy to Develop a Sustainable Tropical Forest Sector

Lack of investments has been the main limitations to sustainably manage tropical forests and develop a competitive tropical forest industry in Brazil. Investments in the forest sector are, globally, mainly private. Investments flow to countries, regions or sectors that are attractive to investors and investment decisions are largely dependent on favorable business climate.

In Brazil, there is clearly a need of a strategy to improve business climate and attract investments to sustainably manage tropical forests, as well as to promote the tropical forest development. The main steps to be considered to develop such strategy are the followings:

- Identification of the major supra, inter and intra sectoral factors (incentives and disincentives) affecting the investment climate;

⁴² Latest update of tariff quota of the EC Taxation and Customs Union
https://ec.europa.eu/taxation_customs/dds2/taric/quota_tariff_details.jsp?Lang=en&StartDate=2020-01-01&Code=090013

- Assessment of the impact/ relevance of the identified factors;
- Selection of priority factors;
- Validation with stakeholders and their commitments;
- Ensure a high level political support and funding;
- Define projects to promote required changes and implement them;
- Monitor the implementation and revise it.

9.2 Specific Proposals Related to Fiscal and Non-Fiscal Incentives and Disincentives

Considering the analysis carried out on the existing incentives and identified disincentives, and based on their relative relevance to promote sustainable forest development, the specific proposals are as follows:

- Develop and implement a National Program of Fiscal Incentives for Sustainable Forest Management, based on a critical assessment of the existing State incentives and other alternatives;
- Expand and facilitate access to international and national funds, for forest management and to promote the development of a sustainable and competitive forest industry;
- Develop and implement a strong and long lasting technical assistance and capacity building program, involving mainly small and medium-sized forest managers and timber industry;
- Strengthen mechanisms for PES and Carbon Credits to be accessible to the private sector managing tropical forests;
- Create mechanisms to accelerate the negotiation of compensation for legal reserves areas, to legalise land use under the Law N° 12.651/2012, and regulated by Normative Instruction MMA N° 2/2014, considering sale or lease of forest lands under sustainable management plans, as a priority to effectively establish an incentive for land owners that have excess legal reserve in their properties to manage their forest;
- Develop alternative fiscal and tax economic instruments, aimed at subsidizing the formulation of public policies that favor forest management and discourage clear-cutting of primary forests for alternative land use in the Amazon;
- Implement an effective national public procurement policy for forest products, as one of the measures to promote legality in the domestic trade of forest products.

9.3 Desirable and Realistic Mixes of Measures Recommended

Some general recommendations are as follows:

- Reduce the tax burden and revise legal instruments complexity, identifying alternatives to gain efficiency on control and monitoring, reducing the complexity and transaction costs for forest managers and timber industry;
- Create a forum, involving relevant stakeholders, from the public and private sector, to enhance the benefits of incentives, identify disincentives and access their impacts on forest management and industrial development, and propose options for mitigation;
- Coordinate efforts to guide and strengthen international cooperation in the forest sector aiming to increase its efficiency, and invest in national priorities programs/ projects to improve forest management practices and promote sustainable development.

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ANNEX 1 – INTERVIEWS IN BRAZIL

A survey was carried in BRAZIL over the period February to April 2020. It should be noted that, a field visit was originally planned for this period, but all meetings have been cancelled due to COVID-19. Therefore, interviews were carried out by audio-conference and through email. The summary of interviews is presented below, describing date, name of interviewees and corresponding positions, organizational name, and the main topics/comments of the interviews.

RESULT OF INTERVIEWS

Date	Name of interviewees	Organization/ Position	Main Topics/ Comments
April 17, 2020	Mr. José Pereira Dias	CIKEL GROUP President	<p>About Incentives: In Brazil there are only a few incentives to promote the development of the tropical timber industry. The main incentives are:</p> <ul style="list-style-type: none"> • Along the last years exchange rate tended to be more stable, increasing the previsibility of the business; • There is no taxes over exports and international prices of most forest products are attractive. <p>About Disincentives: There are a list of disincentives/ limitations to invest in the tropical forest sector, including:</p> <ul style="list-style-type: none"> • Poor logistics and lack of regular shipping lines; • Growing legal complexity and bureaucracy; • Lack of a clear national environment and development strategy, supported by campaigns of national and international NGO, and the media, has created a negative image of Brazil in the international market and constrains trade of tropical timber products; • No dissemination of information on existing good practices adopted to sustainable manage tropical forests; • Poor internal logistics, generatd high transportation costs, port costs are extremely high and led time is long due to lack of load regularity; • Due to the longer turnover of products, and other factors, the demand of working capital is high; • Number of timber species traded/ accepted in the international market is small, and forests; • Product dimensions in the international market are restricted and the leftovers need to be traded in the domestic market at a lower price; • There are legal impediment to export some tropical timber products, for example charcoal and wood chips from waste; • Excessive controls and legal requirements encourages illegal practices; • There are some incentives to manage public forests/ concessions, but these incentives do not apply for private forests.
April 7, 2020	Mr. Roberto Vergueiro Pupo	AIMEX President	<ul style="list-style-type: none"> • There is no incentive effectively for the forest sector; • FNO loan can be considered a general incentive (longer period / lower interest);

Date	Name of interviewees	Organization/ Position	Main Topics/ Comments
			<ul style="list-style-type: none"> • Public agencies deals with forest monitoring and control and not development; • Forest concessions are small areas, logistics are poor, there are traditional communities involved / affected, legal insecurity / land invasions. Today, there are about 1.5 million ha of concession areas, but less than 1 million is effectively in operation. Forest concessions are not accepted as warranty; • Despite these problems forest concessions reduce the risk associated with land tenure (land title-related issues) and require less investment / capital; • The limitations of the forest sector involve legal insecurity, reputation of the sector, legal complexity and high transaction costs; • An example of legal complexity and risk is the log transformation coefficient (log processing conversion rate), which has been the main reason for the application of fines and legal discussions. The conversion factor varies a great deal (according to the raw material, the product, the industrial processing technology, etc.) and it is difficult to adopt a fixed rate; • There are restrictions to export residues, wood chips or charcoal based on wood from natural forests (Normative Instruction IBAMA N° 15 of 5/12/2011). • The fact is that there are other investment opportunities, more attractive and less risky, which has reduced investments in the forest sector. • The forest sector has not been a priority in economic and social development programs. Other sectors are prioritized, such as agriculture and cattle ranching.
April 6, 2020	Mr. Fernando Castanheira Neto	SFB - Brazilian Forest Service General Coordinator of Extension and Social Inclusion	<ul style="list-style-type: none"> • There is no significant incentives in Brazil to promote sustainable management and develop the tropical timber industry; • Along the last decades government has made forest control efforts to improve control and monitoring, aiming to reduce deforestation and forest degradation; • To some extent the new forest law (Law N°. 12.651/2012) open new perspectives to the forest sector. Negotiation to compensate legal reserves, that can be applied to forest management plans is an incentive to forest managers; • The concession program is also an incentive, as it reduces the demand of capital to the forest industry and promotes sustainable management. The concession agreements has a bonus for those concessionaires that adopt good forest practices and that reduces the concession fees; • The new government is working on an agenda to promote the development of the tropical timber industry.
April 1, 2020	Mr. João Baldasso	Guavirá Madeiras Ltda	<p>About Incentives:</p> <ul style="list-style-type: none"> • Mato Grosso Industrial and Commercial Development Program - PRODEIC: reduction in

Date	Name of interviewees	Organization/ Position	Main Topics/ Comments
		President Federation of Industries of Mato Grosso State, Vice President Timber Industries Union of Northern Mato Grosso, Vice President	the payment of ICMS (65 to 80% of ICMS), with various counterparts such as job creation, investments, etc. In practice: - Few timber companies are eligible for the Program, as a large part of them belongs to “simples nacional” simplified tax regime; - Larger companies under the presumed or real profit tax regime, end up not participating because they are predominantly exporters (no State tax is applied). • Financing/ bank credit lines have no special or differential treatment for the forestry sector; • Training courses are mostly offered by SENAI (part of the Industry Federation); • In the case of the State of Mato Grosso, there is no forecast for forest concessions by the state or federal government; • CIPEM - Center for Wood Producing and Exporting Industries of the State of Mato Grosso is largely responsible for organizing and supporting timber companies, including promoting the domestic and foreign markets, participation in forest/timber-related fairs/exhibitions, partnerships with international institutions, such as the IDH, in promoting sustainable trade. About disincentives: • Mato Grosso state has some exclusive fees / taxes such as FETHAB - State Fund for Transport and Housing, which has an amount to be paid per m3 of timber sold. • Very high fees that should be paid to SEMA (State Secretariat for the Environment), for the approval of Operation Licenses, Forest Management, renewal of registration, etc. • All timber sold in the state has to pay an inspection fee to INDEA - Agricultural Defense Institute of Mato Grosso, to check the timber species sold; • Bureaucracy and complexity of the legislation brings enormous legal uncertainty to the timber/ forest operations, and often generate conflicts between state and federal authorities; • These aspects end up discouraging investment in the forestry sector.
March 10, 2020	Mr. Antonio Carlos Prado	SFB – Brazilian Forest Service Director	• Government is promoting concessions as an incentive to private companies; • Concessionaires have to ensure sustainable management and put in place a system to control harvesting and transportation; • Areas near indigenous people and traditional communities are avoided, to prevent risks regarding those groups and forest activities; • SFB uses three methods for forest concession monitoring, Chain of Custody System, Remote sensing (LIDAR and Detex), and Independent audit; • Licensing system of wood processing mills, with different rules in different states, encourage

Date	Name of interviewees	Organization/ Position	Main Topics/ Comments
			illegality; <ul style="list-style-type: none"> • There are bonus applied on concessions fees, it is an incentive to adopt good management practices.
March 4, 2020	Ms. Ana Bastos	Amata S.A. CEO	<ul style="list-style-type: none"> • Forest concessions can be considered as an opportunity to promote SFM, but involve strict regulations; • It is required a forest management plan, forest census, annual harvesting plan, DOF to transport logs from harvesting site at the concession to the sawmill and to transport sawn wood from sawmill to consumer, continuous reporting to SFB and other documents; • Conversion factor (input / output ration) is usually a problem. It varies depending on species, product types and machinery, and it is frequently a case of controversy. It has to be recognized that conversion factor might provide room for timber laundering (mixing unknown sourced timber); • Sawmill has to report every month about input and output which, together with other requirements, makes transaction cost high; • Operational and transaction costs are high and harvesting from natural forests/ concessions is not a profitable operation.
March 3, 2020	Mr. Douglas Granemann de Souza	Triangulo Pisos e Painéis Ltda President ABIMCI Vice President	<ul style="list-style-type: none"> • Sustainable and legally manage tropical forests involve too many regulations (forest inventory, DOF, AUTEEX and others); • The complexity involving legal instruments opens space to different interpretation, and this stimulates illegalities, corruption and bribing; • Transaction costs are high, and illegal timber is cheaper; • Risks are high and security is required to avoid invasions, illegal logging and illegal mining; • Manage forests is a good business, but the future is uncertain, agriculture is expanding around forested areas, and risks are increasing; • Supply of informal/ small industry is usually from new lands opened for agriculture. New lands available are far away from infrastructure/ consuming centers and that, together with offer of timber from plantations, has reduced the competitiveness of the tropical timber in the market; • Carbon trade (REED+) is an incentive to sustainably manage tropical forests. Sale was made at US\$8.00/ ton of CO², but prices are increasing. Compensation of Legal Reserve is another incentive, but market is still in development; • The Constitutional Fund is a good alternative to fund forest and industrial operations, but real guarantee has to be offered.
February 5, 2020	Mr. Paulo Pupo,	ABIMCI Executive Director	About Incentives <ul style="list-style-type: none"> • Incentives to the forest sector in Brazil, especially the tropical timber forest sector, are quite limited; • Public concession is one incentive, but so far the

Date	Name of interviewees	Organization/ Position	Main Topics/ Comments
		Federation of Industries of Paraná State Vice President	<p>impact has been small, as the effective implementation has been quite slow and the area opened for forest concession is still quite small;</p> <ul style="list-style-type: none"> • Carbon trade, involving forest management plans, is another option to create an incentive, but negotiations are not progressing and there are only a few projects; • Market development has been the main incentive. Efforts have been made by the private sector, looking to open new markets, mainly based on new products, including wood frames, mass timber (Glulam and CLT) and other products. This seems to be the best incentive option to promote the development of a strong, sustainable and competitive forest industry; • With the new government, there are expectations of changes in the development policies. The Association is involved in strategic discussions involving the public and private sector to define and develop actions to promote social and economic development. <p>About Disincentives</p> <ul style="list-style-type: none"> • There are a large number of disincentives. The most relevant ones can be summarized into two levels: i) international level; and ii) national level. • At international level: the disincentives are mostly related to market access. Importing countries have created several disincentives or market barriers, including quotas, product certification (environment, structural and others), tariffs, anti-dumping, and others measures. In some demands, there is a need of hiring international legal advisors/lawyers, and costs are high. Recently, it was invested almost US\$ 1 million in a dispute involving wood moldings in the USA market. Brazilian government has not been able to negotiate bilateral/multilateral agreements to mitigate this problem and open new markets, and in case of disputes provide little or no support. • At national level: there are several limitations. Brazil has no strategy or plan to promote the development of the tropical timber sector. Besides that, the legal framework is complex, imposes too many requirements to manage tropical forests, as well as to the industry and trade. Risks and transaction costs are high, and many small and medium-sized companies make the option to operate in the informal market. Another limitation to operate in the Amazon region is the poor infrastructure.

**INCENTIVES FOR GREEN-GROWTH VALUE CHAIN INVESTMENTS IN
TROPICAL FORESTS
CASE STUDY: BRAZIL AND PERU**

**COUNTRY FINAL REPORT
PERU**

By Ivan Tomaselli

CURITIBA – BRAZIL

APRIL 2020

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LIST OF SYMBOLS AND ABBREVIATIONS

%	Percentage
Art.	Article
e.g.	for example
Ha	hectares
Km ²	Square Kilometer
MM	Million
m ³	Cubic meter
N ^o	Number
USD	American Dollar Currency

LIST OF ACRONYMS

ADEX	Exporters Association of Peru (<i>Asociación de Exportadores de Peru</i>)
AGROBANCO	Agriculture Development Bank
AIDSESP	Inter-ethnic Association for Development of the Peruvian Jungle (<i>Asociación Interétnica de Desarrollo de la Selva Peruana</i>)
ANPs	Natural Protected Areas (<i>Áreas Naturales Protegidas</i>)
ARFFS	Regional Forestry and Wildlife Authority (<i>Autoridad Regional Forestal y de Vida Silvestre</i>)
BMEL	Federal Ministry of Food and Agriculture of Germany
CDB	Convention on Biological Diversity
CF	Climate Focus
CIFOR	Center for International Forestry Research
CITES	CNFP National Public Forest Convention on International Trade in Endangered Species of Wild Fauna and Flora
COC	Chain of Custody Certification
COFIDE	Development Finance Corporation S.A (<i>Corporación Financiera de Desarrollo S.A.</i>)
COFOPRI	Commission for the Formalization of Informal Property (<i>Organismo de Formalización de la Propiedad Informal</i>)
CW/COC	Controlled Wood Certification/ Chain of Custody Certification
DEMA	Management Statement (<i>Declaración de Manejo</i>)
DF	Deforestation-free
DGFFS	General Directorate of Forests and Wildlife (<i>Dirección General de Flora y Fauna Silvestre</i>)
ECA	Environmental Cooperation Agreement
EEZ	Economic Ecological Zoning (<i>Zonificación Ecológica y Económica</i>)
EF	Economy and Finance (<i>Economía y Finanzas</i>)
ENBCC	National Strategy on Forests and Climate Change
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FENAMAD	Native Federation of the River Madre de Dios and Tributaries (<i>Federación Nativa del Río Madre De Dios y Afluentes</i>)
FLEGT	Forest Law Enforcement, Governance and Trade
FM/COC	Forest Management Certification/Chain of Custody Certification
FMU	Forest Management Unit
FSC	Forest Stewardship Council
FZ	Forest Zoning
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GOP	Government of Peru
GOREMAD	Madre de Dios Regional Government (Gobierno Regional de Madre de Dios)
GST	General Sales Tax (<i>Impuesto General a las Ventas – IGV</i>)
GTFEN	Waybill for Natural-State Forest Products (<i>Guía de Transporte Forestal al Estado Natural</i>)
HWP	Harvest Wood Products
IDB	Inter-American Development Bank
IGV	Impuesto General a las Ventas
IIAP	Peruvian Amazon Research Institute (<i>Instituto de Investigación de la Amazonía Peruana</i>)
ILO	International Labour Organization
iNDC	Intended Nationally Determined Contributions
INDEPA	National Institute for the Management of Andean, Amazonian and Afro-Peruvian Settlements (<i>Instituto Nacional de Desarrollo de Pueblos Andinos, Amazónicos y Afroperuanos</i>)
INRENA	National Institute of Natural Resources (<i>Instituto Nacional de Recursos Naturales</i>)
IPADEN	National Institute of Development for the Andean, Amazonian and Afro-Peruvian Peoples (<i>Instituto Peruano-Andino Promotor de Desarrollo Nacional</i>)
IR	Income Tax (<i>Impuesto a la Renta</i>)

ISC	Selective Consumption Tax (Impuesto Selectivo al Consumo)
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
JICA	Japan International Cooperation Agency
kfW	Kreditanstalt für Wiederaufbau
LSSC	Legal and Sustainable Supply Chains
MINAG	Ministry of Agriculture and Irrigation (<i>Ministerio de Agricultura y Riego</i>)
MINAGRI	Ministry of Agriculture and Irrigation (<i>Ministerio de Agricultura y Riego</i>)
MINAM	Ministry of the Environment (<i>Ministerio del Ambiente</i>)
MRSE	Remuneration Mechanisms for Ecosystem Services (<i>Mecanismos de Retribución Por Servicios Ecosistémicos</i>)
NAMA	Nationally Appropriate Mitigation Actions
NAP	National Adaptation Plan
NGO	Non-governmental organization
OSINFOR	Forest Resources and Wildlife Supervisory Agency (<i>Organismo Supervisor de Recursos Forestales y de Fauna Silvestre</i>)
OT	Land Use Planning (<i>Ordenamiento Territorial</i>)
OP	Operational Plan (<i>Plan Operativo</i>)
PCM	Presidency of the Council of Ministers (<i>Presidencia del Consejo de Ministros</i>)
PEFC	Program for the Endorsement of Forest Certification
PETT	Land Titling and Registration Program
PGMF	General Forest Management Plan (<i>Plan General de Manejo Forestal</i>)
PMFI	Intermediate Forest Management Plan (<i>Plan de Manejo Forestal Intermedio</i>)
PNCBMCC	National Forest Conservation Program for Climate Change Mitigation
POA	Annual Operating Plan (<i>Plan Operativo Anual</i>)
PPFs	Permanent Production Forests
PROAMBIENTE	Contribution to the Environmental Targets of Peru (<i>Contribucion a las Metas Ambientales del Peru</i>)
PROBOSQUE	Capacity Building Project for the Conservation of Forests and REDD+ Mechanisms (<i>Proyecto de Desarrollo de Capacidades para la Conservacion de Bosques y Mecanismos REDD+</i>)
PTPA	United States – Peru Trade Promotion Agreement
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SAB	Sustainable Amazonian Businesses
SD	Supreme Decree (<i>Decreto Supremo</i>)
SDGs	Sustainable Development Goals
SERFOR	National Forest and Wildlife Service (<i>Servicio Nacional Forestal y de Fauna</i>)
SERNANP	National Service for Protected Areas (<i>Servicio Nacional de Areas Naturales Protegidas</i>)
SFM	Sustainable Forest Management
SMFEs	Small and Medium-Size Forest Enterprises
SINAFOR	National Forest and Wildlife System (<i>Sistema Nacional Forestal y de Fauna Silvestre</i>)
SINANPE	National System of Protected Natural Areas (<i>Sistema Nacional de Areas Naturales Protegidas por el Estado</i>)
SNCP	National Integrated Cadastral and Property Information System (<i>Sistema Nacional Integrado de Información Catastral Predial</i>)
SNIC	National System of Information and Control of Forestry and Wildlife
SNIFFS	National Forest and Wildlife Information System (<i>Sistema Nacional de Información Forestal y de Fauna Silvestre</i>)
SP	Strategic Priorities
SPDE	Peruvian Ecodevelopment Society (<i>Sociedad Peruana de Ecodesarrollo</i>)
SUNARP	Superintendence of Public Registries (<i>Superintendencia Nacional de los Registros Públicos</i>)
SUNAT	National Superintendency of Customs and Tax Administration (<i>Superintendencia Nacional de Administración Tributaria</i>)
SW4SW	Sustainable Wood for a Sustainable World
TFA	Tropical Forest Alliance
TPA	Trade Promotion Agreement
UIT	Tax Levy Unit (<i>Unidad Impositiva Tributaria</i>)
UNFCCC	United Nations Framework Convention on Climate Change
UMF	Forest Management Unit (<i>Unidad de Manejo Forestal</i>)
US	United States

USAID	U.S. Agency for International Development
USFS	United States Forest Service
VAT	Value Added Tax
VEN	Value of Natural State (<i>Valor de Estado Natural</i>)
WWF	World Wildlife Fund

1. BACKGROUND

1.1 Project Context

The "Sustainable Wood for a Sustainable World" (SW4SW), adopted in 2018, is a joint initiative of the Collaborative Partnership on Forests by FAO together with the International Tropical Timber Organization (ITTO), World Bank, Center for International Forestry Research (CIFOR) and World Wildlife Foundation (WWF).

This initiative aims at strengthening sustainable wood value chains to enhance their social, economic and environmental benefits from production to consumption. ITTO members have identified production forests and harvested wood products (HWP thereof) as a promising sector contributing to Sustainable Development Goals (SDG) and Nationally Determined Contributions (NDC) under the Paris Climate Agreement.

In this context, as part of the work program, the activity "Incentives for green-growth value chain incentives in tropical forests" is facilitated by funding from the Government of Germany. BMEL (Federal Ministry of Food and Agriculture) of Germany has granted project financing to ITTO for further promotion and operationalization of legal and sustainable supply chains (LSSC). This activity is the next step towards assessing, formulating and proposing fiscal, non-fiscal and taxation incentives, subsidies and other macroeconomic tools for enhancing investments in tropical production forests for meeting the growing challenges in wood demand and supply in the future.

By proposing and carrying out this action, ITTO assists its producer countries to formulate and implement effective and efficient incentives for the sustainable development of their forests. Moreover, it facilitates the countries to find channels to, and participate in, legal and sustainable supply chains, which are gaining more importance from the proliferation of deforestation-free (DF) initiatives by major corporate and public entities.

This activity is in conformity with objectives and priorities of the ITTA 2006 and with the ITTO Strategic Action Plan, which mandate to promote legal and sustainable trade in tropical forest products. It is relevant to the Strategic Priorities (SP) 1, 2, 3 and 4 of the ITTO Strategic Action Plan and the United Nation Sustainable Development Goals (SDG) 10, 13, 15 and 17, as follows:

- SP 1 – Promote Good Governance and Enabling Policy Frameworks for Strengthening SFM and Related Trade, and Enhancing SFM Financing and Investment;
- SP 2 – Increase the Contribution of Tropical Forests to National and Local Economies, Including through International Trade;
- SP 3 – Enhance the Conservation and Sustainable Use of Biodiversity in Tropical Timber Producing Forests;
- SP 4 – Reduce Tropical Deforestation and Forest Degradation and Enhance the Provision of Environmental Services;
- SDG 10 – Reduced Inequalities;
- SDG 13 – Climate Action;
- SDG 15 – Life on Land;
- SDG 17 – Partnership for the Goals.

Similarly, this activity is also relevant to all ITTO members providing an up-to-date analysis and recommendations on fiscal, non-fiscal incentives and other tools such as taxes and subsidies that are proven effective to the members' adoption with national adjustments. Therefore, this will be a relevant tool in suggesting the scope and type of incentives, which is also beneficial to all ITTO members.

1.2 Objectives of the ITTO Study and Strategic Approach

The major objectives of the study are:

- i. *To create improved capacities and collaborative mechanisms in ITTO producer countries to plan, analyze and deploy fiscal, non-fiscal and other incentives and tools in an effective and fair manner for creating a supply change in tropical timber/wood products; and,*
- ii. *To establish a future vision on foreseeable demand-supply gap for sustainable tropical wood products in global markets, which will convince producers of the market scale and concrete terms of access through Legal and Sustainable Supply Chains (LSSC).*

The specific objective of the study is to assess, model and propose templates of fiscal and non-fiscal incentives and other effective means to promote sustainable forestry practices in tropical countries, taking into account the likely shortfall between timber supply and demand that many tropical countries are likely to face over the next 30 years.

The strategic approach is to stimulate forest sector stakeholders through strengthened analytical skills and exemplary cases that can be emulated in a national re-thinking process on incentives.

Innovative incentives should be perceived as a key tool to attract new forest investments that would help attaining progress in SFM and supply change through LSSCs into growing markets that are increasingly deficient of wood.

The ITTO Project Outputs include:

- i. Review of fiscal, non-fiscal and other incentives for SFM of two existing case studies in major tropical producer countries;
- ii. A study to establish global demand-supply gap for sustainable tropical timber in the next 30 years;
- iii. Six new case studies on models / templates of fiscal and other incentives for promoting SFM and LSSCs.

1.3 Case Studies

In order to facilitate ITTO's Dialogue with participating countries and to help engage producers with ITTO's work, case studies of producer countries were selected in the three tropical regions to give a geographical depth to the analysis. Case studies covers, basically:

- A cost-benefit analysis and an assessment grid (template) of technical aspects of current fiscal incentives to conclude on their effectiveness;
- Feasibility of other (non-fiscal, taxes, subsidies) incentives given individual country situation/policies/timber sector characteristics;
- Narratives on pilot implementation of most promising incentive(s) in case countries or forests concessions in conjunction with other anti-deforestation policies in place.

As the executing agency and organizational structure, ITTO Secretariat assumed the leadership in refining the TORs, overseeing the achievement of the expected objectives and outcomes, quality assurance and liaising with the donor and the partners such as the World Bank and KfW.

ITTO Secretariat and donor made the final choice of case study countries (Brazil and Peru for Latin America Region) in consultation with the partners and Project Coordinator. The Coordinator was responsible to prepare reports regularly, and to present to the ITTO Project Manager on agreed milestone. Sub-contractors for analytical report part, case studies and demand-supply gap analysis reported to the Coordinator.

Finally, in order to collect relevant information on Brazil and Peru, ITTO hired the Consultant STCP Engenharia de Projetos Ltda to undertake case studies on fiscal and non-fiscal incentives for fostering sustainable forest management (SFM) and deforestation-free commodities in these Latin American countries. Based on the TOR, the Consultant was requested to prepare a report, covering information on the current national SFM framework, land tenure legal framework, land use planning process, forest taxation structure, incentives and disincentives for SFM, commitments by the private sector, undertaking a dialogue with relevant stakeholders in both countries, and other related aspects. Furthermore, aside from collecting above-mentioned data/information, the report also includes interviews with representatives of government institutions, wood industry, environmental NGOs and other relevant organizations to support the collected information (See Annex 1).

This document is the Final Report for Peru prepared by the Consultant, Dr. Ivan Tomaselli, with the support of Dr. Sofia Hirakuri.

2. NATIONAL SFM FRAMEWORK

2.1 Forest Resources

Peru is located in the western region of South America, comprising an area of approximately 129 million ha. The country has the second largest area of Amazonian forests and the fourth global largest area of tropical forests.

According to SERFOR (2017), 57.3% of Peru is forested (about 74 million hectares), distributed among three distinct biogeographical zones. These three macro-regions are represented by biomes with different ecological conditions: the Peruvian Amazon ("Amazonia"), the Pacific Coast ("Costa") and the Andean Mountain Range ("Sierra"). Table 1 presents the regions and their corresponding forested area in hectares and Figure 1 illustrates a map of the distribution of ecoregions in Peru.

Table 19 – Peru Forest area by biome

Region	Forest Area (ha)	%
Peruvian Amazon	69.314.485	94,1%
Pacific Coast	4.107.118	5,6%
Andean Mountain Range	211.625	0,3%
Total	73.633.228	100%

Source:

SERFOR (2017) and FAO (2015), compiled by STCP (2020)

According to FAO (2015), around 99% of forest area (72.8 million ha) are primary or naturally regenerated forest. The major forest categories in Peru are humid rainforest in the Amazon region, arid and semi-arid forests on the coastal region and semi-humid forests in mountain areas. Of the 2,500 timber species in the forests of Peru, only 600 are properly classified and just 195 are used for some commercial purpose. Among them, only 14 species concentrate 87% of the country wood production. The most relevant timber species are: *Swietenia macrophylla* (mahogany), *Copaifera officinalis* (copaiba balsam), *Amburana cearensis* (amburana/Ishpingo), *Cedrela odorata* (Cedar), *Coumarouna odorata* (Tonka bean/ Shihuahuaco), *Calycophyllum spruceanum* (Capirona), *Cedrelinga catenaeformis* (Tornillo), *Chorisia insignis* (Lupuna), *Cariniana domesticate* (Cachimbo), *Nectandra sp* (Moena negra), *Virola sp* (Virola), *Iryanthera sp* (Iryanthera), *Chorisia integrifolia* (Lupuna), *Clarisia biflora*, and *Guazuma crinita* (Bolaina). On the other hand, planted forest areas cover approximately 1.2 million ha, with 85% of the plantations distributed in the Andean mountains being with *Eucalyptus* spp and *Pinus radiata*.

Figure 7 – Map of the distribution of Ecoregions in Peru



Source: STCP (2020)

The Peruvian Amazon Region includes the following ecoregions: Tropical Wet Savannah (Sabana de Palmeras), Amazon Tropical Rainforests (Bosque Tropical Amazonico), Highland Tropical *Rainforest* (Selva Alta /Yungas) and Alpine Tundra Ecosystems (Paramo). The Coastal Region comprises Peruvian Pacific Coastal Desert (Desierto Costanero del Pacifico Peruano) and Ecuadorian Dry Forest (Bosque Seco Ecuatorial). The Mountain Region covers the Puna Grassland (Puna), Peruvian Pacific Tropical Forest (Bosque Tropical del Pacifico Peruano) and Mountain Steppe (Serrania Esteparia).

2.2 Overview of SFM Laws and Regulation

Legal instruments to promote Sustainable Forest Management (SFM) in Peru include a set of laws, decrees, regulations and resolutions.

Since 1940, Peru has adopted a Forest Policy, and the government formally undertook the responsibility of forest management through the Ministry of Agriculture. Furthermore, the 1993 Constitution establishes the Government's obligation to promote sustainable use of natural resources and promote conservation of biodiversity and protected areas through environmental policy. Since

then, all governments, and head of the forestry sector, have been involved in the preparation and improvement of a National Forest Policy or, at least, adjustments in the previously existing one. The major current SFM regulation is the Forest Law (Law N° 29763-2011), which entered into force in September 2015. Regulation for management of forests is established by Supreme Decree (SD) N° 018-2015-MINAGRI. It aims to promote the conservation, protection, increase and sustainable use of forest resources, integrating its management with the maintenance and improvement of the services of forest ecosystems and other wild vegetation ecosystems.

Table 2 presents a summary of the main laws and regulations related to sustainable management of forests.

Table 20 – Main Peruvian laws and regulations related to sustainable forest management
a. Major laws and regulations related to management of forests

Law and Regulations	Title	Year	Description
Resolución Ministerial N° 002-2006-AG	National Reforestation Plan (<i>Plan Nacional de Reforestación</i>)	2006	The plan is a tool that sets out the planning and management guidelines for forest development, which will help Regional Governments to develop their own Regional Reforestation Plans.
Law N° 29763-2011	Forests and Wildlife Law (<i>Ley Forestal y del Fauna Silvestre</i>)	2011	The Law aims to promote the conservation, protection, increase and sustainable use of forest and wildlife heritage within the national territory, integrating its management with the maintenance and improvement of forest ecosystem services and other wild vegetation ecosystems, in harmony with the social, economic and environmental interest of the country; as well as promoting forestry development, improving its competitiveness, generating and increasing forest and wildlife resources and its value for society.
Supreme Decree N° 09-2013-MINAGRI	National Forest and Wildlife Policy (<i>Política Nacional Forestal y de Fauna Silvestre</i>)	2013	It serves as a guide for forest and wildlife management, at all levels of government, to ensure sustainable development through proper management and administration of the national forest resources of the country. Its Policy Axis 3 refers to competitiveness that sets out guidelines to increase in productivity levels and strengthening competitiveness factors, as well as generation of favorable conditions and incentives to promote private investment in the Forestry and Wildlife Sector.
Supreme Decree N° 018-2015-MINAGRI	Regulation for Forest Management (<i>Reglamento para la Gestión Forestal</i>)	2015	It regulates the institutional, planning, zoning, management and information related to forest and wildlife management. In addition, this decree presents the Forest and Wildlife Inventory System. It also defines modalities for access to forest resources, e.g. qualification/ authorization granted by the forestry authority that allows natural or legal persons access, through management plans, for sustainable use of forest resources.
Supreme Decree N° 020-2015-MINAGRI	Regulations for the Forest Plantation Management and Agroforestry Systems (<i>Reglamento para la Gestión de las</i>	2015	Its goal is to promote the conservation, protection, establishment and sustainable use of planted forests for production and forest ecosystems; as well as maintaining or recovering the provision of goods and services of ecosystems located in areas of

Law and Regulations	Title	Year	Description
	<i>Plantaciones Forestales y los Sistemas Agroforestales</i>)		special treatment for agroforestry or silvopastoral activity.
Supreme Decree N° 021-2015-MINAGRI	Regulations for Forest and Wildlife Management in Indigenous and Rural Communities (<i>Reglamento para la Gestión Forestal y de Fauna Silvestre en Comunidades Nativas y Comunidades Campesinas</i>)	2015	It aims to promote the conservation, protection, increase and sustainable use of forest and wildlife resources, within the indigenous/native and rural communities.

Source: Compiled by STCP (2020)

b. Trade in forest products of legal origin

Law and Regulations	Title	Year	Description
Legislative Decree N° 1220-2015	Measures for the Fight against Illegal Logging (<i>Medidas para la Lucha contra la Tala Ilegal</i>)	2015	It provides the Public Ministry (Prosecutor's office) instruments to combat logging in protected areas, buffer zones, and other forest areas.
Legislative Decree N° 1319-2017	Measures to Promote Trade in Forest Products and Wildlife coming from Legal Origin (<i>Medidas para promover el comercio de productos forestales y de fauna silvestre de origen legal</i>)	2017	Its main purpose is to provide measures aimed at promoting trade in forest and wildlife products from legal origin.

Source: Compiled by STCP (2020)

c. Other major environmental policies

Law and Regulations	Title	Year	Description
Law N° 26821-1997	Organic Law for Sustainable Use of Natural Resources (<i>Ley Orgánica para el Aprovechamiento Sostenible de los Recursos Naturales</i>)	1997	It defines that natural resources are considered to be every component of nature susceptible to use by human beings to satisfy their needs and that have a present or potential value in the market, such as the soil, subsoil, and lands based on their best land use capacity: crop-farming, animal husbandry, forestry, and protection.

Law and Regulations	Title	Year	Description
Law N° 28611-2005	General Environmental Act (<i>Ley General de Ambiente</i>)	2005	It establishes the rights for sustainable development, access to information, participation in environmental management and decision-making processes, and access to environmental justice.
Law N° 28852-2006	Law for Promotion of Private Investment in Reforestation and Agroforestry (<i>Ley de Promoción de la Inversión Privada en Reforestación y Agroforestería</i>)	2006	General objective is to promote private investment in reforestation with forest plantations, agroforestry and environmental services.
Supreme Decree N° 012-2009-MINAM	National Environment Policy (<i>Política Nacional del Ambiente</i>)	2009	It defines the main objectives, guidelines, contents and national standards and is binding for all sectors, at the regional and local level, in environmental issues. The policy includes specific guidelines for forests, such as preventing the reduction and degradation of forests and the implementation of actions to avoid deforestation of natural forests.

Source: Compiled by STCP (2020)

In addition to national laws and regulations on forestry, the Government of Peru (GOP)¹ has made international commitments to address sustainable forest management, as well as deforestation, illegal logging and associated trade.

One of the commitments is the United States – Peru Trade Promotion Agreement (TPA) that entered into force in 2009. It contains binding commitments to ensure trade and environmental policies are mutually supportive, and that environmental protection and law enforcement are strengthened. It contains an Annex on forest sector governance that includes concrete steps the Parties will take to strengthen forest sector governance, combat illegal logging and illegal trade in timber and wildlife products.

2.3 Institutions involved in forests

Peru is a decentralized State (Decentralization Law - Ley de Descentralización N° 27783-2002), with management concentrated at the federal level and certain functions granted to different national, regional, and local governments, including the promotion, administration, supervision, and control of forestry and wildlife. The main government institutions involved in forestry are presented in Table 3.

Table 21 – Main Peruvian government institutions involved in forests

Organization	Roles and Responsibilities
Ministry of Agriculture and Irrigation (Ministerio de Agricultura y Riego - MINAG or MINAGRI)	It is in charge of the agricultural sector, including agricultural lands, pastures, forest lands, barren land with agricultural suitability, and forest resources. One of its main responsibilities is to create national policies for the conservation and sustainable use of forest resources, in accordance with the National Environmental Policy. MINAGRI has also the competence to carry out national forest inventories, to implement projects on forest conservation, and issue policies and strategies related to deforestation and degradation.

¹ The terms the Government of Peru (GOP), the Peruvian Government, Peru are used somewhat interchangeably.

Organization	Roles and Responsibilities
<p>Wildlife Service (<i>Servicio Nacional Forestal y de Fauna – SERFOR</i>)</p>	<p>It is the National Forestry and Wildlife Authority of Peru, under MINAGRI, created by the Forest and Wildlife Law (Law No. 29763/2011) and began its operation in July 2014; it is the governing body of the National Forest and Wildlife Management System (SINAFOR); it is leading agency responsible for planning, issue and propose regulations and guidelines of national application related to management, administration and sustainable use of forest resources, promote the access of forestry products to financial services, to the national and international markets and to improve the conditions of competitiveness of the sector, among others (Art. 14).</p>
<p>General Directorate of Forests and Wildlife (<i>Dirección General de Flora y Fauna Silvestre – DGFFS</i>)</p>	<p>Under MINAGRI, it is responsible for the public management of forest resources and wildlife. It was the main national forest and wildlife authority, but its functions are being absorbed by SERFOR.</p>
<p>SERFOR Regional offices - Regional Forestry and Wildlife Authority (<i>Autoridad Regional Forestal y de Fauna Silvestre - ARFFS</i>)</p>	<p>ARFFS are in charge of granting logging titles and the approval of SFMP in the respective regions. SERFOR, in coordination with ARFFS, approves the promotional regime and the levels of discounts in the payment of logging rights, implementation, procedure and the application of respective discount (SD N° 018-2015, art. 185).</p>
<p>Ministry of the Environment (<i>Ministerio del Ambiente – MINAM</i>)²</p>	<p>Responsible for leading Peru’s strategies for biodiversity and climate change, as well as the country’s readiness preparation for the implementation of REDD+. It is also responsible for developing the national forest inventory, establishing mechanisms for the valuation, incentivisation and retention of environmental services, as well as overseeing their financing and supervision.</p>
<p>National Service for Protected Areas (<i>Servicio Nacional de Areas Naturales Protegidas – SERNANP</i>)</p>	<p>Under MINAM, it is the governing body of the National System of Protected Natural Areas by the State (SINANPE) and carries out its work in coordination with regional and local governments. It is responsible for directing and establishing the technical and administrative criteria for the conservation of Natural Protected Areas (ANPs) and for safeguarding the maintenance of biological diversity.</p>
<p>Forest Resources and Wildlife Supervisory Agency (<i>Organismo Supervisor de Recursos Forestales y de Fauna Silvestre – OSINFOR</i>)</p>	<p>OSINFOR is a national body under the Presidency of the Council of Ministers (Presidencia del Consejo de Ministros) established by SD N° 066-2019-PCM; responsible for supervising sustainable forest management and conservation of forest resources, the environmental services generated by forests; it also oversees forest-related taxation.</p>

Source: Compiled by STCP (2020)

Additionally, other national development institutions such as, Amazonian and Afro-Peruvian Peoples (Instituto Peruano-Andino Promotor de Desarrollo Nacional - IPADEN) and Peruvian Amazon Research Institute (Instituto de Investigación de la Amazonía Peruana - IIAP) play important roles in the promotion of SFM at the local level.

In terms of academia, the University Agraria La Molina has a strong forestry faculty, actively involved in SFM research. This university serves as an advisory capacity to MINAGRI regarding CITES listings of timber species.

Furthermore, indigenous peoples’ associations have an increasing influence on the development of forest policies in Peru. For instance, the Inter-ethnic Association for Development of the Peruvian Jungle (Asociación Interétnica de Desarrollo de la Selva Peruana - AIDSESP) and the National Institute for the Management of Andean, Amazonian and Afro-Peruvian Settlements (Instituto Nacional de Desarrollo de Pueblos Andinos, Amazónicos y Afroperuanos - INDEPA), deals with the protection of the interests and cultural heritages of Indigenous peoples in Peru as well as territorial reform.

² MINAM is the focal point in Peru for the United Nations Framework Convention on Climate Change (UNFCCC), Convention on Biological Diversity (CDB) and the scientific authority for the CITES convention.

Similarly, national and international NGOs are active in the development of Peruvian forest policy. For example, WWF Peru, ForoEcológico, Conservation International Peru, ProNaturaleza (Fundación Peruana para la Conservación de la Naturaleza) and Red Ambiental are important organizations in driving forest conservation and the forest concession reform process.

Various private-sector organizations are also involved in the promotion and discussions involving the forest sector in Peru. Among the most active are the National Forestry Chamber (Cámara Forestal Nacional), the National Timber Corporation (Corporación Nacional de la Madera del Perú), ADEX-Exporters Association (Asociación de Exportadores) and regional forest producer associations, in particular those of the provinces of Madre de Dios and Ucayali.

2.4 Managing and Harvesting Tropical Forests

Forest management plans in Peru were established as forest management tools for natural forests. Therefore, holders of a concession of natural forest on public lands who wish to harvest need an approved Forest Management Plan (Article 88, SD 018-2015). There are different types of authorization to conduct logging in natural forests, according to the level of harvest intensity and other particularities.

Article 56 of the Forest Law (Law N° 29763-2011) and its Regulation (SD N° 018-2015), establishes:

- General Forest Management Plan (Plan General de Manejo Forestal – PGMF)
The PGMF is the instrument of long-term strategic planning and has as its main source of information the forest inventory carried out, based on the Forest Management Units (FMUs), for the duration of the concession license, which varies from 20 to 40 years.
- Intermediate Forest Management Plan (Plan de Manejo Forestal Intermedio – PMFI)
It is the management instrument that combines strategic and operational planning, into a single management document. The PMFI is formulated for FMU and for the duration of the concession license.
- Operational Plan (Plan Operativo -PO)
It is the main instrument of short-term forest planning based on information the forest census that generates maps and lists of species that is the main tools for harvesting and inspections. It is valid for one to three operational years. When it is carried out within a PGMF, it should respect the recovery cycle and logging areas established for FMUs. This tool can correspond to the high and medium levels of planning.
- Management Statement (Declaración de Manejo – DEMA)
This Statement is the simplified planning tool for short or medium term, applicable for low harvesting intensities with practices that do not significantly affect the resilience of the ecosystem or the species under management. The DEMA should include the forestry/silviculture practices to be carried out. The instrument corresponds to the low planning level. DEMA does not require supervision by forestry professional. Filing a DEMA does carry a processing fee and the timber harvested is subject to a tax according to the species and volume extracted.

All management plans should be signed by a forestry regent (forestry professional), with the exception of DEMA. Likewise, forestry professionals should supervise forestry operations.

In the case of forest plantation concessions, SERFOR establishes the technical measures for establishment and harvesting that must be formulated for and included in a forest plantation concession management plan.

In general, the Forest Management Plan includes different levels of planning. Nonetheless, SERFOR establishes the technical guidelines for the elaboration of forest management plans. According to Article 57 (SD N° 018-2015) it should contain the following:

- General information;
- Information on species, resources or services;
- Zoning or internal planning of the area with identification of FMU and conservation areas;
- Forest management system and forestry/ silviculture activities;
- Description of harvesting activities, including machinery and equipment to be used;
- FMU protection measures;
- Schedule of activities;
- Identification and characterization of negative environmental impacts, prevention measures and mitigation of environmental impacts generated by the activity, including solid waste management;
- Maps or plans, including field data report.

Management and harvesting of agroforestry systems do not require management plans, except when harvesting in natural forests. In that case, a management statement (DEMA) should be submitted. The establishment and management of forest plantations on private property, as well as harvesting these plantations, do not require management plans, and these activities are not subject to payment of a harvesting right fee.

As to harvesting, the Forest Law defines the control of timber harvesting, and should consider, basically, the following aspects:

- Payment of a harvesting right fee (this aspect will be discussed in section 5.1 of this report “Payment of royalties and harvesting fees”);
- Minimum cutting diameters for each species, according to Departmental Resolution (Resolución Jefatural N° 458-2002-INRENA);
- Species to be protected, according to SD N° 043/2006-AG;
- Presentation of a summary report 45 days of the completion of the annual harvest, describing the activities carried out, volumes, species logged, and other information as per SERFOR regulations.

Forest plantations in private and communal properties are not considered part of the national forest patrimony, therefore harvesting authorization is not required. Whereas forests planted on public lands and natural forest resources either on public or on private land is considered national forest patrimony, therefore they are under government regulation (Forest Law N° 29763-2011, Article 4). In other words, it is required forest management plan and authorization to harvest, and consequently timber is subject to taxation.

2.5 Processing, Transport and Trading Tropical Timber

• Timber Production Chain

Timber production chain is a set of successive operations involving timber harvesting, processing and trade. Considering that in Peru the timber production chain concentrates its operations on the mechanical transformation of wood, this analysis is focused on this context.

Article 5° of SD N° 018-2015 defines processing as the “mechanical, chemical and/or biological treatment or transformation of forest products” (subsection 5.58). The first processing or primary processing, has as input the roundwood and that according to subsection 5.59 refers to primary processing as “the first transformation process that forest products and by-products are subjected to natural state”. The subsection 5.45 defines the first processed product as “product that comes neither from a primary transformation plant that is not final products nor for direct use; that is, those that will become inputs for secondary processing plants.”

The primary processing include sawmill; square; resawing; shredded; wood chipping; laminate; pre-parquet production; poles; beams, timber cracks, sleepers, sized woods; non-standardized packaging; pyrolysis and packaging products. These processes are generally carried out in processing plants outside the forest.

The secondary processing is considered the stage where value is added to the products from the first processing. Secondary transformation is the processing to which forest products and by-products are processed, coming from a primary transformation industry to get value added products. This concept includes the processes that are not included in the definition of primary processing (Article 5, Subsection 5.60).

The production chain also includes domestic trade, export and import, which can be products of primary and secondary processing. The Port of Callao is the main port for exports and imports of forest products in Peru.

As to the Peruvian timber processing industries, Article 174 of the Forest Law Regulation (SD N° 018-2015) sets out that establishment of primary processing plants, collection sites, storage areas and commercialization centers should have an authorization issued by the Regional Forestry and Wildlife Authority - ARFFS. On the other hand, according to Article 176 of the same Regulation, the secondary processing plants for forest products need the authorization of the Ministry of Production, which registers the secondary processing plants, and approves the respective procedures and requirements. Prior to granting operation licenses, the timber processing plants should require an authorization from the respective authority. Basically ARFFS grants authorization for the establishment of primary processing plants and SERFOR establishes its characteristics and conditions.

• Transportation of Timber and Forest Products

A transport guide/ document (guía de transporte) is required for the transportation of timber and forest products, whether they are in natural state or primary processed products. That transport document should be signed by the right holder or the “Forestry Regent” (responsible forestry professional), and the representative of the local government. It has to be signed by the owner of the processing plant, in the case of transfer of primary processed products, or present the ARFFS at the request of the owner of

the product that is not the holder of the qualifying titles or of the processing plants (SD N° 018-2015, Art. 172).

Article 124 of the Forests Law (Law 29763-2011) establishes that transportation of forest products are controlled based on the transport guide/documents (guías de transporte). These are legal documents given to the title-holder of a forest authorization certificate, regulated and standardized by SERFOR, that will inspect forest products intended for transport, and their transportation will be entered into a national registry.

In more details, for timber and wood products transportation, the individuals or legal entities transporting forest products should submit the following documentation:

- Any movement/ transportation of roundwood timber requires a Waybill for Natural-State Forest Products (Guía de Transporte Forestal al Estado Natural - GTFEN);
- Forestry transport document has to be signed by the titleholder of the authorization certificate, the titleholder of the land, the titleholder of the processing center, or ARFFS;
- Waybill for exotic species and registry issued by ARFFS.

In addition, the Forest Law (Law N° 29763-2011) states that SERFOR will regulate all forest products intended for export (including those that are subject to international agreements). SERFOR, in its capacity as CITES Administrative Authority, is responsible for the control of exports, imports and re-exports of specimens or products of species of flora (Art. 128, Forest Law). For instance, these species include mahogany (*Swietenia macrophylla*) and cedar (*Cedrela odorata*).

Furthermore, the National Superintendency of Customs and Tax Administration (Superintendencia Nacional de Administración Tributaria – SUNAT) has competencies in the implementation of tax and customs regulations for timber trade. So, the individuals or legal entities who will export the goods need to have a customs agent³ authorized by SUNAT.

In short, the legally required documents or records for timber and forest products international trade and transport are:

- Management plans;
- Management statements;
- Forest operations book⁴;
- Forest shipping waybills;
- Invoices issued for volumes shown in the forest shipping waybills;
- Invoices for payment of the harvesting right fee for the volumes shipped;
- Remittance tickets for products from plantations.

SERFOR uses an electronic app for "Emission and Registration of Forest Transport Guides" which is a tool to help registration of operations of harvesting, input, processing and output of timber and its products from sawmills or processing plants, as well as volume and balance control.

• **Legality of Transporting and Processing Wood**

The Forest Law regulation (SD N° 018-2015) sets out proof of the legal origin of forest products and by-products (Article 168). It says that any natural or legal person, including state entities, which acquires, transports, transforms, stores or commercialize forest specimens, products or by-products, it is obliged to support their legal provenance, as appropriate, through:

- a. Forest transport guides/documents;
- b. Authorizations for scientific purposes;
- c. Carrier Referral Guide (proof of payment/Guía de remisión)
- d. Import or re-export documents.

The Peruvian Government has implemented various regulatory measures, especially over the last ten years since the establishment of a Trade Promotion Agreement (TPA) with the US. This TPA signed has provisions to ensure that none of its timber is being harvested or produced illegally, and consider legal action in cases of violations.

Peruvian companies that buy, transport, process and sell wood products are required to track wood flow to show that they come from legal sources. Transportation permits, forest harvest records, recovery rates from converting logs to sawnwood, and logs marked with sequential code numbers are utilized to show authorities that wood is legal.

Moreover, there are international efforts, for instance the EU Forest Law Enforcement, Governance and Trade (FLEGT), aimed at tackling illegal logging and improving the controls along the timber supply chain. Other examples are the bilateral Environmental Cooperation Agreement (ECA) and

³ Customs agents are individuals and legal entities authorized by the Customs Administration to provide services to third parties and any type of customs procedures under the terms and conditions required by the General Customs Law – Legislative Decree 1053 and its regulations.

⁴ Forests Operation book is the document in which the titleholder or the regent, if applicable, obligatorily records the information on the implementation of management plan (SD 018/2015, Article 172, a.).

SNIC, the National System of Information and Control of Forestry and Wildlife. SNIC is a bilateral agreement involving Peruvian agencies and the US Forestry Service and aims to combat illegal logging.

Peru has adopted a set of mechanisms to promote legality, such as the Legal Wood Pact. Legality is one of SERFOR's concerns, and constitutes one of the main supports to the regions through better coordination between sectors.

3. LAND TENURE FRAMEWORK

3.1 Land Tenure Categories and Management Rights

Based on Article 4 of Law N° 29763-2011 in Peru all naturally forested areas are part of the nation's forest heritage, including forest plantations on public lands, lands with a greater capacity for use as forests, and lands with a greater capacity for use as protected areas, with or without forests. The same Article states that forest plantations on private and communal lands and their products, as forest resources, are not a part of the nation's forest heritage.

According to MINAM (2015) 81.4% of forests in Peru is public. This includes about 56.5 million ha in production, conservation, land reserves, and areas with no forest rights assigned. The rest, 18.6%, are private forests (corresponding to on landholdings, rural and indigenous communities).

Peru's Constitution establishes that customary rights may be used as a basis for the application of legal principles. For indigenous and rural communities, their authorities may perform decision-making functions in their territory in the exercise of their customary rights. ILO Convention 169 guarantees their inclusion in the decision-making process of the State and the adoption of measures that respected their collective rights.

The legally required documents to ensure the access to the land resources are:

- In the case of natural forests

A concession license is required to ensure the legal person the right to harvest timber and other forest products. The same procedure applies for forest concession contracts for purposes of harvesting timber, concession contracts for reforestation and transfer of rights contracts for agroforestry systems;

- In the case of indigenous communities

A Forest Timber Resources Harvesting Permit is required as well as the Minutes of the Community General Assembly delegating the functions of implementation of the management plan;

- In the case of private landholdings

The property title is required;

- In the case of local forests

The declaration of the local forest by the corresponding municipal government is required.

3.2 Legal Authorities

Along the last decade, land regularization has been the responsibility of different agencies. In 2008, MINAGRI based on Article 51 of Law N° 27867-2002, transferred authority to Regional Governments, including the authority for the regional agriculture directorates, the rights to grant land titles and land use.

Currently, urban titling is a prerogative of the Provincial and District Municipalities, while rural titling is the responsibility of Regional Governments under the oversight of MINAGRI.

Table 4 presents the main organizations involved in land tenure and its respective roles and responsibilities.

Table 22 – Peruvian organizations involved in land tenure

Organization	Roles and Responsibilities
MINAGRI	MINAGRI is the governing agency regarding rural land regularization and is in charge of designing and implementing projects, with the regional governments, to improve services and rural land titling. It also has competency in land ownership and indigenous communities.
Regional Governments	Mainly in charge of concession licenses.
Municipal Government	Responsible for implementing land titling and registration. They have also the competency in local forest definitions.
Association for the Development of the Peruvian Rainforest (AIDSESP)	Political role in the defense of indigenous fundamental rights and territories.
National Center for Strategic Planning	It plays a role on questions relating to forest-tenure allocation and forest use.
Agency for Formalization of Informal Property (Organismo de Formalización de la Propiedad Informal - COFOPRI)	COFOPRI was created as a decentralized Public Institute subject to regulations applicable to public entities, with its own endowment, administrative, technical and economic autonomy. It is responsible for the land tenure regularization program.

Source: Compiled by STCP (2020)

Furthermore, community organizations, nongovernmental organizations and in some cases private enterprises, have been instrumental in helping to formalize properties in Peru. For instance, the Tenure Facility's Pilot Project in Peru, completed in 2017, capitalized on this opportunity by testing a unique partnership between the Indigenous Peoples' Federation, a NGO, and Regional Government to resolve insecure tenure rights. The project involved the Native Federation of the River Madre de Dios and Tributaries (FENAMAD), the Peruvian Environmental Law Society (SPDA), and the Madre de Dios Regional Government (GOREMAD).

4. LAND USE PLANNING PROCESS

4.1 Ecological-Economic Zoning - EEZ

The Economic Ecological Zoning is a mechanism introduced by Article 11 of the Organic Law for the Sustainable Use of Natural Resources (Law 26821-1997). It is, basically, a mechanism to prevent conflicts related to overlapping titles and improper land uses.

The "Economic Ecological Zoning Regulation" was approved in 2004 by Supreme Decree N° 087-PCM. The Decree defines the EEZ process as a dynamic and flexible process, and Article 11 establishes that the Regional and Local Governments are the entities responsible for the implementation of EEZ within their respective jurisdictions. The implementation of EEZ at federal level is the responsibility of MINAM.

In this context, Article 3 of SD N° 087-2004 sets out the EEZ's objectives, which are:

- a) To reconcile the conservation of natural heritage with the sustainable use of natural resources;
- b) To guide the formulation, approval and implementation of national, sectoral, regional and local public policies on the sustainable use of the territory and its natural resources, as well as the environmental management according to the characteristics and potentialities of ecosystems, the environmental conservation and the population's well-being;
- c) To provide technical support for the formulation of development and land use plans at the national, regional and local levels;
- d) To support the strengthening of capacities of the corresponding authorities to conduct the spatial and natural resources management within their jurisdictions;
- e) To supply technical information and the framework to promote and guide public and private investments;
- f) To contribute to the consultation processes among different social actors for the occupation and adequate use of the territory.

MINAM transferred land-use planning responsibility to the Regional Governments, including the development and approval of EEZ process, according to Article 51 of Law N° 27867-2002.

The EEZ is also the reference for the Forest Zoning (FZ). The authority in charge of managing the FZ process in Peru is MINAM. FZ is approved by MINAM, based on the technical report prepared by the respective Regional Government, in coordination with SERFOR and MINAM.

According to Article 27 of Law N° 29763-2011, the following categories are established:

- Zones most suitable for productive use
It has by their nature, greater aptitude for forest use. They consist of forests of the following categories:
 - Category I: primary or secondary natural forest areas, whose biotic and abiotic conditions allow the sustainable use of forest resources; for instance logging, including intensive or mechanized systems, extraction of non-wood products and the economic use of ecosystem services;
 - Category II: forest areas with the same characteristics of Category I, it is only allowed logging under low intensity systems;
 - Category III: primary or secondary natural forest areas, which have biotic and abiotic conditions, giving special value for the provision of ecosystem services. It is allowed the sustainable use of non-wood forest resources without reducing vegetation cover, as well as the economic use of ecosystem services;
 - Planted forests: they are forest plantation or reforestation areas for the purpose of sustainable timber production and other forest products, as well as the economic use of ecosystem services.
- Ecological protection and conservation zones
They cover fragile ecosystems that, due to their low resilience or ability to restore to their original conditions, are unstable due to anthropogenic events. They constitute priority areas for biodiversity conservation where extractivism is restricted or limited.
- Rehabilitation zones
Include areas that require a special strategy to replenish forest ecosystems. There are the following categories:
 - Areas of forest recovery for timber production purposes: areas which do not have primary forests coverage or mature secondary forests greater than or equal to thirty percent of the area, whose biotic and abiotic conditions favor the establishment of forest plantations for the purpose of timber production and other forest products. Its plantations are incorporated as planted forests in the category of permanent production areas;
 - Areas of forest established for restoration and conservation purposes: forest aptitude or protection areas that do not have mature primary or secondary forests coverage greater than or equal to thirty percent. Where the biotic and abiotic conditions favor reforestation with native species destined for ecological restoration, for the provision of ecosystems services.
 - Special treatment zones: considering their biophysical, socio-economic, cultural and geopolitical nature, the areas require a special strategy for their use. For instance, land reserves for indigenous peoples, agroforestry and silvo pastoral production areas, and residual or remnant forests.

4.2 Procedures for Creating Forest Estates

In Peru, land use zoning is based on its Optimal Land Use Capacity (Capacidad de Uso Mayor de Tierras), that is, each land unit is assigned considering its most appropriate use and management under certain conditions of soils, climate, relief and vegetation cover (forests). Articles 37 and 38 of the Forest Law (Law N° 29763-2011), regulated in 2015 (SD 018/2015), defines that land use changes are prohibited in areas where its Optimal Land Use Capacity is forestry (e.g. Protected Forest Lands).

The SD N° 018-2015 establishes the conditions for granting forest concessions for timber purposes (Title XI), forest permits on private landholdings (Title XIII), transfer of rights contracts for residual or remnant forests (Title XVII), and management of local forests (Title XVIII).

A concession agreement grants the forest holder rights to use and benefit from forest resources. Each type of concession sets the time limit and means of use. The concessions are irrevocable, the holder should comply with its obligations, and the relevant management plan stipulated under the forestry legislation.

The Forest Law considers the following types of concessions:

- Forest concessions for timber purposes (Article 56)
Granted by the competent forestry authority (ARFFS and SERFOR) for the use of forest resources, mainly timber, in accordance with the management plans for permanent production forests. It is given for 40 years and the contract is renewable. If the grantee wishes to use other resources from its concession area, such as non-timber forest resources, he should submit additional management plans, which should be approved by the competent authority;

- Concessions for forest products other than timber (Article 57)
These concessions are granted in Permanent Production Forests and forests with production land, for a renewable term of 40 years and on areas for up to 10,000 hectares. This type of concessions include basically non timber products (leaves, flowers, fruits, seeds, gums, resins, palms and other commercial or industrial purposes) and technical considerations need to be presented in the management plan. In addition, the concession holder can request a complementary management plan to utilize the timber resources in the area of the concession;
- Concessions for Ecotourism (Article 58)
These concessions are granted up to 10,000 hectares of forests preferably not classified as permanent production forest or land for protection, for renewable periods of up to 40 years;
- Concessions for conservation (Article 59)
These concessions are granted on protection lands to develop biodiversity conservation projects for a period up to 40 years, renewable. The main objectives of these concessions are protection, research and environmental education. The concession area is determined on request and based on technical studies carried out by the competent forestry authority, taking into account criteria for watershed management, including forest ecosystem types and requirements for maintaining biodiversity. There is no area limitation and it is based on the technical study and proposal submitted to the forestry and wildlife authority.

4.3 Territorial Planning

According to Article 28 of the Forest Law (N° 29763-2011), the Land Use Planning (Ordenamiento Territorial - OT) is a planning tool designed to define criteria and environmental indicators that enable efficient land use allocation, as well as an orderly land occupation. The OT responds to the need to plan and organize the territory, assigning use priorities based on socioeconomic, cultural and ecological aspects.

The establishment of forest planning units is a part of the Land Use Planning. In general, the authority in charge of establishing the forest planning units is SERFOR in coordination with Regional Governments and local governments. Once SERFOR establishes forest planning units, these are the basis for granting forest concession licenses, for access under management plans to sustainable harvesting of forest products.

Protected natural forest areas are part of forest management plan, but its establishment and management have specific rules.

Both the forest planning units and the logging titles (títulos habilitantes) need to be registered in the national forest register and, where appropriate, at the National Superintendence of Public Registries (Superintendencia Nacional de los Registros Públicos - SUNARP).

The forest planning units (Article 28 of the Forest Law) are categorized as follows:

- Permanent Production Forests (PPF)
Established by MINAGRI and accessed via concessions granted to private operators. Its main purpose is timber and/or non-timber forest products, as well as provision of ecosystem services. The State promotes the integral management of these forests;
- Local Forests
Established by SERFOR, on public lands, for legal access of local people for sustainable use of forest resources, forest ecosystems services and other wild vegetation ecosystems, as well as their sustainable use for commercial purposes;
- Forests Reserves
They are permanent production forests that the State keeps under reserves for future use;
- Protection Forests
Forest established under category III in permanent production forests or in areas of special treatment. "Special treatment" areas are destined for conservation of water sources, soils and critical habitats, in which forestry activities are allowed. Concessions for forest conservation, ecotourism, use of non-timber forest products, and wildlife management, extractivism for local use or subsistence consumption are allowed.
- Forests on Native and Communal Lands
Those lands are located within the recognized territory of indigenous and rural communities. No forest concessions are granted to third parties on indigenous or rural communities lands.
- Forests on Private Lands

Forests located in private lands, recognized by the regional forest and wildlife authority.

4.4 Forest Register

According to Article 34 of the Forest Law N° 29763-2011, the Forest Register includes cartographic and documentary information of categories, such as forest zoning, forest management units, legal authorization to harvest (títulos habilitantes), plantations and public lands for forest plantations destined for production or protection forests, as well as native and peasant communities' lands. The Forest Register is mandatory, for all sectors and levels of government, to grant any rights over the forest resource.

Article 36 of the Regulation of Forest Management (SD N° 018-2015) sets out that SERFOR is in charge of the forest register, which is integrated into the National Superintendence of Public Registries (Superintendencia Nacional de los Registros Públicos - SUNARP) and in the National Registry of Territorial Planning and Economic Ecological Zoning under MINAM. SUNARP, in coordination with SERFOR, prepares the procedure for incorporating the information from the Forest Register into the database of the National Integrated Cadastral and Property Information System (SNCP - Sistema Nacional Integrado de Información Catastral Predial), linked to the National Forest and Wildlife Information System (Sistema Nacional de Información Forestal y de Fauna Silvestre-SNIFFS).

4.5 National REDD+ Strategies

Within the framework of UNFCCC, the importance of forests for mitigating climate change has been recognized and REDD+ was established as a positive policy and incentive approach, for issues relating to the reduction of emissions resulting from deforestation and forest degradation.

The Peruvian Government also recognized the importance of forests for mitigating climate change and establishing REDD+ as a focus for positive policies and incentives. Since then, GOP has been committed to actively get involved in REDD+ initiatives. The main initiatives and efforts to increase forested areas and benefits of ecosystem services, in addition to increasing public investment in forest conservation and improving competitiveness in the forestry sector are described below, in chronological order:

- 2009 – The National Environment Policy (Supreme Decree N° 012-2009-MINAM) Highlights the importance of forests in Peru, including their role in mitigation and adaptation to climate change;
- 2010 – The National Forest Conservation Program for Climate Change Mitigation (Supreme Decree N° 008-2010-MINAM) Sets out specific interventions aimed at the conservation of tropical forests and mitigation of climate change, taking as aim to conserve 54 million hectares of tropical forests as a contribution to mitigation against climate change and sustainable development;
- 2014 – Launched the 20x20 Initiative Initiative aiming to undertake the restoration of 24.8 million hectares of deforested land by 2020, with an investment of US\$ 730 million, in Latin America and the Caribbean⁵;
- 2014 – Approved the Law on Remuneration Mechanisms for Ecosystem Services – MRSE (Law N° 30215-2014);
- 2014 – Signed the Declaration of Intent of the National Pact for Legal Wood The pact has an ambitious goal that by 2021, all timber produced in the country will come from legal sources;
- 2015 – Commitment of the Peruvian government to reduce Peru's Greenhouse Gas (GHG) emissions equivalent to 30% by 2030 (iNDC Peru);⁶
- 2016 – The National Strategy on Forests and Climate Change - ENBCC (Supreme Decree N° 007-2016-MINAM) Establishes the approach and measures for the implementation of REDD+, in addition, it requires instruments for its effective application;
- 2016 – Approved Guidelines for the Management and Implementation of REDD+ (Resolución Ministerial N° 187-2016-MINAM);
- 2016 – Created a GEO BOSQUES platform For monitoring changes in the forest coverage, prepared by the National Forest Conservation Program for Climate Change Mitigation (PNCBMCC); it is an innovative and friendly digital mapping platform;

⁵ MINAM 2015. Iniciativa 20x20: Restauración de 24.8 millones de hectáreas de bosques con una inversión de \$730 millones en América Latina y el Caribe.

⁶ Government of Peru (2015), Contribution iNDC from the Republic of Peru.

- 2018 – The Council on the Project “UN-REDD Peru Program” was established in July 2018
The objective was to promote adequate conditions for the development of REDD+. In Peru, the project will invest around US\$ 4 million until June 2020. The Project is part of the efforts of the government to prepare for REDD+ implementation within the framework of the National Strategy for Forests and Climate Change;
- 2018 – Enacted the Framework Law on Climate Change (Law N° 30754-2018)
Sets out that promoting public and private investment that contributes to the implementation of mitigation/adaptation measures to climate change, the national and regional climate change strategies, the Nationally Determined Contributions and the Plan of Adaptation and Mitigation Action against Change Climate are considered of national interest;
- 2019 – Launched participatory process for the development of the National Adaptation Plan (NAP) for Climate Change, in November 2019
Defines that for the government, it will be an essential tool for implementing actions needed to reduce risks and vulnerability against climate change’s effects.

5. FOREST TAXATION STRUCTURE

5.1 Analysis of Existing Forest Taxation Structure

The main taxes derived from forest management levied on rural producers include income tax, general sales tax (GST)/value added tax (VAT), and Real Estate Property Tax. These taxes are detailed below.

– Income Tax

In Peru, income tax (Impuesto a la Renta - IR) is collected once a year over all revenue obtained from employment or the exploitation of capital.

Income Tax is applicable to all persons and companies resident in Peru and their taxable income. According to ProInversión - Private Investment Promotion Agency, Income Tax aimed at business activities can be applied in four categories (see Table 5).

Table 23 – Income Tax Category Applied to Companies

Category	Rate (%)
Corporate income	26 (General)
	15 (Agriculture and agribusiness)
Dividends	9.3
Royalties	30
Interest on loans granted abroad	4.99

Source: Compiled by STCP (2020)

– General Sales Tax – GST/Value Added Tax – VAT

In Peru, the Value Added Tax (VAT) is known as the General Sales Tax – GST (Impuesto General a las Ventas - IGV). The General Sales Tax, established by Supreme Decree No. 055-99-EF is a monthly tax levied on sale of goods within the country; rendering or first use of services; construction contracts; first sale of real estate made by constructors; importation of goods from outside Peru, regardless of the importer status.

The tax rate is 18%, composed by 16% of VAT plus 2% of municipal promotion tax. Companies that have not started production operations with a pre-production stage of two years or more can use a special system to obtain the advanced recovery of VAT charged on certain acquisitions, provided that they sign an investment contract with the State. It should be noted that GST/VAT does not apply to goods and services export operations.

– Real Estate Property Tax

Legislative Decree No. 667 created the Registry of Rural Properties and established the norms that facilitate the registration of rural properties.⁷

The Real Estate Property Tax is an annual tax that is applied to the value of properties, including the value of the land and improvements that constitute integral parts of it. All individuals and legal entities owning rural properties pay this tax.

⁷The main legal frameworks for real estate registration in Peru are: Legislative Decree No 667, Property Registry Law; Legislative Decree No 889, changes Art. 26 of Legislative Decree No 667; Ley No 26.838, Article Amending Law 23° and Chapter V of Rural Land Registry Law; Law No 27.161, Modifying and Expanding Law of the Rural Land Registry Law.

The taxable base is calculated considering the value of all the properties owned in a specific local district. The tax is calculated by applying the progressive cumulative scale to the appraised value of the total properties⁸ (see Table 6).

Table 24 – Rural Property Tax Rate

Real Estate Value	Rate (%)
Up to 15 tax units	0.2
More than 15 tax unit and up to 60 tax units	0.6
Over 60 tax units	1.0

Source: Compiled by STCP (2020).

5.2 Payment of royalties and harvesting fees

The Forest Law (Law N° 29763-2011) establishes rules for the payment of royalties and harvesting fees for the right to use of forest resources. According to Article 49 of the Forest Law, payment for a harvesting right fee in forest concessions is established as follows:

- In forest concession for extraction of timber products, payment is based on area, according to the resource granted;
- For forest products other than wood, payment is based on value of the *product in natura* or based on area granted;
- In local forests, communities' permits and authorizations, payment is based on the volume extracted and the value of the species;
- In concessions for agroforestry purposes, and concessions for the use in residual or remnant forests, payment is based on area granted;
- In case of forest ecosystems services and other wild vegetation ecosystems, the economic remuneration in favor of the State is considered within the payment for the right of exploitation;
- Concessions for forest plantations in public lands are subject to the payment based on area, and a promotional regime may be established (Article 112, Forest Law N° 29763/2011).

The Regulation for Forest Management (SD N° 018-2015 MINAGRI), in its Title XIX, establishes payment of a harvesting right fee in favour of the State, and give the responsibilities to SERFOR and MINAM for setting the amounts in relation to the Tax Levy Unit (Unidad Impositiva Tributaria - UIT).

Specifically, Article 114 of the Regulation established the payment for the right of use in forest concessions for timber purposes, and includes the following payment forms:

- By area:
It is a payment for keeping the right over the total concession area, whose basic fee per hectare is equivalent to 0.01% of Tax Levy Unit (Unidad Impositiva Tributaria - UIT).⁹ The payment of the use right is annual and should be paid until the end of the calendar year, in accordance with the conditions established by ARFFS. This payment is a condition to mobilize products the following year and it is carried out independently of conducting logging/harvesting;
- By timber resource granted:
It is a payment based on the value of the natural state of harvested timber species and volume harvested. The values applied by species group are presented in Table 7 (SERFOR, 2016a).

Table 25 – Determination of Values of Natural State of Timber

Category	Species Description	Value S/. / m3(r)
A	Highly valuable	55
B	Valuable	12

⁸ Decreto Supremo N° 156-2004-EF, Article 13.

⁹ The value of UIT for 2020 is S/. 4,300 (in accordance with SD N° 380-2019 EF available at: <https://www.gob.pe/institucion/mef/normas-legales/391143-380-2019-ef>). The fee per hectare is 0.01% of the UIT; that means the value per hectare for 2020 is S/. 0,43 or about US\$ 0.12 per hectare.

C	Intermediate	6
D	Potentials	4
E	Other species (Future economic value)	2

Source: SERFOR (2016a).

5.3 Distribution of National Forest Taxes Collected

According to Legislative Decree N° 1085-2008 and its Regulation (Supreme Decree N° 024-2010 PCM) the revenues obtained from the collection of fees, from the holders of the rights granted for the sustainable use and conservation of forest and wildlife resources, are distributed as follows:

- 50% to the Regional Government of the departments where the concession is located;
- 25% for the Regional forestry authority (to be used for forestry development, improvement of control and supervision systems, and promotion of afforestation, reforestation and recovery of degraded ecosystems); and,
- 25% for OSINFOR (to be used for supervision).

6. INCENTIVES AND DISINCENTIVES FOR SFM

Government of Peru (GOP) has defined mechanisms of incentives for management, conservation, harvesting, processing of forest resources and trade in forest products. The basic objective is to add value and promote conservation of biological diversity of the forest (Art 131, Forest Law 29763-2011). Besides that, the Consultant also identified other incentives and a list of disincentives.

6.1 Existing Incentives

The Forestry Law, Title II of Sixth Section “forest products management”, deals with Forest Promotion, Financing, Certification and Investment. According to Article 131, the Government of Peru fosters the development of forestry activities at the national level, promoting their competitiveness under an ecosystem approach that generates greater social and economic benefits.

Promotional activities especially consider the following components or aspects: a) Diversified and integral harvesting of forest resources; b) Recovery of forest cover; c) Forest plantations and agro-forestry systems; d) Access to technology, training, technical assistance and information and to markets; and, e) Adoption of good practices to improve forestry competitiveness.

The Government mechanisms include incentives of a fiscal and non-fiscal nature to the activities of forest management, conservation, harvesting, processing of forest resources in rural and native communities or other areas of enabling titles/authorizations that generate greater added value and promote the conservation of biological diversity of the forest. The Forest Law regulation (SD N° 018-2015) details the incentive mechanisms referred to in this article.

Furthermore, the Government of Peru recognizes the importance of forest resources as a national heritage and its contribution to environmental sustainability, according to Article 180 of SD N° 018-2015. To this end, it promotes the development of forestry and related activities at the national level in forest ecosystems, seeking to increase productivity levels and strengthen competitiveness, under the SFM framework.

For the promotion of forestry activity, SERFOR develops, according to Article 181 of the Forest Regulation (SD N° 018-2015), the following strategies:

- (i) Facilitate the conditions of integration of the production chain, through the design of incentives, to improve the competitiveness of forestry activity;
- (ii) Promote, propose and coordinate financing and investment alternatives for the development of forestry activities, and promote the design of programs and projects.

The Forest Regulation, and other instruments, establish several types of incentives, which could be separated into fiscal and non-fiscal incentives.

6.1.1 Fiscal Incentives

This item presents fiscal incentives, based on different types of sales taxes, which apply to the material being sold, including selling material as growing forest (standing stock sales).

A General Sales Tax (GST) is applicable for the sale of forest products in Peru (Ley del Impuesto General a las Ventas e Impuesto Selectivo al Consumo – SD N° 055-1999-EF). When invoices are issued, the prices shown include the sales taxes. Companies’ accounting systems record all the invoices issued and the taxes on sales made.

The Extraordinary Solidarity Tax and the Extraordinary Tax on Net Assets (Law N° 26777-1997) is applicable to third category income earners, with a rate equivalent to 0.5%. The term tax in this law refers to "Extraordinary Tax on Net Assets". The taxpayers are the third category income recipients, according to the Income Tax Law, which includes forestry activities.

The Law on Promotion of Investment in the Amazon (Law N° 27037-1998) sets out that companies located in the region will have either, tax exemption or tax credits. Specifically, the forestry sector benefits consider the following:

- **Exemption of Income Tax**

Exemption from Income Tax for companies who mainly develop agricultural activities and / or transformation or processing of products qualified as native crops (Art. 12, Subitem 12.3).

- **Subject to (Taxable) Income Tax**

The economic activities of forest harvesting and forestry processing are subject to a 10% tax rate for the Third Category Income Tax¹⁰, with the exception of those located in the lowland¹¹ that is subject to a 5% tax rate. In the case of forest harvesting activities (concessionaires) a 5% tax rate is applied (Art. 12, Subitem 12.1; 12.2).

- **Exemption of General Sales Tax**

The incentives include the exemption from the payment of GST in the Amazon region and include:

- a) Goods sold in the Amazon for local consumption;
- b) Services provided in the Amazon region;
- c) Construction contracts or the first sale of real estate in the region (Art 13, Subitem 13.1).

The incentives also include exemption from the payment of GST and Selective Consumption Tax (ISC) for fuel sales made for consumption in the department of Loreto, Madre de Dios and Ucayali. Additionally, the incentive covers the exemption of the Extraordinary Solidarity Tax (Art. 15).

- **Tax Credits**

Companies located in the Amazon, who are mainly engaged in the activities, such as forest transformation/processing, will enjoy a special tax credit to determine the General Sales Tax that corresponds to the sale of taxable goods that they carry out outside the Amazon area.

Special Tax credit equivalent to 25% of the Gross Monthly Tax for those companies dedicated to forest processing, located in the Amazon. Those located in the lowland apply to a tax credit equal to 50% of the Gross Monthly Tax (Art. 13, Subitem 13.2).

For the purposes of the provisions of this tax credits, the following procedure shall apply:

- Determine the gross tax corresponding to the taxable operations of the month;
- Deduct, from the gross tax, the tax credit determined according to the General Sales Tax legislation;
- Deduct the special tax credit. The application of this special tax credit will not generate surpluses in favor of the company, it cannot be carried over to the following months, nor will it give the right to request its return;
- The resulting amount will constitute the tax to pay. The amount deducted or applied as a special tax credit must be credited to the earnings and business losses of the companies.

Companies who totally or partially reinvest their net income in investment programs involving forest processing are entitled to a tax benefit equivalent to 5% of the amount reinvested (Supplementary Provisions 5, a)).

A similar incentive applies to natural or legal persons who invest in programs in the forest sector. They may deduct the amount actually invested, with a limit of 20% of their net income (Supplementary Provisions 5, b)).

- **Agrarian Promotion Law**

Recently the Urgency Decree N° 043-2019 extended until 2031 the Agrarian Promotion Law (Ley de Promoción Agraria N° 27360-2000). Based on this law the forestry sector will benefit from the 50% reduction of the Income Tax (from 29.5% to 15%) in case of investments in the coastal and mountain regions (in the Amazon, the Tax for this activity is 5% and 10%, according to the department). The incentives include the early recovery of GST during the pre-productive stage of investments.

¹⁰ Article 28 of Income Tax Law (Decreto Supremo N° 179-2004-EF) considers Third Category Income those derived from the following 10 options: i) Commerce, mining or industry (including agricultural, forestry, fishing or other natural resources exploitation, among others); ii) Activity of trade mediators, auctioneers and any other similar activity; iii) Income obtained by Notaries; iv) Capital earnings interests and usual operations income; v) Legal persons; vi) Association or civil society; vii) Other income, not included in the other categories; ix) Transfer of assets; and x) Private educational institution.

¹¹ Companies located in the departments of Loreto, Madre de Dios and the Districts of Iparia and Masisea of the Coronel Portillo province and the Atalaya and Purús provinces of the department of Ucayali.

6.1.2 *Non-Fiscal Incentives*

The non-fiscal incentives applied to the forest sector identified, based on the SD N° 018-2015 and other instruments, are presented below.

- **Reduction of Forest Concession Fee Payments**

The Regulation for Forest Management establishes incentives, such as promotional regime in the payment of the right of timber harvesting (Art. 194, SD N° 018-2015). The GOP provides incentives to concessionaires by allowing for reduced concession payment fees, as follows:

- 25% discount on the payment of the amount of the concession fee, if the concessionaire carry out research aligned with the Forest Research Program approved by SERFOR and have field results based on demonstrable, replicable and scientific data;
- 20% discount on the payment of the concession fee, if the concession holder develops environmental education program in educational institutions of basic education, universities or institutes of higher education; capacity building in environmental education management, for teachers and management staff. Likewise, the concession holder will benefit with an additional 5% discount if he develops pre-professional program for students, through the official agreements with institutes, schools and universities.
- 25% discount on the payment of concession fee if the concessionaire reports annually to ARFFS and SERFOR the results of the permanent sampling plots established in the concession area;
- Up to 25% discount on the payment of concession fee for conservation and/or recovery areas not intended for forest use;
- Up to 20% discount on the payment of concession fee in case of diversified forest management (diversified use of timber, non-timber forest species and ecotourism activities).

These discounts could be cumulative and a maximum discount of up to 70% on forest concession fees is allowed.

- **Legal origin of forest products in the government procurement processes (SD N° 018-2015 Art. 183)**

In the government procurement processes, the public institutions should apply the rules that proving evidences of the legal origin of the forest products, including evidences of forest certification and good practice schemes can be considered as improvements, for purposes of qualifying proposals. The criteria used for selecting suppliers in the government procurement process, involving these aspects, is basically qualitative.

- **Forestry projects in priority areas for the government (SD N° 018-2015 Art. 184 and Art. 194)**

For forestry projects in frontier areas, high-risk areas or other areas prioritized by the federal, regional or local government, SERFOR approves the application of discounts (25 %) on payment for the right to timber harvest and other benefits, in coordination with regional governments.

- **Development of forest-industry integrated projects for forest use¹²(SD N° 018-2015 Art. 185)**

The holders of qualifying titles (permits) implementing forest-industry integrated projects of local, regional or national scope are entitled to get the following benefits and incentives:

- Non-fiscal incentives, such as the discount on the payment of the right to harvest/logging;
- Access to training programs;
- Capacity building to improve their labor conditions and entrepreneurship;
- Capacity building to improve productivity and competitiveness.

SERFOR, in coordination with ARFFS, approves the levels of discounts in the payment of the right of use/logging and the application of respective discount.

Discount of up to 30% on the amount of concession fee, considering vertically integrated forest industry, applies in the following cases:

- 15% in case of primary processing occurring in the concession area or nearby populated center;
- 8% in case that is carried out outside of concession area but within the same region;

¹² Forest-industry integrated projects are investment initiatives that contemplate the implementation of harvesting activities, processing and commercialization of forest products (Art. 185, SD N° 018-2015). SERFOR proposes the development of assistances for access to financial services provided by governmental entities or funds, for the actors referred to in this article.

- 10% in case of performing only secondary processing, taking third-party services for primary processing, regardless of the location of the plant;
- 30% if it performs both primary and secondary processing, regardless of the location of the plants.

- **Use of forest residues and recycling (SD N° 018-2015 Art. 186)**

SERFOR and ARFFS establish promotional regimes for the use of forest residues resulting from logging under management plans and processing plants, as well as forest products used for recycling and establishes mechanisms to make its use possible. Among them, the use of waste generated by harvesting under management plans, processing plants, as well as recycled forest products, are not subject to the payment of right to use.

- **Inclusion of Small producers in the Compensation Program for Competitiveness (SD N° 018-2015 Art. 188)**

Organized medium- and small-sized producers that carry out forestry activities can access incentives for associativity, technology management and adoption, subject to eligibility granted by the Competitiveness Compensation Program. To this end, regional and local governments, in coordination with SERFOR, offer direct technical assistance or through alliances with other public and private entities, for the preparation of business plans and compliance with the requirements established by the aforementioned Program.

- **Mortgage of Forest Concession (SD N° 018-2015 Art. 189)**

A concession holder may offer the forest concession as a guarantee for access to financing, oriented to forest management, vertically integrated projects, projects or investments to promote forestry and related activities. Thus registered forest concessions may serve as legal guarantees for financial obligations.

- **Forest Cover (*vuelo forestal*) as movable guarantees (SD N° 018-2015 Art. 190)**

Forest cover is a movable asset that can be given as a guarantee to obtain resources from the financial system or the capital market. It is made up of the set of trees, wood and forest by-products of a natural forest. Natural forests can be offered as a movable warranty provided that the forest cover to be offered as a guarantee has a management plan approved by ARFFS.

- **Voluntary Forest Certification/ good practices for forestry competitiveness (SD N° 018-2015 Art. 191, Art. 193)**

SERFOR encourages forest certification to promote SFM, the legality of harvesting and facilitate the entry of forest products to specific, national and international market niches. In order to access the benefits and incentives for voluntary forest certification, one of the following types of certification should be accredited:

- Forest Management Certification;
- Chain of Custody Certification;
- Controlled Wood Certification; and,
- Other types of certification recognized by SERFOR.

Up to 35% discount is applied on the concession fee for voluntary forest certification, adoption of good practices duly certified, and certifications of legal or other origin. And, an additional 20% discount is applied in case of maintenance beyond the fifth year. For the issuance of an evaluation report or “scoping” of your concession by the certifying company, concessionaire will receive 5% discount for up to one year (Art. 194, e.). Apparently, this measure is enforced, covering most of the certified concessions.

6.1.3 Other Incentive Mechanisms

In addition to the mechanisms to promote SFM and development of the forest sector, established by the Forest Law and its regulation (SD N° 18-2015), other mechanisms that directly or indirectly create incentives to develop the forest sector were identified, including:

- **International Cooperation Programs**

International cooperation is an incentive, contributing to promote SFM of Peruvian forests. There are currently several organizations financing forest related programs and projects, covering different areas.

Among the relevant programs and projects supported by the international cooperation identified by the consultant, that directly or indirectly, creates incentives to develop the forest sector, are:

- PROAMBIENTE II – Contribution to the Environmental Targets of Peru (Contribución a las Metas Ambientales del Peru)/ GIZ

The Proambiente II supports SERFOR in the implementation of the Environment Program: Climate change and Biodiversity. The focus is, basically, institutional strengthening, mainly of Regional

Governments, aiming to facilitate and improve the assessment and approval process of forest management plans.

- PROBOSQUE – Capacity Building Project for the Conservation of Forests and REDD+ Mechanisms (Proyecto de Desarrollo de Capacidades para la Conservación de Bosques y Mecanismos REDD+) /JICA

The initial focus of this technical cooperation project was on REDD+. Currently the project supports SERFOR and MINAM on mapping and monitoring deforestation, improve control and surveillance of dry forests.

- FOREST – USAID and USFS Technical Cooperation Program (Programa de Cooperación Técnica de USAID y USFS)

In 2009 Peru and USA signed a Trade Promotion Agreement. The Agreement has an annex defining targets to improve the trade of forest products. The USA decided, in 2010, to support Peru to facilitate the achievement of the targets set, and agreed on the implementation of a program involving USAID and the USFS.

At the initial phase the Forest Program supported the creation of SERFOR and OSINFOR, and the development of the Forest Law. It also supported forest and environmental control to improve legality. The new phase, started in 2018, and deals with the improvement of management of production chains, efficiency of institutions and support to regional authorities. The Forest Program covers diverse aspects, including:

- a) Support the private sector to improve efficiency;
- b) Support community workers in production and trade – Forest Alliance Program (Alianza Florestal Program);
- c) Mitigation of impacts and changes in natural landscape;
- d) Strengthening of environment inspections.

A new project in early stage of implementation is the Permanent Production Forests Project (Proyecto Bosques de Producción Permanente). This project will cover a group of concessions to develop pilot management projects to generate knowledge, improve productivity and sustainability.

- **ITTO PROJECTS**

The International Tropical Timber Organization-ITTO has support the implementation of several projects in Peru to improve sustainable forest management, the development of the timber industry and promotion of trade. One project had a particularly important impact, the ITTO/CITES Project. This project was launched in 2008, as a global program to ensure that international trade of wood species included in CITES annex is consistent with its sustainable management. Peru was part of the program and several projects were implemented having as the main focus mahogany (*Swietenia Macrophylla*) harvesting

The project supported the efforts of the country to sustainable manage the forests, and to protect the remaining mahogany populations by reducing harvesting volumes. Due to this initiative, timber industry was forced to change management practices, and as a result the number of new timber species harvested and processed was increased. This facilitated the development of new markets and reduced the business risks.

- **Aliado por la Conservation Program**

This program was created by SERNANP - National Service of Natural Areas Protected by the State (Servicio Nacional de Areas Naturales Protegidas por el Estado). The program aims to develop brands to promote the trade of non-wood products, collected and processed based on good practices. So far, the main products have been Brazilian nuts, fruits and some other seeds.

Stakeholders interested to participate in the program, and ensure the access to the protected areas to collect the products, need to prepare a master plan to be eligible. The payment for the material collected can be made by surveillance services of the protected areas. So far, the program involved 3,000 persons, representing a significant contribution to ensure that forest in protected areas are properly managed.

- **Forest Plantations Regulations**

The Decree N° 020-2015 approves the regulations for the management of forest plantations and agroforestry systems. Forest plantations and agroforestry systems are declared to be of national interest for contributing to industrial development, food and nutritional security, protection of soils, water regulation, and provision of ecosystem services.

Article 16 of the Decree defines that establishment, management and use of forest plantations, including those established in agroforestry systems, on private land, either with native or exotic species, does not require authorization of the forestry and wildlife authority or the presentation of a management plan. The products or by-products are property of the owners of these plantations and are not subject to payment for right of use. Nevertheless, forest plantations should be registered at the National Registry of Forest Plantations and only require an update of registration before harvesting.

As plantations are not subject to regulations, the owner defines the silvicultural, management, harvesting practices to be adopted in its establishment and also trade practices. These are purely

technical / economic decisions, made by of the plantation owner. As a result it reduces bureaucracy, risks and transaction costs, and therefore can be considered is an incentive to private investors.

6.2 Identified Disincentives

Several disincentives were identified. They create limitations to the implementation of sustainable management of tropical forests and the development of the forest industries and trade of tropical timber products in Peru.

The main disincentives were identified in meetings and discussions, held with government organizations, nongovernmental organizations, international cooperation and private sector, during the visit of the Consultant to Peru. The key are summarized below.

- **Access to Forest Resources**

According to Fischer (2012), the private sector considers that the annual fixed fee paid for the concessions, based on the total area, should be much lower. The private sector considers that to compensate an alternative criterion could consider payments based on the volume harvested. This would reduce risks, particularly in years when the concessionaire, due to climatic or other reasons, faces harvesting reduction.

Concession holders also face high risks associated with invasions involving illegal harvesting, illegal mining and deforestation. Based on the concession agreement they are responsible for the proper management of the forests, and these illegal operations might affect the management plan and therefore it represents a potential source of liabilities.

- **Institutional Limitations**

Assessment and approval of the concessions forest management plans involves Regional Governments. Some Regional Governments have limited capacity to assess management plans. The weakness is sometimes a result of a lack of permanent or qualified staff, and is quite common to be linked to a high turnover of the Regional Government forest team. In general, this increases the time required to approve forest management plans and therefore, quite frequently delays the issue of harvesting permits. Due to rainy season, postponing harvesting operations has implication on the harvesting period, and can reduce the production, affecting timber industry.

- **Financing/Funding Operations**

The SD N° 18-2015, approving the Regulation for Forest Management for concessions, defines as an incentive, that the concession holder may consider the concession rights in a mortgage as collateral for access to financing, oriented to forest management, forest-industry integrated projects, projects or investments to promote forest related activities.

In spite of this legal provision, private and state/ public financial institutions do not accept the concessions rights as a guarantee for funding forest companies operations and investments, requiring additional real estate guarantees. Even in the case guarantees can be offered interest rates, especially those of private bank, are quite high.

One state bank providing credit lines is the Peru's state-owned Agriculture Development Bank, AGROBANCO. It is oriented to promote and facilitate the granting of credits, at lower interest rate, to small agricultural producers in Peru. In the past AGROBANCO also financed forest projects, although to limited amounts and mostly oriented to forest plantations. In spite of this alternative, over the last few years, AGROBANCO has faced financial constraints and cannot be consider, currently, as an option to fund forest projects.

Another funding option for the forest sector of Peru is the Development Finance Corporation S.A – COFIDE (Corporación Financiera de Desarrollo S.A.), also known as the Development Bank of Peru. This denomination is associated with the contribution of COFIDE with the development of the country, through financing of the production investment, supporting development programs and improving the business competitiveness.

One of the COFIDE funding programs, called BIONEGOCIOS (bio-business), supports both entrepreneurs and small and medium-sized companies involved in projects related to Energy Efficiency and Renewable Energy. In addition, this program promotes various sources of renewable energy and production processes, contributing directly to the mitigation of greenhouse gas emissions. One of the pillars of this Program involves financing of processes of transformation and preservation of the environment (biodiversity, biogenetics and forestry development). The BIONEGOCIOS Program is financed with COFIDE's own resources, resources of the Japanese International Cooperation Agency (JICA) and KfW.

In spite of the available mechanism, so far COFIDE has not financed any relevant forest project. Reasons are not clear but they are revising their approach to make forest financing more attractive to the forest operators.

Allocation of other government or private funds to finance forest sector in Peru are quite limited. Nacional private investment sources, for instance, are quite limited. Pension funds, an option in many countries, are not investing in the forest sector. In the past they have made small investments in forest

plantations. No significant international investment funds have been identified to finance forestry related operations in Peru.

- **Bureaucracy and Transaction Costs**

In Peru, the concessionaire is responsible for all costs involving the forest operation and other activities, including the costs of licensing procedures, logistics, infrastructure development, energy generation, mitigation of environmental impacts, preparation of business plan and voluntary forest certification. As concessions are in remote areas they sometimes also invest in health, education, accommodation and welfare of workers and their family. Concessionaires should also consider the costs of forest auditing, carried out by OSINFOR every 5 years (Art. 202, SD N° 018-2015), and the costs of preparing the Annual Operational Plan (POA).

All these activities are expected to be included in the Business Plan and the Business Proposal. The document has to include precise information, including information on cost involved, and its impact on the timber price (Fischer 2012). These generate a significant transaction costs, and mainly smallholders have difficulties to fully comply with these cumbersome regulations.

Furthermore, as most of these activities have to be implemented prior to the start of the operation, the costs added increases the demand, particularly, of working capital, a critical limitation in the case of a country where funding is not available, or is not accessible, to most forest companies.

Costs also have to be transferred to prices, reducing the competitiveness in the market and the capacity to invest in technology development to enhance productivity. It also creates limitation to introduce new species (lesser known/ lower price species) in the market and develop new products. As a result, selective logging, involving only most valuable species for traditional products, is a common practice.

Peru has a relatively complex forest legal framework, involving a large number of institutions/ organizations, diverse legal requirements. The discussions to introduce changes to promote development and improve competitiveness, generally involve a large number of stakeholders. Over the last few years, SERFOR promoted discussions to formulate a National Forest Plan to promote the forest sector development. Many organizations were involved and in spite of long discussions, a full agreement was not reached. So far, the plan has not been officially published.

Additionally, because of the complex legal framework and the need to involve in the discussion and decisions of forest issues a large number of stakeholders, problems have also been identified in the interpretation and effective application of legal instruments. These create constraints, increase risks and transaction costs, generates a legal and fiscal terrorism environment, and stimulates corruption and bribery.

- **Illegalities**

Illegalities involving harvesting, processing and trading of forest products are a drawback in Peru. Illegal logging threatens SFM in the country. Corruption is associated to several reasons, but the complexity involving the legalization, and the resulting high transaction costs are unquestionably an important component.

Larger companies, trading in the international market tend to operate legally. Illegality tends to be more frequent in domestic trade that generally involves smaller operators. Small-sized companies have less access to technical support and face financial limitations, but they are less visible and traceability is less efficient.

As a result of these illegalities, that generate market distortions, large companies have only a small share of the domestic market. Normally, due to international market demand, they to operate with a smaller number of timber species, so that harvesting volumes per area are smaller and this increase the forest operations costs.

- **Lack of a Strategy to Improve Competitiveness**

SERFOR is the most relevant Peruvian institution to guide a discussion aiming at a definition of a strategy to improve the competitiveness and promote the development of the forest sector. The institution has proposed to develop, with the involvement of other relevant stakeholders, a National Forest Plan. Apparently, it was difficult to reach an agreement and, so far, the Plan has not been made public.

The private sector should be the main interested in a plan to promote the forest development. Nevertheless, it seems that public and private sector were not able to join efforts and coordinate, to reach an agreement to propose and adopt a strategy to promote the sustainable development of the forest sector. Part of the problem seems to be associated to the lack of a political decision and the large number of organizations involved in matters related to the forest sector. Other reasons need to be clearly identified and solutions need to be proposed to overcome these limitations.

Undoubtedly, Peru has no instruments and no strategy to promote the development of the forest sector. Attraction of investments is essential for that, which requires improving investment climate. The country needs a structured strategy to achieve the forest sector development.

The Government of Peru has to make a clear political decision, and adopt a long-term forest sector development strategy. The strategy should consider as a priority to create/promote funding/ investment alternatives, to facilitate the dialogue with relevant stakeholders. That, as mentioned, is difficult today

as decisions pertinent to the forest sector involve many institutions and a complex legal framework. The country needs, for instance, an efficient forest extension service, which could help to improve productivity and competitiveness of the forest sector, involving particularly small and medium size companies. There are other limitations, involving technical, economic, market information and other aspects.

- **Poor infrastructure and high energy costs**

Forest concessions in Peru are located in the Amazon region, at eastern region of the country. Wood products need to be transported to the western region, where most consumers and export ports are located. Transportation is made by truck, and in view of the poor road infrastructure, costs are a strong limitation. In addition, energy costs in the Amazon region are high.

- **Lack of Public Procurement Policy**

In Peru large forest companies trade most of their products in the international market. These companies face difficulties to trade their products in the domestic market, were small companies, mostly informal, compete with them.

One option would be effectively to implement a public procurement policy for forest products. In spite of the fact that Article 183 of the Supreme Decree No. 018- 2015 deals with legal origin of forest products in the government procurement processes, this provision has not been properly considered.

7. SUMMARY OF THE COMMITMENTS BY THE PRIVATE SECTOR

As discussed above, the Peruvian government has promoted SFM through various types of incentives offering fiscal and non-fiscal incentives for forest concessions, including promotion of forest certification, establishment of forest plantations in degraded lands in conjunction with other anti-deforestation policies.

Forest management of natural forests does not usually lead to deforestation, but unsustainable logging practices can lead to forest degradation, so the importance of initiatives such as forest certification. On the other hand, as the main market stimulus comes from buyers and users, the consumer countries are requiring more and more that tropical producer countries shift their supplies of timber and forest products into LSSC. In this context, deforestation-free initiatives have taken place in Peru as well. In order to promote zero deforestation, GOP has engaged in some initiative encouraging the private sector to reduce deforestation and forest degradation.

7.1 Certification Process

There are two main forest certification schemes worldwide: the Forest Stewardship Council (FSC) and the Program for the Endorsement of Forest Certification (PEFC). At present, the FSC is the only forest certification scheme that has been operating in Peru, both in natural forests and forest plantations, involving primary and secondary wood processing industries.

The Peruvian legislation recognizes the certification and promotes it, associated with the registration and control of the legality of forest products (timber and non-timber products), as well as the sustainability of forest management, establishing incentives for Forest Management Certification, Controlled Wood Certification, Chain of Custody Certification, and other types of certification recognized by SERFOR.

In this context, FSC has worked considering three certification standards, which have been applied in Peru:

- Forest Management Certification (FM/COC): granted to forest managers or owners whose management practices meet the requirements of the FSC Principles and Criteria or the FSC National Standard;
- Controlled Wood Certification (CW/COC): issued to products from forests that are not FSC certified, but are proved as material from acceptable sources that can be mixed with FSC certified material in products with the FSC Mixed label.
- Chain of Custody Certification (COC): for manufacturers, processors and traders of forest products. This type of certification verifies whether products sold with the FSC label actually contain FSC certified materials and controlled sources;

Based on the certificates granted in natural forests and plantations, until January 2020, a total of 60 timber processing companies in Peru had FSC certification, of which 49 have the Chain of Custody Certification (COC), 9 have the Forest Management Certification (FM/COC) and 2 have the CW/FM Controlled Wood Certification.

Table 8 shows information on certified area and number of certificates. As previously mentioned Peru offers incentives for obtaining FSC certified status.

Table 26 – Forest Management Certified Areas in Peru (2019)

Certification Type	Certified Areas (ha)	Number of certificates
FSC	717.599,79	60

Source: FSC Peru (2019), compiled by STCP.

7.2 Zero Deforestation Pledges for Agricultural Commodities

The main causes of deforestation in Peru are agriculture and livestock farming, which together contribute to 81%-93% of total deforestation. Agriculture alone is responsible for approximately 49%-54% of all deforestation, representing a loss of almost 70,000 hectares per year¹³.

Hence, the GOP aims to reduce deforestation in the Peruvian Amazon by 30% by 2030. The Government is taking concerted actions with key national and international organizations to reduce commodity-driven deforestation and support sustainable rural development to reduce deforestation linked to supply chains in the country.

- **Tropical Forest Alliance (TFA)**

The Peruvian government through MINAGRI, in coordination with MINAM, joined the Tropical Forest Alliance-TFA¹⁴, in 2019, to promote public-private partnerships for deforestation-free agriculture in the country.

¹³ SPDE & CDP (2018).

TFA will support Peru towards fulfilling the objectives outlined in the Joint Declaration to Reduce Deforestation, signed with Norway and Germany in September 2014, contributing to the achievement of its National Determined Contribution in the Paris Agreement. In this context, the Peruvian government shows its commitment to associating with the private sector and civil society towards sustainable production and deforestation-free commodity supply chains.

TFA's actions in Peru are supporting the creation and consolidation of the Peruvian Public-Private Coalition, working with local partners and engaging the private sector, targeting efforts on the implementation of the National Coffee and Cocoa Plans among other commodities (TFA, 2020).

- **Project to Reduce Deforestation**

The project called “Business Models to Address Drivers of Deforestation in Peru” (shortened to Sustainable Amazonian Businesses-SAB) develops deforestation-free business models for the oil palm and cacao sectors in Ucayali region¹⁵.

The project aims to facilitate adoption of sustainable practices for palm oil and cacao production, where companies commit to achieve zero deforestation. It is a joint initiative coordinated with MINAM and MINAGRI, the subnational Government of Ucayali, and in partnership with the Climate Focus (CF). In order to tackle the implementation of agricultural management practices that improve productivity while also contributing to GHG emissions reduction, the GOP seeks to establish public-private partnerships that facilitate the adoption of sustainable practices in prioritized production systems in deforested lands and reduce pressure of agriculture on forests.

- **Palm Oil Nationally Appropriate Mitigation Actions (NAMA)**

The GOP through MINAGRI/ SERFOR is coordinating the development of the Nationally Appropriate Mitigation Action (NAMA) in the palm oil sector, to contribute to the mitigation of GHG emissions and sustainable growth of agriculture in the Peruvian Amazon, through reduction of deforestation and the implementation of mitigation measures appropriate to the oil palm sector¹⁶.

The implementation of this initiative is set for the period 2016-2025, through an inter-institutional platform with the National Forest Conservation Program of MINAM, the Amazon Interregional Council, and the Regional Governments. The NAMAs are also a part of the National Strategy on Forests and Climate Change.

The NAMA is expected to generate the “how-to” of low-carbon palm oil production necessary to design incentive schemes targeting all actors involved, considering good practices to reduce inefficiency along the production chain, which complying with national strategies, targets and environmental commitments.

7.3 Needs and Motivation of Key Companies

Forest concessions rarely consider the multiuse of forests, and there are legal limitations to considering this option. There is also, in Peru, a lack of basic information such as economic and market information, availability of funds and proper investment conditions.

For instance, access to carbon credits is possible but the mechanism is not clear. In reality, Peru has little experience in the payment for environmental services. This issue should be more explored as the needs of the forest production chain in terms of incentives to SFM.

In Peru, as a matter of fact, according to many stakeholders interviewed, incentive programs have not worked properly. According to ADEX, although these incentives exist, they only reach a few concessionaires with the technical and financial capacity to take advantage of them, which represent less than 15% of the concessions still in operation. Thus, SMFEs do not fully benefit from these incentives.

Government of Peru encourages SFM and conservation practically without disbursing funds since most of the existing incentive, specifically applied for good forest management and promote forest industry sustainable development, is of a non-fiscal nature. The main incentive is basically a discount in the payment of harvesting rights. An assessment of the existing incentives to promote the development of the Peruvian forest sector, as well of disincentives, is presented in the next chapter.

8. ASSESSMENT OF EXISTING INCENTIVES AND DESINCENTIVES

The success of an incentive program to promote development depends on the social, economic, political and environmental conditions of the country. A general assessment of existing incentives to

¹⁴ TFA 2020 is a global public-private partnership to drive action towards deforestation-free supply chains. It counts over 150 the public-private partners with the goal of reducing tropical deforestation associated with these key global commodities.

¹⁵ The project is part of the International Climate Initiative (IKI), supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). It is aligned with the environmental and low-emissions development goals of the national government of Peru. Available at: <https://blog.ciat.cgiar.org/ciat-leads-project-to-reduce-deforestation-in-the-peruvian-amazon/>

¹⁶ Measures including: 1) Conversion of agricultural areas, technically and legally allowed for oil palm plantations to prevent the expansion of the agricultural frontier and have lower GHG balance; 2) Reduction of GHG emissions in the fresh fruit production stages, and, 3) Reduction of GHG emissions in the transport, and processing stages (SERFOR, 2016).

promote sustainable forest management in Peru, taking into consideration relevant country particularities identified by the consultant, is provided below.

- Forest Policy and Strategy: The National Forest and Wildlife Policy (SD N° 009-2013-MINAGRI) can be part of a possible strategy to stimulate increase in productivity levels and strengthening of competitiveness factors for forest management¹⁷. Nonetheless, in Peru, the lack of a political decision at high level, the large number of organizations involved in matters related to the forest sector and the complexity of the legal framework is offsetting the adoption and implementation of such strategy;
- Economic Incentives: Peru has not introduced strong economic incentives, apart from differentiated forest fees payment. Most common incentives in Peru involve discounts on the payment of the right to harvest e.g. forest certification, wood processing. These are expected to reduce operating costs and make concessions more competitive with illegal wood. Nevertheless, the incentives listed in the Forest Law Regulation (SD N° 018-2015), involving reduction in forest fees have limited impact on operations. In spite of the fact that the private sector consider that the forest fee is an important cost component, its contribution to the total operational cost is quite small. Other incentives such as those related to General Sales Tax, applicable for the sale of forest products in Peru (Ley del Impuesto General a las Ventas e Impuesto Selectivo al Consumo) have, in principle, no impact over the larger companies. They operate mostly in the international market and exports are not subject to taxes;
- Forest plantations: Plantations are less regulated and this alone should be an incentive to expand planted areas. Besides that, the Government of Peru has stimulated the private sector to promote investments in the forest sector through various tools. The National Reforestation Plan, started in 2005, provides incentives and mechanisms to support the establishment of forest plantations, including: i) Creation of forest plantation research and development centers; ii) Promotion, education, technical assistance and information management; iii) Improvement of land ownership conditions; and, iv) Promotion of private investment. Although important, these initiatives are insufficient to capture investments from the private sector for plantations, as improvements in the national investment climate has been limited and insufficient to attract investments. In fact, an aggressive financial incentive program is needed to effectively created a positive impact, and promote the forest plantations establishment. Other appropriate policies and measures are also needed, such as land tenure assured, technical assistance and other conditions that make the investment attractive even with limited subsidy;
- Forest Certification: The government promotes forest certification by setting a reduction in the fees over rights to harvest. Thus, the Forestry Law (Law N° 29763-2011, Art. 133) gives a legitimization to the forest certification pointing out the social, environmental and economic benefits that this process offers, although it considers it as a voluntary practice. It is the government's interest that, specially, forest products exporting companies be certified, since by having that status, consumers are assured that the forest products they purchase do not contribute to deforestation and degradation of forests. The international market demands are also motivating companies pay more attention to forest certification;
- Mortgage Incentive: The forestry mortgage incentive model cannot be considered successful, since these models have faced problems in its effective implementation. In fact, financial institutions, both public and private, require other conditions for loans and guarantees. Access to finance continues to be an important investment limitation to the forest sector as banks/ financial institutions do not accept concessions as a guarantee;
- Informality and Corruption: A large portion of the forest sector in Peru is informal. Informality is predominant in the domestic market and corruption is endemic. Large companies tend to be formal, and most are involved mainly in the international trade, as they have limitations to compete with the informal sector in the domestic market. Government procurement policies is not effective and adjustments are needed to play preminent role, and increase the share of formal supply of wood products in the domestic market;

¹⁷ SD N° 009-2013-MINAGRI stimulates increase in productivity levels and strengthening of competitiveness factors for forest management. Specifically considering: i) Generation of favorable conditions and incentives to promote private investment in the Forestry Sector; ii) Integration of public management and coordination with specialized agencies to articulate the development programs and projects of other sectors with the Forest Sector; iii) Incentive to the formalization of production activities, by simplifying administrative procedures in the Forestry and Wildlife Sector, and respecting labor norms and standards linked to adequate employment conditions, among other measures; iv) Impact on the private financial system to ensure that it accepts the value of the forest resources of the concession titles, as assets that can be constituted as guarantees for credit operations.

- Deforestation free commodities: The pressure to reduce deforestation should be shared by all levels of society to reduce that burden on forest communities. Government is promoting incentives for deforestation free commodities, but so far the impacts have been limited;
- Forest Extension Services: Peru has not introduced an extension of services to support SFM and promote the development an efficient forest industry. This has a detrimental effect especially among the small and medium size holders and entrepreneurs;
- Bureaucracy and Institutional problems: Bureaucracy is a strong limitation and tends to stimulate informality, especially involving small and medium size holders/ companies. Most government decisions require the involvement of several organizations and actors, at the national and regional levels. Most Regional Governments have limited capacity to assess and approve management plans, and staff turnover is expressive. The process is generally complex, approval a long time and transaction costs are high. This scenario stimulates informality and corruption;
- Land Tenure and property rights: Lack of legal certainty especially in land tenure and lack of land titling lead to conflict, deforestation and forest degradation. Also makes difficult to access finance and obtain any kind of incentives.

9. RECOMMENDATIONS AND PROPOSALS

The discussions presented above illustrate the general features of incentives and disincentives for SFM for promoting SFM and forest sector sustainable development. This section presents recommendations for desirable and realistic mixes of measures proposed for Peru.

It is noteworthy that, in Peru, statistical data on revenues separated by tax measures are not readily available; the government does not make it public. Therefore, it is not possible to carry out analysis on quantification of the impact on the national budget of fiscal measures involving the forest sector. In any case, as the forest sector has a small contribution to the country GDP, and therefore it would be expected that any fiscal or non-fiscal incentive, to promote sustainable forest management and the development of a sustainable forest sector, would have a small impact in the national budget.

A range of desirable and realistic mixes of measures to be considered to promote SFM is provided below, including priority and desirable measures.

- **Priority Measures**
 - Define and adopt a National Strategy to increase forest sector efficiency and competitiveness, through the creation of a positive business climate to attract investments and promote sustainable forest management and the development of a sustainable tropical timber industry;
 - A positive business climate should prioritize access to credit/ financing, improve markets access and to improve land use rights, as part of the strategy to promote SFM and forest plantations, aiming to reduce deforestation and forest degradation, benefiting specially concession holders and SMFEs;
 - Provide effective technical and administrative capacity building to support specially the SMFEs, and make available/ facilitate access to technical, economic and market information.
- **Desirable Measures that Should be Promoted:**
 - Implement an effective national public procurement policy for forest products, as one of the measures to promote legality in the domestic trade of forest products;
 - Review the forest sector legal framework, aiming to reduce the complexity of regulations and bureaucracy, to reduce transaction costs, corruption, associated risks, and increase attractiveness of the forestry business;
 - Further expand forest certification to encourage producers and companies to participate in and support supply chain transparency for timber and wood products, as part of the efforts to reduce illegality;
 - Mainstream sustainable forestry practices at all levels, considering incentive policies for sustainable forest management, through alternative mechanisms including payment for environmental services and other uses of the forest lands;
 - Propose and implement, based on proper incentives, a long-term forest plantation program, including measures to encourage private sector investments, to make available an alternative source of competitive raw material to support the forest industry development, supply mainly local market replacing imported timber products, and reduce the impact over tropical natural forests.

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ANNEX 1 – INTERVIEWS/FIELD SURVEY IN PERU

A field survey was carried in Peru over the period January 20-23, 2020. The summary of interviews is presented below, describing date and time, name of interviewees and corresponding positions, organizational name, and the main topics/subjects of the interviews.

Result of interviews and field survey

Date and time	Name of interviewees	Organization	Main topics
Jan. 20 / 15:00	Hannes Hotz, Principal Advisor, Sustainable Forest Management	GIZ	<ul style="list-style-type: none"> • National public sector weakness; • Difficulty in approving management plans; • Corruption; • Difficulty in accessing credit line; • Lack of land titling; • There is no rural extension services; • Analysis of current financial institutions (AGROBANCO and Development Bank of Peru - COFIDE).
Jan. 20 / 17:00	Fernando Bernardo Regal Gasgtelumendi, Technical Coordinator; Cesar Rafael Taira Hirashima, Coordinator / Capacity Building	JICA	<ul style="list-style-type: none"> • Focus on REDD+ and its limitations; • Weakness in regional government, high employee turnover; • Limited PSA experience; • Lengthy/bureaucratic procedures and complex processes.
Jan. 20 / 18:30	John Leigh Vetter, International Consultant	Former Executive Director of SERFOR	<ul style="list-style-type: none"> • The importance of National Forest Plan; • Incentives (basically those listed in the Forest Law regulation/ Supreme Decree n° 018/2015); • Limitations (weak decision making process, little effectiveness of SERFOR in the competitiveness of the forest sector).
Jan. 21 / 09:00	Jorge Bustamante, General Directorate of Economy and Environmental Financing	MINAM - Ministry of Environment	<ul style="list-style-type: none"> • MINAM's organizational structure; • PROBOSQUE support/ wood traceability; • Incentives for SFM; • Limitations of the forestry sector.
Jan. 21 / 11:00	Alvaro Anicama, Senior Management Advisor; Idefonso Riquelme, Director, Directorate of Forest Supervision	OSINFOR - Forest Resources Supervision Agency	<ul style="list-style-type: none"> • Stakeholders that influence the sector's control operations; • Main incentives for SFM; • Payment of concessions; • Limitations on incentives.
Jan. 22 / 09:00	Cindy Vergel Roriguez, Coordinator of the Financial Sustainability	SERNANP - National Service of Natural Protected	<ul style="list-style-type: none"> • SERNANP organizational structure; • Incentives for SFM; • Access to natural resources.

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

Date and time	Name of interviewees	Organization	Main topics
	Initiative	Areas by The State	
Jan. 22 / 15:00	Renato Poiré, Program Manager; Franco Pinatte, Program Manager	USAID and USFS	<ul style="list-style-type: none"> • Commercial Promotion Agreement (TLC); • US support, which involved the creation of SERFOR and OSINFOR and the development of the Forest Law; • FOREST program; • Permanent Production Forests (Bosques de Producción Permanente) Project; • Forest Program; • Incentives for SFM; • Limitations to incentives.
Jan. 23 / 12:00	Erik Fischer Llanos, ADEX President; Alfredo Biasevich - President of the Wood Committee, National Society of Industries of Drago Bozovich - CEO, Maderera Bozovich	ADEX- Asociacion De Exportadores; National Society of Industries; Maderera Bozovich	<p>It was a joint meeting, involving the three institutions. Main subjects discussed:</p> <ul style="list-style-type: none"> • The role of private sector in the Ministry of Economy and Finance; • Economic aspects / incentives to the industrial forestry sector; • Limitations, including: <ul style="list-style-type: none"> - Regulation-related issues; - Illegal activities; - Corruption; - Infrastructure/ logistics; - Energy costs; - Lack of public procurement policies.
Jan. 23 / 15:30	Alba Solís, General Manager	FSC – Forest Stewardship Council	<ul style="list-style-type: none"> • Certified forest area in Peru; • Benefits of forest certification; • Risks associated with the forest sector; • Financing/loan limits.

Source: Compiled by STCP (2020).

Republic of Congo
Incentives for Green-Growth Value Chain Investments in Tropical Forests

August 10, 2020

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List of acronyms

ATIBT:	International Tropical Timber Technical Association (<i>Association Technique Internationale des Bois Tropicaux</i>)
CAFI:	Central African Forest Initiative
CAGDF:	Sustainable Forest Mngt Support Circle (<i>Cercle d'appui à la Gestion Durable des Forêts</i>)
CDA:	Community Development Area (<i>Série de développement communautaire</i>)
CIB:	<i>Congolaise Industrielle du Bois</i>
CNIAF:	National Centre for Inventories and Management of Forest and Wildlife Resources (<i>Centre national d'inventaire et d'aménagement des ressources forestières et fauniques</i>)
CTI:	Industrial Processing Agreement (<i>Contrat de Transformation Industrielle</i>)
EITI:	Extractive Industries Transparency Initiative
EU:	European Union
FAO:	United Nations Organization for Food and Agriculture
FFN:	National Forest Fund (<i>Fonds Forestier National</i>)
FLEGT:	Forest Law Enforcement, Governance and Trade
FLU:	Forest Logging Unit
FMU:	Forest Management Unit
FOB:	Free on Board
FOT:	Free on Trucks
FPIC:	Free, Prior and Informed Consent
FRA:	Forest Resources Assessment (FAO)
FSC:	Forest Stewardship Council
HCS:	High-carbon stock
HCV:	High-conservation value
HDI:	Human Development Index
IFM:	Independent Forest Monitor
IFO:	<i>Industrielle Forestière d'Ouessou</i>
IM:	Independent Monitoring
ITTO:	International Tropical Timber Organization
LS:	Legal Source Standard
MEF:	Ministry of Forestry Economy (<i>Ministère de l'Économie Forestière</i>)
MEFDD:	Ministry of Forestry Economy and Sustainable Development
MEFDDE:	Ministry of Forestry Economy, Sustainable Development, and the Environment
OLB:	Origin and Legality of Timber (<i>Origine et Légalité des Bois</i>)
PAFC:	Pan-African Forest Certification
PEFC:	Program for the Endorsement of Forest Certification
NTFPs:	Non Timber Forest Products
PGDF:	Sustainable Forest Management Platform
PNAT:	National Land Development Planning (<i>Plan National d'Aménagement du Territoire</i>)
PPECF:	Program for the Promotion of Certified Forest Operations (<i>Programme «Promotion de l'Exploitation Certifiée des Forêts»</i>)
PRONAR:	National Afforestation and Reforestation Program (<i>Programme National d'Afforestation et de Reboisement</i>)
SCPFE:	Department for the Verification of Forest Products for Export (<i>Service de Contrôle des Produits Forestiers à l'Exportation</i>)
SDAT:	Departmental Land Development Plan (<i>Schéma Départemental d'Aménagement du Territoire</i>)
SGS:	<i>Société Générale de Surveillance</i>
SNAT:	National Land Development Plan (<i>Schéma National d'Aménagement du Territoire</i>)
SNR:	National Reforestation Department (<i>Service National de Reboisement</i>)
UNDP:	United Nations Development Program
UPARA:	Pilot Unit for Management, Reforestation and Agroforestry (<i>Unité Pilote d'Aménagement, de Reboisement et d'Agroforesterie</i>)
VLC:	Verification of Legal Compliance
VPA:	Voluntary Partnership Agreement
ZES:	Special Economic Zone

Executive summary

The study identified the main incentives or disincentives affecting various major themes. Incentives are preceded by (+) and disincentives are preceded by (–).

Legal and regulatory provisions relating to land

- + Tree planting is conditional on land security, and this is promoted by the possibility of recognizing customary rights.
 - *However, the process of recognizing customary rights is associated with "land development", which may encourage users to replace the natural forest with crops to demonstrate such land development.*
 - *The lack of resources allocated to commissions in charge of recognizing customary rights keeps many communities in a state of legal insecurity, exposing them to land-grabbing operations that may also be harmful to natural ecosystems, including forests.*

Forest land legislation

- + Planting trees in the non-permanent forest estate is encouraged by the individual's right to exclusive enjoyment of the land planted and the ownership of the trees therein, subject (in particular) to the rights of third parties.
 - *Production forests have not been gazetted, so the permanent forest estate has not been established in law. This means that various administrative authorities have the potential to issue agricultural permits over forest areas.*
 - *The National Land Use Plan (Plan National d'Aménagement des Terres) has not been implemented and the Commission responsible for resolving issues of overlapping rights (mining vs. forestry) has not been operational.*

Institutional framework

- + The creation of a financial mechanism, the Congo Basin Blue Fund (*Fonds Bleu pour le Bassin du Congo*), to address the nexus between water resources and forests.
 - *The separation of ministerial powers over forests on the one hand, and over the environment on the other, undermines the consistency of government action on major issues such as the issue of peat lands or international negotiations on climate and biodiversity.*
 - *The inadequacy of inspection, supervision and environmental policing functions.*
 - *The continued unreliability of the Ministry in charge of forests' annual budgetary allocations (irregular or delayed payments) does not allow administrations to properly fulfill their mission to support sustainable forest management.*

Management standards for production forests

- + Management standards in the Congo are rigorous and fairly comprehensive.
 - *The requirements of management standards are focused on the timber resource and place only modest emphasis on biodiversity. More specifically they do not require the development of wildlife management plans.*
 - *The process whereby the administration validate development plans is often too long.*
 - *The minimum replenishment rate for marketable tree species is established for the first cutting cycle, but Development Standards do not address the issue of sustainability beyond the first cutting cycle. As it stands, tacit renewal of the target of replenishing 50% of the volume from one cutting cycle to another may seem incompatible with the objective of sustainable yield.*
 - *Current national standards, particularly the Industrial Processing Agreements (Contrats de Transformation Industrielle — IPAs), do not take into account other production forests.*

Current state of certification

- + Independent surveys conducted by researchers have shown that FSC (Forest Stewardship Council)-certified Congolese companies (certification of "forest management") have obtained convincing results in the social arena, in terms of anti-poaching and wildlife management.

- + Certification provides a guarantee of correct implementation of development plans and “forest management” certification encourages companies to go beyond legal standards on development and specifications.
 - *Certified companies face unfair competition from other forest companies that only partially comply with regulations (development, processing, social aspects of specifications, etc.), and this undermines their economic position.*

Current state of community forestry

- + The forestry policy document of the Republic of Congo (2014) proposes innovative avenues for involving local communities in the co-management of forest concessions on the basis of the recognition and acknowledgement of their user rights, while also allowing the possibility of autonomous utilization and management of timber resources.
- + The obligation to form community development areas within the framework of forest management plans constitutes a step forward in participatory management, although the principle of acknowledging customary rights throughout the concession, as referred to in the 2014 Forestry Policy, has not yet been implemented.
 - *The absence, prior to the Forestry Law 33-2020 of 8 July 2020, of the possibility of establishing autonomous community forests (which could be concessions benefiting local communities) apart from industrial concessions, when these forests could be a controlled source of supply for small-scale sawmillers, was an issue. The new forestry law amends this situation by providing the opportunity for local communities to apply for a community forest on their own initiative. However, the limits of concessions will need to be modified to allow space for this autonomous community forestry. It will be possible to revise the limits of concessions when proceeding with the gazetting of Forest Management Units (FMUs).*

Governance and sanctions system

- + The establishment by Congo, at the initiative of the government in the 2000s and then as part of the Voluntary Partnership Agreement (VPA), of an Independent Forest Monitoring (IFM) is a very favorable measure for sustainable management.
- + The signing of a VPA between Congo and the European Union (EU) is a very positive element for improving forest governance.
 - *Inadequate enforcement of the regulatory regime, particularly as regards non-compliance with forest management plans, is a major issue.*
 - *The insufficiently dissuasive nature of the sanctions and the absence of a system of joint liability between the contractor companies and the subcontractors do not allow for capitalizing on independent monitoring.*

Forest taxation

- + Tax differentiation (Free on Trucks (FOT) value) is in principle favorable to a better distribution of the operational effort across all territories.
- + Congo’s approach towards including the timber sector in the Extractive Industries Transparency Initiative (EITI) has led to a better knowledge of the State’s forest tax revenues and the payment declarations of certain companies. *However, only one company published detailed payments, and some companies simply reported an overall sum of taxes paid, with no breakdown. The vast majority of companies have not reported any data.*
 - *The fact that the felling tax rate is the same for all tree species does not encourage any limitation on the overlogging of some of the main timber species marketed in favor of secondary species, which could benefit from a significant reduction in the rate.*
 - *The obligation for each company to process 85% of its timber production is not a guarantee of sustainable management or optimal valorization of resources. A maximum annual export volume of logs established nationally could replace this requirement by allowing companies to specialize more or less in processing: a domestic market for logs would allow logs to be allocated to the most efficient processing companies. Export quotas for logs could be either sold at auctions or allocated to certified companies.*
 - *The practice of granting tax rebates for carrying out work contravenes the transparency required when collecting tax revenue, and may reduce the financial resources determined by*

the Finance Laws (even though there is no direct allocation of forest taxes to the National Forest).

- *Parafiscal taxation and certain levies, such as the data processing fee (redevance informatique), have assumed considerable importance. This increases tax pressure on businesses, without any incentivizing aspect.*

Comments on the new forestry law (no 33-2020 of July 8, 2020)

The new law includes some interesting features for promoting sustainable management. These include:

- The obligation for forest concession holders to be certified. It should be understood as referring to "forest management" certification (of an FSC or Pan African Forest Certification [PAFC] type) or to certification of legality. Companies will have to "*certify the management of their managed concessions or the legality of the products harvested and processed therein*" (Article 72). The law also mentions the possibility of acknowledging private certification for verifying legality (Article 65) and the implementation of a national forest certification system (Article 70).
- The possibility of acknowledging a community forest "*with a local community being responsible for the initiative leading to its establishment and sustainable management*" and the acknowledgement as a community forest "*of the natural forest located on the land of a local community and indigenous peoples [and] has been classified in their favor*" (Article 15). Article 18 states that once established, the community forest "*is included in the permanent forest estate*".
- The introduction of an agreement for the valorization of forest plantation timber (Article 118).
- The institutionalization of Independent Monitoring to support operations for controlling forest logging (Article 69).
- The introduction of the concept of prior consent of populations and civil society organizations regarding the gazetting of forests: "*forest gazetting obeys the principle of free, prior and informed consent of the populations affected by the planned gazetting and the principle of consulting civil society organizations in the district concerned.*" (Article 40).

The new law also introduces more questionable innovations, whose effects on sustainable forest management could be negative, and which have not been the subject of a prior impact assessment.

- The introduction of a production-sharing principle, that is, the obligation for companies to deliver physical quantities of logs to the State, can probably be explained by the Government of Congo's desire to establish free zones for the processing and export of timber, similar to the Special Economic Zone in Gabon. As some industries that are expected to set up in this free zone will not necessarily have forest concessions, the delivery of timber to the State (or an operator it controls) must enable it to meet the raw material supply needs of the industries in this/these future free zone(s).
- The feasibility of transposing a mechanism used in the oil sector to the forestry sector, which has not been tried in other countries so far, may be questionable.
- Some certified companies have invested in industrial units for turning almost all timber production into logs. *An obligation to deliver a percentage of logs could result either in difficulties supplying the processing facilities (with the resulting economic consequences), or in an incentive to increase the volumes harvested in order to both supply the processing facilities and deliver the required quantities of logs to the State.* This would be detrimental to sustainable forest management.

Providing incentives to certified companies

By promoting long-term management of forest resources and natural capital maintenance, certification contributes to the sustainable development of forest areas. The benefits of certification may be considered to be public assets. Certification is being used increasingly in public policies: in Gabon, FSC certification will become mandatory for concessions from 2022 onwards, and in Congo the new forestry law requires certification of the legality of concessions). It may then be legitimate for market incentives to be replaced by government incentives and subsidies for the adoption of certification, forest management certification in particular. In July 2020, Gabon adopted an Amending Finance Law to revise area tax rates on forest concessions (previously fixed at FCFA 400/ha for all concessions) as follows:

- FSC or PEFC/PAFC certified concessions – FCFA 300/ha
- Concessions with legality certificate – FCFA 600/ha
- Uncertified concessions – FCFA 800/ha

Aid may be provided through legality criteria in public procurement for timber. Moreover, certified timber could benefit from a “priority track” to reduce loading times during customs clearance procedures.

Congo might also consider a tax-cutting mechanism. The "business model" of certification is based on "price premiums". As the premiums associated with certified timber are often not high enough, given the diversity of markets and their uneven maturity, incentives could be provided at production level, either by subsidizing certified firms or by cutting costs. Reducing costs through tax cuts would not only complement the commercial incentive for certification, but would potentially attract a new category of concession holders, namely those whose outlets are in markets that are not overly sensitive to certification.

Full financial compensation for the government’s tax revenue foregone over a number of years would be sought from development partners, including the Central African Forest Initiative (CAFI), which does not have a specific instrument for this type of compensation scheme, despite several donors having shown interest in the concept.

1. Context of the study

“Sustainable Wood for a Sustainable World” (SW4SW), adopted in 2018, is an initiative of the Collaborative Partnership on Forests (CPF) and is jointly led by the Food and Agriculture Organization of the United Nations (FAO), the International Tropical Timber Organization (ITTO), the World Bank Group, the Centre for International Forestry Research (CIFOR) and the World Wildlife Fund (WWF).

The overall aim of this initiative is to strengthen sustainable timber value chains to improve their social, economic and environmental benefits from production to consumption. In particular, the initiative aims to strengthen the contribution of sustainable timber value chains to achieve more effectively the Sustainable Development Goals (SDGs) and objectives associated with combating climate change.

A work program has been developed to achieve these objectives, the activity: “**Incentives for Green-Growth Value Chain Investments in Tropical Forests**” is facilitated by funding from the Government of Germany. The German Federal Ministry of Food and Agriculture (BMEL) has provided the ITTO with project funding for promoting and operationalizing legal and sustainable supply chains (LSSCs). This activity is a step toward the assessment, formulation and proposal of tax and non-tax incentives, subsidies and other macroeconomic tools for strengthening investment in tropical production forests in order to meet the growing challenges of supply and demand for certified timber in the future.

By proposing and carrying out this action, the ITTO is assisting member producer countries with identifying channels and participating in legal and sustainable supply chains that are becoming increasingly important given the proliferation of initiatives to combat deforestation taken by large companies and government entities.

The project aims to provide an analytical vision of the complexity of incentives, including it in the dynamics of supply and demand, and to improve the capacity of ITTO producer member countries in developing and implementing effective and successful incentives for the sustainable development of their forests.

1.1 Description of the activity (extracted from consultants' Terms of Reference)

- (i) Review the current national framework for sustainable forest management in the country, the national land-use plan, and identify existing incentives for sustainable forest management and "zero deforestation" agricultural commodities in government policies.
- (ii) Identify what might be considered as dissuasive elements for "compliant economic actors", which could be removed by changes in the regulatory or administrative framework.
- (iii) Review, describe and simulate the costs and potential impact of tax incentives (multiple scenarios) in favor of "sustainable wood" and deforestation-free products.
- (iv) Consider, describe and assess the potential impact of the non-tax incentives that could be expected (e.g. duration of concessions, priority tracks for export, etc.)
- (v) Organize a three-day training session on the economic instruments for sustainable forest management and the green economy.
- (vi) Engage in dialog with policymakers (executive and parliamentary), non-government organizations (NGOs) and industry organizations about the extent they consider feasible and about the type of policy mix (introduction of incentives, removal of dissuasive measures) that would be most appropriate.

1.2 Expected outcomes

A. An initial report ("Report 1") comprising:

- A review and comparative analysis of national sustainable forest management frameworks;
- An overview of the legal frameworks of land tenure and their likely influence on forest management;
- An overview of the national land use planning process, including an analysis of the procedures for establishing permanent forest estates (publication in the official journal, registration, etc.), national Reducing Emissions from Deforestation and Forest Degradation (REDD+) strategies and development policies;
- A presentation and analysis of the structure of forest taxation, the revenue collected and reported (transparency);
- A three-day training session on economic instruments for sustainable forest management and the green economy targeting officials from the main ministries (forests, environment, agriculture, land use planning, economy and finance) and members of Parliament;
- An analysis of existing incentive/disincentive measures for sustainable forest management and deforestation-free products;

- A summary of the commitments made by private sector companies: the needs and motivations of major companies will be examined, as well as their expectations in relation to any incentives introduced and the deterrent measures that should be removed;
 - A set of proposals concerning tax and non-tax incentives that could be introduced and disincentives that could be removed. Tax measures will be quantified and their impact on the national budget will be discussed.
- B. A final report ("Report 2") containing recommendations on desirable and realistic combinations of measures (tax and non-tax, incentives and disincentives) will be submitted for proposal.

2. History of the use of forest resources

Congo has two distinct geographical and climatic zones, the North and the South. Forest cover is highly discontinuous and heterogeneous and includes land-based forests (45% of the territory) and flooded forests in the Congolese basin (20%). These forests play a major ecological and socio-economic role.

The natural forest covers almost 65% of the country and represents about 22 million hectares (ha) (according to FAO criteria). It is divided into two large forest complexes, the North forest complex and the South forest complex (Mayombe and Chaillu), separated by vast expanses of savannas in the center of the country. However, much of this forest cannot be considered productive. In the North forest complex for example, out of 15 million hectares of forests, nearly 60% (or 9 million ha) is located in flood-proof zones and is therefore exploitable. Taking into account the presence of existing national parks, the productive forest is estimated at about 10 million ha over the whole country, distributed as follows:

Two thirds are located in the northern forest sector (departments of Sangha, Likouala, the Cuvette centrale and the Cuvette ouest). This forest is rich in red wood, tree species of great commercial value, mainly meliaceae (Sapele: *Entandrophragma cylindricum*, Sipo: *Entandrophragma utile*, Bosse: *Guarea* or *Leplaea cedrata*, etc.) and Leguminosae (doussie: *Afzelia Africana*, wenge: *Millettia laurentii*, etc.). For a long time it remained an area free from logging. Since the 70s and speeding up in the 1990s, this forest complex has been the subject of more systematic logging. For a long time access to the forest complex in this region was limited, but it is now linked to Brazzaville, firstly as a result of the action of logging companies that had made a commitment to establish the "Likouala loop" (as part of a protocol signed in 2006 with the Ministry of Forestry) followed by the Ouessou-Owando-Makoua link, largely created by the Government and supported by Chinese cooperation. The *Congolese Industrielle de Bois* (CIB) logging company has constructed almost all the secondary roads in Sangha and some of the secondary roads in Likouala. Prior to the Likouala loop, CIB established a link to Cameroon due to difficulties in transporting timber out of Brazzaville by water and land, particularly during the political-military hostilities of 1997, 1998 and early 2000. Logging in the North forest sector has remained highly selective and concerns only a very limited number of species whose commercial value is high enough to cover transportation costs. Much of the forest in the North zone is being overtaken by logging (and mining), but the majority of FMUs are in the first rotation cycle as part of the management plans¹. The frequency of large diameter trees in this area is therefore relatively high.

The other third of the natural forests is located in the South forest sector (Kouilou, Niari and Lékoumou departments). This area contains the Mayombe forest complex, originally rich in Limba but which has undergone numerous logging operations since colonial times. The Chaillu forest complex, rich in Okoumé and heavily logged since the 60s, lies on the boundary with Gabon. As a result, all the forest complexes in the South are severely degraded, overlogged and large diameter species have become rare. This trend is very marked in Kouilou, the department closest to Pointe Noire, where a large proportion of illegal logging activities are concentrated. This contrasts with the North area where there are several large-scale forest concessions operated by internationally-owned forest operators. Forest concessions in the central and southern parts of the country are smaller and partly run by domestic operators, who often outsource their licenses to Asian companies.

About 4% of the productive surface is found in the central region and is only of limited interest due to its relatively isolated situation and marked remoteness from both the port of Pointe Noire and the exit routes of the North.

3. Basic statistical data

According to the PopulationData.net website, the population of Congo stood at 5.3 million in 2018, with a very high annual growth rate of 3.68%. The density is 15.45 inhabitants / km².

¹ Prior to the management plans, however, the concessions were subject to more or less extensive selective logging.

The rural areas of the South are relatively densely populated (between 5 and 40 inhabitants/km²), with the maximum being reached in and around the Boko (Pool) area. In contrast, densities in the northern part of the country most often lie between 0 and 2 inhabitants/km², particularly in the swamps of the north-east.

Gross Domestic Product (GDP) per capita is US\$2,148, making Congo a lower middle-income country. Due to a concentrated and poorly distributed rent-based economy, its human development is moderate (137th out of 189 worldwide and 13th in Africa in 2018, according to the United Nations Development Program (UNDP), with a Human Development Index (HDI) of 0.591) and inequality remains high (Gini coefficient of 0.46) with a poverty rate of over 35%. The Congolese economy relies almost exclusively on oil, which accounts for 1/3 of the GDP, 2/3 of budgetary revenues, and 85% of export revenues².

Congo is not favorably ranked in the governance indicators proposed by international bodies: 180th (out of 190 countries examined) in the World Bank's "Doing Business" ranking³ and 165th (out of 180 countries) in the Corruption Perception Index developed by Transparency International⁴.

3.1 Forest cover rate and deforestation

Congo is a country with dense forest cover and low deforestation, according to the characterization adopted in REDD+ debates. According to the FRA 2020 report produced by the FAO⁵, the average net deforestation rate for the period 2010-2020 is 0.06% with an average net annual loss of 12,900 ha over the period, with the area of forest dropping from 22,075 million ha to 21,946 million ha.

The figure below shows the forest cover rate by Department.

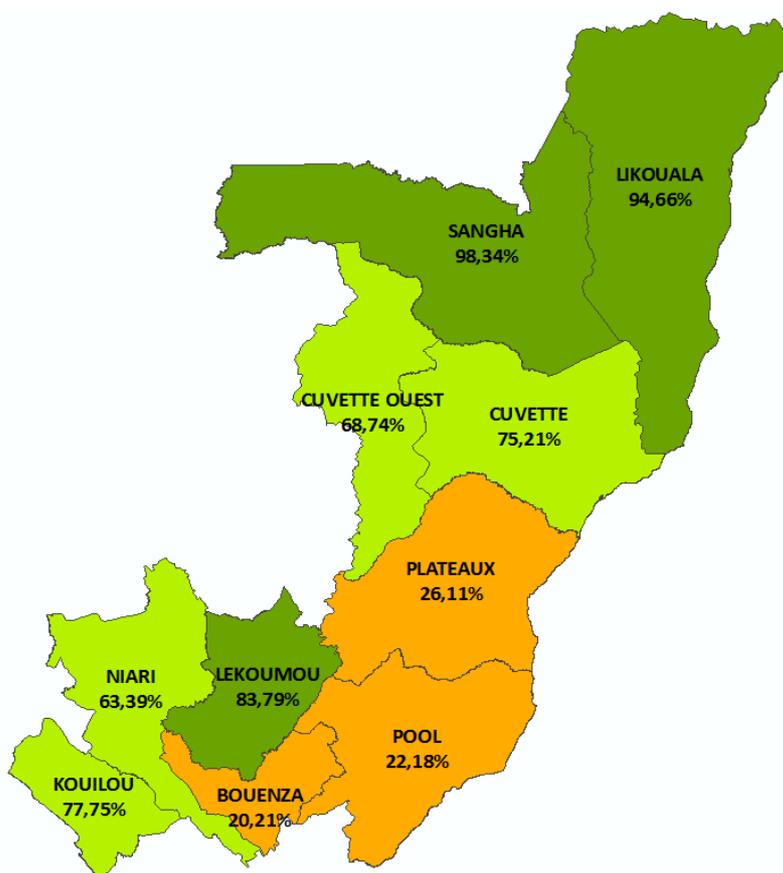


Figure: Forest cover rate (source: BRLi study, 2014)

² <https://www.tresor.economie.gouv.fr/Pays/CG/indicateurs-et-conjoncture>

³ <https://www.doingbusiness.org/content/dam/doingBusiness/country/c/congo-rep/COG.pdf>

⁴ <https://www.transparency.org/en/countries/republic-of-the-congo#>

⁵ FAO. 2020. Global Forest Resources Assessment 2020: Main report. Rome. <https://doi.org/10.4060/ca9825en>

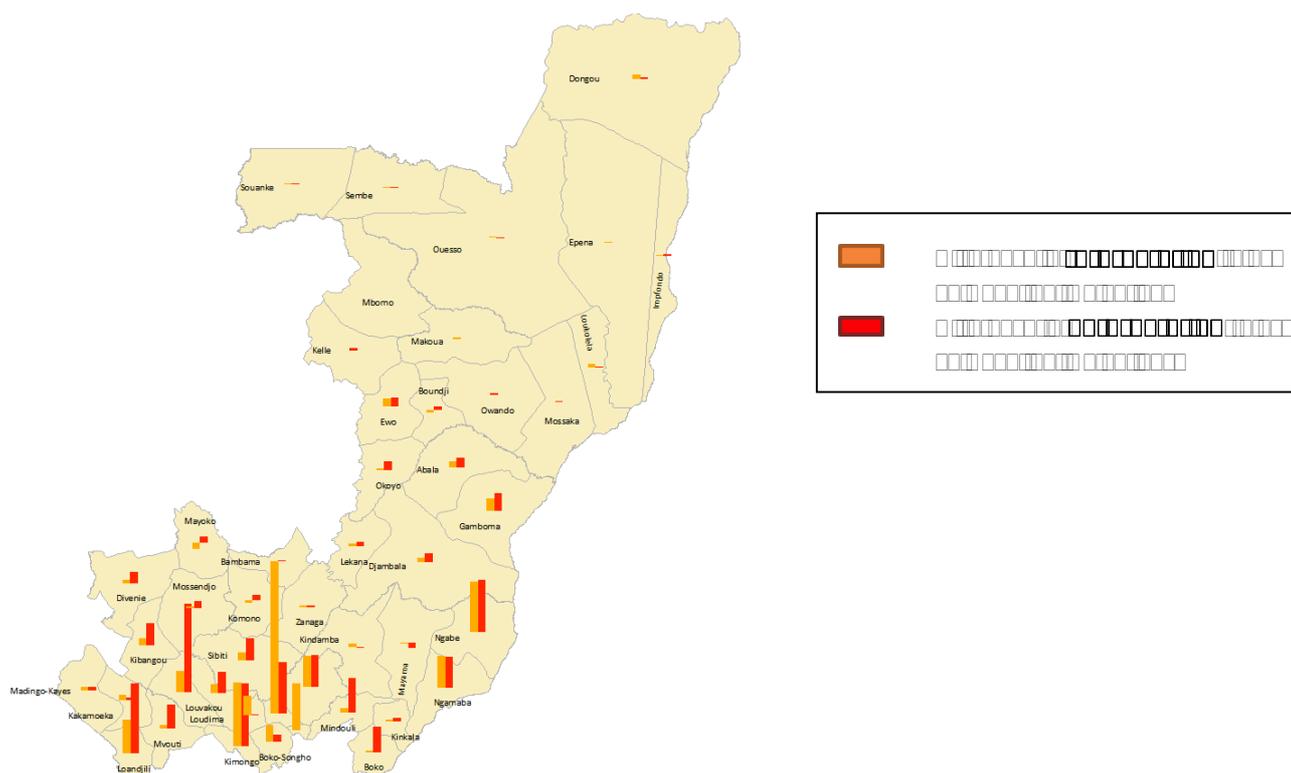


Figure: Deforestation/reforestation rates over 1990-2000 and 2000-2010 periods (source: BRLi study, 2014)

According to the BRL Ingénierie (BRLi) study (2014)⁶, the gross rate of deforestation increased between the periods 1990-2000 and 2000-2010, going from 0.58% to 0.77%, respectively. The same applies to net deforestation, which increased from 0.33% in 1990-2000 to 0.47% between 2000 and 2010.

Only three Departments show a declining rate of gross or net deforestation: Sangha, Likouala (the two northern Departments, from which the majority of industrial timber production originates), and Bouenza. Deforestation has more than doubled in some Departments. This rate of deforestation is very low; however its rapid growth is becoming a concern in the Departments of Pool, Niari, Kouilou, Lékoumou and in Plateaux, i.e. in the southern and central forest areas.

Overall, across the country, from 1990-2000 to 2000-2010, according to the results of this data, **forest conversion into cultivated areas was the main cause of deforestation**, with 58.66% of total losses between 1990-2000 and 78.44% of total losses between 2000-2010, respectively, namely an increase in the agricultural factor between the two periods. In second place comes forest loss due to **the establishment of permanent or non-permanent human settlements**, i.e. 20.04% for both periods and 15.28% of total forest area losses.

However, charcoal production and firewood harvesting is a factor which is on the rise.

3.2 Forest concessions

Forest concessions constitute the method of forest logging further to an agreement between an investor and the forest administration. The majority of concessions are held by foreign capital. The largest forest company (nearly 2 million ha over several concessions, located in the Departments of Sangha and Likouala), the CIB, is owned by the Singapore-based multinational, Olam. Another large company (approximately 1.2 million ha), IFO, is owned by the Swiss-based Interholco group. Next are large Asian companies, mainly located in the south of the country: Taman Industry (Malaysia), SICOFOR (China), Asia Congo Industry (China). Other Asian companies operate in the central and northern parts of the country, namely: Wang Sam Resources (China) owning 706,000 ha in the Department of La Cuvette, CDW (China), SEFYD (China), Thanry-Congo (China HK). There are also two Lebanese companies, SIFCO and BPL, in the same part of the country.

The Rougier Group (France) owns Mokabi SA, which has a concession in the north of the country. Other European or Lebanese operators of lesser importance operate in the south or north of the

⁶ BRLi, 2014. Étude de la spatialisation et de la pondération des causes de la déforestation et la dégradation forestière et analyse des options stratégiques, proposées par le R-PP de la République du Congo, MEFDD-CN REDD+, Republic of Congo.

country. In general, Asian operators dominate the landscape. CIB-OLAM is the only company controlled by Asian capital with FSC certification. Prior to its acquisition by OLAM in 2010, CIB had been owned by German and then Danish interests. Other Asian companies are characterized by deficient or ineffective management, with priority being given to the exportation of logs (despite regulations that require 85% of its production to be processed or for export quotas for logs to be purchased from other firms). It should be noted, however, that the Tama company (Malaysia) has held Origin and Legality of Timber (*Origine et Légalité des Bois*—OLB) certification since 2017.

The average area allocated per operator is close to 400,000 ha, with wide disparities. Concessions in North of Congo are larger than those in the South. CIB (OLAM Group) and IFO (Interholco) each manage over one million ha (almost two million for CIB over five concessions and one million two hundred for IFO in one concession). SEFYD (north Congo) operates two concessions (Jua-Ikié and Karagoua) of approximately 1.2 million ha. Mokabi SA (Groupe Rougier) operates over 586,000 ha in one concession and Likouala Timber over 596,000 ha in two concessions.

4. Legal and regulatory framework

4.1 Forestry law

Act N° 16-2000 of 20 November 2000 establishing the Forest Code regulates the management and use of forest resources in the Congo. The purpose of the act is to define the national forest estate and to determine criteria and standards for collaborative and participatory organization and management, reconciling the use of forest products with the requirements of conserving the forest heritage and biological diversity with a view to sustainable development.

This legislation has been supplemented by six implementing texts (Decree 2002-437 of 31 December 2002, laying down the conditions for the management and use of forests, Decree 2002-433 of 31 December 2002 on the organization and operation of the Water and Forests officers, Decree 2002-434 of 31 December 2002 on the organization and operation of the National Forest Fund, Decree 2002-435 of 31 December 2002 on the powers, organization and operation of the National Centre for Inventories and Management of Forest and Wildlife Resources (*Centre National d'Inventaire et d'Aménagement des Ressources Forestières et Fauniques*—CNI AF), etc.) and a large number of Orders concerning national guidelines for the sustainable management of forest concessions; the establishment, definition of forest management or logging units, the procedures for gazetting and ungazetting forests, forest taxation, etc.

Certain provisions of Law 16-2000 were amended by Law 14-2009 of 30 December 2009. The latter introduced the calculation of the felling tax and the export tax on the basis of the Free On Truck (FOT) value, rather than the Free On Board (FOB) value, in order to take into account the average transport costs that vary from one zone to another. From now on the tax calculated on the basis of the surface area is applied to the production area for managed concessions and to the entire area of the concession for the others (incentive measure to avoid delaying completion of the management plan). Finally, it is now possible for businesses to transfer logging export quotas of 15% of a company's total production between companies, after approval by the Forest administration. However, this transfer has never been used, as companies are still obtaining log export permits in excess of quotas.

A new forest act has just been published. This is Act No 33-2020 of 8 July 2020 establishing the Forest Code, and the changes it introduces have been analyzed in Section 13 of this report.

4.2 Land-related laws

Currently the mechanism is based on a series of texts, including Law No 9-2004 of 26 March 2004 establishing the State-Owned Property Code, Law No 10-2004 of the same date laying down the general principles applicable to estate and land tenure regimes, and also the earlier Law No 17-2000 of 30 December, 2000 pertaining to the regime of land ownership in the Congo.

- **Public estate:** This can belong to the State or to decentralized authorities. It therefore includes natural public property and man-made public property, with all of these dependencies being subject to the legal regime characterized by inalienability, unseizability and imprescriptibility. This estate may be occupied as a result of allocation or express occupational authorization, with the terms and conditions of this occupation being established by a specific decree, No 2005-515 of 26 October 2005. The ministry in charge of land reform is also specifically responsible for the "preservation of public property".
- **Private estate:** All real property registered in the name of the State or the authorities, and vacant and ownerless property.
- **Land ownership:** This involves registration of the land and real rights, starting with registration of property, according to appropriate procedures for discharging prior legal situations thus making registration of these rights indisputable. In order to have a real legal existence, the rights over buildings must be recorded in the land register held by the Registrar of Mortgages and Land Ownership. Only real rights over buildings, i.e. over the ground, can be registered in the land register. This procedure for recording property rights constitutes

registration. Although Article 10 of Law No 17-2000 makes registration compulsory, the number of people who have registered their land rights is limited. It is estimated that under 10% of the land is registered, with the majority being located in urban areas.

- **Customary land rights:** Provisional certificates of ownership can be drawn up on the basis of customary land rights. The problem is that these provisional documents are designed to be converted into land titles after land registration, and this can only take place after the land has been developed. So it is not really a question of validating customary land rights as such, employing a specific, more or less decentralized mechanism and procedure, but more simply of situating them under the common law of land ownership, based on the registration procedure.

For these rights to have a legal existence, they must be "recorded" and "acknowledged", two distinct steps.

- This recording was a matter to be determined by an *ad hoc* commission in charge of recording customary rights, up until Law No 21-2018 of 13 June 2018 laying down the rules for the occupation and acquisition of territories and land. The commission hears the relevant witnesses. The applicant may establish proof by any useful and relevant means, such as judicial decisions, authentic documents or private deeds. It is necessary to provide "*evidence of actual development over at least thirty years and evidence of clear and permanent occupation or right of way can be provided by witnesses*".
- Acknowledgement: An *ad hoc* body in charge of acknowledging customary land rights was to be established by a decree of 2006. "*The ad hoc commission for the acknowledgment of customary land rights may not issue a provisional certificate of ownership for land or plots whose area exceeds 100 ha*" (Article 4, Decree No 2006-255). At the end of this procedure, applicants may obtain provisional certificates of ownership which may then be converted into definitive title deeds. Very few provisional certificates of ownership and land titles have been issued, because commissions have not received the financial resources to operate.

Law No 21-2018 of 13 June 2018 establishing the rules for the occupation and acquisition of land and plots replaces these specific commissions for recording and acknowledging customary land rights by a national commission for the acknowledgement of customary lands. Law No 21-2018 obliges the holders of customary land rights to proceed to have their land rights acknowledged by the State and makes such acknowledgment a prerequisite for enjoyment of this land. Customary land acknowledged by the State is registered and constitutes undivided co-ownership of land. The law provides for sanctions for individuals who fail to comply with these provisions and establishes "*the systematic registration of customary lands by the State*" in exchange for the surrender to the State of 5% of the land area acknowledged "*corresponding to land registry fees and the establishment of land title*".

In practice, as in other countries in Africa, land is controlled by "customary owners", the descendants of the first settlers, who distribute plots to various applicants, locals or "outsiders" to the region, either free of charge or for one-off or recurring payments. However, land entrusted to others by customary owners may, in general, only be used for annual crops, with the planting of trees (especially fruit trees) and perennial crops often prohibited, in order to avoid land appropriation procedures being implemented by users.

Incentive/disincentive aspects of legal and regulatory land provisions:

- + The possibility of acknowledging customary rights encourages land tenure security, which is a condition for tree planting.
- *However, the process of acknowledging customary rights is associated with "land development", which may encourage users to replace the natural forest with crops as testimony to this development.*
- *The lack of resources allocated to commissions in charge of acknowledging customary rights keeps many communities in a state of legal insecurity that exposes them to land-grabbing operations that may also be harmful to natural ecosystems, including forests. Whether Law No 21-2018 will address this deficiency or whether its application will be hindered, through lack of resources, remains to be seen.*

4.3 Logical framework for the gazetting of forest land in the Congo

The logical framework for the gazetting of forest land, which can be reconstructed on the basis of both former Law 16-2000 and Law 33-2020 establishing the Forest Code, does not always make a clear distinction between entitlement to land *uses* and its ownership. This stems from the presumption of State ownership of land involving the vast majority of natural forests (excluding private plantations).

A particular conception of the public estate is evident in the outline adopted: indeed, in the legal tradition inspired by French law, public estate cannot be transferred (except for reasons of public utility), unlike private estate; in the Congo, however, private plantations can be established from deeds

in the public estate, which amounts to a transfer in favor of a private person since even trees which have not been planted become the property of the operator⁷. In Cameroon (as in other African countries), legislation has provided for a specific category (national estate, which can be equated with a shared national heritage) that allows this difficulty to be circumvented. In the absence of this mechanism, Congolese legislation accepts that at least part of the public estate's wooded resources can be transferred, leading to the establishment of private plantations.

The two Articles (36 and 37) of the 2000 Forest Code that blend together this singular position are particularly interesting and innovative in the context of the sub-region: the planter acquires the exclusive, transmissible enjoyment (subject to third-party rights), but not ownership, of the land. This right ceases when the land is abandoned or cleared. Consequently this provision potentially creates an incentivizing framework for private/farming plantations.

Table 1: Testing of a logical framework for gazettement different forest categories in the Congo

National forest estate					
<i>(Land use and ownership)</i> State Forest Estate (*)				<i>(Land use and ownership)</i> Forest land owned by private persons	
<i>(Land use)</i> Permanent Forest Estate			<i>(Land use)</i> Non-permanent Forest Estate (public estate, non-gazetted protected forests)	Private plantations...	Private forests
<i>(Land ownership)</i> Private State Estate (should be gazetted)	<i>(Land ownership)</i> Private Estate of local or territorial authorities (gazettement, planting or transferring)	<i>(Land ownership)</i> Private Estate of public persons	<i>(Land ownership)</i> Public estate	(...which may come from the public estate)	

(*) "*Falls within State jurisdiction*", Article 4. The law carefully avoids talking about State ownership, that is to say, it retains a concept of State-owned land closer to the idea of the shared heritage of the Congolese, consistent with the idea that individuals can create property rights through certain forms of development (in this case planting).

The main issue is that in order to be legally valid the permanent forest estate need to be gazetted according to procedures specified in the Forest Code (notably: "*the gazettement of a forest follows the principle of free, informed and prior consent of the populations concerned and the principle of consulting the civil society organizations in the district concerned*" (Law No 16-2000) and specified by Decree No 6509 of 19 August 2009 specifying the terms and conditions for gazettement and ungazettement forests. However, production forests that should be part of the permanent forest estate have not been gazetted⁸.

Similarly, the constitution by law of private State estate (and the private estate of local authorities) should involve registration, in accordance with the provisions of the land law. Again, this procedure has not been initiated. Private State estate grants the Congolese State exclusive private ownership and makes it the only party authorized to sign commercial contracts (agreements) with third parties for the commercial use of resources.

4.4 Absence of a national land-use plan

One of Congo's issues is the overlapping of utilization rights, particularly between mining and forestry. There are two separate "land registers", one – the mining land register – consisting of exploration permits and mining licenses, and the other – the forest register – consisting of forest logging agreements. The Ministry of Energy and Mines also offers operators oil and mining blocks. As in most countries, mining rights have political priority over forest management rights.

⁷Article 36: Any natural person, of Congolese or foreign nationality, or legal person under Congolese law, who plants forest trees on land falling within the non-permanent forest estate, acquires the exclusive enjoyment of the land planted and the ownership of the trees therein, subject to:

- the rights of third parties;
- the number of trees planted exceeding that of trees not resulting from planting
- the boundaries of the land planted being clearly marked out physically.

Article 37: Rights acquired under the provisions of Article 36 above shall be transferable in accordance with the law. They shall cease with land clearing, abandonment or decline of the stand (...)

⁸ See Client Earth, "Le Cadre légal de conversion des terres en République du Congo", June 2015, UKAid.

In the Congo, Law No 10-2004 of 26 March 2004, establishing the general principles applicable to estate and land tenure regimes, devotes a chapter to the assessment, gazetting and allocation of areas of land. This chapter indicates that the State is empowered to proceed to allocate land via procedures for the identification, delimitation, assessment and gazetting of land. Allocation of land takes place throughout the territory, i.e. over rural, peri-urban and maritime lands as well as subsoils, whether or not these lands are privately owned.

On the other hand, the law specifies that the use of areas must take account of the general allocation of land space in four main areas: urban areas (allocated to housing, commercial and industrial activities), peri-urban areas (for various crops), rural areas (divided into three categories, for agricultural, forestry or mining purposes) and maritime or river areas. Decree No 2019-133 of May 31, 2019, submits land allocations for prior approval of the Interministerial Committee for Land Use Planning and Development (*Comité Interministériel d'Aménagement et de Développement du Territoire*).

However, no National Land Development Planning (PNAT) or other land-use planning document for allocating land has been compiled since this law was issued. Yet the implementation of a “draft multi-resource forest inventory for developing a national land allocation plan” clearly illustrates the government’s willingness to develop such a plan in a coherent manner based on the valorization of existing resources.

Only a National Territorial Development Plan (SNAT) was drawn up in 2005 under the auspices of the Ministry of Land Planning and Development. The SNAT represents the first level of spatial planning in the country. It sets out a diagnosis of the territory of the Congo, both geographical, institutional, and economic; it essentially defines Congo’s major priorities in terms of infrastructure, communication, and use of natural resources; and finally it proposes a strategic vision for the economic emergence of the Congo in 2025.

The SNAT indicates that “*the destruction of forest areas should be avoided, and legislative mechanisms will accurately define the procedures for obtaining advance permits for deforestation, even outside forest land*”. While the SNAT provides guidelines for the various business sectors, it does not replace the PNAT, which is designed to plan land use at the national level in much greater detail.

In 2009 an "Interministerial Consultation Committee" was established to address conflicts of use in natural ecosystems. The Committee is responsible for the harmonization of overlapping uses in natural ecosystems. In principle the Prime Minister of Congo chairs the Committee, which is composed of several ministers, including those responsible for the forestry economy, the environment, mining, hydrocarbons, land use planning, land affairs and agriculture. However, the post of Prime Minister has been abolished in Congo since 2009 and the Committee has never really been operational. The current structure of the government again includes a prime minister, but despite this the interministerial committee is still not functioning.

The Letter of Intent signed by the Republic of Congo with the Central African Forest Initiative (CAFI) in 2019

The Letter of Intent (LoI) signed between CAFI and the Government of the Congo as part of the funding of the REDD+ National Strategy Investment Plan (September 2, 2019) provides for:

- Defining and implementing a land-use policy that ensures the protection and sustainable management of forest cover and peatlands.
- A commitment "*not to convert and to sustainably manage high-carbon stock (HCS) and high-conservation value (HCV) forests that will be defined in consultation with all stakeholders*". Specifically, the Congo is committed not to convert more than 20,000 ha per year, except in areas with high carbon stocks and high conservation values. The agreement also provides for “*Establishing and implementing land-use plans that promote the protection and sustainable management of peatlands and prevent their drainage and drying out*”.
 - o However, a note states that "*exceptionally, the conversion of HCS and HCV forests could occur in the case of the development of infrastructure and extractive industries, outside the agro-industrial sector, which are considered of vital interest to the national economy, ensuring that these activities meet the principles of carbon compensation and/or biodiversity*".
- “*Introducing a permanent ceiling on the area of non-HCS/HCV forests available for conversion of forest land to other uses and ensuring that these activities meet the principle of compensation (carbon and/or biodiversity)*". This permanent ceiling has not been defined to date.
- The LoI sets out the objective of "*Developing, adopting and implementing a PNAT, a SNAT and Departmental Land Development Plan (SDAT) which organize and optimize land use by the various national economic sectors*"
- Finally, the goal mentioned by the LoI is to “*Establish a crossover land register (mining register, oil register, agro-industry register, forest register) in order to avoid an overlap of conflicting land uses.*”

Incentive/disincentive aspects of forest land legislation

- + The planting of trees is encouraged through the right, over the non-permanent forest estate, for an individual to have exclusive enjoyment of the land planted and the ownership of the trees therein, subject (in particular) to the right of third parties
- *The gazetting of production forests has not taken place, so the permanent forest estate is not established in law. This leaves different administrative authorities with the possibility of issuing agricultural permits over forest areas.*
- *The PNAT has not been implemented and the Commission responsible for resolving issues of overlapping rights (mines vs. forestry) has not been operational.*

5. Institutional framework

The Congolese forest sector inherited an institutional structure marked by a centralized organization where the State would directly or indirectly perform numerous production-related functions and sought to direct economic activity through issuing regulatory requirements. The main instrument for forest management remains Law No 16/2000 of 20 November 2000, supplemented by Law No 37-2008 of 28 November 2008 on wildlife and protected areas.

In 2002, the ministry responsible for forests was the Ministry of Forestry Economy (*Ministère de l'Économie Forestière*—MEF), also responsible for fisheries and fisheries resources. In 2012, the MEF became the Ministry of Forestry Economy, Sustainable Development and the Environment (MEFDDE), thus expanding its scope. Among the objectives of the MEFDDE is the "continuation of forest management work, so that by 2016 (...) all forest concessions have management plans". This fundamental objective was not achieved, as 17 concessions representing 4.68 million hectares did not have a management plan as of 2019 (with basic surveys still not having started). The majority of these concessions are located in the south of the country.

There were 22 concessions with management plans approved or awaiting approval in 2019, for a total area of 8.16 million hectares. To this, we must add 4 concessions under management, representing a little over 900,000 hectares. Some concessions have management plans but they have not been implemented or are not observed. This is the case with Bois et Placages de Lopola (BPL), Likouala Timber, SICOFOR and other companies, which have approved management plans, some dating back ten years.

In 2017, the establishment of a Ministry of Tourism and the Environment (*Ministère du Tourisme et de l'Environnement*) took away responsibility for managing a number of issues, such as peatlands—identified as the largest in the tropical world and major carbon reservoirs, by various scientific papers⁹. This is also the case with a financial instrument under development, the Congo Basin Blue Fund (CCBC), whose aims is to fund conservation and restoration around the Congo River.

5.1 Department for the Verification of Forest Products for Export (SCPFE)

The *Service de Contrôle des Produits Forestiers à l'Exportation* (SCPFE) was established in 2002 to address the spread of responsibilities for verifying exports and collecting statistical data on timber exports. This Department was implemented with the support of *Société Générale de Surveillance* (SGS), the company which was responsible for verifying Congo's goods exports. The aim was to establish a public, technical and operational department for verifying forest products for export. SGS has developed mechanisms and procedures that have been gradually transferred to the SCPFE.

The SCPFE was established by Decree No 436-2002 of 31 December 2002, establishing the powers, organization and operation of the Department, supplemented by two subsequent orders. Its missions are to:

- Verify the quantity and quality of timber for export through approval;
- Verify the quantity and quality of flora and fauna products for export, re-export, import and re-import, in accordance with current approval rules;
- Monitor the prices of timber and non-timber forest products for export;
- Monitor the international market conditions for forest products to obtain and disseminate reliable information on their prices;
- Ensure refresher training for graders of timber and other forest products;
- Create and manage the data bank on exports of timber products and by-products, and publish the relating annual statistics;
- Create and manage the database on the export, re-export, import and re-import of flora and fauna products, and publish the relating statistics;

⁹ Dargie, G. C., Lewis, S. L., Lawson, I. T., Mitchard, E. T., Page, S. E., Bocko, Y. E., & IFO, S. A. (2017). Age, extent and carbon storage of the central Congo basin peatland complex. *Nature*, 542(7639), 86-90; Fatoyinbo, L. (2017). Ecology: Vast peatlands found in the Congo Basin. *Nature*, 542(7639), 38-39.

- Participate in the forest certification process;
- Provide technical support to timber professionals within their field of competence;
- Periodically produce and publish economic outlook reports;
- Ensure compliance with export quotas for logs;
- Verify bills of lading for imported and exported forest products
- Sign all export documents for forest and wildlife products;
- Maintain cooperative relations with similar national, regional or international bodies.

Several observers consider that Decree No 436-2002 on the powers, organization and operation of the SCPFE should be revised. The decree does not grant SCPFE officers belonging to the Water and Forest administration officers the possibility of making reports on forest-related offenses identified as part of their job. So it does not at any time confer the timber traceability component to the SCPFE, even though it was included in the Terms of Reference of the agreement of 6 June 2003 signed between the Government of Congo and the SGS company¹⁰.

Other recommendations have been made. This includes:

- Capacity building of SCPFE administrative and technical officers;
- Organization of training for the International Tropical Timber Technical Association (*Association Technique Internationale des Bois Tropicaux*—ATIBT) graders modeled on that organized in Pointe-Noire in 2005 by SGS company;
- Conducting a study of the African tropical timber grading system for logs applied in China in relation to ATIBT grading;
- Opening of an office in Douala similar to that set up by the Congolese Shipping Council (*Conseil Congolais des Chargeurs*) in order to avoid the manipulation of administrative acts of Congolese origin on Cameroonian territory;

5.2 National Centre for Inventories and Management of Forest and Wildlife Resources (CNIAF)

Established by Decree No 2002-435 of 31 December 2002, the *Centre National d'Inventaire et d'Aménagement des Ressources Forestières et Fauniques* (CNIAF) is a public administrative institution with legal personality and financial autonomy. It is placed under the supervision of the MEFDDE.

Its missions are to:

- Implement national forest and wildlife inventory programs;
- Process, maintain and update forest, wildlife and protected area inventory data;
- Develop and update national forest mapping;
- Develop national forest estate management plans;
- Propose and monitor any revision of adopted and implemented forest and protected area management plans.

The Government of Congo has long aspired to the idea of forest management plans being developed by a public body, and this was the purpose of the CNIAF. Due to financial constraints, lack of equipment and trained personnel, the Government has left forest concession holders with the responsibility of developing management plans under their logging licenses. The difficult financial situation of the country has had an impact on the operations of the CNIAF, with the reduction of its operating budget. In particular, this situation has limited the capacity to monitor the implementation of development plans by the authorities.

5.3 SNR: National Reforestation Department

The Congo has 12 million hectares of savanna land that are not, or are not visibly, utilized, namely about 35% of national territory. The Government wishes to use part of these areas for establishing timber and energy wood plantations, either subject to public governance or in association with the private sector. Legally these lands are part of the public estate, but have been appropriated by individuals, families and ancestral lines according to customary processes. Land occupation is not normally very visible, but development involving plantations is very often a source of claims over the land concerned.

Decree No 89-042 of 21 January 1989 establishes, grants authority to and organizes the National Reforestation Department (*Service National de Reboisement*—SNR). Created from the ashes of the Congolese Forest Agency (*Office Congolais des Forêts*—OCF) and all the structures that preceded it

¹⁰ Within the framework of the Voluntary Partnership Agreement (VPA), this function is devolved to the Forest Legality and Traceability Unit (CLFT) of the MEFDDE.

since 1937, the SNR is a technical and scientific public service. The management bodies are the Management Committee and the Directorate.

The SNR is responsible for monitoring, coordinating and implementing national reforestation policy. The SNR missions include

- Implementing the national afforestation and reforestation policy with a view to ensuring the restoration and enhancement of the national forest heritage;
- Conducting work in afforestation and reforestation sites through silvicultural techniques;
- Conducting work within the areas requiring protective action (protection of watersheds);
- Conducting work in natural forests through tending (seed and seedling production, seed harvesting, natural regeneration);
- Conducting extension work on forestry and agroforestry techniques in farming settings;

The SNR faces a number of difficulties with comprehensively fulfilling its mission. These include the absence of financial resources for its operation, the lack of training for staff, the absence of a database for the technical division and the absence of a technical procedure and schedule for harvesting seeds. In the field, SNR must address the lack of clarity about land rights, the multiplicity of claims, and the conflicts that occur on a fairly regular basis. The lack of a land-use plan at the national level is an additional difficulty.

In 2013, a National Afforestation and Reforestation Program (*Programme National d’Afforestation et de Reboisement*—PRONAR) was established by Decree No 2013-221 of 30 May 2013) to implement the Government’s policy on afforestation, reforestation and agroforestry. Its purpose is to:

- Promote forest plantations on national territory;
- Encourage, register and support the actors involved in afforestation and reforestation activities with a view to supplying national and international markets with timber and non-timber forest products;
- Promote plantations with a high capacity for forest carbon sequestration as part of the restoration of degraded forest areas;
- Seek appropriate funding for the implementation of the public program and support for small and medium-sized plantation holders;
- Ensure the expansion of the national forest cover to combat deforestation, forest degradation and climate change.

There is a skill overlap between the SNR and the PRONAR. Officially, the SNR is responsible for implementing the PRONAR’s vision. As a result of the difficulties mentioned, the Congo, through the various successive structures to promote plantations, has failed to establish any more than 80,000 ha of plantations (no data on survival rates). Under PRONAR, between 1,700 and 2,000 hectares were planted, although the aim was to afforest or reforest one million hectares over the period 2010-2020. These plantations consisted of eucalyptus, limba (*Terminalia superba*), pine trees and rubber trees.

Incentive/disincentive aspects of the institutional framework

- + The creation of a financial mechanism, the Blue Fund, to address the nexus between water resources and forests, including mangroves.
- *The separation of ministerial powers on forests on the one hand, from those of the environment on the other, undermines the coherence of government action on major issues such as the issue of the peatlands or international negotiations on climate and biodiversity.*
- *The inadequacy of inspection, supervision and environmental policing functions.*
- *The lack of security of the Department’s annual budgetary allocations from the MEFDDE (irregular or delayed payments) does not allow administrations to properly fulfill their mission to support sustainable forest management.*

5.4 UPARAs: Pilot Units for Management, Reforestation and Agroforestry

The Ministry of Forestry Economy (MEF) and the forest logging companies signed a Memorandum of Understanding in 1996 to establish the first Pilot Units for Management, Reforestation and Agroforestry (*Unités Pilotes d’Aménagement, de Reboisement et d’Agroforesterie*—UPARAs) in the SOCOBOIS (Department of Niari), BOPLAC (Department of Lékoumou) and CIB (Department of Sangha) companies. The UPARAs came under the supervision of the MEF, with the SNR providing technical management.

The missions of the UPARAs were to:

- Identify the seed trees in the FMUs and forest logging units (FLUs);
- Harvest seeds of various tree species;
- Establish and develop nurseries

- Identify areas of intervention (degraded forests, open forests, deforested areas, etc.) in the FMUs/FLUs;
- Reforest unwooded, insufficiently wooded and badly degraded areas with local tree species;
- Perform agroforestry tests, in agricultural areas inside and outside forest logging licenses;
- Establish pilot plots for monitoring and measuring natural regeneration;
- Establish village plantations for various needs (charcoal, agroforestry, firewood or fuel wood, NTFPs needs, etc.) for the benefit of populations, etc.

Encouraging results were recorded but interrupted because of the political events of 1997. In 1998, the ITBL-UPARA (Enyélé FMU) was established in the Department of Likouala. It operated until 2013, when this forest company went bankrupt. It had carried out 190 ha of reforestation before this occurred. The CIB-UPARA operated until 2012 and achieved 300 ha of reforestation. However, half of these areas have been destroyed by farming populations carrying out agricultural activities. This suggests the need for participatory mapping of the land rights of local communities within concessions and the conclusion of agreements for the use and management of areas between the concession holders and user populations of this same space.

Until 2003, UPARAs were funded by the forest logging companies with a reduction in forest taxes to compensate for the expenditure incurred. After 2004, 50% of the UPARAs budget came from the National Forest Fund and 50% from the forest logging company concerned. This experience with UPARAs did not spread to other forest logging companies. The CIB-OLAM UPARA gradually ceased its activities, not because of a lack of funding from the company, but because of the lack of a steering committee to approve the work program and budgets for several years. The creation of the PRONAR has probably helped to marginalize the UPARAs, as institutional priorities have changed.

6. Management of production forests

Management standards were produced under the auspices of the CNIAF. There are two reference documents, the "National **Guidelines** for Sustainable Management of Natural Forests in the Congo" (2004 in the first version, then "National Guidelines for Sustainable Management of Forest Concessions" in 2007) and the "National Inventory **Standards** for Management of Forest Resources in the Republic of Congo" (2005). The Standards contain the technical parameters necessary for operations and are therefore more detailed than the Guidelines.

According to Article 56 of Law No 16-2000 establishing the Forest Code, the Management Plan is approved by decree adopted in the Council of Ministers, for a period of between ten and twenty years after which it is revised.

The experts interviewed felt that the Management Standards were rigorous in terms of timber resource management. Nevertheless, there is a significant imbalance between the sections focused on timber resource management and actions for biodiversity—essentially multi-resource inventories and the establishment of conservation areas. Inventories must include a “presentation of indicators of human pressure on NTFPs”, which is interesting, but the Standards do not encourage the development of plans for biodiversity management or wildlife management.

With regard to timber resource management, the National Inventory Standards for Management of Forest Resources specify that the replenishment rate should be at least “50% for the group of marketable tree species” and “75% for all trees in the harvested stands”. These replenishment rates represent the proportion of the number of harvestable stems in the 2nd rotation compared to the number of harvestable stems in the 1st rotation.

Although the Management Standards were designed on the basis of logging in primary forests, a 50% replenishment rate appears to be fairly inconsistent with sustainable management requirements, even though forest managers can, depending on tree species characteristics, set higher replenishment targets. Another issue remains unresolved: 50% replenishment of the volume of marketable tree species (the most sought by farmers) between the first and second rotation would mean a 25% replenishment rate from the initial volume between the 2nd and 3rd rotation. Of course it is difficult to know the characteristics of the timber markets in several decades’ time and the possible developments within the range of marketable tree species, but the replenishment rate of only 50% between the first two rotations is not conducive to sustainable management.

Incentive/disincentive aspects of standards for the management of production forests

- + Management standards in the Congo are rigorous and fairly comprehensive.
- *The requirements of management standards are focused on the timber resource and place only modest emphasis on biodiversity. In particular, they do not require the production of wildlife and NTFP management plans.*
- *The process whereby the authorities validate management plans is often too long.*
- *The minimum replenishment rate for marketable tree species is established for the first cutting cycle, but Management Standards do not address the issue of sustainability between the*

second and third cutting cycles: merely repeating the 50% volume replenishment target from one cutting cycle to another may seem incompatible with the objective of sustained yield.

- *Current national standards including ITCs do not take into account other production forests, in particular Industrial Processing Agreements (Contrat de Transformation Industrielle – CTI).*

7. Forest certification

The Congo is the country with the largest area of certified natural tropical forest, with 3.16 million hectares having FSC certification for “forest management”. This land area corresponds to two forest logging companies (IPC-OLAM and IFO) and four FMUs. Certification under the PAFC (Pan-African Forest Certification) is supported by the Program for the Endorsement of Forest Certification (PEFC) and is expected to be made available to Congolese companies from 2021.

Just over 2 million hectares certified as “legal” (OLB) or Legal Source (LS), representing three other forest logging companies, must be added to this.

Several studies, conducted in particular by researchers from Center for International Forestry Research (CIFOR) and the French Agricultural Research Center for International Development (CIRAD), have shown that the management of FSC-certified concessions in the Congo Basin is comparatively better than that of non-certified companies. It is undoubtedly with regard to social aspects and wildlife management that forest certification indicates significant added value. For forest logging operators committed to forest management certification, undertakings to perform wildlife resource management within concessions are more important than certification of legality and traceability of timber origin and legality (OLB) or Verification of Legal Compliance (VLC)¹¹. For several researchers¹², FSC-certified forests contribute more to the well-being of local people than other concessions.

On the other hand, few analyses have addressed the issue of the replenishment rates of logged species, which is the key point when analyzing the sustainability of logging in the long-term. The two FSC-certified companies embrace research tools aimed at studying forest dynamics in logged and non-logged areas.

The "business model" for certification depended on "price premiums". Given that the incentives associated with certified timber are often not compelling enough for the concession holders, due to the diversity of markets and their uneven maturity, incentives could be provided at production level, either by subsidizing certified companies or by reducing costs. Forest taxation could contribute to this (see 'Proposals' chapter).

In early 2019 the OLAM group, owner of the largest certified forest logging company, i.e., the CIB, announced its intention to divest itself of the latter as soon as a potential buyer deemed sufficiently credible in terms of sustainable forest management appears. OLAM wants to refocus its business portfolio on agriculture and agri-food. Although CIB-OLAM states that its activity is profitable, the situation is more uneven for other enterprises and it appears that there are more companies with the intention of selling assets than potential buyers.

Incentive/disincentive aspects of the current certification situation

- + Certified Congolese companies have achieved conclusive results in terms of social achievements, anti-poaching and wildlife management, as evidenced by independent research conducted by researchers.
- + Certification provides a guarantee of correct implementation of development plans and "forest management" certification encourages companies to go beyond legal standards on management and specifications.
- *Certified companies face unfair competition from other forest companies that only partially comply with regulations (management, processing, social dimensions of specifications, etc.), and this undermines their economic position.*

8. Community Forestry

Unlike other countries in the sub-region, up until the new Forestry Law 33-2020, promulgated on 8 July 2020, Congo did not wish to establish autonomous community forests. The model selected was based on "Community Development Areas" (CDAs) within forest concessions. CDAs must be

¹¹ Dubiez, E., Karsenty, A., Dessard, H., 2017. Gestion de la faune dans les concessions forestières en Afrique Centrale. In: Van Vliet, N., Nguinguiri, J. -C., Cornelis, D., Le Bel, S., (eds). *Communautés locales et utilisation durable de la faune en Afrique centrale*. FAO/CIFOR/CIRAD.

¹² Cerutti, P.O., Lescuyer, G., Tacconi, L., EBA'a Atyi, R., Nasi, R., Tabi Ekebil, P., Tsanga, R., 2016. Social impacts of the Forest Stewardship Council certification in the Congo Basin. *International Forestry Review* 18 (S1), 1–14.

Tsanga, R., Cerutti, P.O., Lescuyer, G., 2014. What is the role for forest certification in improving relationships between logging companies and communities? Lessons from FSC in Cameroon. *International Forestry Review* 16(1): 14–22.

indicated in the forest concession management plans for the development of community-led local development initiatives. Several potential CDAs have not been implemented and local people are not familiar with the concept. A few simple management plans have been produced, but their implementation is random.

However, civil society organizations in the CoNGOs consortium consider that "CDAs are not community forests, but rather participatory forests"¹³. "Indeed, the State grants logging licenses to forest companies which then, as part of their management plan, define the CDAs within which they acknowledge a certain number of rights to local communities such as the harvesting of timber and non-timber forest products, agriculture and agroforestry, and user rights (fishing, hunting, etc.). Civil society considers that a community forest is a forest in which communities manage and valorize forest resources in addition to actually exercising their customary land rights, whether or not formally recognized."

Civil society organizations recommend, *inter alia*, that the Government promote an expanded concept of the community forest and identify land capable of accommodating community forests by reducing the size of industrial forest concessions. These organizations also recommend using the customary land rights recognition procedure provided for in the land law to record and acknowledge the rights of communities over the lands they have occupied for over thirty years.

Civil society organizations recall in particular the content of the 2014-2025 forestry policy document of the Republic of Congo, which aims to promote community forestry and suggests that "community forestry should be understood on two levels:

- *the first level is a customary entity (the 'terroirs' or land) corresponding to a factual report which does not require any particular institutionalization. However, through participatory mapping, it can benefit from political recognition reflected in principles of co-management when it comes to the part of the land that overlaps with an industrial concession or a protected area;*
- *the second level corresponds to an institutional innovation (the community concession) which will be based on the customary situation but is distinct from it and may constitute the basis for community enterprises."*

Incentive/disincentive aspects of the current community forestry situation

- + The forest policy document of the Republic of Congo (2014) proposes innovative avenues for involving local communities in the co-management of forest concessions on the basis of the recognition and acknowledgement of their rights of use, while also allowing the possibility of autonomous utilization and management of wooded resources.
- + The obligation to form community development areas within the framework of management plans constitutes a step forward in participatory management, although the principle of acknowledging customary rights throughout concessions, as referred to in the 2014 Forestry Policy, has not yet been implemented.
- *The current lack of any possibility of establishing autonomous community forests (which could be concessions benefiting local communities) apart from industrial concessions, when these forests could be a controlled source of supply for artisanal sawmillers, is an issue. The new forestry law amends this situation by providing the opportunity for local communities to apply for a community forest on their own initiative. However, the limits of concessions will need to be modified to allow space for autonomous community forestry. It will be possible to revise the limits of concessions when the FMUs are gazetted.*

9. Governance and sanctions regime

9.1 Independent Forest Monitoring

In the interests of good governance and transparency, Congo voluntarily took the option of establishing an independent forest monitor system to strengthen forestry control. Independent Monitoring (IM), which began in the Republic of Congo in 2006, was implemented by the *Resources Extraction Monitoring* (REM) non-governmental organization until 2013.

Independent Forest Monitoring is currently being implemented by the Sustainable Forest Management Support Circle (*Cercle d'appui à la Gestion Durable des Forêts*—CADGF), a civil society organization. The VPA (concluded with the EU under the Forestry Law Enforcement, Governance and Trade [FLEGT] process) recognizes an Independent Forest Monitor from civil society, facilitated by a national structure, as one of the actors involved in monitoring and control of forest logging. The Independent Forest Monitor analyzes governance, identifies shortcomings with the

¹³ Implementation of Community Forestry in the Republic of Congo, CoNGOs Project Note: NGO collaboration for equitable and sustainable community livelihoods in the forests of the Congo Basin funded by the UK Government UK Aid program (*Improving livelihoods and Land use in the Congo Basin Forests* program under the DFID (ILLUCBF).

implementation of forestry law (on the ground and at government level), ensures improved transparency, and supports a strengthened legal enforcement system including sanctions.

The specific objectives of the Independent Forest Monitor are established as follows by the VPA:

- To improve Government systems for enforcing forestry law;
- To contribute to ensuring forestry law enforcement and governance;
- To strengthen civil society capacities based on the “independent monitoring” approach;
- To document and make available to the Forest Legality and Traceability Unit (*Cellule de Légalité Forestière et de la Traçabilité*—CLFT) and the Joint Implementation Committee of the VPA any information collected.

The MEF grants a permanent assignment mandate to the Independent Forest Monitor (IFM) for conducting its field missions. However, some analysts consider that the law determining the system governing associations adopted by the Congolese Parliament in 2017 contains certain restrictions on the freedom of civil society organizations to act independently, particularly in the area of governance¹⁴.

In addition to the IFM, the VPA between the Republic of Congo and the EU has established an independent system auditor (AIS-FLEGT) in charge of verifying the Timber Legality Assurance System as part of the FLEGT process.

9.2 Sanctions that are not sufficiently dissuasive

Despite the establishment of an IFM, many offenses remain unpunished, including the absence of a management plan, particularly in the southern region. In 2013, the IFM-REM report pointed to three common and inadequately sanctioned offenses:

- Tax-cutting fraud
- Failure to respect the maximum export quotas for logs
- Illegal cutting in concessions, and non-compliance with the limits of annual allowable cuts.

Moreover, sanctions against offenders are generally insufficiently dissuasive. A World Bank economic survey (2007) indicated:

“Sanctions are insufficiently dissuasive for certain types of fraudulent exploitation such as non-compliance with minimum logging diameters, failure to mark logs, stubs and stumps (FCFA 200,000 to 500,000), counterfeiting or falsification of timber marks (FCFA 200,000 to 1 million) since the penalties are not proportional to the volume of wood subject to fraud and therefore to the profit that the owner of the logging activity could obtain as a result of the fraud”.

This study made the following recommendation for limiting the impunity of large companies which outsource some of their logging activities to smaller, often Congolese, companies:

“Introduce joint liability into agreements involving the joint operation of forest logging concessions so that all members of the group (not just the concession holder) subject of the agreement are liable in case of non-compliance with the law” (World Bank 2007)

A 2015 Independent Forest Monitor/FLEGT report also addressed the case of “special permits” for cutting timber.

Incentive/disincentive aspects of governance and the sanctions regime

- + The establishment of an Independent Forest Monitor (IFM) by the Congo, on the initiative of the Government, is a very favorable measure for sustainable management.
- + The signing of a VPA between the Congo and the EU is a very positive element for improving forest governance.
- *Inadequate enforcement of the regulatory regime, particularly as regards non-compliance with forest management plans, is a major problem.*
- *The insufficiently dissuasive nature of the sanctions and the absence of a system of joint liability between the contractor companies and the subcontractors fail to capitalize on independent monitoring.*

10. National Forest Fund

Established by Law No 16-2000 of 20 November 2000 establishing the Forest Code, the National Forest Fund (*Fonds Forestier National*—FFN) is implemented in accordance with the provisions of Decree No 2002-434 of 31 December 2002, establishing the organization and operation of the FFN. The FFN is intended to provide finance for projects and studies to protect, manage and develop forest and wildlife resources.

¹⁴ <https://www.business-humanrights.org/fr/r%C3%A9p-du-congo-un-projet-de-loi-menace-les-associations-et-les-ong-travaillant-sur-la-bonne-gouvernance-selon-la-socit%C3%A9t%C3%A9-civile>

It is administered by a Management Committee which deliberates on all matters relating to its management.

Organization, operation and mission:

In accordance with Decree No 2002-434, of 31 December 2002 defining its organization and operation, the National Forest Fund finances the following programs:

Forestry:

- Forest resource inventories;
- Management and silviculture projects in dense forests and the savanna;
- Gazetting of a permanent forest estate;
- Operations for verifying forest products intended for export and monitoring of timber market conditions;
- Operations related to the establishment of a permanent forest estate;
- Control, monitoring and assessment of forestry activity;
- Promoting forest products.

Wildlife:

- Inventories of wildlife resources;
- Establishment and management of protected areas;
- Management of regular hunting areas;
- Control of the harvesting and circulation of wildlife products;

Water conservation:

- Protection of soil, watersheds and water bodies;
- Monitoring the water level of water bodies.

Governance:

The main management bodies are the **Management Committee** and **the Fund Directorate**. The role of the latter is to implement the Committee's decisions. The Management Committee includes members of the government administrations and the private sector.

The assets of the National Forest Fund are deposited in a deposit account opened with the Public Treasury. National Forest Fund expenditure is carried out and audited on the basis of public accounting principles. The National Forest Fund Accountant is appointed by the Minister of Finance. He is obliged to submit an annual management account to the Audit and Budgetary Discipline Office. The various forest taxes are collected by the forestry administration on behalf of the Public Treasury and pass through the accounting agency to the National Forest Fund.

Sources of funding:

National Forest Fund revenues are derived from:

- The felling tax;
- The tax on accessory forest products;
- The deforestation tax;
- 50% of the surface area tax;
- 50% of the revenue from the sale of plantation timber from the State-owned forests;
- 30% of the amount of fines, transactions, refunds, damages, public auctions, or direct seizure of proceeds and miscellaneous items for the benefit of the Water and Forest administration;
- Taxes relating to the harvesting of wildlife;
- Government grants;
- Gifts and bequests.

Forestry Law No 33-2020 of July 8, 2020 indicates that the National Forest Fund will be funded by:

- A share of the surface area tax (no longer 50% as previously)
- The deforestation tax
- The felling tax on domestic and special permits
- The tax on permits for cutting plantation wood
- The amounts of fines, transactions, sales, refunds and damages (no longer 30% as previously)
- The waste tax. This new tax introduced by Law 33-2020 will be discussed in detail in the tax section below.

With the abolition of the felling tax for concessions (as a consequence of the production-sharing scheme) and the replacement of the minimum threshold of 50% of the surface area tax to be paid into it (replaced by “a quota”, that is, subject to annual budget trade offs according to the finance law applicable at the time), it is worth bearing in mind that the potential revenue of the National Forest Fund may decline.

Replenishment:

In January 2017, the National Forest Fund had a revenue forecast of FCFA 25.21 billion, of which FCFA 18.9 billion was forecasted revenue for 2017 and FCFA 6.3 billion was arrears for 2016. For 2017, the National Forest Fund recorded a low level of replenishment in comparison with its forecast, with only FCFA 10.40 billion, a success rate of 41.59%.

11. Tax framework**11.1 Structure of forest taxation**

As in several Central African countries, forest taxation is organized around three main taxes: land area, felling, and export, even though an established company has to pay approximately thirty contributions. Other significant levies exist, such as the data processing fee (based on the FOB value of exported production) whose revenue must cover the functions of the customs authorities. It costs some companies almost half of what they pay for the export tax. It is not, however, a specific tax, related to forest taxation, but a levy applicable to all enterprises that import or export products. Part of the data processing fee paid by forestry companies should be used for the computerization of departmental forestry economy directorates, particularly the frequently under-equipped forest brigades. This was the option envisaged when this tax was created, but it has not been implemented in practice.

Since 2009 (Decree 2009-303), a tender procedure has been in place for forest concessions. It consists of a combined review of a technical bid (with the score comprising 60% of the total score) and a financial bid (with the score accounting for 40% of the total score). The financial bid represents the amount that a concession holder undertakes to pay annually in addition to the surface area tax. It is based on the usable area of the concession. This provision has been little used to date and, according to various observers, the decisions about allocation in fact remain in the hands of the government.

- **Surface area tax:** FCFA 250 to 500 ha depending on the production sector (Centre, North, South), based on the “useable area” of the concessions. One provision of Article 91 of Law 14 of 30 December 2019 states: “*the surface area tax is indexed to the production area if the concession has an approved and implemented management plan, or to the entire area of the concession if it does not have a management plan...*”. However, this incentive for sustainable forest management also improperly benefits companies that do not implement their management plans, such as Likouala Timber, SICOFOR and BPL.
- **Felling tax:** 5% of the FOT (Free on Trucks) value in 2017. Calculation basis: trunk volume (tree felled, but before purging).

There are five different zones for the FOT value. The FOT is a FOB value minus the average costs of transportation from the production area to the nearest port.

The sapelli log FOB value is FCFA 177,108 and the okoumé (*Qualité Supérieure-Loyal et Marchand* – best quality [QS-LM]) value is FCFA 160,709.

For sawn lumber, texts distinguish between wet and dried products.

- **Export tax:**

Logs: 10% of the FOT value (okoumé, afrormosia, ebony), 9% for all other tree species.

There is a surcharge of 30% of the FOT value for each production area for logs exported above the authorized quota of 15% per company.

However, in principle this surtax should no longer be levied since in the 2019 Finance Act the Government decided to no longer grant an exemption from the obligation for each company to convert 85% of its timber production into logs.

Processed Products:

The basis of taxation is the FOT value.

- Wet sawn timber, reconstituted logs: 4% of the FOT value
- Dried timber: 1.5%
- Rotary-cut veneers: 1%
- Sliced veneers: 0.5%
- Other products: 0%

A new tax: the “waste tax”

The forestry Law 33-2020 introduces a "waste tax" ("*fee due for the categories and quantities of waste produced by a company*") whose precise terms and conditions will be established by implementing texts. Article 128 states: "*Forest companies shall adopt measures to optimize timber processing and to valorize wood waste from logging and processing industries.*" Article 2 defines waste as follows: "*wood left in the forest after logging or by-products of the timber processing industry such as: stumps, stubs, branches, slabs, edgings, trimming scraps¹⁵, bark, residual cores, rotary or sliced veneer strips, sawdust, chips*".

One might think that the new tax is intended to encourage companies to limit the amount of wood left behind in the forest and to increase the recovery rate for processing. However, it is not clear how forest officers, who are already rarely present in the field through the lack of resources, will be able to assess the volumes of waste left in the forest (what will be the formula for determining the volumes of stumps, stubs, branches, etc.?). Similar problems will arise with regard to the by-products of the processing industry. In addition, some industries use waste wood and sawdust as fuel for dryers or cogeneration. Finally, a simple (but undesirable) way to limit forest waste and increase the recovery rate for processing would be to further increase logging selectivity, by harvesting only defect-free trees with the best conformation, but this would be contrary to the objectives of reducing hyper-selectivity (concentrating harvesting on a few tree species and the best qualities).

The implementation of this future tax is therefore set to be very difficult, and one might think that it will be applied “at a flat rate” to the volumes that are being logged and processed—that is, without really considering the volumes of waste. The assumed incentive aspect of the new tax is therefore unlikely to materialize.

11.2 Yield from forest taxation

The surface area tax raised **FCFA 2.4 billion** in 2017. It may be assumed that a similar amount was recovered in 2018. The theoretical potential (100% recovery) is FCFA 3.9 billion. It is difficult to know whether this discrepancy between the potential amount and the actual one is due to incomplete replenishment or to the practice of tax cuts in exchange for the benefits (works, equipment) requested from companies. It seems that this discrepancy is actually linked to the tax relief granted in exchange for benefits (works and equipment) with forest logging companies. This is the case with CIB and Likouala Timber in the Departments of Sangha and Likouala. Moreover, as noted earlier, the forest administration has allowed some firms to tax only the “usable area” even though these companies do not have or have not implemented any management plans.

The felling tax generated about **FCFA 4.5 billion** in revenue in 2018.

Exit levies (export) raised **FCFA 12.66 billion** in 2018, of which FCFA 10.8 billion came from the tax on exported logs. In 2018, Congo exported 790,000 m³ of logs, 256,000 m³ of sawn timber and 33,400 m³ of veneers, which corresponds to approximately **1.45 million m³** of log equivalent. To this, we must add the volumes of processed wood sold on the domestic market. In 2009, a CIFOR study¹⁶

¹⁵ It should probably read as “chutes d’éboutage” (i.e., waste from trimming, shortening by cutting the tip) in the French text.

¹⁶ Lescuyer, G., Yembe-Yembe, R. I. and Cerutti, P. O. 2011 Le marché domestique du sciage artisanal en République du Congo: État des lieux, opportunités et défis. Occasional Paper 71. CIFOR, Bogor, Indonesia.

indicated a volume of 99,000 m³ for the two urban markets of Brazzaville and Pointe Noire. A decade later, taking into account population growth, the visible construction boom in cities, and other urban and rural markets, one might think that a figure of 150,000 m³ is plausible. Converted into log equivalent, this would represent approximately 450,000 m³.

The annual production of timber in the Congo can therefore be estimated at approximately 1.9 to 2 million m³.

In total, forest taxation in the Congo probably yielded just under **FCFA 20 billion** in 2018. It should be noted that the Ministry of Finance and Budget's very strong commitment to the VPA process since 2018-2019 demonstrates the willingness to use the systems developed under the VPA to improve the collection and yield of forest taxation.

There are discrepancies between theoretical and actual taxation: often companies do not pay the forest taxes that they should theoretically pay, owing to bilateral (and usually not made public) agreements with different authorities involving tax prerogatives. These are rebates in exchange for services (maintenance of roads, equipment for an administrative structure, etc.). Some of these rebates are the subject of formalized procedures, others relate more to informal arrangements.

In the Congo, it is well known that companies are asked to build road or river infrastructure in exchange for exemptions from forest taxes over several years. There is a large government debt towards forest logging companies (debt incurred for road works or cocoa development) that may exceed around ten billion FCFA for the largest companies. Tax rebates (in exchange for works) involve surface area and felling taxes, not export taxes. Companies report insufficient compensation for building infrastructure. In addition, the State is very slow to reimburse the value-added tax (VAT) paid by exporters and significant arrears have accumulated, with some companies having a claim against the State equivalent to over 2 million euros.

The Treasury is required to redistribute the revenue from felling tax and half of the surface area tax to the National Forest Fund, but these repayments are irregular and capped at FCFA 4 billion per year (amount registered in the Finance Act 2020). However, payments are irregular as it is not always possible for the MEFDD to have access to the full amount in certain years, and this poses problems with carrying out a number of verification and management tasks in the sector. Furthermore, in 2017 the FLEGT-VPA-IFM reported that the Departmental Directorates of Water and Forests (DDEFs) received less than half of their annual budget allocation, which inevitably has implications for verification operations.

The carrying out of construction or road maintenance works, the supply (purchase) of motorized ferries to cross rivers, administration equipment, etc. are equally compulsory contributions, whether or not entered in the specifications, giving entitlement to tax rebates (surface area tax, in particular).

As a result of this development, parafiscal taxation (statutory fees introduced by different administrations) has tended to develop to fund various activities carried out by the MEFDD or peripheral administrations.

11.3 The Congo, one of the few countries to have placed the timber sector in the Extractive Industries Management Transparency Initiative (EITI)

The EITI brings together stakeholders from around the world (governments in developing countries, donors, businesses, investors, civil society organizations and international financial institutions). Announced in September 2002 in Johannesburg during the World Summit on Sustainable Development, EITI aims at dual transparency, involving:

- Payments of royalties from extractive industries to the Governments, as reported by companies;
- The collection by administrations and the use made of these levies by recipient countries or governments.

The forest sector is not the EITI's priority target. Countries may, however, propose to include it in EITI reporting processes alongside other industries. This is the case in Liberia and Congo.

Three EITI reports have been produced for the Congo. The first two relate to 2015 and 2016 revenues, the third (published in 2020¹⁷) to 2017 revenues. In these three reports, it can be noted that the majority of companies do not report the levies and taxes paid, making reconciliations difficult. In particular, the EITI reports note that the National Forest Fund, which is funded by the felling tax and 50% of the surface area levy (but does not collect these taxes directly), does not publish an annual report and does not provide any information about the taxes recovered. Through presidential decrees (late 2019 and early 2020), the composition of the EITI national bodies has been adapted, with (i) a better representation of civil society organizations (CSOs) working in extractive sectors; and (ii) formalizing the place of the forest sector through the representation of the "forestry" civil society via the Sustainable Forest Management Platform (*Plateforme pour la gestion durable des forêts*)—PGDF) and the private sector.

¹⁷ https://eiti.org/files/documents/rapport_final_itie_congo_2017.pdf

Incentive/disincentive aspects of forest taxation

- + Tax differentiation (Free on Trucks, FOT, value) is in principle favorable to a better distribution of the operational effort across all territories.
- + Congo's approach to including the timber sector in the Extractive Industries Transparency Initiative (EITI) has led to a better knowledge of the State's forest tax revenues and the payment declarations of certain companies. *However only one company published detailed payments, and a few companies simply reported an overall sum of taxes paid, without any breakdown. The vast majority of companies have not reported any data.*
- *The fact that the felling tax rate is the same for all tree species does not encourage any limitation on the overlogging of some of the main species marketed in favor of secondary species, which could benefit from a significant reduction in the rate.*
- *The obligation for each company to process 85% of its timber production is not a guarantee of sustainable management or optimal valorization of resources. A maximum annual export volume of logs established nationally could replace this requirement by allowing companies to more or less specialize in processing: an internal market for logs would allow logs to be allocated to the most efficient processing companies. Export quotas for logs could be either sold at auction or allocated to certified companies.*
- *The practice of granting tax rebates for conducting works contravenes the transparency required when collecting tax revenue and may reduce the financial resources determined by the Finance Laws (even though there is no direct allocation of forest taxes to the National Forest Fund).*
- *Parafiscality has taken on considerable importance (e.g. data processing fee) and contributes to increasing tax pressure on companies, without any incentive aspect.*

12. Changes made by Law 33-2020 of July 8, 2020 pertaining to the Forest Code

Since 2018, a new draft forestry law has been under discussion in the Congo. Law No 33-2020 was promulgated on 8 June 2020. The new law makes constructive contributions for promoting sustainable management. These include:

- The obligation for concession holders to obtain certification. It is understood that this should be "forest management" certification (of an FSC or PAFC type) or certification of legality. Companies will have to "*certify the management of their concessions under management or the legality of the products harvested and processed therein*" (Article 72). The law also mentions the possibility of acknowledging private certification for the verification of legality (Article 65) and the implementation of a national forest certification system (Article 70);
- The possibility of acknowledging a community forest "*with a local community being responsible for the initiative leading to its creation and sustainable management*" and the acknowledgement as a community forest "*of the natural forest found in the land of a local community and indigenous peoples [and] that has been gazetted in their favor*" (Article 15). Article 18 states that once created, the community forest "*is included in the permanent forest estate*";
- The introduction of a concept of "*simplified management*" for medium-sized forest management units (Article 77);
- The introduction of an agreement for the valorization of plantation timber (Article 118);
- The introduction of two new taxes: the occupation tax and the waste tax (Article 110 and seq.), the terms of which shall be specified by subsequent texts;
- The institutionalization of Independent Forest Monitoring to support logging verification operations (Article 69);
- The "*right to generate carbon credits and to market them is acknowledged for natural and legal persons*" as well as a principle of co-ownership between the project promoters, the State, local authorities and holders of customary rights (Article 180);
- The introduction of the concept of prior consent of populations and civil society organizations for the gazetting of forests: "*forest gazetting obeys the principle of free, prior and informed consent of the populations affected by the gazetting project and the principle of consulting civil society organizations in the district concerned*" (Article 40).

Many of these innovations can be seen as favorable to sustainable forest management, but it will be necessary to wait for implementation texts to confirm this.

However, several Articles announce the introduction of a package of measures that profoundly and unilaterally alter relations between the Congolese State and the forest industry, and *de facto* reduce the portion of tax revenues for the Treasury. In summary, this package: (i) bans the export of timber in the form of logs quite widely (only "heavy and hard" timber that uses a specific technology for machining

can be exported, its list must be fixed by regulation; (ii) introduces the "production-sharing regime" which requires the physical delivery to the State of a percentage of logs produced by forest companies; and (iii) converts a number of taxes and levies (e.g. corporate tax) into contributions in kind through the transfer of logs to the State.

The focus will be on tax measures and the introduction of the principle of "production sharing," a formula derived from arrangements between the State and the oil companies but not previously found in the forestry sector.

12.1 Introduction of "domestic permits".

The Forestry Law is introducing domestic permits for the first time in the Congo. According to the authorities, their purpose would be to ensure supplies for the local market, which is suffering from structural scarcity due to exports which appear to absorb almost all of the industrial timber production. In fact, there is insufficient information to qualify and quantify local demand, consisting of timber and timber rafters. Given the very high transport costs from northern Congo to Douala, the area's main export port (up to €200/m³ for some concessions), selling timber of lower commercial value (which cannot absorb such high transport costs) on the internal market is appealing, provided that it is not too far away from the markets of Brazzaville or Pointe-Noire, because sale prices are not very high.

Domestic permits will be issued for three years. Their surface area will be determined by order (the draft bill's preparatory texts referred to a surface area of between 1000 and 5000 ha). These permits will be reserved for the Congolese, issued by the forestry administration apart from the FMUs and administered in accordance with simple management plans. The areas over which these permits will be issued will be gazetted.

On the basis of experiences in comparable countries, particularly Cameroon, it is worth bearing in mind that in their present form, domestic permits run the risk of being exploited by industrial companies under the guise of national dummy corporations or of moving over into a tenant farming regime (with penalties having very little deterrent value). By supplying illegal circuits targeting the export market, timber from domestic permits would therefore threaten the integrity of the traceability system and therefore the FLEGT-VPA agreement with the EU. Strong safeguards should be put in place in the implementing decrees to allow domestic permits to achieve their desired objective.

12.2 Changes in the tax structure

The preparatory texts for the forestry law included fairly detailed provisions on forest taxation. Most of these provisions were not included in the legislative text promulgated on 8 June 2020. The latter states that, for enterprises in a production-sharing regime (in principle, all enterprises three years after the award of a Management and Processing Agreement or a Plantation Timber Value-Adding Agreement), "only the duties and taxes relating to forest logging, allocated to local authorities, local communities and indigenous peoples" will need to be paid. Article 112 specifies that these taxes are:

- The tax on non-timber forest products;
- The occupancy tax;
- "A portion of the surface area tax" (to be fixed by the finance law).

For the rest, Article 109 states that "*a forest company carrying out its activities under the production-sharing regime is exempt from direct State taxes applying to forest logging*".

The abandonment of specific taxes (particularly the felling tax) will result in MEFDD officials paying less attention to felling operations (examination of workbooks, etc.). It seems likely that supervision of the industry will be reduced. Forest taxation is an important element in controlling the legality of timber (legal sources), and this aspect will be weakened. Moreover, eliminating the felling tax would deprive operators of the possibility of shifting their choices to resilient secondary species (by lowering tax rates) and of reducing pressure on overlogged tree species (by increasing rates).

12.3 The matter of "shared production"

The introduction of a production-sharing principle, that is, the obligation for companies to deliver physical quantities of logs to the State can probably be explained by the Government of Congo's desire to create free zones for the processing and export of timber, as with the Special Economic Zone in Gabon. As some industries that are expected to be located in this area will not necessarily hold forest concessions, the delivery of timber to the State (or an operator it controls) must meet the raw material supply needs of the industries in that or those future free zone(s).

The feasibility of transposing a mechanism used in the oil sector to the forestry sector, which has not been tried in other countries so far, may be questionable.

Production-sharing contracts in the oil sector

In the oil sector, the principle is that the State reimburses exploration and operating costs by giving up part of the production (*cost oil*) to the foreign company and that the rest of the production (*profit oil*) is shared between the foreign company and the State. Each party is allocated a percentage of the net profit oil (*profit oil*), i.e., after deducting costs and taxes (royalties not included), with, for example, a share of 65% to 80% owned by the public company and 20% to 35% reverting to the foreign company. This type of contract is the subject of tight negotiations, particularly with regard to estimated expenditures.

Many production-sharing contracts indicate a percentage or ceiling for reimbursing costs (*cost oil*). For example, 60% of production revenue is allocated to the reimbursement of contractor expenses. All risks relating to the operation are the responsibility of the contractor, as well as the risks arising from cooperation with a national oil company authorized to participate in the development and production operation as owner and/or beneficiary. The foreign oil company is also forced to pay a portion of the revenue to the oil-producing country in the form of royalties once production has been sold.

In this type of contract, the State transfers neither the ownership rights over reserves once they are discovered nor the ownership rights over the resources extracted. Only the foreign company is assigned ownership rights to the part of the extracted resources that revert to the latter as *cost oil* and *profit oil*, with the rest being owned by the State. This feature allows the production-sharing contract to be differentiated from the oil and gas lease contract and the oil concessions, because in these two contracts ownership of all the resources extracted at the wellhead usually reverts to the oil company.

Sources: <https://www.encyclopedie-energie.org/petrole-le-contrat-de-partage-de-production-en-indonesie/> <https://www.planete-energies.com/fr/content/contrat-de-partage-de-production>

Oil extracted in a country is of a certain quality, and oil prices are quoted daily on different markets. This is not the same for the forestry sector: the number of tree species marketed is significant and several qualities are offered to buyers. It is very unlikely that production sharing will be based on simple volume sharing, and it will have to involve species and qualities. Tree species are not of the same quality or even value. The value may be different within the same species, as in the case with white limba (*Terminalia superba*) and variegated white limba.

The profit level in the timber industry is not comparable to that in the oil industry, and the financial standing of the timber industry companies is very different from that of the oil companies. Today, many forest logging companies struggle to cover their costs for management, logging, processing, and transport, to which existing taxes must be added. Put in another way, *cost timber* (by analogy with *the cost oil* of oil contracts), i.e. the share of log production that the company can keep to cover its costs, is likely to be very significant and thus reduce *the profit timber* that must be shared with the State to very little indeed. If the State decides to cap the *cost timber* (as in some oil contracts) at, say, 60% of total production, the risk is that the company will not be able to cover its costs and must stop doing business. In any case, negotiations with operators on the amount of operational costs are likely to be extremely difficult, and this will hardly be conducive to establishing a climate of trust between the partners.

Some certified companies have invested in industrial units to turn almost all timber production into logs. **An obligation to deliver a percentage of logs could result either in difficulty supplying processing facilities (with the resulting economic consequences) or in an incentive to increase levies in order to be able to supply the processing facilities and deliver the required quantities of logs to the State.** This is especially so as converting “*direct state taxes applying to forest logging*” (Article 109) into a contribution in kind in the form of logs delivered to the State will further reduce the share of raw material that manufacturers may retain.

Is increasing harvesting favorable to sustainable forest management?

With production sharing, one of the authorities' wishes is to be able to supply the Congolese market with timber as well as to supply raw material to the wood-processing industries that will settle in the Special Economic Zones (ZESs). In order to meet the timber needs of the already established processing companies and those that the government wants to attract to the ZESs, the authorities want to increase timber production and envisage this taking place through the harvesting of secondary or currently less logged tree species. This diversification is sought by forest managers, both for reasons of profitability and to reduce the operating pressure on the main commercial tree species.

For the timber industries to be able to supply the Congolese market at affordable costs for the consumer, transport and marketing costs between the cutting site, the processing unit and the final market must not be too high. Even for an export-oriented company, it is advantageous to be able to sell timber of lower commercial value to local markets, provided that the operation is profitable. But this is possible only for permits close to the main Congolese markets, namely Brazzaville and Pointe-Noire. For more distant permits, production sharing cannot alter this economic constraint: a public structure cannot sell timber at a price lower than transport and marketing costs.

As mentioned earlier, production sharing will create an incentive for industrial companies to increase levies so that they can both supply processing facilities and deliver the required quantities of logs to the State. Given the constraint of the transport costs which limits the "scope of profitability" to certain species and qualities, the desired increase in production is likely to result in added operating pressure on the main commercial species (sapelli, okoumé, doussié, wengé, etc.).

In the context of selective logging in tropical forests, unless there is a significant change in the price of certain species or technical innovations in processing that provide certain "secondary" species with a high added value (by increasing the price of the final product), the pressure to increase harvested volumes does not result in harvest diversification but, on the contrary, in increased selectivity (skimming).

Such a development would be detrimental to sustainable forest management. Conducting a study on the implementation of the principle of production sharing, based on Terms of Reference defined with the MEFDD, would allow the terms of production sharing to be clarified, proposals for an incentive tax to be produced, leading to preparation of the implementing texts of the new forest act establishing the Forest Code.

With regard to companies exporting unprocessed timber, the prohibition on the export of logs (even if certain exemptions are provided for heavy wood or hardwoods "*whose machining uses a specific technology*" – Article 97) will affect the profitability of certain companies, at least in the short term. Large and rapid investments in timber processing could come at the expense of those needed for forest management and certification.

13. Proposals

An incentive framework for sustainable forest management should include several elements:

- Participatory and inclusive land use plans as part of land use planning;
- The legal constitution of a permanent forest estate;
- Strict supervision of artisanal operations in defined spaces;
- The supply of good quality machined products to the local market at the right prices;
- Security of the rights granted to the economic actors and the local communities;
- Transparency in the collection and use of tax revenues;
- Equal treatment of the different companies operating in the territory with respect to regulatory constraints;
- Fiscal and institutional stability;
- The use of incentives, especially tax incentives, for companies that exceed regulatory thresholds.

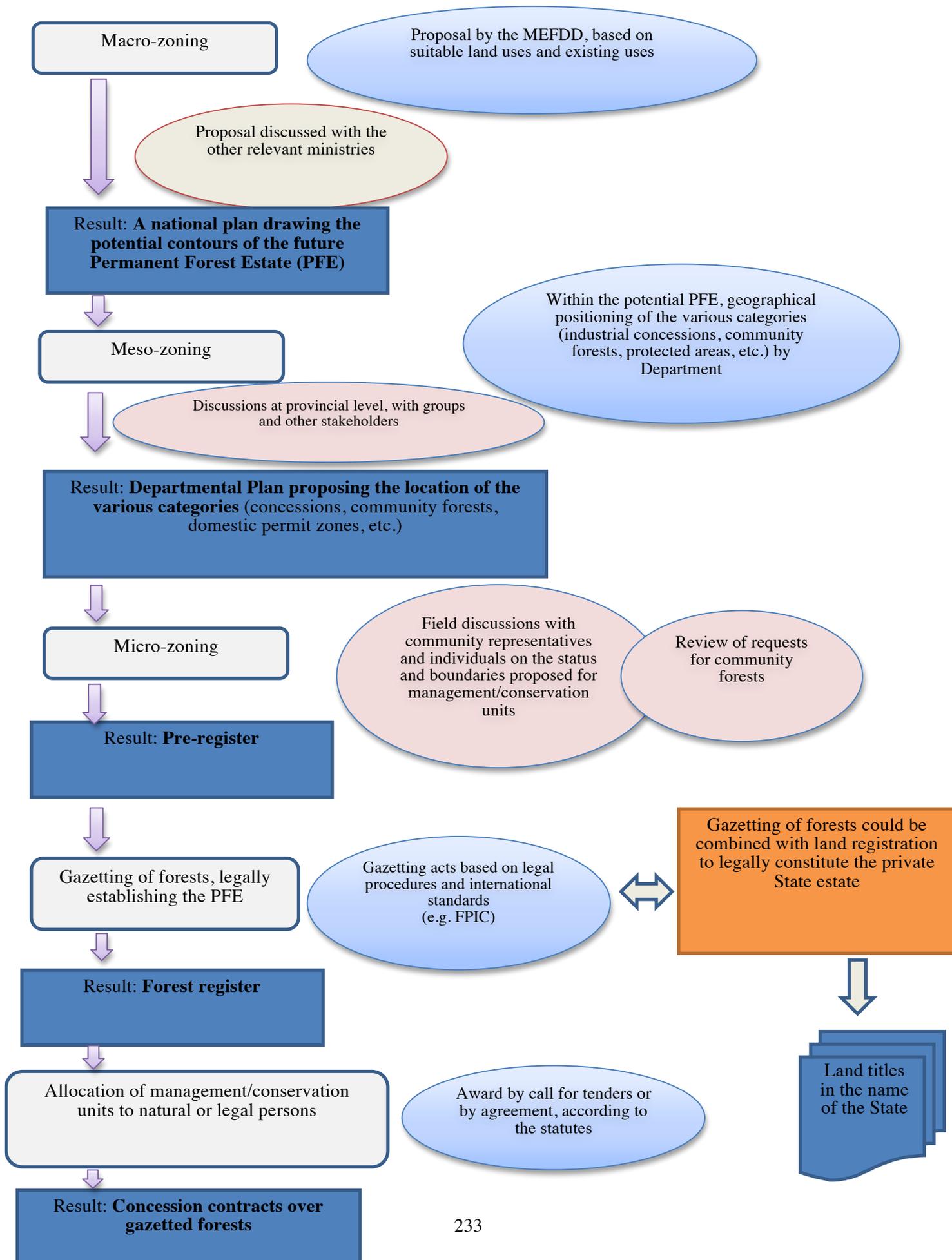
13.1 Land use

- In the Congo, the overlapping of mining and forestry rights is a known problem. The need for a land use plan is acknowledged by the authorities. An inclusive land use plan must be preceded by consultations accompanying zoning procedures. Several levels of zoning can be considered, at national, departmental and, where appropriate, small-scale level, so that the boundaries of the various categories of land use planning can be discussed with users. The figure (next page) maps a possible process.

The absence of a State forest estate established by law stems from the lack of forest gazetting, which the government intends to address (provided additional funding is obtained from development partners). Finally, the strengthening of legal security requires the registration of wooded land in the name of the State (or other legal or physical persons). *Because gazetting and registration procedures are very similar, the government could work on a combined procedure* that, once the forest gazetting procedure has been completed, would allow the registration of land corresponding to Land Conservation and the establishment of the land title in the name of the State.

Listing wooded land in (i) a zoning plan; (ii) a forest register; and, finally, (iii) a land title secures the investment and encourages long-term management. Plantations and agroforestry will not be able to develop without this type of forest and land security process.

- Domestic permits provided for in the new law should be precisely located in clearly defined spaces to avoid uncontrolled extension of cutting. In principle, *future community forests should constitute one of the preferred areas for the conclusion of sustainable cutting contracts* between artisanal operators and local communities.
- The security of rights granted to economic actors and communities also requires participatory mapping of the accompanying customary rights over land and resources. Communities are able to identify areas over which they exercise different rights of use, areas that do not stop at the door of forest concessions or protected areas. *The identification of these spaces (territories or boundaries) by mapping* combined with the identification of the different rights exercised over these areas by the various groups of actors who use it *could become a new obligation of forest concession holders, in partnership with the commissions for acknowledging customary rights, and serve as a basis for a proportional distribution of the area tax quota for local communities* (the new forestry law indicates that part of the surface area tax must be paid to the local development fund for the benefit of local and indigenous communities). Mapping village boundaries crossing concessions can also be used to develop inclusive governance processes for the concession in order to sustainably manage wildlife, lead the fight against poaching and develop channels for marketing non-timber forest products.



13.2 Economic and fiscal incentives

- Equal treatment of companies and other economic actors is a fundamental condition for building trust leading to long-term investment. Coexistence between companies that enforce laws and regulations (especially in relation to forest management) and others that have not been in good standing for many years creates unfair competition between companies and is a particularly negative point for promoting responsible investment.
- The insufficiently dissuasive nature of the sanctions and the absence of a system of joint liability between the contractor companies and the subcontractors fail to capitalize on independent monitoring. The introduction of joint responsibility between the contractor companies and the subcontractors would be an important step forward for the governance and sustainable management of forests.
- The practice of granting tax rebates to enterprises in exchange for them carrying out works, notably road works, is scarcely compatible with the necessary transparency in the area of fiscal performance, and with annual and multiannual public budget programming based on expected tax revenues. The problem will be all the more acute as the new forestry law provides for the allocation of at least part of the surface area tax to the development of local communities. In general, this practice is not compatible with the way a modern State operates.
- Government debts to companies (delay in paying VAT to exporters, delay in paying cocoa development contributions to concessions, etc.) impede the necessary investments in sustainable forest management and modernization of the processing structure. Clearing these debts should be a political priority.
- The lack of security of the Ministry in charge of forests' annual budgetary allocations (irregular or delayed remittances) does not allow administrations to properly fulfill their mandate to support sustainable forest management; as in checking forestry activities without prior warning. Procedures for the automatic allocation of financial resources to the Ministry in charge of forests should be in place and an annual progress report from the Treasury Directorate should be produced.
- Parafiscality, but also certain taxes enshrined in financial laws, such as the data processing fee, have become very important and contribute to increasing tax pressure on companies, with no incentivizing aspect. It would be desirable to bring these levies into proportion with the exact cost of the service provided to the sector of activity – which implies accurately characterizing the service. It would be better to redeploy some of the forest tax to compensate for the potential shortfall from refocusing and recalibrating these levies.
- The uniform rates of the felling tax for all species does not encourage any limitation of the overlogging of some of the main species in exchange for secondary species, which could benefit from a significant reduction in rate that could be offset by increasing rates for the most traded species (bonus-malus principle).
- Public investment is needed to develop the competitiveness of Congolese timber and to enable companies to reduce transport costs. Dredging of the Sangha River would improve North-South flows, reduce transportation costs and reduce carbon dioxide emissions.
- Investments in the training of forestry personnel (mechanical, sawing, saw-doctoring, logging, etc.) through a national training center are also necessary for the development and competitiveness of enterprises.

13.3 Promoting certification through tax and non-tax incentives

- By promoting long-term management of forest resources and maintaining natural capital, certification contributes to the sustainable development of forest areas that could be converted to other uses if they no longer provide sufficient benefits to governments and local jurisdictions (taxes, direct and indirect employment), providing direct benefits to local communities dependent on forest resources.
- Because companies invest in certification to take over or maintain shares in environmentally sensitive markets, which are also the most profitable, they self-regulate so as not to lose their certification, thus complying as much as possible with laws and regulations. The benefits of certification can be considered as public assets. Certification is being used increasingly in public policies: in Gabon, Forestry Management certification will become mandatory for concessions as early as 2022, and in Congo the new forestry law requires certification of the legality of concessions. It may then be legitimate for market incentives to take over from public incentives and subsidies for the adoption of certification, including forest management

certification. Support can be manifested through criteria for accessing public timber markets, as is the case in many public authorities around the world, where only certified timber is allowed to compete. The "business model" of certification is based on "price premiums". As the premiums associated with certified timber are often not high enough, given the diversity of markets and their uneven maturity, incentives could be provided at the production level, either by subsidizing certified firms or by cutting costs. Reducing costs through tax cuts would not only supplement the commercial incentive for certification, but would potentially attract a new category of concession holders, namely those whose outlets are in markets that are not overly sensitive to certification. Full financial compensation for the government's fiscal shortfall for a number of years would be sought from development partners, including CAFI.

- In 2019, the Program for the Promotion of Certified Forest Operations (*Programme de Promotion de l'Exploitation Certifiée des Forêts—PPECF*) commissioned a feasibility study for a mechanism for the compensated reduction (for States) of forest tax for certified concessions in three Central African countries, including the Congo. On the basis of current taxation, and on the basis of harvesting and processing scenarios, the following results were obtained (See table next page):

Parameters

Table: Parameters used for the Congo simulation

	Average value	Levels
Annual forest levy (surface area)	FCFA350/ha	
Average value FOT logs (FCFA)	90,000	9% or 10% (in particular Okoumé) Simulation using 9%
Average value FOT wet sawn timber	225,000	4%
Average value FOT dry sawn timber	231,000	1.5%
Rotation (years)	30	
Average taxable "trunk" volume taken (m ³ /ha)	9	
Average volume marketed (m ³ /ha)	7	
Average recovery rate on sawing	38%	
Proportion of logs exported	15%	
Wet sawn timber/sawn timber ratio	67%	
Dried sawn timber/sawn timber ratio	33%	

Results*Table: Tax rebate amounts in different scenarios (Congo)*

Year	1	2	3	4	5	6
Certified Area (ha)	3,100,000	3,550,000	3,950,000	4,550,000	4,850,000	4,960,000
Tax rebate	(Euros)					
10%	1,187,454	1,359,826	1,513,046	1,742,875	1,857,790	1,899,926
20%	2,374,907	2,719,652	3,026,091	3,485,751	3,715,581	3,799,851
30%	3,562,361	4,079,478	4,539,137	5,228,626	5,573,371	5,699,777
40%	4,749,814	5,439,303	6,052,183	6,971,502	7,431,161	7,599,703
50%	5,937,268	6,799,129	7,565,228	8,714,377	9,288,951	9,499,629
60%	7,124,721	8,158,955	9,078,274	10,457,252	11,146,742	11,399,554
70%	8,312,175	9,518,781	10,591,320	12,200,128	13,004,532	13,299,480
80%	9,499,629	10,878,607	12,104,365	13,943,003	14,862,322	15,199,406
90%	10,687,082	12,238,433	13,617,411	15,685,879	16,720,112	17,099,331
100%	11,874,536	13,598,259	15,130,457	17,428,754	18,577,903	18,999,257

The above table proposes several scenarios of certified forest areas and several possibilities for reducing forest taxation (from 10% to 100%) with the corresponding amounts to be compensated to the State by development partners. For example, for the area currently FSC-certified in Congo (around 3.1 million ha), a 30% reduction in forest taxes for certified concession holders would represent around €3.56 million per year, which could be offset by the partners.

It is also possible to adjust tax rebates according to the type of certification. For example, certification of legality would qualify for a 20% rebate, while forest management certification (FSC or PAFC) would qualify for a 50% rebate. In July 2020, Gabon adopted an Amending Finance Law to revise area tax rates on forest concessions (previously fixed at FCFA 400/ha for all concessions) as follows:

- FSC or PEFC/PAFC certified concessions – FCFA 300/ha
- Concessions with legality certificate – FCFA 600/ha
- Uncertified concessions – FCFA 800/ha

The fact that Gabonese forest taxes used to be the lowest in the sub-region since the 2010 log export ban made it possible to increase taxation as a whole while allowing for the introduction of a tax rate schedule based on the types of certification obtained by concessionaires.

With the introduction of production sharing, forest taxation will be readjusted, and the issue of tax incentives will need to be reconsidered in line with the new parameters and implementing texts. However if implementation of the production-sharing regime is delayed by a few years (a study of the impacts of this regime is to be undertaken by the Ministry, it would be possible to discuss with development partners the possibility of such an incentive mechanism being put in place during the transitional period.

- **Non-tax** incentives for certification may be considered.
 - It would be desirable for certified timber to benefit from significant advantages in the awarding of all public procurement contracts.
 - In customs clearance procedures, certified timber could benefit from a “priority track” to reduce loading times.

**République du Congo: Incitations pour des investissements porteurs d'une
croissance verte des filières en forêts tropicales**

10 août 2020

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Liste des acronymes :

APV :	Accord de Partenariat Volontaire
ATIBT :	Association Technique Internationale des Bois Tropicaux
CAFI :	Initiative pour les forêts d'Afrique centrale
CAGDF :	Cercle d'appui à la Gestion Durable des Forêts
CIB :	Congolaise Industrielle du Bois
CLIP :	Consentement Libre, Informé et Préalable
CNIAF :	Centre national d'inventaire et d'aménagement des ressources forestières et fauniques
CTI :	Contrat de Transformation Industrielle
FAO :	Organisation des Nations Unies pour l'Agriculture et l'Alimentation
FF:	Fonds Forestier
FLEGT :	Forest Law Enforcement, Governance and Trade - Application des réglementations forestières, la gouvernance et les échanges commerciaux
FOB :	Free on Board
FOT :	Free on Trucks
FRA :	Forest Resources Assessment (Évaluation mondiale des ressources forestières – FAO)
FSC :	Forest Stewardship Council
HSC/HCS :	Haut stock de carbone
HVC/HCV :	Haute valeur de conservation
IDH :	Indice de Développement Humain
IFO :	Industrielle Forestière d'Ouessou
ITIE:	Initiative pour la Transparence dans les Industries Extractives
LS :	LegalSource Standard
MEF :	Ministère de l'Économie forestière
MEFDD :	Ministère de l'Économie Forestière et du Développement Durable
MEFDDE :	Ministère de l'Économie Forestière, du Développement Durable et de l'Environnement
OI :	Observation Indépendante
OIBT :	Organisation Internationale des Bois Tropicaux
OIF:	Observateur Indépendant des Forêts
OLB :	Origine Légale du Bois
PAFC :	Pan-African Forest Certification
PEFC:	Programme pour la reconnaissance mutuelle des certifications forestières
PFNL :	Produits forestiers non ligneux
PGDF :	Plateforme pour la Gestion Durable des Forêts
PNAT :	Plan National d'Aménagement du Territoire
PNUD :	Programme des Nations Unies pour le Développement
PPECF :	Programme « Promotion de l'exploitation certifiée des forêts »
PRONAR :	Programme national d'afforestation et de reboisement
SCPFE :	Service de contrôle des produits forestiers à l'exportation
SDAT :	Schémas départementaux d'aménagement du territoire
SDC :	Séries de Développement Communautaire
SGS :	Société Générale de Surveillance
SNAT :	Schéma National d'Aménagement du Territoire
SNR :	Service National de Reboisement
UE :	Union Européenne
UFA :	Unité Forestière d'Aménagement
UFE :	Unité Forestière d'Exploitation
UPARA :	Unités Pilotes Aménagement de Reboisement et Agroforesterie
VLC :	Vérification of Legal Compliance
ZES:	Zone Économique Spéciale

Résumé exécutif

L'étude a identifié pour un certain nombre de grands thèmes les principales dimensions incitatives ou désincitatives. Les dimensions incitatives sont précédées d'un (+), les dimensions désincitatives sont précédées d'un (-).

Dispositions légales et réglementaires relatives au foncier

- + La possibilité de reconnaissance des droits coutumiers est favorable à la sécurité foncière, laquelle est une condition de la plantation d'arbres.
 - *Cependant, le processus de reconnaissance des droits coutumiers est associé à la « mise en valeur », laquelle peut inciter les usagers à remplacer la forêt naturelle par des cultures afin de témoigner de cette mise en valeur.*
 - *Le manque de moyens alloués aux commissions de reconnaissance des droits coutumiers maintient nombre de communautés dans une insécurité juridique qui les expose à des opérations d'accaparement des terres qui peuvent être également néfastes pour les écosystèmes naturels, dont les forêts.*

Législation foncière forestière

- + La plantation d'arbres est encouragée à travers le droit, sur le domaine forestier non permanent, pour un particulier de jouir exclusivement du terrain planté et de la propriété des arbres qui s'y trouvent, sous réserve (notamment) du droit des tiers
 - *Le classement des forêts de production n'a pas été réalisé, le domaine forestier permanent n'est donc pas établi en droit. Ceci laisse la possibilité à différentes autorités administratives d'attribuer des permis agricoles sur des zones forestières.*
 - *Le Plan National d'Aménagement des Terres n'a pas été réalisé et la Commission chargée de résoudre les problèmes de superposition de droits (mines vs foresterie) n'a pas fonctionné.*

Cadre institutionnel

- + La création d'un instrument financier, le Fonds Bleu, pour intervenir sur le nexus entre les ressources en eau et les forêts
 - *La séparation des compétences ministérielles concernant les forêts, d'un côté, et sur l'environnement, de l'autre, affaiblit la cohérence de l'action gouvernementale sur des sujets majeurs comme le dossier des tourbières ou les négociations internationales sur le climat et la biodiversité.*
 - *La faiblesse des fonctions d'inspection, de contrôle et de police environnementale.*
 - *L'absence de sécurisation des dotations budgétaires annuelles du Ministère en charge des forêts (versements irréguliers ou retardés) ne permet pas aux administrations de remplir correctement leur mission de soutien à la gestion durable des forêts*

Normes d'aménagement des forêts de production

- + Les normes d'aménagement au Congo sont rigoureuses et assez complètes.
 - *Les prescriptions des normes d'aménagement sont centrées sur la ressource ligneuse et n'accordent qu'une place modeste à la biodiversité. Elles n'obligent pas, notamment, à produire des plans de gestion de la faune.*
 - *Le processus de validation des plans d'aménagement par l'administration est souvent trop long*
 - *Le taux de reconstitution minimal des essences commercialisables est fixé pour le premier cycle de coupe, mais les Normes d'aménagement n'abordent pas le problème de la durabilité après le premier cycle de coupe. En l'état actuel des choses, la reconduction implicite de l'objectif de 50% de reconstitution du volume d'un cycle de coupe à l'autre peut sembler incompatible avec l'objectif de rendement soutenu.*
 - *Les normes nationales actuelles ne prennent pas en compte les autres forêts de production, notamment les Contrats de Transformation Industrielle (CTI).*

Situation actuelle en matière de certification

- + Les entreprises congolaises certifiées FSC (« gestion forestière ») ont obtenu des résultats probants en matière de réalisations sociales, de lutte contre le braconnage et de gestion de la faune, résultats attestés par des études indépendantes menées par des chercheurs.
- + La certification apporte une garantie de bonne application des plans d'aménagements et la certification « gestion forestière » pousse les entreprises à aller au-delà des normes légales en matière d'aménagement et de cahiers des charges.
 - *Les entreprises certifiées sont confrontées à une compétition déloyale de la part d'autres entreprises forestières qui ne respectent que partiellement les réglementations (aménagement, transformation, dimensions sociales des cahiers des charges...) et cela fragilise leur position économique*

Situation actuelle de la foresterie communautaire

- + Le document de politique forestière de la République du Congo (2014) propose des pistes novatrices pour associer les communautés locales à la cogestion des concessions forestières sur la base de la constatation et de la reconnaissance de leurs droits d'usage, tout en ménageant la possibilité d'une exploitation et d'une gestion autonome de ressources boisées par ailleurs.
- + L'obligation de constituer des séries de développement communautaires dans le cadre des plans d'aménagements constitue une avancée en matière de gestion participative, même si le principe de reconnaissance des droits coutumiers sur l'ensemble de la concession, évoqué par la Politique forestière de 2014, n'est pas encore mis en œuvre.
 - *On peut regretter l'absence, jusqu'à la loi forestière 33-2020 du 8 juillet 2020, de la possibilité de créer des forêts communautaires autonomes (qui pourraient être des concessions au profit des communautés locales) en dehors des concessions industrielles, forêts qui pourraient constituer une source d'approvisionnement maîtrisée pour les scieurs artisanaux. La nouvelle loi forestière modifie cette situation en offrant la possibilité aux communautés locales de demander une forêt communautaire à leur initiative. Il faudra toutefois que les limites des concessions puissent être modifiées pour laisser de la place à cette foresterie communautaire autonome. La révision des limites des concessions pourra être réalisée à l'occasion du classement des UFA.*

Gouvernance et régime de sanctions

- + La mise en place par le Congo, à l'initiative du gouvernement dans les années 2000 puis dans le cadre de l'APV, d'un observateur indépendant des forêts est une mesure très favorable à la gestion durable.
- + La signature d'un Accord de Partenariat Volontaire (APV) entre le Congo et l'UE est un élément très positif pour l'amélioration de la gouvernance forestière.
 - *L'insuffisante application du régime réglementaire, notamment en ce qui concerne le non-respect des plans d'aménagements forestiers, constitue un problème majeur.*
 - *Le caractère insuffisamment dissuasif des sanctions et l'absence d'un système de responsabilité solidaire entre les sociétés donneurs d'ordre et les sous-traitants ne permet pas de capitaliser sur l'observation indépendante.*

Fiscalité forestière

- + La modulation des taxes (valeur Free on Trucks, FOT) est a priori favorable à une meilleure répartition de l'effort d'exploitation sur l'ensemble des territoires
- + La démarche du Congo pour inclure le secteur bois dans l'ITIE permet de mieux connaître les recettes de fiscalité forestière de l'État et les déclarations de paiement de certaines entreprises. Néanmoins, une seule entreprise a publié des paiements détaillés et quelques entreprises se contentent d'indiquer une somme globale de taxes payées, sans aucun détail. La grande majorité des entreprises n'a pas communiqué la moindre donnée.
 - *L'unicité de taux de la taxe d'abattage pour toutes les essences n'incite pas à limiter la surexploitation de certaines des principales essences commercialisées au profit d'essences secondaires, lesquelles pourraient bénéficier d'une baisse importante du taux.*
 - *L'obligation, pour chaque entreprise de transformer 85% de sa production de bois n'est pas une garantie de gestion durable ni de valorisation optimale des ressources. Un volume maximum d'exportation annuelle de grumes fixé au niveau national pourrait remplacer cette obligation en laissant aux entreprises la possibilité de se spécialiser plus ou moins sur la*

transformation: un marché intérieur des grumes permettrait une allocation des grumes aux entreprises les plus efficaces dans la transformation. Des quotas d'exportation de grumes pourraient être soit vendus aux enchères, soit attribués aux entreprises certifiées.

- *La pratique de remise de taxes contre la réalisation de travaux va à l'encontre de la transparence nécessaire dans la collecte des recettes fiscales et peut réduire les ressources financières décidées par les Lois de Finance (même s'il n'y a pas d'affectation directe des taxes forestières au Fonds Forestier)*
- *La parafiscalité et certains prélèvements comme la redevance informatique ont pris une importance considérable. Ceci contribue à renforcer la pression fiscale sur les entreprises, sans aucune dimension incitative*

Quelques remarques sur la nouvelle loi forestière (n°33-2020 du 8 juillet 2020)

La nouvelle loi apporte des éléments intéressants susceptibles de favoriser la gestion durable. Parmi ceux-ci, on peut citer :

- L'obligation pour les concessionnaires de se certifier. On comprend qu'il devrait s'agir de certification de « gestion forestière » (type FSC ou PAFC) ou de légalité. Les entreprises devront « certifier la gestion de leurs concessions aménagées ou la légalité des produits qui y sont exploités et transformés » (art. 72). La loi mentionne également la possibilité d'une reconnaissance de la certification privée pour la vérification de la légalité (art. 65) et la mise en place d'un système national de certification forestière (art. 70).
- La possibilité de reconnaître une forêt communautaire « dont l'initiative de la création et de la gestion durable relève d'une communauté locale » et la reconnaissance comme forêt communautaire « de la forêt naturelle se trouvant sur le terroir d'une communauté locale et des populations autochtones [et] et a été classée à leur profit » (art. 15). L'article 18 précise qu'une fois créée, la forêt communautaire « est incluse dans le domaine forestier permanent ».
- L'introduction d'une la convention de valorisation de bois de plantation (art. 118);
- L'institutionnalisation de l'Observation Indépendante en appui des opérations de contrôle de l'exploitation forestière (art. 69)
- L'introduction de la notion de consentement préalable des populations et des organisations de la société civile pour le classement des forêts: « le classement d'une forêt obéit au principe du consentement libre, informé et préalable des populations affectées par le projet de classement et au principe de consultation des organisations de la société civile de la circonscription concernée » (art. 40).

Cette nouvelle loi introduit également des innovations plus discutables, dont les effets sur la gestion durable des forêts pourraient être négatifs, et qui n'ont pas fait l'objet d'analyse d'impact au préalable.

- ❖ L'introduction d'un principe de partage de production, c'est-à-dire l'obligation pour les entreprises de livrer des quantités physiques de grumes à l'État trouve très probablement son explication dans la volonté du gouvernement congolais de créer des zones franches pour la transformation et l'exportation du bois, à l'instar de la Zone Économique Spéciale au Gabon. Dans la mesure où certaines industries qui devraient s'installer dans cette zone n'auront pas forcément de concessions forestières, la livraison de bois à l'État (ou un opérateur qu'il contrôle) doit permettre de répondre aux besoins d'approvisionnement en matière première des industries de cette ou ces futures zones franches.
- ❖ On peut s'interroger sur la faisabilité de la transposition d'un mécanisme pratiqué dans le secteur pétrolier au secteur forestier, et qui n'a pas été expérimenté dans d'autres pays jusqu'à présent.
- ❖ Certaines entreprises certifiées ont investi dans des unités industrielles pour transformer la quasi-totalité de production de bois en grumes. Une obligation de livrer un pourcentage de grumes pourrait se traduire, soit par une difficulté à alimenter l'outil de transformation (avec les conséquences économiques qui s'ensuivraient), soit à une incitation à augmenter les prélèvements afin de pouvoir à la fois approvisionner l'outil de transformation et de livrer les quantités requises de grumes à l'État. Ceci serait préjudiciable pour la gestion durable des forêts.

Offrir des incitations aux entreprises certifiées

En favorisant une gestion à long terme des ressources boisées et le maintien d'un capital naturel, la certification contribue à la mise en valeur forestière durable d'espaces. Les bénéficiaires de la certification peuvent être considérés comme des biens publics. Les certifications sont de plus en plus

utilisés dans les politiques publiques: au Gabon, la certification FSC deviendra obligatoire pour les concessions dès 2022, et au Congo la nouvelle loi forestière requiert une certification de légalité des concessions). Il peut être alors légitime de relayer les incitations du marché par des incitations et subventions publiques pour l'adoption de la certification, notamment la certification de gestion forestière. En juillet 2020, le Gabon a adopté une loi de finances rectificative modulant la taxe de superficie selon trois cas en relation avec la certification: alors que la taxe de superficie était fixée à 400 FCFA par hectare avant la loi de juillet 2020, elle est maintenant de 300 FCFA par ha pour les concessions certifiées FSC ou PAFC/PEFC, de 600 FCFA pour les concessions avec certification de légalité et de 800 FCFA pour les concessions sans certification.

L'aide peut se manifester par le biais de critères d'accès aux marchés publics du bois. En outre, lors des procédures de dédouanement, les bois certifiés pourraient bénéficier d'une « voie prioritaire » permettant de réduire les délais d'embarquement

Le Congo peut également envisager un mécanisme de baisse de la fiscalité. Le « modèle économique » de la certification dépend des « primes sur le prix ». Étant donné que les primes associées au bois certifié ne sont souvent pas suffisamment élevées, compte tenu de la diversité des marchés et de leur inégale maturité, des incitations pourraient être fournies au niveau de la production, soit en subventionnant les entreprises certifiées, soit en réduisant les coûts. La réduction des coûts par le biais de réductions de taxes compléterait non seulement l'incitation commerciale de la certification, mais attirerait potentiellement une nouvelle catégorie de concessionnaires, à savoir ceux dont les débouchés se trouvent sur des marchés peu sensibles à la certification.

Une compensation financière intégrale du manque à gagner fiscal pour l'État pendant un certain nombre d'années serait à rechercher auprès des partenaires au développement, notamment auprès de CAFI (Initiative pour les Forêts d'Afrique centrale), qui n'a pas d'instrument spécifique pour un tel schéma de compensation mais dont plusieurs des donateurs se sont montrés intéressés par le concept.

1. Contexte de l'étude

Le « Bois durable pour un monde durable » (SW4SW), adopté en 2018, est une initiative conjointe du Partenariat de collaboration sur les forêts de la FAO avec l'Organisation internationale des bois tropicaux (OIBT), la Banque mondiale, le Centre pour la recherche forestière internationale (CIFOR) et le Fonds mondial pour la nature (WWF).

L'objectif général de cette initiative est de renforcer les chaînes de valeurs durables du bois afin d'améliorer leurs avantages sociaux, économiques et environnementaux, de la production à la consommation. L'initiative vise notamment à renforcer la contribution des chaînes de valeur du bois durable, pour une réalisation plus effective des objectifs de développement durable (SDG) et des objectifs en matière de lutte contre le changement climatique.

Un programme de travail a été élaboré pour atteindre ces objectifs, l'activité: « **Incitations pour des investissements porteurs d'une croissance verte des filières en forêts tropicales** » est facilitée par un financement du gouvernement allemand. Le BMEL (ministère fédéral allemand de l'alimentation et de l'agriculture) a accordé un financement de projet à l'OIBT pour la promotion et l'opérationnalisation de chaînes d'approvisionnement légales et durables (LSSC). Cette activité constitue une étape vers l'évaluation, la formulation et la proposition d'incitations non fiscales et fiscales, de subventions et d'autres outils macroéconomiques pour renforcer les investissements dans les forêts tropicales de production afin de relever les défis croissants de l'offre et de la demande de bois certifié à l'avenir.

En proposant et en réalisant cette action, l'OIBT aide les pays producteurs membres à trouver des canaux et à participer à des chaînes d'approvisionnement légales et durables qui prennent de plus en plus d'importance du fait de la prolifération des initiatives de lutte contre la déforestation prises par les grandes entreprises et les entités publiques.

Le projet vise à donner une vision analytique de la complexité des incitations, à l'encadrer sur la dynamique de l'offre et de la demande, et à améliorer les capacités des pays producteurs membres de l'OIBT à formuler et à mettre en œuvre des incitations efficaces et performantes pour le développement durable de leurs forêts.

1.1 Description de l'activité (extrait des termes de référence des consultants)

- (i) Examiner le cadre national actuel de la gestion durable des forêts dans le pays, le plan national d'aménagement du territoire et identifier les incitations existantes pour la gestion durable des forêts et les produits de base agricoles « zéro déforestation » dans les politiques publiques.
- (ii) Identifier ce qui peut être considéré comme des éléments dissuasifs pour les "acteurs économiques conformes", qui pourraient être supprimés par des modifications du cadre réglementaire ou administratif.
- (iii) Examiner, décrire et simuler les coûts et l'impact potentiel des incitations fiscales (scénarios multiples) en faveur du "bois durable" et des produits de base exempts de déforestation.
- (iv) Envisager, décrire et évaluer l'impact potentiel des incitations non fiscales qui pourraient être prévues (par exemple, durée des concessions, voies rapides prioritaires pour l'exportation, etc.)
- (v) Organiser une session de formation de 3 jours sur les instruments économiques pour la gestion durable des forêts et l'économie verte.
- (vi) Engager un dialogue avec les décideurs politiques (pouvoir exécutif, parlementaires), avec les ONG et les organisations professionnelles sur la mesure qu'ils considèrent comme réalisable et sur le type de combinaison de politiques (introduction d'incitations, suppression des mesures dissuasives) qui serait le plus approprié.

1.2 Résultats escomptés

A. Un rapport initial ("Rapport 1") comprenant :

- Un examen et une analyse comparative des cadres nationaux de gestion durable des forêts;
- Une présentation des cadres juridiques du régime foncier et de leur influence probable sur la gestion des forêts;
- Une présentation du processus national de planification de l'utilisation des terres, y compris une analyse des procédures de création de domaines forestiers permanents (publication au journal officiel, enregistrement...), des stratégies nationales REDD+ et des politiques de développement;
- Une présentation et une analyse de la structure de la fiscalité forestière, des recettes collectées et déclarées (transparence);
- Une session de formation de 3 jours sur les instruments économiques pour la gestion durable des forêts et l'économie verte pour les fonctionnaires des principaux ministères (forêts, environnement, agriculture, aménagement du territoire, économie et finances) et les membres du Parlement;
- Une analyse des mesures d'incitation/désincitation existantes pour la gestion durable des forêts et les produits de base exempts de déforestation;

- Un résumé des engagements pris par les entreprises du secteur privé: les besoins et les motivations des principales entreprises seront examinés, ainsi que leurs attentes par rapport aux mesures d'incitation qui pourraient être introduites et aux mesures de dissuasion qui devraient être supprimées;
 - Un ensemble de propositions concernant les incitations fiscales et non fiscales qui pourraient être introduites et les éléments dissuasifs qui pourraient être supprimés. Les mesures fiscales seront quantifiées et leur impact sur le budget national sera discuté.
- B. Un rapport final ("Rapport 2") contenant des recommandations sur les combinaisons de mesures souhaitables et réalistes (fiscales et non fiscales, mesures incitatives et dissuasives) sera proposé.

2. Historique de l'utilisation des ressources forestières

Le Congo dispose de deux zones géographiques et climatiques distinctes, le Nord et le Sud. La couverture forestière est très discontinue et hétérogène et comprend des forêts de terre ferme (45% du territoire) et des forêts inondées dans la cuvette congolaise (20%). Ces forêts jouent un rôle écologique et socio-économique majeur.

La forêt naturelle couvre près de 65% du pays et représente environ 22 millions d'hectares (selon les critères FAO). Elle est répartie en deux grands ensembles forestiers, le massif du Nord et les massifs du Sud (Mayombe et Chaillu), séparés par de vastes étendues de savanes au centre du pays. Cependant une grande partie de cette forêt ne peut être considérée comme productive. Dans le massif du Nord par exemple, sur 15 millions d'hectares de forêts, près de 60% (soit 9 millions d'hectares) se situe sur des zones non inondables et donc exploitables. En tenant compte de la présence des parcs nationaux existants, on estime la forêt productive sur l'ensemble du territoire à environ 10 millions ha dont :

Les 2/3 se situent dans le secteur forestier Nord (départements de la Sangha, de la Likouala, la Cuvettes centrale et la Cuvette ouest). Cette forêt est riche en bois rouges, essences de grande valeur commerciale, principalement des méliacées (Sapelli: *Entandrophragma cylindricum*, Sipo: *Entandrophragma utile*, Bossé: *Guarea* ou *Leplaea cedrata*...) et des légumineuses (doussié: *Afzelia Africana*, wengé: *Millettia laurentii*...). Elle est pendant longtemps restée une zone vierge d'exploitation. Depuis les années 70 et encore plus rapidement dans les années 1990, ce massif fait l'objet d'une exploitation forestière plus systématique. L'enclavement du massif de cette région a duré longtemps, mais celui-ci est désormais relié à Brazzaville grâce d'abord à l'action des entreprises forestières qui s'étaient engagées à réaliser « la boucle de la Likouala » (dans le cadre d'un protocole signé en 2006 avec le Ministère en charge des Forêts) puis ensuite grâce à la liaison Ouessou-Owando-Makoua, réalisée en grande partie par le Gouvernement avec l'appui de la coopération chinoise. La société forestière Congolaise Industrielle de Bois (CIB) a réalisé la quasi-totalité des routes secondaires dans la Sangha et une partie des routes secondaires dans la Likouala. Avant la boucle de la Likouala, une liaison a été créée vers le Cameroun par la CIB du fait des difficultés d'évacuation de bois sur Brazzaville par voies d'eau et terrestre, notamment pendant les hostilités politico-militaires de 1997, 1998 et début des années 2000. L'exploitation forestière dans le secteur forestier Nord est demeurée très sélective et ne concerne qu'un nombre très limité de tiges dont la valeur commerciale est assez élevée pour pouvoir couvrir les coûts de transport. Une bonne partie de la forêt de la zone Nord est en train d'être parcourue par l'exploitation forestière (et minière), mais la majorité des UFA en est à la première rotation dans le cadre des plans d'aménagement¹. La fréquence en arbres de gros diamètre y est donc relativement élevée.

L'autre tiers des forêts naturelles se situe dans le secteur forestier Sud (départements du Kouilou, du Niari et de la Lékoumou). Dans cette zone on trouve le massif du Mayombe, originellement riche en Limba mais qui a subi de nombreux passages en exploitation depuis l'époque coloniale. En limite avec le Gabon se trouve le massif du Chaillu, riche en Okoumé et fortement exploité depuis les années 60. L'ensemble des massifs forestiers du Sud est donc fortement dégradé, surexploité et les essences de gros diamètres y sont devenues rares. Cette tendance est très marquée dans le Kouilou, département le plus proche de Pointe Noire, où se concentre une grande partie des activités illégales de coupes de bois. Contrairement à la partie Nord dans laquelle on trouve plusieurs concessions forestières de grande taille attribuées à des exploitants forestiers à capitaux internationaux. Les concessions forestières du centre et du sud du pays sont plus petites et en partie attribuées à des exploitants nationaux, lesquels confient souvent en sous-traitance leurs permis à des entreprises asiatiques. Environ 4% de la surface productive se retrouve dans la région centre et ne représente qu'un intérêt limité du fait d'une situation relativement isolée et d'un éloignement marqué tant du port de Pointe Noire que des routes d'évacuation du Nord.

¹ Avant les plans d'aménagement, les concessions ont toutefois fait l'objet d'une exploitation sélective plus ou moins poussée.

3. Données statistiques de base

Selon le site PopulationData.net, la population du Congo s'établissait à 5,3 millions d'habitants en 2018, avec un taux d'accroissement annuel très élevé de 3,68%. La densité est de 15,45 habitants / km².

Les zones rurales du Sud sont relativement densément peuplées (entre 5 et 40 habitants/km²), le maximum étant atteint dans la zone de [Boko](#) (Pool) et aux alentours. En revanche, la partie septentrionale du pays a des densités le plus souvent comprises entre 0 et 2 habitants/km², en particulier dans les zones marécageuses du Nord Est.

Le PIB par habitant est de 2148 USD, faisant du Congo un pays à revenu intermédiaire de la tranche inférieure. En raison d'une économie de rente concentrée et peu distributive, son développement humain est moyen (137^{ème} rang mondial sur 189 et 13^{ème} en Afrique en 2018, selon le PNUD, avec un IDH de 0,591) et les inégalités restent élevées (coefficient de Gini de 0,46) avec un taux de pauvreté de plus de 35%. L'économie congolaise repose quasi exclusivement sur le pétrole qui est à l'origine d'1/3 du PIB, de 2/3 des recettes budgétaires, et de 85% des recettes d'exportations².

Le Congo n'est pas favorablement classé dans les indicateurs de gouvernance proposés par les organismes internationaux: 180^{ème} (sur 190 pays examinés) dans le classement « Doing Business »³ de la Banque Mondiale et 165^{ème} (sur 180 pays) dans l'Index de Perception de la Corruption élaboré par Transparency International⁴.

3.1 Taux de couverture et déforestation

Le Congo est un pays à fort couvert forestier et à faible déforestation, selon la caractérisation retenue dans les débats concernant REDD+. Selon le rapport FRA 2020 de la FAO⁵, le taux de déforestation nette moyen pour la période 2010-2020 est de 0,06% avec une perte annuelle nette moyenne de 12.900 ha sur la période, la superficie boisée passant de 22,075 millions ha à 21,946 millions ha.

La figure ci-dessous montre le taux de couverture boisée par département.

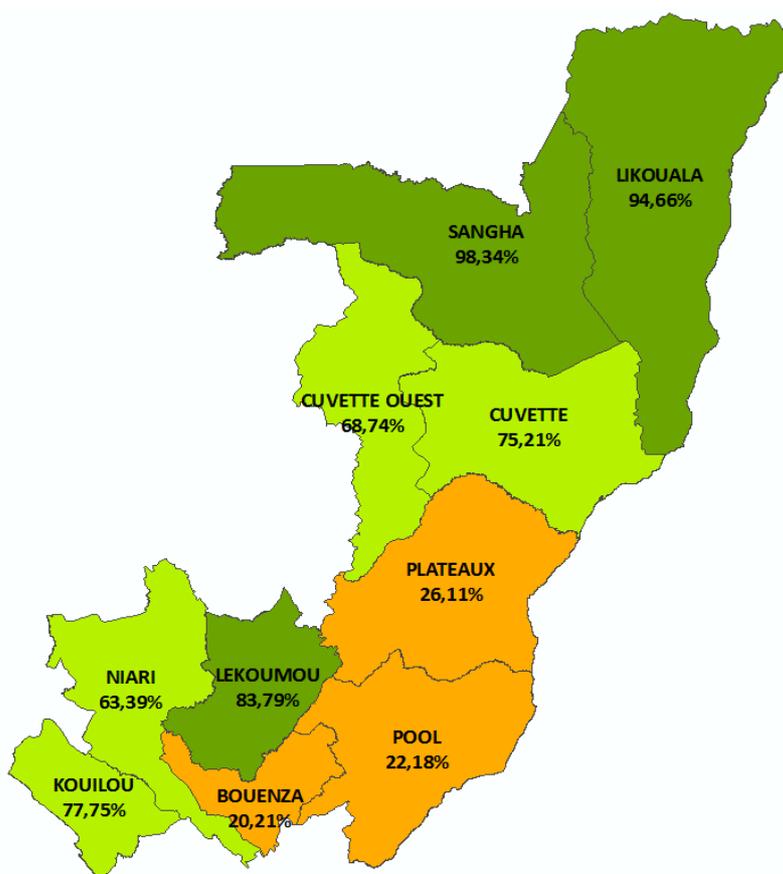


Figure: Taux de couverture forestier (source : étude BRLi, 2014)

² <https://www.tresor.economie.gouv.fr/Pays/CG/indicateurs-et-conjoncture>

³ <https://www.doingbusiness.org/content/dam/doingBusiness/country/c/congo-rep/COG.pdf>

⁴ <https://www.transparency.org/en/countries/republic-of-the-congo#>

⁵ FAO. 2020. Global Forest Resources Assessment 2020: Main report. Rome. <https://doi.org/10.4060/ca9825en>

Le groupe Rougier (France) détient la société Mokabi SA, qui dispose d'une concession dans le nord du pays. D'autres opérateurs européens ou libanais, d'importance moindre opèrent au sud ou au nord du pays. De manière générale, les opérateurs asiatiques dominent le paysage. La CIB-OLAM est la seule entreprise contrôlée par des capitaux asiatiques qui soit certifiée FSC. Avant son rachat par Olam en 2010, la CIB avait été détenue par des intérêts allemands puis danois. Les autres sociétés asiatiques se caractérisent par une absence ou une faible effectivité de l'aménagement, et une priorité accordée à l'exportation de grumes (malgré la réglementation qui impose de transformer 85% de sa production ou d'acheter des quotas d'exportation de grumes à d'autres entreprises). On peut noter toutefois que la société Tama (Malaisie) est certifiée OLB (Origine Légale du Bois) depuis 2017.

La superficie moyenne attribuée par opérateur est de près de 400.000 ha, avec des fortes disparités. Les concessions du Nord Congo étant plus importantes que celles du Sud. Les sociétés CIB (Groupe OLAM) et IFO (Interholco) gèrent chacune plus d'un million d'hectares (pratiquement, deux millions pour la CIB sur cinq concessions et un million deux cent pour IFO sur une concession). La société SEFYD (nord Congo) gère deux concessions (Jua-Ikié et Karagoua) d'environ 1,2 millions ha. La société Mokabi SA (Groupe Rougier) travaille sur 586.000 ha sur une concession et Likouala Timber sur 596.000 ha, sur deux concessions.

4. Le cadre légal et réglementaire

4.1 La loi forestière

La loi n°16-2000 du 20 novembre 2000 portant code forestier, régit la gestion et l'utilisation des ressources forestières au Congo. Cette loi a pour objectif de définir le domaine forestier national et de déterminer les critères et les normes d'organisation et de gestion concertée et participative, de concilier l'exploitation des produits forestiers avec les exigences de la conservation du patrimoine forestier et de la diversité biologique en vue d'un développement durable.

Ce texte de loi a été complété par six textes d'application (Décret 2002-437 du 31 décembre 2002, fixant les conditions de gestion et d'utilisation des forêts, Décret 2002-433 du 31 décembre 2002 portant organisation et fonctionnement du corps des agents des Eaux et Forêts, Décret 2002-434 du 31 décembre 2002 portant organisation et fonctionnement du Fond Forestier, Décret 2002-435 du 31 décembre 2002 portant attributions, organisation et fonctionnement du Centre national d'inventaire et d'aménagement des ressources forestières et fauniques...) et un grand nombre d'Arrêtés portant sur les directives nationales d'aménagement durable des concessions forestières; la création, définition des unités forestières d'aménagement ou d'exploitation, les modalités de classement et de déclassement des forêts, la fiscalité forestière...

Certaines dispositions de cette loi 16-2000 ont été modifiées par la loi 14-2009 du 30 décembre 2009. Celle-ci introduit le calcul de la taxe d'abattage et de la taxe à l'exportation sur la base de la valeur FOT (Free On Truck) et non plus sur la valeur FOB (Free On Board), afin de prendre en compte les coûts moyens de transport qui varient d'une zone à l'autre. La taxe de superficie est dorénavant appliquée sur la série de production pour les concessions aménagées et sur l'ensemble de la superficie de la concession pour les autres (mesure incitative pour ne pas différer la réalisation du plan d'aménagement). Enfin, il est désormais possible pour les sociétés de se transférer entre les entreprises les quotas d'exportation des grumes de 15% de la production totale d'une société, après approbation de l'administration des eaux et forêts. Cependant, ce transfert n'a jamais été utilisé, les entreprises obtenant toujours des autorisations d'exportation des grumes hors quota.

Une nouvelle loi forestière vient d'être publiée, c'est la loi n°33-2020 du 08 juillet 2020 portant code forestier, les changements qu'elle apporte ont été analysés au point 13 du présent rapport.

4.2 Les lois foncières

Le dispositif repose aujourd'hui sur une série de textes, parmi lesquels on peut citer la loi n° 9-2004 du 26 mars 2004 portant Code du domaine de l'État, la loi n° 10-2004 de la même date fixant les principes généraux applicables aux régimes domaniaux et foncier, mais aussi la loi antérieure n° 17-2000 du 30 décembre 2000 sur le régime de la propriété foncière au Congo.

- Le **domaine public**: Il peut être celui de l'État ou des collectivités décentralisées. On y retrouve donc le domaine public naturel et le domaine artificiel, l'ensemble de ces dépendances étant soumises au régime juridique caractérisé par l'inaliénabilité, l'insaisissabilité et l'imprescriptibilité. Ce domaine peut être occupé par affectation ou autorisation expresse d'occuper, les modalités de ces occupations étant fixées par un décret ad hoc, n° 2005-515 du 26 octobre 2005. Il existe un ministère en charge spécifiquement, outre de la réforme foncière, de la « préservation du domaine public ».
- Le **domaine privé**: il s'agit de l'ensemble des biens immeubles immatriculés au nom de l'État ou des collectivités, et des biens vacants et sans maître.
- La **propriété foncière**: Elle implique l'immatriculation du terrain et l'inscription des droits réels, à commencer par celui de propriété selon des procédures appropriées permettant de purger les situations juridiques antérieures et donc de donner un caractère inattaquable aux droits

inscrits. Pour avoir une existence juridique réelle, les droits portants sur les immeubles doivent être inscrits sur le livre foncier tenu par les Conservations des Hypothèques et de la Propriété Foncière. Seuls les droits réels portants sur les immeubles, c'est-à-dire sur le sol, peuvent être inscrits dans le livre foncier. Cette procédure d'inscription des droits de propriété est l'immatriculation. Si l'article 10 de la loi n°17-2000 rend l'immatriculation obligatoire, le nombre de personnes ayant procédé à l'immatriculation de leurs droits fonciers est limité. On estime que moins de 10% des terres sont immatriculées, la majorité se situant en milieu urbain.

- Les **droits fonciers coutumiers**: Il est possible d'établir des certificats provisoires de propriété à partir des droits fonciers coutumiers. Le problème est que ces documents provisoires sont conçus pour être transformés en titres fonciers, après immatriculation du terrain, celle-ci ne pouvant intervenir qu'après la mise en valeur du terrain. Il ne s'agit donc pas vraiment de valider les droits fonciers coutumiers en tant que tels, par un dispositif et une procédure ad hoc, plus ou moins décentralisée, mais plus simplement de situer ceux-ci au regard du dispositif de droit commun de la propriété foncière, basé sur la procédure d'immatriculation.

Pour que ces droits puissent avoir une existence juridique, ils doivent être « constatés » et « reconnus », deux étapes distinctes.

- La constatation, relevait, jusqu'à la loi n°21-2018 du 13 juin 2018 fixant les règles d'occupation et d'acquisition des terres et des terrains, de la compétence d'une commission *ad hoc* de constatation des droits coutumiers. La commission auditionne les témoins appropriés. Le requérant peut établir la preuve par tous moyens utiles et pertinents, comme des décisions de justice, des actes authentiques ou sous seing privé. Il faut apporter « *La preuve de la mise en valeur effective depuis au moins trente ans et la preuve de l'occupation ou de l'emprise évidente et permanente peuvent être apportées par témoins.* »
- La reconnaissance: un organe ad hoc de reconnaissance des droits fonciers coutumiers, était prévu par un décret de 2006. « *La commission ad hoc de reconnaissance des droits fonciers coutumiers ne peut délivrer une attestation provisoire de propriété pour des terres ou terrains dont la superficie est supérieure à 100 hectares* » (art. 4, décret n° 2006-255). Au terme de cette procédure, les requérants peuvent obtenir des attestations provisoires de propriété qui peuvent ensuite être transformées en titres de propriété définitifs. Très peu d'attestations provisoires de propriété et de titres fonciers ont été émis, car les commissions n'ont pas reçu de moyens financiers pour fonctionner.

La loi n°21-2018 du 13 juin 2018 fixant les règles d'occupation et d'acquisition des terres et des terrains remplace ces commissions ad hoc de constatation et reconnaissance des droits fonciers coutumiers par une commission nationale de reconnaissance des terres coutumières. La loi n°21-2018 oblige les détenteurs de droits fonciers coutumiers à procéder à la reconnaissance de leurs droits fonciers par l'État et fait de cette reconnaissance un préalable à la jouissance de ces terres. Les terres coutumières reconnues par l'État sont immatriculées et constituent une propriété foncière indivise. La loi prévoit des sanctions pour les individus qui ne se conformeraient pas à ces dispositions et institue « *l'immatriculation d'office des terres coutumières par l'Etat* » en l'échange de la rétrocession à ce dernier de 5% de la superficie des terres reconnues « *au titre des frais cadastraux et de création du titre foncier* ».

Dans la pratique, et comme dans d'autres pays en Afrique, les terres sont contrôlées par des « propriétaires coutumiers », descendants des premiers arrivants, qui distribuent des parcelles à différents demandeurs, habitants de la localité ou « étrangers » à la région, à titre gracieux ou contre des rémunérations ponctuelles ou récurrentes. Cependant, les terres confiées à d'autres par les propriétaires coutumiers ne peuvent être utilisées, en général, que pour des cultures annuelles, la plantation d'arbres (fruitiers notamment) et de cultures pérennes étant souvent prohibée, cela afin d'éviter des processus d'appropriation foncière par les usagers.

Dimension incitative/désincitatives des dispositions légales et réglementaires relatives au foncier :

- + La possibilité de reconnaissance des droits coutumiers est favorable à la sécurité foncière, laquelle est une condition de la plantation d'arbres.
- *Cependant, le processus de reconnaissance des droits coutumiers est associé à la « mise en valeur », laquelle peut inciter les usagers à remplacer la forêt naturelle par des cultures afin de témoigner de cette mise en valeur.*
- *Le manque de moyens alloués aux commissions de reconnaissance des droits coutumiers maintient nombre de communautés dans une insécurité juridique qui les expose à des opérations d'accaparement des terres qui peuvent être également néfastes pour les écosystèmes naturels, dont les forêts. Il faudra voir si la loi n° 21-2018 va combler cette défaillance ou si son application sera entravée, faute de moyens.*

4.3 Un cadre logique de classification des terres forestières au Congo

Le cadre logique de classification des terres forestières, que l'on peut reconstituer aussi bien à partir de l'ancienne loi 16-2000 que de la loi 33-2020 portant Code forestier, ne distinguent pas toujours bien les *vocations* d'usage des terres et la propriété de celles-ci. Ceci découle de la présomption de domanialité sur la grande majorité des forêts naturelles (les plantations privées mises à part).

Une conception particulière du domaine public est manifeste dans le schéma retenu: en effet, dans la tradition juridique inspirée du droit français, le domaine public ne peut être aliéné (sauf pour cause d'utilité publique), contrairement au domaine privé; or, au Congo, les plantations privées peuvent être constituées à partir d'actes se situant sur le domaine public, ce qui équivaut à une aliénation au profit d'une personne privé puisque même les arbres non plantés deviennent propriété de l'opérateur⁷. Au Cameroun (comme dans d'autres pays africains), le législateur a prévu une catégorie spécifique (le domaine national, assimilable à un patrimoine commun de la nation) qui permet de contourner cette difficulté. Faute de cette facilité, le législateur congolais admet qu'au moins une partie des ressources boisées du domaine public peuvent être aliénées et conduire à la constitution de plantations privées.

Les deux articles (36 et 37) du code forestier de 2000 qui fondent cette singularité sont particulièrement intéressants et novateurs dans le contexte de la sous-région: le planteur acquiert la jouissance (sous réserve du droit des tiers) exclusive, transmissible, mais pas la propriété du terrain. Ce droit cesse avec l'abandon ou le défrichement. On a là une disposition qui crée potentiellement un cadre incitatif pour des plantations privées / paysannes.

Tableau 2 : essai de cadre logique de classification des différentes catégories de forêts au Congo

Domaine Forestier national					
<i>(Usage et propriété des terres)</i>			<i>(Usage et propriété des terres)</i>		
Domaine Forestier de l'État (*)			Domaine forestier des personnes privées		
<i>(Usage des terres)</i>			<i>(Usage des terres)</i>		
Domaine Forestier Permanent			Domaine Forestier non permanent (domaine public, forêts protégées non classées)		Plantations privées... Forêts privées
<i>(Propriété des terres)</i>	<i>(Propriété des terres)</i>	<i>(Propriété des terres)</i>	<i>(Propriété des terres)</i>		
Domaine Privé de l'État (doivent être classées)	Domaine Privé des Collectivités locales ou territoriales (classement, plantation ou transfert)	Domaine Privé des personnes publiques	Domaine public		(...qui peuvent venir du domaine public)

(*) « Relève de la compétence de l'Etat », art. 4. Le législateur évite soigneusement de parler de propriété de l'État, c'est-à-dire qu'il retient une conception de la domanialité plus proche de l'idée de patrimoine collectif des Congolais, et cohérente avec l'idée que des particuliers peuvent créer des droits de propriété par certaines formes de mise en valeur (ici la plantation).

⁷Art. 36 : Toute personne physique, de nationalité congolaise ou étrangère, ou personne morale de droit congolais, qui plante des arbres forestiers sur un terrain relevant du domaine forestier non permanent, acquiert la jouissance exclusive du terrain planté et la propriété des arbres qui s'y trouvent, sous réserve :
- des droits des tiers;

- que le nombre des arbres plantés excède celui des arbres ne résultant pas de la plantation
- que les limites du terrain planté soient clairement matérialisées.

Art. 37 : Les droits acquis en application des dispositions de l'article 36 ci-dessus sont transmissibles, conformément à la loi. Ils cessent avec le défrichement du terrain, l'abandon ou le dépérissement du peuplement (...)

Le principal problème est que le domaine forestier permanent doit, pour être juridiquement valide, être classé, selon des procédures indiquées dans le code forestier (notamment: « *le classement d'une forêt obéit au principe de consentement libre, informé et préalable des populations affectées et au principe de consultation des organisations de la société civile de la circonscription concernée* » (loi n°16-2000) et précisées par le Décret n°6509 du 19 août 2009 précisant les modalités de classement et de déclassement des forêts. Or, les forêts de production qui doivent faire partie du domaine forestier permanent n'ont pas été classées⁸.

De manière similaire, la constitution en droit du domaine privé de l'État (et du domaine privé des collectivités locales) devrait passer par l'immatriculation, conformément aux dispositions de la loi foncière. Là encore, cette procédure n'a pas été entamée. Le domaine privé de l'État confère à l'État congolais la propriété privée exclusive et en fait le seul habilité à signer des contrats commerciaux (conventions) avec des tiers pour une exploitation commerciale des ressources.

4.4 L'absence d'un plan national d'aménagement du territoire

L'un des problèmes du Congo est la superposition de droits d'exploitation, notamment entre les mines et la foresterie. Il existe deux « cadastres » distincts, l'un – le cadastre minier – étant constitué des permis d'exploration et d'exploitation, et l'autre – le cadastre forestier – constitué des conventions d'exploitation forestière. Le ministère en charge de l'énergie et des mines propose également aux opérateurs des blocs pétroliers et miniers.

Comme dans la plupart des pays, les droits d'exploitation miniers bénéficient d'une priorité politique sur les droits de gestion forestière.

Au Congo, la loi n°10-2004 du 26 mars 2004, fixant les principes généraux applicables aux régimes domaniaux et fonciers, consacre un chapitre à l'évaluation, la classification et l'affectation des espaces fonciers. Dans ce chapitre, il est indiqué que l'État est habilité à procéder à l'affectation des terres par les procédures de recensement, de délimitation, d'évaluation et de classification des terres. L'affectation des terres est réalisée sur l'ensemble du territoire, c'est-à-dire aussi bien sur les terres rurales, périurbaines et maritimes que sur les sous-sols, que ces terres fassent l'objet d'une appropriation privée ou non.

D'autre part, la loi précise que l'usage des espaces doit tenir compte de l'affectation générale des espaces fonciers dans quatre zones principales: les zones urbaines (affectées aux habitations, activités commerciales et industrielles), les zones périurbaines (pour les cultures diverses), les zones rurales (divisées en trois catégories, pour des usages agricoles, forestiers ou miniers) et les zones maritimes ou fluviales. Le décret n°2019-133 du 31 mai 2019 soumet les affectations des terres à l'approbation préalable du comité interministériel d'aménagement et de développement du territoire.

Pour autant, aucun Plan National d'Aménagement du Territoire (PNAT) ou autre document de planification de l'affectation des terres n'a été élaboré suite à l'adoption de cette loi. Pourtant, la mise en œuvre d'un « *projet d'inventaire forestier multi-ressources en vue de l'élaboration d'un plan national d'affectation des terres* » montre bien la volonté du gouvernement de développer un tel plan de façon cohérente et en se basant sur la valorisation des ressources existantes.

Seul un schéma national d'aménagement du territoire (SNAT) a été élaboré en 2005 sous l'égide du Ministère du plan et de l'aménagement du territoire. Le SNAT représente le premier niveau de planification spatiale du pays. Il expose un diagnostic du territoire du Congo, à la fois géographique, institutionnel et économique; il définit les grandes priorités du Congo en termes d'infrastructures, de communication et d'utilisation des ressources naturelles principalement; enfin, il propose une vision stratégique pour l'émergence économique du Congo en 2025.

Le SNAT prévoit que « *la destruction des zones forestières devra être évitée, et les outils législatifs définiront de manière précise les procédures préalable des permis de déboisement, mêmes en dehors des zones à vocation forestière* ». Si le SNAT offre des lignes directrices pour les divers secteurs d'activités, il ne remplace pas pour autant le PNAT qui devrait planifier de façon beaucoup plus précise l'affectation des terres au niveau national.

Depuis 2009, il a été mis en place un « comité interministériel de concertation » en cas de conflits d'usage dans les écosystèmes naturels. Ce comité est chargé de l'harmonisation des usages superposés dans les écosystèmes naturels. Le Premier Ministre congolais préside en principe ce comité qui est composé de plusieurs ministres dont ceux en charge de l'économie forestière, de l'environnement, des mines, des hydrocarbures, de l'aménagement du territoire, des affaires foncières et de l'agriculture. Cependant, le poste de Premier Ministre a été supprimé au Congo depuis 2009 et ce comité n'a jamais été véritablement opérationnel. La structure actuelle du gouvernement inclut à nouveau une primature, malgré cela la commission interministérielle ne fonctionne toujours pas.

⁸ Cf. Client Earth, « Le Cadre légal de conversion des terres en République du Congo », juin 2015, UKAid.

La lettre d'Intention signée par la République du Congo avec l'Initiative pour les forêts d'Afrique centrale (CAFI) en 2019

La Lettre d'Intention (LoI) signée entre CAFI et le Gouvernement du Congo dans le cadre du financement du Plan d'Investissement de la Stratégie Nationale REDD+ (2 septembre 2019) prévoit :

- De définir et de mettre en œuvre une politique d'aménagement du territoire qui garantit la protection et la gestion durable du couvert forestier et des zones de tourbière.
- Un engagement « *de ne pas convertir et de gérer durablement les forêts à haut stock de carbone (HSC) et de haute valeur de conservation (HVC) qui seront définies en consultation avec toutes les parties prenantes* ». Plus précisément le Congo s'engage à ne pas convertir plus de 20 000 hectares par an, et ce uniquement en dehors des zones à haut stock de carbone et à haute valeur de conservation. L'accord prévoit également « *Établir et mettre en œuvre des plans d'affectation de terres qui favorisent la protection et la gestion durable des tourbières, et préviennent leur drainage et leur assèchement* »
 - o Cependant, une note précise que « *de manière exceptionnelle, la conversion de forêts HSC et HVC pourrait advenir dans le cas du développement d'infrastructures et d'industries extractives, hors secteur agro-industriel, qui sont considérés d'intérêt vital à l'économie nationale, en veillant à ce que ces activités répondent aux principes de compensation carbone et/ou biodiversité* ».
- D'« *Introduire un plafond permanent sur la superficie des forêts non-HSC/HVC disponibles pour une conversion des terres forestières à d'autres usages et en veillant à ce que ces activités répondent au principe de compensation (carbone et/ou biodiversité)* ». À ce jour, ce plafond permanent n'a pas été défini.
- La LoI indique l'objectif de « *Développer, adopter et mettre en œuvre un plan national d'affectation des terres (PNAT), un Schéma National d'Aménagement du Territoire (SNAT) et des Schémas Départementaux d'Aménagement du Territoire (SDAT) qui organisent et optimisent l'utilisation des terres par les différents secteurs économiques nationaux* »
- Enfin, l'objectif mentionné par la LoI est de « *Mettre en place un cadastre foncier croisé (cadastre minier, cadastre pétrolier, cadastre agro-industrie, cadastre forestier) en vue d'éviter une superposition d'usages de terre conflictuel* »

Dimension incitative/désincitatives de la législation foncière forestière

- + La plantation d'arbres est encouragée à travers le droit, sur le domaine forestier non permanent, pour un particulier de jouir exclusivement du terrain planté et de la propriété des arbres qui s'y trouvent, sous réserve (notamment) du droit des tiers
- *Le classement des forêts de production n'a pas été réalisé, le domaine forestier permanent n'est donc pas établi en droit. Ceci laisse la possibilité à différentes autorités administratives d'attribuer des permis agricoles sur des zones forestières.*
- *Le Plan National d'Aménagement des Terres n'a pas été réalisé et la Commission chargée de résoudre les problèmes de superposition de droits (mines vs foresterie) n'a pas fonctionné.*

5. Le cadre institutionnel

Le secteur forestier congolais a hérité d'une structuration institutionnelle marquée par une organisation centralisée où l'État assurerait directement ou indirectement de nombreuses fonctions liées à la production, et cherchait à orienter l'activité économique à travers des prescriptions réglementaires. Le principal instrument de gestion des forêts demeure la loi 16/2000 du 20 novembre 2000, complété par la loi n°37-2008 du 28 novembre 2008 sur la faune et les aires protégées.

Le ministère en charge des forêts était en 2002, le Ministère de l'Économie Forestière (MEF), en charge également de la pêche et des ressources halieutiques. En 2012, ce Ministère est devenu le Ministère de l'Économie Forestière, du Développement Durable et de l'Environnement (MEFDDE), élargissant ainsi son périmètre. Parmi les objectifs du MEFDDE, on peut noter la « poursuite des travaux d'aménagement des forêts, afin qu'à l'horizon 2016 (...) toutes les concessions forestières disposent des plans d'aménagement ». Cet objectif fondamental n'a pas été atteint, puisque 17 concessions représentant 4,68 millions ha n'étaient pas dotées de plan d'aménagement en 2019 (les études de base n'ayant pas encore commencées). La majorité de ces concessions se situent dans le sud du pays.

Les concessions avec des plan d'aménagement approuvés ou en cours d'approbation en 2019 étaient au nombre de 22, pour une surface totale de 8,16 millions ha. À cela, il faut ajouter 4 concessions en cours d'aménagement, représentant un peu plus de 900.000 ha. Certaines concessions ont des plans d'aménagement mais qui ne sont pas mis en œuvre ou ne sont pas respectés. C'est le cas de Bois et Placages de Lopola (BPL), Likouala Timber, SICOFOR et d'autres sociétés, qui ont des plans d'aménagement approuvés, pour certains depuis 10 ans.

En 2017, la création d'un Ministère du tourisme et de l'environnement va ôter au ministère en charge des forêts la responsabilité de la gestion de certains dossiers, comme celui des tourbières – identifiées comme les plus importantes du monde tropical et réservoirs majeurs de carbone, par différents articles scientifiques⁹. C'est également le cas d'un instrument financier en cours de constitution, le Fonds Bleu pour le Bassin du Congo qui vise à financer de la conservation et de la restauration autour du fleuve Congo.

5.1 Le service de contrôle des produits forestiers à l'exportation (SCPFE)

Le SCPFE a été créé en 2002 afin de répondre à l'éparpillement des responsabilités en matière de contrôle des exportations et de collecte de données statistiques concernant les exportations de bois. Ce Service a été mis en place avec le soutien de la SGS, qui assurait le contrôle des exportations de marchandise du Congo. L'objectif était la mise en place d'un service public, technique et opérationnel en matière de contrôle des produits forestiers à l'exportation. La SGS a développé des outils et procédures qui ont été progressivement transféré au SCPFE.

Le SCPFE a été créé par le décret 436-2002 du 31 décembre 2002, portant attributions, organisations et fonctionnement du Service de Contrôle des Produits Forestiers à l'Exportation, complété par deux arrêtés ultérieurs. Ses missions sont :

- Contrôler la quantité et la qualité du bois à l'exportation par l'agrégé;
- Contrôler la quantité et la qualité des produits de la flore et de la faune à l'exportation, à la réexportation, à l'importation et à la réimportation, conformément aux règles d'agrégé en vigueur;
- Suivre les prix du bois et des produits forestiers non ligneux à l'exportation;
- Suivre la conjoncture du marché international des produits forestiers pour disposer et diffuser des informations fiables sur leurs prix;
- Assurer le recyclage des classeurs des bois et des autres produits forestiers;
- Créer et gérer la banque de données sur les exportations des produits de bois et dérivés et publier les statistiques annuelles y relatives;
- Créer et gérer la banque de données sur l'exportation, la réexportation, l'importation et la réimportation des produits de la flore et de la faune et publier les statistiques y relatives;
- Participer au processus de la certification forestière;
- Apporter un appui technique aux professionnels du bois dans le domaine de sa compétence;
- Produire et publier périodiquement une note de conjoncture;
- Veiller au respect des quotas d'exportation des bois en grumes;
- Vérifier les connaissements des produits forestiers importés et exportés;
- Signer tous les documents d'exportation des produits forestiers et fauniques;
- Entretenir des relations de coopération avec les organismes nationaux, régionaux ou internationaux similaires.

Plusieurs observateurs considèrent qu'il conviendrait de réviser le décret 436-2002 portant attributions, organisation et fonctionnement du SCPFE. Ce décret n'octroie pas aux agents du SCPFE appartenant au corps des eaux et forêts la possibilité de verbaliser sur les infractions en matière de forêt constatées au cours de leur exercice. Aussi, il ne confère à aucun moment le volet traçabilité des bois au SCPFE, alors que celui-ci figurait dans les Termes de références de la convention du 06 juin 2003 signée entre le Gouvernement Congolais et la Société Générale de Surveillance¹⁰.

D'autres recommandations ont été émises. Parmi lesquelles on peut retenir :

- Le renforcement de capacité des agents administratifs et techniciens du SCPFE;
- l'organisation des formations des classeurs ATIBT à l'image de celle organisée en 2005 à Pointe-Noire par la SGS;
- La réalisation d'une étude du système de classement des bois tropicaux africains en grumes appliqué en Chine par rapport au classement ATIBT;
- L'ouverture d'une Antenne de Douala à l'instar de celle mise en place par le Conseil Congolais des Chargeurs pour éviter la manipulation des actes administratifs d'origines congolaise sur le territoire camerounais;

⁹ Dargie, G. C., Lewis, S. L., Lawson, I. T., Mitchard, E. T., Page, S. E., Bocko, Y. E., & Ifo, S. A. (2017). Age, extent and carbon storage of the central Congo Basin peatland complex. *Nature*, 542(7639), 86-90; Fatoyinbo, L. (2017). Ecology: Vast peatlands found in the Congo Basin. *Nature*, 542(7639), 38-39.

¹⁰ Dans le cadre de l'APV, cette fonction est dévolue à la Cellule de Légalité Forestière et de Traçabilité (CLFT) du MEFDD.

5.2 Le Centre national d'inventaire et d'aménagement des ressources forestières et fauniques (CNIAF)

Créé par le décret n°2002-435 du 31 décembre 2002, le CNIAF est un établissement public à caractère administratif doté de la personnalité juridique et de l'autonomie financière. Il est placé sous la tutelle du Ministère chargé de l'Économie Forestière.

Ses missions sont :

- Réaliser les programmes nationaux d'inventaire des ressources forestières et fauniques;
- Traiter, conserver et actualiser les données des inventaires sur la forêt, la faune et les aires protégées;
- D'élaborer et actualiser la cartographie forestière nationale;
- D'élaborer les plans d'aménagement du domaine forestier national;
- Proposer et suivre la révision éventuelle des plans d'aménagement des forêts et des aires protégées adoptés et mis en exécution.

Le gouvernement congolais a longtemps ambitionné l'idée de faire réaliser par un organisme public les plans d'aménagements forestiers, et le CNIAF avait une telle vocation. Du fait des contraintes financières, du manque de matériel et de personnel formé, l'État a laissé aux concessionnaires forestiers le soin de réaliser les plans d'aménagement sur leurs permis. La situation financière difficile du pays a eu des répercussions sur le fonctionnement du CNIAF, avec la réduction de son budget de fonctionnement. Cette situation a notamment limité la capacité de suivi de la mise en œuvre des plans d'aménagements par l'administration.

5.3 Le SNR: Service national de reboisement

Le Congo dispose de 12 millions d'hectares de terres en savane qui ne sont pas exploités de manière visible ou qui le sont peu, soit environ 35% du territoire national. Le gouvernement souhaite utiliser une partie de ces superficies pour réaliser des plantations de bois d'œuvre et de bois-énergie, soit en régie publique soit en association avec le secteur privé. Juridiquement ces terres font partie du domaine public, mais elles sont appropriées par des individus, des familles et des lignages selon des modalités coutumières. L'occupation foncière est peu visible en temps normal, mais une mise en valeur par des plantations suscite très souvent des revendications sur le foncier concerné.

Le Décret 89-042 du 21 janvier 1989, porte création, attributions et organisation du Service national de reboisement (SNR). Créé sur les cendres de l'Office Congolais des Forêts (OCF) et de toutes les structures qui l'ont précédé depuis 1937, le Service national de reboisement est un service public à caractère technique et scientifique. Les organes de gestion sont: le Comité de gestion et la Direction.

Le SNR est chargé du suivi, de la coordination et de l'exécution de la politique nationale en matière de reboisement. Les missions du SNR sont entre autres :

- De mettre en œuvre la politique nationale en matière de boisement et de reboisement, en vue de garantir la reconstitution et l'accroissement du patrimoine forestier national;
- De réaliser les travaux dans les stations de boisement et de reboisement par l'application des techniques sylvicoles;
- De réaliser les travaux dans les périmètres nécessitant des actions de protection (protection des bassins versants);
- De réaliser les travaux dans les forêts naturelles par des soins sylvicoles (production des graines et des jeunes plants, récolte des graines, régénération naturelle);
- De vulgariser les techniques sylvicoles et agroforestières en milieu paysans;

Le SNR rencontre un certain nombre de difficultés pour remplir pleinement sa mission. Parmi celles-ci on doit mentionner l'absence des moyens financiers pour son fonctionnement, le manque de formation du personnel, l'absence de base de données au service technique et l'absence de procédure technique et d'un planning de récolte des semences. Sur le terrain, le SNR doit faire face au manque de clarté quant aux droits fonciers, à la multiplicité des revendications et les conflits qui se manifestent assez régulièrement. L'absence d'un plan d'aménagement des terres au niveau national constitue une difficulté supplémentaire.

En 2013, un Programme national d'afforestation et de reboisement (PRONAR) a été constitué par décret (Décret n°2013-221 du 30 mai 2013) pour mettre en œuvre la politique du Gouvernement en matière d'afforestation, de reboisement et d'agroforesterie. Le PRONAR a pour missions de :

- Promouvoir les plantations forestières sur le territoire national;
- Encourager, enregistrer et accompagner les acteurs dans les activités d'afforestation et de reboisement en vue d'approvisionner les marchés national et international en produits forestiers ligneux et non ligneux;
- Promouvoir les plantations à haute capacité de séquestration du carbone forestier dans le cadre de la restauration des zones forestières dégradées;

- Rechercher des financements appropriés pour l'exécution du programme public et l'appui aux petits et moyens planteurs;
- Assurer l'extension de la couverture forestière nationale, en vue de lutter contre la déforestation, la dégradation des forêts et le changement climatique.

Un chevauchement de compétences existe entre le SNR et le PRONAR. Officiellement, le SNR est chargé de mettre en œuvre la vision du PRONAR. Du fait des difficultés mentionnées, le Congo, à travers les différentes structures qui se sont succédées pour promouvoir les plantations, n'est pas parvenu à réaliser plus de 80.000 ha de plantations (pas de données sur le taux de survie). Dans le cadre du PRONAR, ce sont entre 1700 et 2000 hectares qui ont été plantés, alors que l'objectif était de boiser ou reboiser un million d'hectares sur la période 2010-2020. Ces plantations sont constituées d'eucalyptus, de limba (*Terminalia superba*), de pins et d'hévéas.

Dimension incitative/désincitatives du cadre institutionnel

- + La création d'un instrument financier, le Fonds Bleu, pour intervenir sur le *nexus* entre les ressources en eau et les forêts, y compris la mangrove
- *La séparation des compétences ministérielles concernant les forêts, d'un côté, et sur l'environnement, de l'autre, affaiblit la cohérence de l'action gouvernementale sur des sujets majeurs comme le dossier des tourbières ou les négociations internationales sur le climat et la biodiversité.*
- *La faiblesse des fonctions d'inspection, de contrôle et de police environnementale.*
- *L'absence de sécurisation des dotations budgétaires annuelles du Ministère en charge de forêts (versements irréguliers ou retardés) ne permet pas aux administrations de remplir correctement leur mission de soutien à la gestion durable des forêts.*

5.4 Les UPARA: Unités Pilotes Aménagement de Reboisement et Agroforesterie

Le MEF (Ministère de l'Économie forestière) et les sociétés forestières avaient signé un protocole d'accord en 1996, pour créer les premières UPARA à SOCOBOIS (département du Niari), BOPLAC (département de la Lékoumou) et CIB (département de la Sangha). Les UPARA étaient sous la tutelle du MEF, le SNR assurant la gestion technique.

Les missions des UPARA étaient:

- Identifier les semenciers dans les UFA et les UFE;
- Récolter des graines des espèces diverses;
- Créer et mettre en place des pépinières;
- Identifier les zones d'intervention (forêts dégradées, forêts claires, zones déforestées....) dans les UFA / UFE;
- Reboiser en essences locales des zones non boisées, insuffisamment boisées et fortement dégradées;
- Pratiquer les essais agroforestiers, dans les zones agricoles situées à l'intérieur et l'extérieur des permis forestiers;
- Créer des parcelles pilotes d'observation et de mesure de régénération naturelle;
- Mise en place des plantations villageoises pour des besoins divers (charbon, agroforestier, bois de cuisson ou de chauffe, les besoins en PFNL...) au profit des populations . . .

Des résultats encourageants ont été enregistrés mais interrompus à cause des événements politiques de 1997. En 1998, a été créé l'UPARA-ITBL (UFA Enyéllé) dans le département de la Likouala. Elle a fonctionné jusqu'en 2013, année à laquelle cette société forestière a fait faillite. Auparavant, elle avait réalisé 190 ha de reboisement. L'UPARA de la CIB a fonctionné jusqu'en 2012 et a réalisé 300 ha de reboisement. Cependant, la moitié de ces surfaces a été détruite par les populations paysannes pour y mener des activités agricoles. Ceci suggère le besoin de cartographie participative des droits fonciers des communautés locales au sein des concessions et de la conclusion d'accords d'utilisation et de gestion des espaces entre les concessionnaires et les populations usagères du même espace.

Jusqu'en 2003, le financement des UPARA était assuré par les sociétés forestières avec une réduction des taxes forestières en compensation des dépenses effectuées. Après 2004, le budget des UPARA a été financé à 50% par le Fonds Forestier et à 50% par la société forestière concernée. Cette expérience des UPARA n'a pas essaimé auprès des autres sociétés forestières. L'UPARA de CIB-OLAM a peu à peu cessé ses activités, non pas du fait d'un manque de financement de la société mais faute d'un comité de pilotage qui approuve le programme de travail et les budgets, et ce durant plusieurs années. La création du PRONAR a probablement contribué à une marginalisation des UPARA, les priorités institutionnelles ayant changé.

6. L'aménagement des forêts de production

Les normes d'aménagement ont été produites sous l'égide du Centre National d'Inventaire et d'Aménagement des Ressources Forestières et Fauniques (CNIAF). Il existe deux documents de référence, les « Directives nationales d'aménagement durable des forêts naturelles du Congo » (2004 pour la première version, puis « Directives nationales d'aménagement durable des concessions forestières » en 2007) et les « Normes nationales d'inventaire d'aménagement des ressources forestières en République du Congo » (2005). Les Normes contiennent les paramètres techniques nécessaires aux opérations et sont donc plus détaillées que les Directives.

Selon l'article 56 de la Loi n° 16-2000 portant Code forestier, le Plan d'Aménagement est approuvé par décret pris en Conseil des Ministres, pour une période comprise entre dix et vingt ans et à l'issue de laquelle il est révisé.

Les Normes d'aménagement sont jugées rigoureuses sur le plan de la gestion de ressource ligneuse par les experts interrogés. On peut néanmoins noter un déséquilibre important entre les parties consacrées à gestion de la ressource bois et les actions en faveur de la biodiversité – lesquelles, pour l'essentiel, se résument à un inventaire multi-ressources et la mise en place de séries de conservation. Les inventaires doivent comporter une « présentation des indices de la pression de l'homme sur les PFNL », ce qui est intéressant, mais les Normes ne poussent pas à réaliser des plans de gestion de la biodiversité ou de gestion de la faune.

En ce qui concerne la gestion de la ressource ligneuse, les Normes nationales d'inventaire d'aménagement des ressources forestières, précisent que le taux de reconstitution doit être au moins de « 50 % pour le groupe d'essences commercialisables » et de « 75 % pour l'ensemble de tous les arbres constituant les peuplements exploités ». Ces taux de reconstitution représentent la proportion du nombre de tiges exploitables en 2^{ème} rotation par rapport au nombre de tiges exploitables en 1^{ère} rotation.

Même si les Normes d'aménagement ont été pensées sur la base de l'exploitation de forêts primaires, un taux de reconstitution de 50% semble peu compatible avec les exigences de gestion durable, même si les aménagistes peuvent, en fonction des caractéristiques des essences, fixer des objectifs de reconstitution supérieurs. Une autre question reste en suspens: une reconstitution de 50% du volume des essences commercialisables (les plus recherchées par les exploitants) entre la première et la deuxième rotation, signifierait un taux de reconstitution de 25% du volume initial entre la 2^{ème} et la 3^{ème} rotation. Certes, il est difficile de connaître les caractéristiques des marchés du bois dans plusieurs dizaines d'années et l'évolution possible au sein de la gamme des essences commercialisables, mais le taux de reconstitution de seulement 50 % entre les deux premières rotations n'est pas favorable à une gestion durable.

Dimension incitative/désincitatives des normes d'aménagement des forêts de production

- + Les normes d'aménagement au Congo sont rigoureuses et assez complètes.
- *Les prescriptions des normes d'aménagement sont centrées sur la ressource ligneuse et n'accordent qu'une place modeste à la biodiversité. Elles n'obligent pas, notamment, à produire des plans de gestion de la faune et des PFNL*
- *Le processus de validation des plans d'aménagement par l'administration est souvent trop long*
- *Le taux de reconstitution minimal des essences commercialisables est fixé pour le premier cycle de coupe, mais les Normes d'aménagement n'abordent pas le problème de la durabilité entre le deuxième et le troisième cycle de coupe: la simple reconduction de l'objectif de 50% de reconstitution du volume d'un cycle de coupe à l'autre peut sembler incompatible avec l'objectif de rendement soutenu*
- *Les normes nationales actuelles ne prennent pas en compte les autres forêts de production, notamment les Contrats de Transformation Industrielle (CTI).*

7. La certification forestière

Le Congo est le pays qui dispose de la plus grande superficie de forêt naturelle tropicale certifiée, avec 3,16 millions d'hectares certifiés FSC « gestion forestière ». Ceci correspond à deux sociétés forestières (CIB-OLAM et IFO) et quatre UFA. La certification PAFC (Pan-African Forest Certification), soutenue par le PEFC, devrait être proposée aux entreprises congolaises à partir de 2021.

À cela, il faut ajouter un peu plus de 2 millions d'hectares certifiés « légalité » (OLB ou LS), représentant trois autres sociétés forestières.

Plusieurs études menées notamment par des chercheurs du CIFOR et du CIRAD, ont montré que les concessions certifiées FSC dans le Bassin du Congo avaient une gestion comparativement meilleure que les entreprises non-certifiées. C'est sans doute en ce qui concerne les aspects sociaux et la gestion de la faune que la certification forestière montre probablement une importante valeur ajoutée. Pour les

exploitants forestiers engagés dans la certification de gestion forestière, les engagements de gestion de la ressource faunique au sein des concessions sont plus importants que pour les certifications de légalité et de traçabilité OLB (Origine et légalité des bois) ou VLC (Verification of Legal Compliance)¹¹. Pour plusieurs chercheurs¹², les forêts certifiées FSC contribuent davantage au bien-être des populations locales que les autres concessions.

En revanche, peu d'analyses ont abordé la question des taux de reconstitution des essences exploitées, point central pour l'analyse de la soutenabilité de l'exploitation sur le long terme. Les deux compagnies certifiées FSC accueillent des dispositifs de recherche qui visent à étudier la dynamique forestière dans les zones exploitées et non exploitées.

Le « modèle économique » de la certification a dépendu des « primes sur le prix ». Étant donné que les primes associées au bois certifié ne sont souvent pas suffisamment convaincantes pour les concessionnaires, compte tenu de la diversité des marchés et de leur inégale maturité, des incitations pourraient être fournies au niveau de la production, soit en subventionnant les entreprises certifiées, soit en réduisant les coûts. La fiscalité forestière pourrait être mise à contribution pour cela (voir le chapitre « Propositions »).

Le groupe Olam, propriétaire de la plus grande société forestière certifiée, la CIB, a annoncé début 2019 son intention de se défaire de cette dernière dès qu'un acheteur potentiel jugé suffisamment crédible en matière de gestion durable des forêts se présentera. Olam souhaite recentrer son portefeuille d'activité sur l'agriculture et l'agroalimentaire. Si la CIB-Olam indique que son activité est rentable, la situation est plus contrastée pour d'autres entreprises et il semble qu'il y ait plus de sociétés avec l'intention de vendre des actifs que d'acheteurs potentiels.

Dimension incitative/désincitatives de la situation actuelle en matière de certification

- + Les entreprises certifiées congolaises ont obtenu des résultats probants en matière de réalisations sociales, de lutte contre le braconnage et de gestion de la faune, résultats attestés par des études indépendantes menées par des chercheurs.
- + La certification apporte une garantie de bonne application des plans d'aménagements et la certification « gestion forestière » pousse les entreprises à aller au-delà des normes légales en matière d'aménagement et de cahiers des charges.
- *Les entreprises certifiées sont confrontées à une compétition déloyale de la part d'autres entreprises forestières qui ne respectent que partiellement les réglementations (aménagement, transformation, dimensions sociales des cahiers des charges...) et cela fragilise leur position économique*

8. La foresterie communautaire

Contrairement à d'autres pays de la sous-région, le Congo n'a pas, jusqu'à la nouvelle loi forestière 33-2020 promulguée le 8 juillet 2020, voulu constituer de forêts communautaires autonomes. Le modèle choisi était celui de « séries de développement communautaires » (SDC) au sein des concessions forestières. Ces séries doivent être prévues par les plans d'aménagement des concessions forestières pour la mise en valeur d'initiatives de développement local menées par les communautés. Plusieurs SDC qui auraient pu être constituées n'ont pas été réalisées et le concept n'est pas bien connu des populations. Quelques plans simples de gestion ont été réalisés, mais leur mise en œuvre est aléatoire.

Cependant, des organisations de la société civile regroupés dans le consortium CoNGOs considère que « *les SDC ne sont pas des forêts communautaires, mais plutôt des forêts participatives* »¹³. « *En effet, l'État octroie des titres d'exploitation à des sociétés forestières qui ensuite, dans le cadre de leur plan d'aménagement, délimitent les SDC dans lesquelles elles reconnaissent un certain nombre de droits aux communautés riveraines tels que l'exploitation des bois d'œuvre et des produits forestiers non ligneux, l'agriculture et l'agroforesterie et les droits d'usage (pêche, chasse, etc.). La société civile considère comme forêt communautaire une forêt dans laquelle les communautés gèrent et valorisent*

¹¹ Dubiez, E., Karsenty, A., Dessard, H., 2017. Gestion de la faune dans les concessions forestières en Afrique centrale. In: Van Vliet, N., Nguingui, J. -C., Cornélis, D., Le Bel, S., (eds). *Communautés locales et utilisation durable de la faune en Afrique centrale*. FAO/CIFOR/CIRAD.

¹² Cerutti, P.O., Lescuyer, G., Tacconi, L., Eba'a Atyi, R., Nasi, R., Tabi Ekebil, P.P., Tsanga, R., 2016. Social impacts of the Forest Stewardship Council certification in the Congo Basin. *International Forestry Review* 18 (S1), 1–14.

Tsanga, R., Cerutti, P.O., Lescuyer, G., 2014. What is the role for forest certification in improving relationships between logging companies and communities? Lessons from FSC in Cameroon. *International Forestry Review* 16(1): 14–22

¹³ Mise en œuvre de la foresterie communautaire en République du Congo, Note du projet CoNGOs: Collaboration d'ONG en faveur de moyens de subsistance communautaires équitables et durables dans les forêts du bassin du Congo financé par le programme UK Aid du gouvernement britannique (programme *Improving Livelihoods and Land Use in the Congo Basin Forests* (ILLUCBF) de DFID)

les ressources forestières en plus de l'exercice effectif de leurs droits fonciers coutumiers, que ceux-ci soient formellement reconnus ou non ».

Les organisations de la société civile recommandent notamment au Gouvernement de promouvoir une notion élargie de la forêt communautaire et d'identifier des terres pouvant accueillir des forêts communautaires en réduisant la taille des concessions forestières industrielles. Ces organisations recommandent également d'utiliser la procédure de reconnaissance des droits fonciers coutumiers prévue par la loi foncière afin de faire constater et reconnaître les droits des communautés sur les terres qu'elles occupent depuis plus de trente ans.

Les organisations de la société civile rappellent notamment ce que dit le document de politique forestière de 2014-2025 de la République du Congo, qui entend promouvoir la foresterie communautaire et suggère que « *la foresterie communautaire devra se concevoir à deux niveaux* :

- *le premier niveau est une réalité coutumière (les 'terroirs') qui correspond à un rapport de fait et qui ne nécessite pas d'institutionnalisation particulière. Elle peut néanmoins bénéficier, grâce à la cartographie participative, d'une reconnaissance politique traduite dans des principes de cogestion quand il s'agit de la partie du terroir qui se superpose avec une concession industrielle ou une aire protégée;*
- *le deuxième niveau correspond à une innovation institutionnelle (la concession communautaire) qui sera constituée à partir de la réalité coutumière mais qui en est distincte, et peut constituer la base d'entreprises communautaires ».*

Dimension incitative/désincitatives de la situation actuelle de la foresterie communautaire

- + Le document 2014 de politique forestière de la République du Congo propose des pistes novatrices pour associer les communautés locales à la cogestion des concessions forestières sur la base de la constatation et de la reconnaissance de leurs droits d'usage, tout en ménageant la possibilité d'une exploitation et d'une gestion autonome de ressources boisées par ailleurs.
- + L'obligation de constituer des séries de développement communautaires dans le cadre des plans d'aménagements constitue une avancée en matière de gestion participative, même si le principe de reconnaissance des droits coutumiers sur l'ensemble de la concession, évoqué par la Politique forestière de 2014, n'est pas encore mis en œuvre.
- *On peut regretter l'absence actuelle de la possibilité de créer des forêts communautaires autonomes (qui pourraient être des concessions au profit des communautés locales) en dehors des concessions industrielles, forêts qui pourraient constituer une source d'approvisionnement maîtrisée pour les scieurs artisanaux. La nouvelle loi forestière modifie cette situation en offrant la possibilité aux communautés locales de demander une forêt communautaire à leur initiative. Il faudra toutefois que les limites des concessions puissent être modifiées pour laisser de la place à cette foresterie communautaire autonome. La révision des limites des concessions pourra être réalisée à l'occasion du classement des UFA.*

9. La gouvernance et le régime des sanctions

9.1 L'observation indépendante des forêts

Dans un souci de bonne gouvernance et de transparence, le Congo a volontairement pris l'option de mettre en place un système d'observateur indépendant pour renforcer le contrôle forestier. L'Observation Indépendante, débutée en République du Congo en 2006, et a été mise en œuvre par l'ONG *Resources Extraction Monitoring* (REM) jusqu'en 2013.

L'Observation Indépendante est à ce jour mise en œuvre par le Cercle d'appui à la Gestion Durable des Forêts (CAGDF), organisation de la société civile. L'APV (Accord de Partenariat Volontaire conclu avec l'UE dans le cadre du processus FLEGT) reconnaît un Observateur Indépendant de la société civile, animé par une structure nationale, comme un des acteurs intervenant dans le suivi et le contrôle de l'exploitation forestière. L'observateur analyse la gouvernance, détecte les lacunes en matière de mise en œuvre des législations forestières (sur le terrain et au niveau gouvernemental), assure l'amélioration de la transparence, et soutient un système de mise en œuvre des lois renforcé incluant aussi des sanctions.

Les objectifs spécifiques de l'Observateur Indépendant sont fixés ainsi par l'APV :

- Améliorer les systèmes de mise en application de la loi forestière par l'État;
- Concourir au respect de l'application de la loi forestière et de la gouvernance;
- Renforcer les capacités de la société civile à l'approche « observation indépendante »;
- Documenter et mettre à la disposition de la Cellule de Légalité Forestière et de la Traçabilité et du Comité Conjoint de Mise en Œuvre de l'APV toute information collectée.

Un ordre de mission permanent est accordé à l'Observateur Indépendant des Forêts (OIF) par le MEF pour effectuer ses missions de terrain. Toutefois, certains analystes considèrent que la loi déterminant le régime des associations adoptée par le Parlement congolais en 2017 contient certaines restrictions à

la liberté des organisations de la société civile d'agir de manière indépendante, notamment en matière de gouvernance¹⁴.

Outre l'OIF, l'APV conclu entre la République du Congo et l'UE a établi un auditeur indépendant du système de vérification de la légalité (AIS) dans le cadre du processus FLEGT.

9.2 Des sanctions insuffisamment dissuasives

Malgré l'institution d'un OIF, de nombreuses infractions restent non sanctionnées, notamment l'absence de plan d'aménagement, particulièrement dans la région du sud. En 2013, le rapport de l'OIF REM pointait trois infractions communes et insuffisamment sanctionnées :

- La fraude visant à réduire les taxes
- Le non-respect des quotas maximum d'exportation des grumes
- Les coupes illégales dans les concessions, avec un manque de respect des limites des assiettes annuelles de coupe.

En outre, les sanctions dressées contre les contrevenants sont généralement insuffisamment dissuasives. Une étude économique de la Banque Mondiale (2007) indiquait :

« Les sanctions sont insuffisamment dissuasives pour certains types d'exploitation frauduleuse telle que le non-respect des diamètres minimum d'exploitation, le défaut de marquage sur les billes, les culées et les souches (de 200.000 à 500.000 FCFA), la contrefaçon ou la falsification des marteaux forestiers (de 200.000 à 1 million FCFA) puisque les sanctions ne sont pas proportionnelles au volume de bois objet de la fraude et donc au bénéfice que le titulaire de l'activité d'exploitation pourrait obtenir suite à la fraude ».

Cette étude formulait la recommandation suivante pour limiter l'impunité de grandes sociétés sous-traitant certaines de leurs activités d'exploitation à de plus petites compagnies, souvent congolaises :

« Introduire la responsabilité solidaire dans les accords qui impliquent l'exploitation conjointe de concessions forestières de manière à ce que tous les membres du groupe (et non seulement le titulaire de la concession) faisant objet de l'accord soient responsables en cas de non-respect de la loi » (Banque Mondiale 2007)

Un rapport de l'OI/FLEGT de 2015 s'est également penché sur le cas des « permis spéciaux » de coupe de bois d'œuvre.

Dimension incitative/désincitatives de la gouvernance et du régime de sanctions
<p>+ La mise en place par le Congo, à l'initiative du gouvernement, d'un observateur indépendant des forêts, est une mesure très favorable à la gestion durable.</p> <p>+ La signature d'un Accord de Partenariat Volontaire (APV) entre le Congo et l'UE est un élément très positif pour l'amélioration de la gouvernance forestière</p> <p>— <i>L'insuffisante application du régime réglementaire, notamment en ce qui concerne le non-respect des plans d'aménagements forestiers, constitue un problème majeur</i></p> <p>— <i>Le caractère insuffisamment dissuasif des sanctions et l'absence d'un système de responsabilité solidaire entre les sociétés donneurs d'ordre et les sous-traitants ne permet pas de capitaliser sur l'observation indépendante.</i></p>

10. Le Fonds Forestier

Institué par la loi n°16-2000 du 20 novembre 2000, portant code forestier, le Fonds forestier est mis en œuvre conformément aux dispositions du décret n°2002-434 du 31 décembre 2002, portant organisation et fonctionnement du Fonds forestier. Ce Fonds est destiné à assurer le financement des travaux et des études visant à protéger, à aménager et à développer les ressources forestières et fauniques.

Il est administré par un Comité de Gestion qui délibère sur toutes les questions relatives à sa gestion.

Organisation, fonctionnement et mission:

Conformément au décret n°2002-434, du 31 décembre 2002 définissant son organisation et son fonctionnement, le fonds forestier finance les programmes ci-après :

En matière forestière :

- L'inventaire des ressources forestières;
- Les travaux d'aménagement et de sylviculture en forêt dense et en savane;
- Le classement d'un domaine forestier permanent;
- Les opérations de contrôle des produits forestiers destinés à l'exportation et le suivi de la conjoncture du marché du bois;
- Les opérations liées à la constitution d'un domaine forestier permanent;
- Le contrôle, le suivi et l'évaluation de l'activité forestière;
- La promotion des produits forestiers.

¹⁴ <https://www.business-humanrights.org/fr/r%C3%A9p-du-congo-un-projet-de-loi-menace-les-associations-et-les-ong-travaillant-sur-la-bonne-gouvernance-selon-la-socit%C3%A9t%C3%A9-civile>

En matière de faune:

- L'inventaire des ressources fauniques;
- La création et l'aménagement des aires protégées;
- L'aménagement des zones banales de chasse;
- Le contrôle de l'exploitation et de la circulation des produits de la faune;

En matière de conservation des eaux :

- La protection de sol, des bassins versants et des plans d'eau;
- Le suivi du niveau hydrographique des plans d'eau.

Gouvernance :

Les principaux organes de gestion sont le **Comité de Gestion** et la **Direction du Fonds**. Cette dernière a pour rôle d'exécuter les délibérations du Comité. Le Comité de gestion comprend les membres des administrations publiques et du secteur privé.

Les avoirs du Fonds forestier sont déposés dans un compte de dépôt ouvert au Trésor Public. Les dépenses du Fonds forestier sont exécutées et suivi selon les principes de la comptabilité publique. Le Comptable du Fonds forestier est nommé par le Ministre en charge des Finances. Il a l'obligation de présenter annuellement un compte de gestion à la Cour des Comptes et de Disciplines Budgétaire. Les différentes taxes forestières sont collectées par l'administration forestière pour le compte du Trésor public et transitent par l'agence comptable près le Fonds forestier.

Sources de financement :

Les recettes du Fonds forestier proviennent de:

- La taxe d'abattage;
- La taxe sur les produits forestiers accessoires;
- La taxe de déboisement;
- 50% de la taxe de superficie;
- 50% des recettes provenant de la vente des bois de plantations du domaine de l'État;
- 30% du montant des amendes, des transactions, des restitutions, des dommages et intérêts, des ventes aux enchères publiques, ou de gré à gré des produits et des objets divers saisis au profit de l'administration des Eaux et Forêts;
- Les taxes relatives à l'exploitation de la faune sauvage;
- Les subventions allouées par l'État;
- Les dons et legs.

La loi forestière 33-2020 du 8 juillet 2020 indique que le Fonds forestier sera financé par :

- Une quotité de la taxe de superficie (et non plus 50% comme précédemment)
- La taxe de déboisement
- La taxe d'abattage sur les permis domestiques et spéciaux
- La taxe sur les permis de coupe de bois de plantation
- Les montants des amendes, des transactions, des ventes, des restitutions et des dommages et intérêts (et non plus 30% comme précédemment)
- La taxe de résidus. Dans la partie, ci-dessous, sur la fiscalité, on reviendra sur cette nouvelle taxe introduite par la loi 33-2020.

Avec la suppression de la taxe d'abattage pour les concessions (conséquence du régime de partage de production) et le remplacement du seuil minimal de 50% de la taxe de superficie devant lui être reversé (remplacé par « une quotité », c'est-à-dire soumis à des arbitrages budgétaires annuels au gré des lois de finances), on peut penser que les recettes potentielles du Fonds forestier risquent de diminuer.

Recouvrement :

En janvier 2017, le Fonds forestier avait une prévision de recettes de 25,21 milliards de FCFA, dont 18,9 milliards FCFA au titre des prévisions de recettes 2017 et 6,3 milliards de FCFA au titre des arriérés 2016. Pour l'année 2017, le Fonds forestier a constaté un faible niveau de recouvrement au regard de ses prévisions, avec seulement 10,40 milliards FCFA, soit un taux de réalisation de 41,59%.

11. Le cadre fiscal

11.1 La structure de la fiscalité forestière

Comme dans plusieurs pays d'Afrique centrale, la fiscalité forestière est organisée autour de trois principales taxes: superficie, abattage et exportation, même si une entreprise établie doit s'acquitter d'une trentaine de contributions. D'autres prélèvements significatifs existent, comme la redevance informatique (assise sur la valeur FOB de la production exportée) dont les recettes doivent couvrir le fonctionnement de l'administration des douanes. Elle coûte à certaines sociétés près de la moitié de ce qu'elles acquittent pour la taxe à l'exportation. Il ne s'agit pas néanmoins d'une taxe spécifique, relevant de la fiscalité forestière, mais d'un prélèvement applicable à toutes les entreprises important ou exportant des produits. Une partie de la redevance informatique versée par les entreprises forestières devrait servir à l'informatisation des directions départementales de l'économie forestière,

notamment des brigades forestières souvent sous équipées. Au moment de la création de cette taxe, c'était bien l'option envisagée mais dans la pratique celle-ci n'a pas été mise en œuvre.

Depuis 2009 (décret 2009-303), une procédure d'appel d'offres existe pour les concessions forestières. Elle consiste en l'examen combiné d'une offre technique (dont la note compte pour 60% de la note totale) et une offre financière (dont la note compte pour 40% de la note totale). L'offre financière représente la somme qu'un concessionnaire s'engage à verser annuellement en sus de la taxe de superficie. L'assiette est la superficie utile de la concession. Cette disposition a été peu utilisée jusqu'à maintenant et, selon différents observateurs, les décisions d'attribution restent, de fait, entre les mains du gouvernement.

- **Taxe de superficie:** 250 à 500 FCFA ha en fonction du secteur de production (Centre, Nord, Sud), assise sur la « superficie utile » des concessions. Une disposition de l'article 91 de la loi 14 du 30 décembre 2019 stipule: « *la taxe de superficie est indexée à la série de production si la concession dispose d'un plan d'aménagement approuvé et mis en œuvre, ou à l'ensemble de la superficie de la concession si celle-ci ne dispose de plan d'aménagement...* ». Cependant, cette incitation à la gestion durable des forêts profite aussi de manière irrégulière aux entreprises ne mettant pas en œuvre leurs plans d'aménagement, telles que Likouala Timber, SICOFOR et BPL.

- **Taxe d'abattage:** 5% de la valeur FOT (Free on Trucks) en 2017. Base de calcul: volume fût (arbre abattu, mais avant purge).

Pour la valeur FOT, il y a 5 zones différentes. Le FOT correspond à une valeur FOB moins les coûts moyens de transport de la zone au port le plus proche.

La valeur FOB grumes du sapelli est de 177 108 FCFA et celle de l'okoumé (QS-LM) de 160 709 FCFA.

Pour les débités, les textes distinguent des produits humides ou séchés.

- **Taxe à l'exportation:**

Grumes: 10% de la valeur FOT (okoumé, afrormosia, ébène), 9% pour toutes les autres essences.

Il existe une surtaxe de 30% de la valeur FOT pour chaque zone de production pour les grumes exportées au-delà du quota autorisé de 15% par entreprise.

Cependant cette surtaxe ne devrait plus, en principe, être prélevée puisque le gouvernement a décidé dans la loi de finances 2019 de ne plus accorder de dérogation à l'obligation pour chaque entreprise de transformer 85% de sa production de bois en grumes.

Produits transformés:

La base de taxation est la valeur FOT.

- Sciages humides, grumes reconstituées: 4% de la valeur FOT
- Sciages séchés: 1,5%
- Placages déroulés: 1%
- Placages tranchés: 0,5%
- Autres produits: 0%

Une nouvelle taxe: la « taxe de résidu »

La loi forestière 33-2020 introduit une « taxe de résidu » (« *redevance due au titre des catégories et quantités des déchets produits par une société* ») dont les modalités précises seront fixées par des textes d'application. L'article 128 indique: « *Les sociétés forestières prennent les dispositions pour optimiser la transformation des bois et valoriser les résidus des bois issus de l'exploitation et des industries de transformation* ». L'article 2 définit ainsi les résidus: « *bois laissé dans la forêt après l'exploitation forestière ou sous-produits ligneux de l'industrie de transformation de bois tels que: souches, culées, branches, dosses, déligneurs, chutes d'ébouage (sic)¹⁵, écorces, noyaux résiduels, bandes de placage déroulés ou tranchés, sciures, copeaux* ».

On peut penser que cette nouvelle taxe vise à inciter les entreprises à limiter les volumes de bois abandonnés en forêt et à augmenter le rendement matière de la transformation. Cependant, on ne voit pas comment les agents forestiers, déjà peu présents sur le terrain faute de moyens, pourront évaluer les volumes de résidus laissés en forêt (quel sera la formule pour déterminer les volumes des souches, culées, branches, etc. ?). En ce qui concerne les sous-produits de l'industrie de transformation, des problèmes similaires vont se présenter. Par ailleurs, certaines industries utilisent les chutes de bois et la sciure comme combustible pour les séchoirs ou la cogénération. Enfin, une manière simple (mais non souhaitable) de limiter les résidus en forêt et d'augmenter les rendements matière à la transformation serait d'accroître encore la sélectivité de l'exploitation, en ne récoltant que les arbres les mieux conformés et ne présentant pas de défauts, ce qui irait à l'encontre des objectifs de réduction de l'hyper-sélectivité (concentration des récoltes sur quelques essences et les meilleures qualités).

¹⁵ Il s'agit vraisemblablement de chutes d'ébouage (fait d'ébouter, de raccourcir en coupant le bout.)

La mise en œuvre de cette future taxe s'annonce donc très difficile et on peut penser qu'elle sera appliquée de manière « forfaitaire » en fonction des volumes exploités et transformés, c'est-à-dire sans véritablement considérer les volumes de résidus. La dimension incitative implicite de cette nouvelle taxe a donc peu de chances de se concrétiser.

11.2 Rendement de la fiscalité forestière

La taxe de superficie a permis de collecter **2,4 milliards** FCFA en 2017. On peut penser qu'un montant similaire a été recouvré en 2018. Le potentiel théorique (100% de recouvrement) est de 3,9 milliards FCFA. Il est difficile de savoir si cet écart entre le potentiel et le réalisé est lié à un recouvrement incomplet ou à la pratique des baisses de taxes en l'échange de prestations (travaux, équipements) demandées aux entreprises. Il semble que cet écart est effectivement lié aux allègements fiscaux accordés en l'échange de prestations (travaux et équipements) avec les sociétés forestières. C'est le cas de CIB et de Likouala Timber dans la Sangha et dans la Likouala. En outre, comme signalé précédemment, l'administration forestière a accordé à certaines entreprises de ne taxer que la « superficie utile » alors que ces entreprises n'ont pas ou ne mettent pas en œuvre les plans d'aménagements

La taxe d'abattage a généré environ **4,5 milliards** de FCFA de recettes en 2018.

Les droits de sortie (exportation) ont rapporté **12,66 milliards** FCFA en 2018, dont 10,8 milliards proviennent de la taxe sur les grumes exportées. En 2018, le Congo a exporté 790.000 m³ de grumes, 256 000 m³ de bois scié et 33 400 m³ de placages, ce qui correspond environ à **1,45 millions m³** équivalent grumes. À cela, il faut ajouter les volumes de bois transformés écoulés sur le marché intérieur. En 2009, une étude CIFOR¹⁶ indiquait un volume de 99 000 m³ pour les deux marchés urbains de Brazzaville et Pointe Noire. Une dizaine d'années plus tard, et pour tenir compte de l'accroissement de la population, du boom de la construction visible dans les villes, et des autres marchés urbains et ruraux, on peut penser qu'un chiffre de 150.000 m³ est plausible. Converti en équivalent grumes, ceci représenterait environ 450 000 m³.

On peut donc estimer la production annuelle de bois d'œuvre au Congo est d'environ 1,9 à 2 millions m³.

Au total, la fiscalité forestière aurait rapporté un peu moins de **20 milliards FCFA** en 2018 au Congo. On peut noter que l'engagement très marqué depuis 2018-2019 du Ministère des Finances et du Budget dans le processus APV manifeste la volonté de mettre à profit les systèmes développés sous l'APV pour améliorer la collecte et le rendement de la fiscalité forestière.

Il existe des écarts entre la taxation théorique et la taxation effective: il est fréquent que les entreprises ne s'acquittent pas des taxes forestières qu'elles devraient théoriquement payer, du fait d'accords bilatéraux (et généralement non rendus publics) avec différentes autorités ayant des prérogatives fiscales. Il s'agit de remises gracieuses en échange de services (entretien de routes, équipement d'une structure administrative...). Certaines de ces remises font l'objet de procédures formalisées, d'autres relèvent plus d'arrangements informels.

Au Congo, il est notoire que les entreprises sont sollicitées pour la réalisation d'infrastructures routières ou fluviales en échange d'exonérations de taxes forestières sur plusieurs années. Il existe une dette importante de l'État vis-à-vis des entreprises forestières (dette contractée à l'occasion des travaux routiers ou de développement cacaoyer) qui peut dépasser la dizaine de milliards de CFA pour les plus grandes entreprises. Les remises de taxes (en échange de travaux) concernent les taxes de superficie et d'abattage, pas les taxes d'exportation. Des entreprises font état de compensations insuffisantes pour la réalisation d'infrastructures. En outre, l'État rembourse la TVA aux exportateurs avec beaucoup de retard et beaucoup d'arriérés se sont accumulés, certaines sociétés ayant une créance équivalent à plus de 2 millions d'euros sur l'État.

Le Trésor public doit reverser les recettes de taxe d'abattage et la moitié de la taxe de superficie au Fonds Forestier, mais ces versements sont irréguliers et plafonnés à 4 milliards de FCFA par an (somme inscrite dans la loi de Finances 2020). Toutefois, les versements sont irréguliers il n'est pas toujours possible pour le ministère en charge des forêts de disposer de la totalité de cette somme certaines années, ce qui pose des problèmes pour réaliser un certain nombre de tâches de contrôle et de gestion du secteur. Par ailleurs, l'OI-APV-FLEGT signalait, en 2017, que les Directions Départementales de Eaux et Forêts (DDEF) recevaient moins de la moitié de leur allocation budgétaire annuelle, ce qui a forcément des conséquences sur les opérations de contrôle.

La réalisation de travaux de construction ou d'entretien routier, la fourniture (achat) de bacs motorisés pour le passage des fleuves, l'équipement de l'administration, etc. sont autant de contributions obligatoires, inscrites ou non dans les cahiers des charges, qui donnent droit à des remises de taxes (taxe de superficie, notamment).

¹⁶ Lescuyer, G., Yembe-Yembe, R. I. et Cerutti, P. O. 2011 Le marché domestique du sciage artisanal en République du Congo : État des lieux, opportunités et défis. Document Occasionnel 71. CIFOR, Bogor, Indonésie

Conséquence de cette évolution, une parafiscalité (redevances instaurées par voie réglementaire par différentes administrations) a eu tendance à se développer pour financer différentes activités menées par le ministère en charge des forêts ou des administrations périphériques.

11.3 Le Congo, un des rares pays à avoir placé le secteur bois dans l'ITIE

L'Initiative sur la Transparence dans la gestion des Industries Extractives (ITIE regroupe des parties prenantes du monde entier (des gouvernements des pays en développement, des donateurs, des entreprises, des investisseurs, des organisations de la société civile et les institutions financières internationales). Annoncée en septembre 2002 à Johannesburg à l'occasion du Sommet Mondial sur le Développement durable, ITIE vise une double transparence, qui concerne :

- Les paiements des redevances des industries extractives aux États, tels que déclarés par les entreprises;
- Le recouvrement par les administrations et l'utilisation que les pays ou les gouvernements bénéficiaires font de ces redevances.

Le secteur forestier ne constitue pas la cible prioritaire d'ITIE. Les pays peuvent néanmoins proposer de l'inclure dans les processus de rapportage ITIE aux côtés des autres industries. C'est le cas du Liberia et du Congo.

Trois rapports ITIE ont été réalisés pour le Congo. Les deux premiers portent sur les revenus de 2015 et 2016, le troisième (publié en 2020¹⁷) porte sur les revenus de 2017. Dans ces trois rapports, on constate que la majorité des sociétés ne déclarent pas les redevances et taxes payées, ce qui rend les réconciliations difficiles. Les rapports ITIE constatent notamment que le Fonds Forestier, qui est alimenté par la taxe d'abattage et 50% de la redevance de superficie (mais qui ne collecte pas directement ces taxes), ne publie pas de rapport annuel, et ne communique pas sur les taxes recouvrées. A travers des décrets présidentiels (fin 2019 et début 2020), la composition des instances nationales de l'ITIE a été aménagée, avec (i) une meilleure représentation des organisations de la société civile (OSC) travaillant dans les secteurs extractifs; et (ii) l'officialisation de la place du secteur forestier via la représentation de la société civile « forestière » (PGDF) et du secteur privé.

Dimension incitative/désincitatives de la fiscalité forestière

- + La modulation des taxes (valeur Free on Trucks, FOT) est a priori favorable à une meilleure répartition de l'effort d'exploitation sur l'ensemble des territoires
- + La démarche du Congo pour inclure le secteur bois dans l'ITIE permet de mieux connaître les recettes de fiscalité forestière de l'État et les déclarations de paiement de certaines entreprises. *Néanmoins, une seule entreprise a publié des paiements détaillés et quelques entreprises se sont contentées d'indiquer une somme globale de taxes payées, sans aucun détail. La grande majorité des entreprises n'a pas communiqué la moindre donnée.*
- *L'unicité de taux de la taxe d'abattage pour toutes les essences n'incite pas à limiter la surexploitation de certaines des principales essences commercialisées au profit d'essences secondaires, lesquelles pourraient bénéficier d'une baisse importante du taux.*
- *L'obligation, pour chaque entreprise de transformer 85% de sa production de bois n'est pas une garantie de gestion durable ni de valorisation optimale des ressources. Un volume maximum d'exportation annuelle de grumes fixé au niveau national pourrait remplacer cette obligation en laissant aux entreprises la possibilité de se spécialiser plus ou moins sur la transformation: un marché intérieur des grumes permettrait une allocation des grumes aux entreprises les plus efficaces dans la transformation. Des quotas d'exportation de grumes pourraient être soit vendues aux enchères, soit attribuées aux entreprises certifiées.*
- *La pratique de remise de taxes contre la réalisation de travaux va à l'encontre de la transparence nécessaire dans la collecte des recettes fiscales et peut réduire les ressources financières décidées par les Lois de Finance (même s'il n'y a pas d'affectation directe des taxes forestières au Fonds Forestier)*
- *La parafiscalité a pris une importance considérable (e.g. redevance informatique) et contribue à renforcer la pression fiscale sur les entreprises, sans aucune dimension incitative.*

12. Les changements apportés par la loi 33-2020 du 8 juillet 2020 portant code forestier

Depuis 2018, un projet de nouvelle loi forestière était en cours de discussion au Congo. Cette loi n°33-2020 a été promulguée le 8 juin 2020. Cette nouvelle loi apporte des éléments intéressants susceptibles de favoriser la gestion durable. Parmi ceux-ci, on peut citer :

- L'obligation pour les concessionnaires de se certifier. On comprend qu'il devrait s'agir de certification de « gestion forestière » (type FSC ou PAFC) ou de légalité. Les entreprises

¹⁷ https://eiti.org/files/documents/rapport_final_itie_congo_2017.pdf

devront « certifier la gestion de leurs concessions aménagées ou la légalité des produits qui y sont exploités et transformés » (art. 72). La loi mentionne également la possibilité d'une reconnaissance de la certification privée pour la vérification de la légalité (art. 65) et la mise en place d'un système national de certification forestière (art. 70).

- La possibilité de reconnaître une forêt communautaire « dont l'initiative de la création et de la gestion durable relève d'une communauté locale » et la reconnaissance comme forêt communautaire « de la forêt naturelle se trouvant sur le terroir d'une communauté locale et des populations autochtones [et] et a été classée à leur profit » (art. 15). L'article 18 précise qu'une fois créée, la forêt communautaire « est incluse dans le domaine forestier permanent ».
- L'introduction d'une notion « d'aménagement simplifié » pour les unités forestières d'aménagement de superficie moyenne (art. 77)
- L'introduction d'une la convention de valorisation de bois de plantation (art. 118);
- L'introduction de deux nouvelles taxes: la taxe d'occupation et la taxe de résidus (art. 110 et suivants), dont les modalités seront précisées par des textes ultérieurs;
- L'institutionnalisation de l'Observation Indépendante en appui des opérations de contrôle de l'exploitation forestière (art. 69)
- Le « droit de générer des crédits carbone et de les commercialiser est reconnu aux personnes physiques et morales » et un principe de copropriété entre les promoteurs de projet, l'État, les collectivités locales et les titulaires de droit coutumier (art. 180)
- L'introduction de la notion de consentement préalable des populations et des organisations de la société civile pour le classement des forêts: « le classement d'une forêt obéit au principe du consentement libre, informé et préalable des populations affectées par le projet de classement et au principe de consultation des organisations de la société civile de la circonscription concernée » (art. 40).

Plusieurs de ces innovations peuvent être vues comme favorables à la gestion durable des forêts, mais il faudra attendre les textes d'application pour pouvoir le confirmer.

Cependant, plusieurs articles annoncent l'introduction d'un paquet de mesures qui modifient profondément et unilatéralement les relations entre l'État congolais et l'industrie forestière, et réduit *de facto* la portion des recettes fiscales destinées au Trésor. En résumé, ce paquet: (i) interdit assez largement l'exportation de bois sous forme de grumes (seuls des bois « lourds et durs » dont l'usage fait appel à une technologie spécifique peuvent être exportés, leur liste doit être fixée par voie réglementaire; (ii) introduit le « régime de partage de production » qui demande la livraison physique à l'État d'un pourcentage des grumes exploitées par les entreprises forestières, (iii) transforme un certain nombre d'impôts et de taxes (par exemple l'impôt sur les sociétés) en contribution en nature à travers la cession de grumes à l'État.

On se concentrera sur les mesures fiscales et sur l'introduction du principe du « partage de production », formule issue des arrangements entre l'État et les sociétés pétrolières mais inédit dans le secteur forestier.

12.1 L'introduction de « permis domestiques »

La loi forestière introduit pour la première fois les permis domestiques au Congo. Selon les autorités, leur but serait d'assurer l'approvisionnement du marché local qui souffre d'une pénurie structurelle à cause de l'exportation qui semble absorber la quasi-totalité de la production industrielle de bois. En fait, on manque d'éléments pour qualifier et quantifier la demande locale, composée de bois de construction et de charpentes. Compte tenu des coûts de transport très élevés depuis le nord du Congo jusqu'à Douala, le principal port d'exportation de cette zone (jusqu'à 200 €/m³ pour certaines concessions), écouler les bois de moindre valeur commerciale (qui ne peuvent pas amortir des coûts de transport aussi élevés) sur le marché intérieur est intéressant, à condition de ne pas être non plus trop éloigné des marchés de Brazzaville ou de Pointe-Noire, car les prix de vente ne sont pas très élevés.

Les permis domestiques seront délivrés pour trois ans. Leur surface sera déterminée par arrêté (les textes préparatoires du projet de loi évoquaient une surface comprise entre 1000 et 5000 hectares). Ces permis seront réservés aux Congolais, délivrés par l'administration forestières en dehors des UFA et gérés selon des plans simples de gestion. Les zones sur lesquelles ces permis seront délivrés feront l'objet de classement.

Sur la base de l'expérience de pays comparables, notamment le Cameroun, on peut penser que dans la forme actuelle, les permis domestiques risquent d'être exploités par les sociétés industrielles sous couvert de prête-noms nationaux, ou de passer en régime de fermage (pour lequel les pénalités sont très peu dissuasives). En alimentant des circuits illégaux vers le marché d'exportation, les bois des permis domestiques menaceraient donc l'intégrité du système de la traçabilité et donc les accord APV FLEGT avec l'Union européenne. De forts garde-fous devraient être mis en place au niveau des décrets d'application pour permettre aux permis domestiques d'atteindre l'objectif visé.

12.2 Les changements dans la structure fiscale

Les textes préparatoires à la loi forestière comprenaient des dispositions assez détaillées relatives à la fiscalité forestière. La plupart de ces dispositions n'ont pas été reprises dans le texte de loi promulgué le 8 juin 2020. Ce dernier précise que, pour les entreprises en régime de partage de production (en principe, toutes les entreprises trois ans après l'attribution d'une Convention d'Aménagement et de Transformation ou d'une Convention de valorisation des bois de plantation), « *seuls les droits et taxes en rapport avec l'exploitation forestière, affectés aux collectivités locales, aux communautés locales et aux populations autochtones* » devront être acquittés. L'article 112 précise que ces taxes sont :

- La taxe sur les produits forestiers non ligneux;
- La taxe d'occupation;
- « Une quotité de la taxe de superficie » (qui sera fixée par la loi de finances).

Pour le reste, l'article 109 indique que « *Une entreprise forestière exerçant ses activités sous le régime du partage de production est dispensée des impôts directs d'État s'appliquant à l'exploitation forestière* ».

L'abandon des taxes spécifiques (notamment la taxe d'abatage), va se traduire par une moindre attention des agents du MEFDD aux opérations d'abatage (examen des carnets de chantier, etc.). On peut penser que le secteur sera moins surveillé. La fiscalité forestière constitue un élément important pour le contrôle de la légalité des bois (sources légales), et cette dimension va être affaiblie. En outre, supprimer la taxe d'abatage c'est se priver de la possibilité d'orienter les choix des exploitants vers des essences secondaires résilientes à l'exploitation (en baissant les taux de taxation) et de diminuer la pression sur les essences surexploitées (en augmentant les taux).

12.3 La question du « partage de production »

L'introduction d'un principe de partage de production, c'est-à-dire l'obligation pour les entreprises de livrer des quantités physiques de grumes à l'État trouve probablement son explication dans la volonté du gouvernement congolais de créer des zones franches pour la transformation et l'exportation du bois, à l'instar de la Zone Économique Spéciale au Gabon. Dans la mesure où certaines industries qui devraient s'installer dans cette zone n'auront pas forcément de concessions forestières, la livraison de bois à l'État (ou un opérateur qu'il contrôle) doit permettre de répondre aux besoins d'approvisionnement en matière première des industries de cette ou ces futures zones franches. On peut s'interroger sur la faisabilité de la transposition d'un mécanisme pratiqué dans le secteur pétrolier au secteur forestier, et qui n'a pas été expérimenté dans d'autres pays jusqu'à présent.

Les contrats de partage de production dans le secteur pétrolier

Dans le secteur pétrolier, le principe est que l'État rembourse les coûts d'exploration et d'exploitation en abandonnant une partie de la production (*cost oil*) à l'entreprise étrangère et que le reste de la production (*profit oil*) est partagé entre l'entreprise étrangère et l'État. Chaque partie se voit attribuer un pourcentage du pétrole net produit (*profit oil*), c'est-à-dire, une fois déduits les coûts et les impôts (redevances non incluses), avec, par exemple, une part de 65 à 80% revenant à l'entreprise publique et de 20 à 35 % revenant à l'entreprise étrangère. Ce type de contrat fait l'objet de négociations serrées, notamment pour ce qui concerne l'estimation des dépenses.

De nombreux contrats de partage de production prévoient un pourcentage ou un plafond de remboursement des coûts (*cost oil*). Par exemple, 60 % du revenu de la production est affecté au remboursement des dépenses de l'entrepreneur. Tous les risques relatifs à l'exploitation sont à la charge de l'entrepreneur, ainsi que les risques induits par une coopération avec une société pétrolière nationale autorisée à participer à l'opération de développement et de production en qualité de propriétaire et/ou de bénéficiaire. La société pétrolière étrangère est également contrainte de verser une partie des recettes au pays pétrolier sous forme de redevances une fois la production écoulée.

Dans ce type de contrat, l'État ne transfère ni les droits de propriété des réserves une fois découvertes ni les droits de propriété des ressources extraites. Seuls sont cédés à la compagnie étrangère les droits de propriété de la partie des ressources extraites qui reviennent à cette dernière comme *cost oil* et *profit oil*, le reste appartient à l'État. Cette caractéristique permet de différencier le contrat de partage de production du contrat d'amodiation (location) de pétrole et de gaz (*oil and gas lease*) et des concessions pétrolières, car dans ces deux contrats, la propriété de la totalité des ressources extraites à la sortie du puits (*wellhead*) revient en général à la compagnie pétrolière.

Sources : <https://www.encyclopedie-energie.org/petrole-le-contrat-de-partage-de-production-en-indonesie/> <https://www.planete-energies.com/fr/content/contrat-de-partage-de-production>

Le pétrole extrait dans un pays est d'une qualité donnée, et les cours du pétrole sont cotés quotidiennement sur différents marchés. Ce n'est pas la même chose pour le secteur forestier: le nombre d'essences commercialisées est important et plusieurs qualités sont proposées aux acheteurs. Le partage de production ne pourra sans doute pas se baser sur un simple partage des volumes, il devra concerner les essences et les qualités. Les essences forestières ne sont pas de même qualité ni de même

valeur. Au sein d'une même espèce, la valeur peut être différente, comme dans le cas du limba (*Terminalia superba*) blanc et du limba blanc bariolé.

Le niveau des profits dans l'industrie du bois n'est pas comparable avec celui existant dans l'industrie pétrolière, et la surface financière des entreprises de la filière bois n'a rien à voir avec celle des sociétés pétrolières. Aujourd'hui, de nombreuses entreprises forestières peinent à couvrir leurs coûts d'aménagement, d'exploitation, de transformation et de transport, coût auxquels il faut rajouter la fiscalité existante. Dit d'une autre manière, le *cost timber* (par analogie avec le *cost oil* des contrats pétroliers), c'est-à-dire la part de production de grumes que l'entreprise pourra conserver pour couvrir ses coûts, risque d'être très importante et réduire ainsi à peu de choses le *profit timber* qui doit être partagé avec l'État. Si l'État décide de plafonner le *cost timber* (comme dans certains contrats pétroliers) à, mettons, 60% de la production totale, le risque est que l'entreprise ne puisse couvrir ses coûts et doive cesser son activité. Dans tous les cas, les négociations avec les opérateurs sur le montant des coûts opérationnels risquent d'être extrêmement ardues, ce qui ne sera guère propice à l'établissement d'un climat de confiance entre les partenaires.

Certaines entreprises certifiées ont investi dans des unités industrielles pour transformer la quasi-totalité de production de bois en grumes. **Une obligation de livrer un pourcentage de grumes pourrait se traduire, soit par une difficulté à alimenter l'outil de transformation (avec les conséquences économiques qui s'ensuivraient), soit à une incitation à augmenter les prélèvements afin de pouvoir à la fois approvisionner l'outil de transformation et de livrer les quantités requises de grumes à l'État.** Cela d'autant que la transformation « *des impôts directs d'Etat s'appliquant à l'exploitation forestière* » (art. 109) en contribution en nature sous forme de grumes livrées à l'État va encore réduire la part de la matière brute que les industriels pourront conserver.

L'augmentation des prélèvements est-elle favorable à la gestion durable des forêts ?

Avec le partage de production, l'un des souhaits des autorités est d'être en capacité d'approvisionner le marché congolais en bois d'œuvre ainsi que de fournir de la matière première aux industries de transformation du bois qui s'installeront dans les Zones économiques spéciales (ZES). Pour répondre aux besoins en bois des transformateurs déjà installés et de ceux que le gouvernement souhaite attirer dans les ZES, les autorités souhaitent l'accroissement de la production de bois et envisagent que celle-ci se fasse à travers la récolte d'essences secondaires ou moins exploitées aujourd'hui. Cette diversification est recherchée par les gestionnaires forestiers, tant pour des raisons de rentabilité que de réduction de la pression d'exploitation sur les principales essences commerciales.

Pour que les industries du bois puissent approvisionner le marché congolais à des coûts accessibles pour le consommateur, il faut que les coûts de transport et de mise en marché entre le lieu de coupe, l'unité de transformation et le marché final ne soient pas trop élevés. Même pour une entreprise tournée vers l'exportation, il est intéressant de pouvoir écouler des bois de moindre valeur commerciale sur des marchés de proximité, à condition que l'opération soit rentable. Mais ceci n'est envisageable que pour des permis proches des principaux marchés congolais, à savoir Brazzaville et Pointe-Noire. Pour les permis plus éloignés, le partage de production ne peut pas modifier cette contrainte économique: une structure publique ne peut pas vendre le bois à un prix inférieur aux coûts de transport et de mise en marché.

Comme mentionné précédemment, le partage de production va créer pour les entreprises industrielles une incitation à augmenter les prélèvements afin de pouvoir à la fois approvisionner l'outil de transformation et de livrer les quantités requises de grumes à l'État. Compte tenu de la contrainte des coûts de transport qui limite le « périmètre de profitabilité » à certaines essences et qualités, l'accroissement souhaité de la production risque fort de se traduire par un renforcement de la pression d'exploitation sur les principales essences commerciales (sapelli, okoumé, doussié, wengué...).

Dans le contexte de l'exploitation sélective en forêt tropicale, à moins d'un changement significatif du prix de certaines essences ou d'innovations techniques dans la transformation permettant d'apporter une forte valeur ajoutée à certaines essences « secondaires » (par l'accroissement du prix du produit final), la pression à l'accroissement des volumes récoltés ne se traduit pas par une diversification des récoltes mais, au contraire, par un accroissement de la sélectivité (écrémage).

Une telle évolution serait préjudiciable à la gestion durable des forêts. La réalisation d'une étude sur la mise en œuvre du principe de partage de production, sur la base de termes de références définis avec le Ministère en charge des forêts permettrait de clarifier les modalités du partage de production, de faire des propositions pour une fiscalité incitative et de préparer ainsi les textes d'application de la nouvelle loi forestière portant code forestier.

En ce qui concerne les entreprises exportatrices de bois non transformé, l'interdiction d'exporter des grumes (même si certaines dérogations sont prévues pour les bois lourds ou durs « *dont l'usinage fait appel à une technologie spécifique* » - art. 97) va peser sur la rentabilité de certaines sociétés, au moins à court terme. Les investissements importants et rapides dans la transformation du bois pourraient se faire aux dépens de ceux nécessaires pour l'aménagement forestier et la certification.

13. Propositions

Un cadre incitatif pour la gestion durable des forêts doit comprendre plusieurs éléments :

- Des plans d'usage des terres participatifs et inclusifs dans le cadre d'un aménagement du territoire
- La constitution en droit d'un domaine forestier permanent
- L'encadrement strict de l'exploitation artisanale dans des espaces délimités
- L'approvisionnement du marché local en produits usinés de bonne qualité à des prix adaptés
- La sécurité des droits concédés aux acteurs économiques et aux communautés
- La transparence dans la collecte et l'utilisation des recettes fiscales
- L'égalité de traitement des différentes sociétés opérant sur le territoire au regard des contraintes réglementaires
- La stabilité fiscale et institutionnelle
- L'utilisation d'incitations, notamment fiscales, pour les entreprises qui vont au-delà des seuils réglementaires

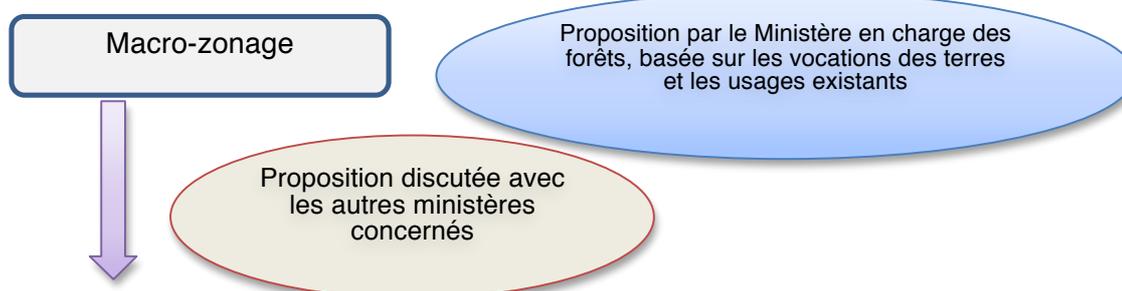
13.1 Usage des terres

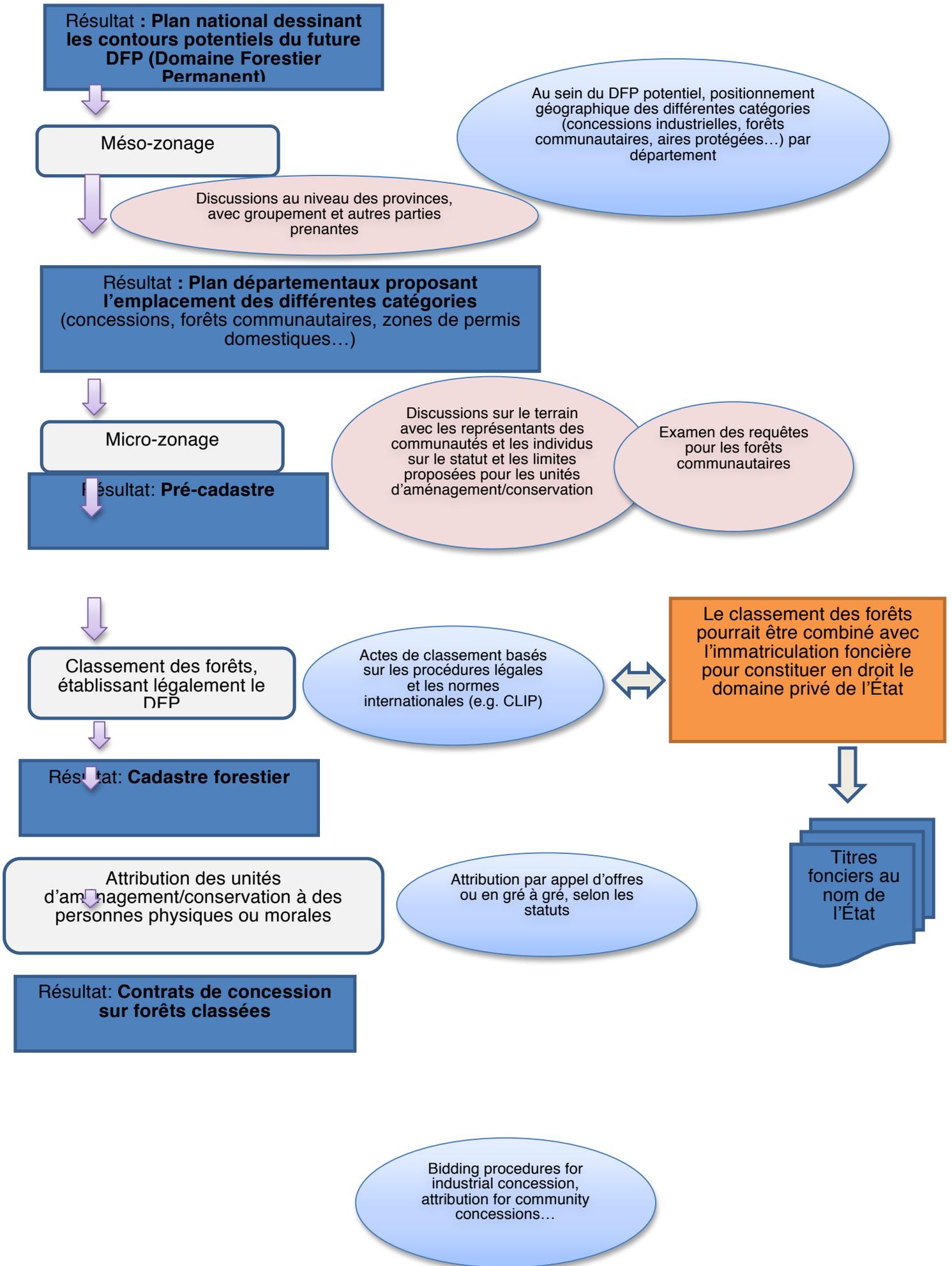
- Au Congo, la superposition de droits miniers et forestiers constitue un problème connu. La nécessité d'un plan d'aménagement du territoire est reconnue par les autorités. Un plan d'aménagement du territoire inclusif doit être précédé de consultations accompagnant les procédures de zonage. Plusieurs niveaux de zonage peuvent être considérés, à l'échelle nationale, à l'échelle départementale et, le cas échéant, à petite échelle pour discuter avec les usagers des limites des différentes catégories d'aménagement du territoire. La figure (page suivante) schématise un processus possible.

L'absence de constitution en droit d'un domaine forestier de l'État découle de l'absence de classement des forêts, problème auquel le gouvernement compte s'attaquer (si des financements complémentaires sont obtenus auprès des partenaires au développement). Enfin, le renforcement de la sécurité juridique passe par l'immatriculation des terres boisées au nom de l'État (ou d'autres personnes morales ou physiques). *Les procédures de classement et d'immatriculation étant très similaires, le gouvernement pourrait travailler à une procédure combinée* qui permettrait, une fois la procédure de classement de la forêt accomplie, d'inscrire le foncier correspondant à la Conservation Foncière et d'établir un titre foncier au nom de l'État.

L'inscription des terres boisées dans (i) un plan de zonage, (ii) un cadastre forestier et, finalement (iii) un titre foncier sécurise l'investissement et incite à une gestion à long terme. Les plantations et l'agroforesterie ne pourront se développer sans un tel processus de sécurisation forestière et foncière.

- Les permis domestiques prévus par la nouvelle loi doivent être précisément localisés dans des espaces bien définis pour éviter une extension incontrôlée des coupes. A priori, *les futures forêts communautaires devraient constituer un des espaces privilégiés pour la conclusion de contrats de coupe durables* entre des exploitants artisanaux et les communautés.
- La sécurité des droits concédés aux acteurs économiques et aux communautés passe également par des processus de cartographie participative des droits coutumiers sur la terre et les ressources qu'elle porte. Les communautés sont en mesure d'identifier les espaces sur lesquels elles exercent différents droits d'usage, espaces qui ne s'arrêtent pas à la porte des concessions forestières ou des aires protégées. *L'identification cartographique de ces espaces (terroirs ou finages) couplée avec l'identification des différents droits exercés sur ces espaces par les différents groupes d'acteurs qui l'utilisent pourrait devenir une nouvelle obligation des concessionnaires forestiers, en partenariat avec les commissions de reconnaissance des droits coutumiers, et servir de base à une répartition proportionnelle de la quotité de taxe de superficie destinée aux communautés locales* (la nouvelle loi forestière prévoit qu'une partie de la taxe de superficie doit alimenter le fonds de développement local au profit des communautés locales et autochtones). La cartographie des finages villageois traversant les concessions peut servir, en outre, à développer des processus de gouvernance inclusive de la concession afin de gérer durablement la faune sauvage, de mener la lutte anti-braconnage et à développer des filières de commercialisation des produits forestiers non-ligneux.





13.2 Incitations économiques et fiscales

- L'égalité de traitement des entreprises et des autres acteurs économiques constitue une condition fondamentale de la confiance et donc de l'investissement à long terme. La coexistence entre des entreprises qui appliquent les lois et règlements (notamment sur l'aménagement forestier) et d'autres qui ne sont pas en règle depuis de nombreuses années engendre une concurrence déloyale entre les entreprises et constitue un point particulièrement négatif pour favoriser l'investissement responsable.
- Le caractère insuffisamment dissuasif des sanctions et l'absence d'un système de responsabilité solidaire entre les sociétés donneurs d'ordre et les sous-traitants ne permet pas de capitaliser sur l'observation indépendante. L'introduction d'une responsabilité solidaire entre les entreprises donneurs d'ordre et les sous-traitants constituerait un progrès important pour la gouvernance et la gestion durable des forêts.
- La pratique des remises fiscales aux entreprises en échange de la réalisation par celles-ci de travaux, notamment routiers, est difficilement compatible avec la nécessaire transparence en matière de performance fiscale et avec une programmation budgétaire publique annuelle et pluriannuelle s'appuyant sur des recettes fiscales escomptées. Le problème va se poser de manière d'autant plus aiguë que la nouvelle loi forestière prévoit l'affectation d'au moins une partie de la taxe de superficie au développement des communautés locales. D'une manière générale, cette pratique n'est pas compatible avec le fonctionnement d'un État moderne.
- Les dettes qu'a contracté l'État vis-à-vis des entreprises (retard dans le remboursement de la TVA aux exportateurs, retard dans le versement des contributions au développement cacaoyer dans les concessions...) freinent les investissements nécessaires dans la gestion durable des forêts et la modernisation de l'appareil de transformation. L'apurement de ces dettes devrait constituer une priorité politique.
- L'absence de sécurisation des dotations budgétaires annuelles du Ministère en charge de forêts (versements irréguliers ou retardés) ne permet pas aux administrations de remplir correctement leur mission de soutien à la gestion durable des forêts – comme les contrôles de manière inopinée des activités des sociétés forestières. Des procédures d'affectation automatique des moyens financiers au Ministère en charge des forêts devraient être mises en place et un rapport annuel d'exécution de la Direction du Trésor devrait être produit.
- La parafiscalité, mais aussi certaines taxes inscrites dans les lois de finance, comme la redevance informatique, ont pris une importance considérable et contribuent à renforcer la pression fiscale sur les entreprises, sans aucune dimension incitative. Il serait souhaitable de proportionner ces prélèvements au coût exact du service fourni au secteur d'activité – ce qui suppose de caractériser précisément ce service. Il est préférable de redéployer une partie de la fiscalité forestière pour compenser l'éventuel manque à gagner d'un recentrage et d'un recalibrage de ces prélèvements.
- L'unicité de taux de la taxe d'abattage pour toutes les essences n'incite pas à limiter la surexploitation de certaines des principales essences commercialisées au profit d'essences secondaires, lesquelles pourraient bénéficier d'une baisse importante du taux qui pourrait être compensée par une majoration des taux sur les essences les plus commercialisées (principe de bonus-malus).
- Des investissements publics sont nécessaires pour développer la compétitivité des bois congolais et permettre aux entreprises d'abaisser les coûts de transport. Le dragage du fleuve Sangha permettrait d'améliorer les flux Nord-Sud, de réduire les coûts de transport et les émissions de CO₂.
- Des investissements dans la formation de personnel forestier (mécanique, scierie, affutage, exploitation...) au travers d'un centre national de formation sont également nécessaires pour le développement et la compétitivité des entreprises.

13.3 Favoriser la certification par des incitations fiscales et non fiscales

- En favorisant une gestion à long terme des ressources boisées et le maintien d'un capital naturel, la certification contribue à la mise en valeur forestière durable d'espaces qui pourraient être convertis à d'autres usages s'ils n'apportaient plus suffisamment des bénéfices aux États et aux juridictions locales (taxes, emplois directs et indirects), et d'avantages directs aux communautés locales dépendant des ressources de la forêt.
- Dans la mesure où les entreprises investissent dans la certification pour prendre ou maintenir certaines parts de marchés sensibles aux questions écologiques, lesquels sont aussi les plus

rentables, elles s'autorégulent pour ne pas perdre leur certification et se conforment donc autant que possible aux lois et règlements. Les bénéficiaires de la certification peuvent être considérés comme des biens publics. Les certifications sont de plus en plus utilisées dans les politiques publiques: au Gabon, la certification FSC deviendra obligatoire pour les concessions dès 2022, et au Congo la nouvelle loi forestière requiert une certification de légalité des concessions). Il peut être alors légitime de relayer les incitations du marché par des incitations et subventions publiques pour l'adoption de la certification, notamment la certification de gestion forestière. L'aide peut se manifester par le biais de critères d'accès aux marchés publics du bois, comme c'est le cas dans de nombreuses collectivités publiques à travers le monde, où seul le bois certifié est autorisé à concourir. Le « modèle économique » de la certification dépend des « primes sur le prix ». Étant donné que les primes associées au bois certifié ne sont souvent pas suffisamment élevées, compte tenu de la diversité des marchés et de leur inégale maturité, des incitations pourraient être fournies au niveau de la production, soit en subventionnant les entreprises certifiées, soit en réduisant les coûts. La réduction des coûts par le biais de réductions de taxes compléterait non seulement l'incitation commerciale de la certification, mais attirerait potentiellement une nouvelle catégorie de concessionnaires, à savoir ceux dont les débouchés se trouvent sur des marchés peu sensibles à la certification. Une compensation financière intégrale du manque à gagner fiscal pour l'État pendant un certain nombre d'années serait à rechercher auprès des partenaires au développement, notamment auprès de CAFI.

- En 2019, le PPECF-COMIFAC a commandité une étude de faisabilité pour un mécanisme de réduction compensée (aux États) de la fiscalité forestière pour les concessions certifiées dans trois pays d'Afrique centrale, dont le Congo. Sur la base de la fiscalité actuellement en vigueur, et en fonction d'hypothèses sur les récoltes et la transformation, les résultats suivants ont été obtenus :

Paramètres

Tableau: Paramètres utilisés pour la simulation Congo

	Valeur moyenne	Taux
Redevance forestière annuelle (surface)	350 FCFA/ha	
Valeur moyenne FOT grumes (FCFA)	90 000	9% ou 10% (Okoumé notamment) Simulé avec 9%
Valeur moyenne FOT sciage humide	225 000	4%
Valeur moyenne FOT sciage sec	231 000	1.5%
Rotation (années)	30	
Volume moyen prélevé taxable « fût » (m ³ /ha)	9	
Volume moyen commercialisé (m ³ /ha)	7	
Rendement matière moyen au sciage	38%	
Proportion des grumes exportées	15%	
Proportion sciages humides/sciages	67%	
Proportion sciages secs/sciages	33%	

Résultats

Tableau: Montants des abattements fiscaux sous différentes hypothèses (Congo)

Année	1	2	3	4	5	6
Surface certifiées (ha)	3 100 000	3 550 000	3 950 000	4 550 000	4 850 000	4 960 000
Abattement fiscal	(Euros)					
10%	1 187 454	1 359 826	1 513 046	1 742 875	1 857 790	1 899 926
20%	2 374 907	2 719 652	3 026 091	3 485 751	3 715 581	3 799 851
30%	3 562 361	4 079 478	4 539 137	5 228 626	5 573 371	5 699 777

40%	4 749 814	5 439 303	6 052 183	6 971 502	7 431 161	7 599 703
50%	5 937 268	6 799 129	7 565 228	8 714 377	9 288 951	9 499 629
60%	7 124 721	8 158 955	9 078 274	10 457 252	11 146 742	11 399 554
70%	8 312 175	9 518 781	10 591 320	12 200 128	13 004 532	13 299 480
80%	9 499 629	10 878 607	12 104 365	13 943 003	14 862 322	15 199 406
90%	10 687 082	12 238 433	13 617 411	15 685 879	16 720 112	17 099 331
100%	11 874 536	13 598 259	15 130 457	17 428 754	18 577 903	18 999 257

Le tableau ci-dessus propose plusieurs scénarios de surfaces forestière certifiées et plusieurs possibilités de réduction de la fiscalité forestière (de 10 à 100%) avec les montants correspondants qui seraient à compenser à l'État par les partenaires au développement. Par exemple, pour la surface actuellement certifiée FSC au Congo (environ 3,1 millions ha), une réduction de 30% des taxes forestières pour les concessionnaires certifiées représenterait environ 3,56 millions € par an, qui pourrait être compensée par les partenaires.

Il est également possible de moduler les abattements fiscaux en fonction du type de certification. Par exemple, une certification de légalité donnerait droit à un abattement de 20% tandis qu'une certification de gestion forestière (type FSC ou PAFC) donnerait droit à un abattement de 50%. En juillet 2020, le Gabon a adopté une loi de finances rectificative modulant la taxe de superficie selon trois cas en relation avec la certification: alors que la taxe de superficie était fixée à 400 FCFA par hectare avant la loi de juillet 2020, elle est maintenant de 300 FCFA par ha pour les concessions certifiées FSC ou PAFC/PEFC, de 600 FCFA pour les concessions avec certification de légalité et de 800 FCFA pour les concessions sans certification. Les taxes forestières gabonaises étaient auparavant les plus faibles de la sous-région depuis l'interdiction d'exportation de grumes en 2010, une situation qui permettait d'augmenter la taxation générale tout en modulant les taux en fonction des certifications obtenues par le concessionnaire.

Avec l'introduction du partage de production, la fiscalité forestière va être remodelée et la question des incitations fiscales devra être reconsidérée en fonction des nouveaux paramètres et textes d'application. Mais si la mise en œuvre du régime de partage de production est différée de quelques années (une étude des impacts de ce régime devant être entreprises par le Ministère, il serait possible de discuter avec les partenaires au développement de la possibilité de mise en place d'un tel mécanisme incitatif durant la période transitoire.

- Des incitations **non fiscales** à la certification peuvent être envisagés.
 - Il serait souhaitable que pour l'ensemble des marchés publics, le bois certifié bénéficie d'avantages significatifs dans la passation de marchés.
 - Lors des procédures de dédouanement, les bois certifiés pourraient bénéficier d'une « voie prioritaire » permettant de réduire les délais d'embarquement.

Study Report on Incentives for Sustainable Forest Management in Côte d'Ivoire

by

AKA JEAN PAUL AKA

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ABBREVIATIONS AND ACRONYMS

AFD	:	French Development Agency (<i>Agence Française de Développement</i>)
AFOR	:	Rural Land Agency (<i>Agence Foncière Rurale</i>)
AIPH	:	Interprofessional Association of the Oil Palm sector (<i>Association Interprofessionnelle de la Filière Palmier à Huile</i>)
APROMAC	:	Association of Natural Rubber Professionals of Côte d'Ivoire (<i>Association des Professionnels du Caoutchouc Naturel de Côte d'Ivoire</i>)
BAU	:	Services while reducing forest degradation and deforestation versus laissez-faire scenario
BNEDT	:	National Office for Technical Studies and Development (<i>Bureau National d'Études et de Développement Techniques</i>)
BNI	:	National Investment Bank (<i>Banque Nationale d'Investissement</i>)
CICPPF	:	Interdepartmental Policy Coordination and Steering Committee (<i>Comité Interministériel de Coordination et de Pilotage de la Politique Forestière</i>)
CIE	:	Côte d'Ivoire Electricity Company (<i>Compagnie Ivoirienne d'Electricité</i>)
CLGP-FC	:	Local Committee Responsible for Gazetted Forest Participatory Management (<i>Comité Local de Gestion Participative des Forêts Classées</i>)
CNDLFB	:	National Committee for Forest Protection and Control of Wildfires (<i>Comité National de Défense de la Forêt et de Lutte contre les Feux de Brousse</i>)
CSPGP-FC	:	Sub-Prefectural Committee Responsible for Gazetted Forest Participatory Management (<i>Comité Sous-Préfectoral de Gestion Participative des Forêts Classées</i>)
COJO	:	Decentralized Tender Opening and Adjudication Commission (<i>Commission Décentralisée d'Ouverture des Pplis et de Jugement des Offres</i>)
CTP	:	Multidisciplinary Technical Unit
DAO	:	Tender Documents
DARH	:	Administration and Human Resources Directorate (<i>Direction de l'Administration et des Ressources Humaines</i>)
DCM	:	Sales and Marketing Department
DFR	:	Rural Land Law
DPPF	:	Planning, Projects and Funding Directorate (<i>Direction de la Planification, des Projets et des Financements</i>)
DT	:	Technical Department (<i>Direction Technique</i>)
DUS	:	Single Exit Duty
ECOSOC	:	United Nations Economic and Social Council
ECOWAS	:	Economic Community of West African States
EU	:	European Union
FAO	:	United Nations Food and Agriculture Organization
FC	:	Gazetted Forest
FLEGT	:	Forest Law Enforcement, Governance, and Trade/International Processes for Improving Forest Governance
FSPDF	:	Special Fund for Forest Preservation and Development (<i>Fonds Spécial pour la Préservation et le Développement Forestier</i>)
GIRE	:	Integrated Management of Water Resources

GIZ	:	German Agency for International Cooperation (<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>)
ICF	:	Cocoa and Forest Initiative
IDH	:	The Sustainable Trade Initiative
ITTO	:	International Tropical Timber Organization
KFW	:	<i>Kreditanstalt Für Wiederaufbau</i> (German Development Bank)
MAT	:	Ministry of Land Use Planning
MINEDD	:	Ministry of Environment and Sustainable Development
MINEF	:	Ministry of Water and Forests
NGO	:	Non-Governmental Organization
OIPR	:	Côte d'Ivoire Parks and Reserves Office (<i>Office Ivoirien des Parcs et Réserves</i>)
PAS	:	Structural Adjustment Programs
PBM	:	performance-based management
PDF	:	Forestry Master Plan (<i>Plan Directeur Forestier</i>)
PDL	:	Local Development Plan
PEF	:	Forest Logging Perimeter (<i>Périmètre d'Exploitation Forestière</i>)
PES	:	Payment for Environmental Services
PFE	:	Permanent Forest Estate
PREF	:	Policy for Forest Preservation, Rehabilitation and Extension (<i>Politique de Préservation, de Réhabilitation et d'Extension des Forêts</i>)
NTFPs	:	Non-Timber Forest Products
PND	:	National Development Policy
PNP	:	National Population Party (<i>Parti National de Population</i>)
PREF	:	Policy on the Preservation, Rehabilitation and Extension of Forests
PSF1	:	Sectoral Forestry Project - Phase 1
REDD+	:	Reducing Emissions from Deforestation and Forest Degradation
SDG	:	Sustainable Development Goal
SP	:	Sectoral Policy
SEP-REDD	:	REDD Permanent Executive Secretariat
SIR	:	Ivorian Refining Company (<i>Société Ivoirienne de Raffinage</i>)
SODECI	:	Water Distribution Company of Côte d'Ivoire (<i>Société de Distribution d'Eau de Côte d'Ivoire</i>)
SODEFOR	:	Forest Development Corporation (<i>Société de Développement des Forêts</i>)
Solibra	:	Africa Breweries and Lemonade Manufacturers Company (<i>Société de Limonaderies et Brasseries d'Afrique</i>)
SRADT	:	Regional Land use Planning and Development Scheme (<i>Schéma Régional d'Aménagement et de Développement du Territoire</i>)
TIG	:	Works of General Interest
UNFF	:	United Nations Forum on Forests
WCF	:	World Cocoa Foundation

EXECUTIVE SUMMARY

Côte d'Ivoire has long suffered and continues to suffer from the adverse effects of deforestation, due mainly to agriculture, illegal logging, urbanization, mining, but also to more indirect factors such as, among others, immigration, rural land insecurity and widespread poverty. The many efforts to stop deforestation and rebuild forest cover have never been successful in reversing the trend. This document analyzes existing incentive mechanisms for sustainable management and makes proposals for improvement. This analysis concerns policy, legislative, institutional and planning frameworks and taxation for sustainable forest management. We will then (ii) identify the incentive/disincentive mechanisms for sustainable forest management and deforestation-free products before (iii) introducing proposals for improvement.

New policy framework for forest management

The current forest policy framework for Côte d'Ivoire is governed by a new policy *for the preservation, rehabilitation and extension of Côte d'Ivoire's forests*, adopted in 2018. It is based on four principles: (i) voluntarism, reflected in governmental awareness and mobilization of all actors around the interests of the forest; (ii) realism, involving acknowledging the current situation of forests with tough decisions to make; (iii) acknowledgement, which considers that all trees sequester carbon, and (iv) the principle of breaking with the "harvesting logic" and replacing it with a "cultivation logic" to promote forest restoration. The resulting strategy for the preservation, rehabilitation and extension of Côte d'Ivoire's forests was adopted in the Council of Ministers in February 2019 at a total cost of FCFA 616 billion, covering the period 2019-2030. The aim is to restore forest cover by 20 per cent by 2040, and thus combat the effects of climate change on three fronts, namely: 1) improving forest governance; 2) strengthening the protection of residual forests, their extension and sustainable management; 3) rehabilitating degraded forest areas and adapting to climate change.

Legislative and regulatory framework adapted to the principle of sustainable forest management

The legislative and regulatory framework for forestry has evolved considerably with time and as the forest resource became depleted. Prior to 2014, forestry regulation was based on various laws, the most important of which was Law No. 65-425 of 20 December 1965 establishing the Forestry Code, which defined two estate types, the rural forest estate and the state forest estate (gazetted forests, protected forests, production areas and reforestation areas). Under this law, rural communities are not associated with the management of state forests, and trees are state property, regardless of the owner of the land.

In response to deficiencies in the 1965 Forestry Code regarding sustainable forest management, a new Forestry Code was adopted in 2014. It was subsequently amended in 2019 by Law No. 2019-675 of 23 July 2019 establishing the Forestry Code. This new Forestry Code, influenced by international processes such as FLEGT (Forest Law Enforcement, Governance and Trade) and REDD+ (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), highlighted the challenges and prospects for sustainable management of the Ivorian forest cover. The new law established a framework for "sustainable forest management" and introduced innovations on the subject of the conservation and recreation of vegetation cover with "*greater involvement of the population*". One of the major innovations was recognizing that ownership of trees belonged to the owner of the land with the possibility for all citizens to establish forests. Even so, this possibility remains problematic given the low registration rate of land in Côte d'Ivoire and the limited number of land certificates. In addition, the new Forestry Code has strengthened the status of water and forest technical officers, henceforth making them judicial police officers. A new forest category has also been created, the agroforests. Agroforests are the former gazetted forests with a degradation rate of over 75 per cent. In this new category of forest, agricultural plantations can coexist with forests. Agroforests can be licensed to an agro-industrialist to carry out agriculture using agroforestry techniques.

Institutional framework marked by long-term instability of the Forestry Administration

The Ministry of Water and Forests (*Ministère en charge des Eaux et Forêts*) is the main actor in forest management with the following structures under its authority which are: the Forest Development Corporation (*Société de Développement des Forêts—SODEFOR*) in charge of the management of gazetted forests, the Bingerville Botanical Garden (JBB) and the Abidjan Zoo. National parks and nature reserves have been managed since 2002 by the Côte d'Ivoire Parks and Reserves Office (*Office Ivoirien des Parcs et Réserves—OIPR*), which is a structure under the authority of the Ministry of the Environment and Sustainable Development. Since independence in 1960, the Forestry Administration has experienced near-permanent instability with a change of supervisory authorities every two years. More than thirty-four Ministers have succeeded to the position of head of this department. Added to this are the insufficient numbers of technical staff and with less experience of sustainable forest management; insufficient material and financial resources; lack of a formal structure

for reforestation management; and poor functioning of the information system. In recent years, it is acknowledged that the state should no longer be considered as the sole entity responsible for forest management given the various international processes for improving forest governance (FLEGT) and the government's commitment to reducing greenhouse gas emissions from deforestation and forest degradation (REDD+). The Law states in its Article 5 that, in order to ensure the implementation of national forest policy, the state should bring together various actors, in particular: (i) Local Authorities; (ii) research institutions; (iii) private sector operators; (iv) civil society organizations; (v) rural communities; and (vi) development partners that the state may approach.

Land tenure and influence on forest management

In the face of the constraints linked to the implementation of Law 98-750 of 23 December 1998 on rural land, as amended by Law 2004-412 – Côte d'Ivoire, the Ivorian Government established the Rural Land Agency (*Agence Foncière Rurale*—AFOR) to accelerate the process of securing land by amending the Law in its articles 2, 4, 6, 9, 12, 17, 23, and 26 (Law N° 2019-868 of 14 October 2019). One of the major changes is the repeal of sections 20, 24 and 25. Article 20 indicated that the owners of land belonging to the rural land estate (excluding the state) were obliged to develop the land, with the possibility of being forced to do this according to conditions laid down by decree made in the Council of Ministers. This repealed provision allows forms of forest development based on natural processes to be taken into consideration. Moreover, the maximum period after which land subject to individual or collective land certificates must be registered is no longer set at three years by law. This deadline will be specified by a decree made in the Council of Ministers. Furthermore, the time limits after which certain lands are considered “unowned” are no longer determined by law. They will be established by a decree made in the Council of Ministers. This new introduction to the Land Code is an opportunity to alleviate a concern identified in the Forestry Code regarding tree ownership. Indeed, because land rights determine the types of occupancy, the issue concerns knowing who owns, uses, manages, and makes decisions about forest land. The new provisions of the Forestry Code thus contain several elements associated with forest land tenure.

Structure of forestry taxation in Côte d'Ivoire

Forestry taxation in Côte d'Ivoire is governed by Articles 1097 and 1134 of the General Tax Code. The first article highlights the annual forest duties and taxes due in respect of forest estate-related income, which are:¹

- Taxes based on the land area of the concession (transfer tax, flat-rate allowance for works of general interest, land area tax);
- Taxes based on logging (taxes on log sales, tax for local development contribution, taxes on costs for restoring forest cover and special tax for forest preservation and development);
- Taxes collected on exports of processed products, i.e. single exit duties and quotas for fresh (non-dried) sawing;
- The fee for works of general interest, fixed at FCFA 48 per hectare.

In addition to taxes, there are also non-tax revenues. They are harmonized with the provisions of Decree n°2013-484 of 2 July 2013 establishing non-tax revenue. This non-tax revenue generally consists of auctions, costs for issuance of certain administrative documents, penalties and various fees.

Direct and indirect incentive mechanisms for sustainable forest management in Côte d'Ivoire

We can distinguish between two types of incentives for sustainable forest management. Direct incentives are based on remunerating efforts associated with forest conservation, sustainable management or restoration. Indirect incentives are legislative, fiscal or non-fiscal mechanisms that may lead to more efficient forest management.

¹ Tax Annex to Law n° 2019-1080 of 18 December 2019 concerning the Government budget for 2020 fiscal year.

Direct incentives for sustainable forest management

There are regulatory tools associated with **sharing profits and economic benefits** from forest management, which have been in use for a long time. Unfortunately, people do not feel that they are profiting from any benefits of forest management. This is why the new Forestry Code emphasizes the need to establish a benefit-sharing mechanism for the sustainable management of all Ivorian forests, which will be clarified by a decree in the process of being signed.

Other incentive mechanisms have been tested in Côte d'Ivoire.

- **PES (Payments for Environmental Services)**, the principle of which is based on compensating loss of income or loss of earnings for a practice that maintains or provides more ecosystem services.
- **Market mechanism for products derived from sustainable forest management**, such as certification with payment of premiums or large and stable market shares. There is a great deal of experience in Côte d'Ivoire with certification programs for products such as cocoa and oil palm.

The introduction of other incentive mechanisms would be possible, such as:

- **Partnerships for landowners to market forest products and NTFPs** with a clear and fixed price for standing timber and certain NTFPs, defined in a consensual manner by all actors according to the price of timber on the international market and the potential markets for each actor, could encourage landowners to become involved in sustainable forest activities.
- **Tax incentive in the form** of an eco-citizen tax that would be levied on companies profiting from forest returns Water Distribution Company of Côte d'Ivoire (*Société de Distribution d'Eau de Côte d'Ivoire*—SODECI), Côte d'Ivoire Electricity Company (*Compagnie Ivoirienne d'Électricité*—CIE), Ivorian Refining Company (*Société Ivoirienne de Raffinerie*—SIR), vehicle manufacturers, Africa Breweries and Lemonade Manufacturers Company (*Société de Limonades et Brasseries d'Afrique*—Solibra), etc. This idea is under discussion in a government working group.
- **Tax exemptions** for companies involved in sustainable forest management. The government could exempt or reduce taxes and duties for companies that have contributed to the restoration of a forest of ecological importance.
- **Conservation easement** which is similar to the conservation PSE and consists of establishing a contractual agreement by imposing permanent and legally binding restrictions on the use of private land.
- **A conservation/restoration incentive agreement** is one of the ways to sustainably manage forests and compete with the actors responsible for deforestation. It is also a variant of the PSE that could be funded by the profits from the sale of carbon or by the national forestry fund envisaged by the Government of Côte d'Ivoire.

Indirect incentives for sustainable forest management

Today, there are certain constraints associated with forest management in Côte d'Ivoire that could be lifted and converted into incentives. They are:

- **At legislative level**, the lifting of constraints linked to the valorization of timber by producers. As a result, the latter will be more interested in reintroducing forest trees and will become more involved.
- **Administratively**, the administrative provisions associated with Order 480, which are very binding and dissuasive for growers, should be revised to facilitate the revitalization of old plantations of fast-growing timber species.
- **Security of land ownership**. The goal is to use this measure to encourage farmers to manage forest resources sustainably and plant trees.
- **The development of infrastructure** (roads, rail network, modern port facilities, hydroelectric power plants) by the government or private companies is an indirect incentive that can offer important outlets for timber and thus increase its standing value.
- **At a policy level, it is stability that** strongly influences private investment in forest plantations.

Dissuasive factors for sustainable forest management

On the basis of the consultations conducted, it can be seen that there are several deterrent factors for sustainable forest management:

- Lack of coordination between different ministries directly or indirectly associated with sustainable forest management. This causes overlaps and often contradictions in sectoral policies and strategies.
- Constraints related to the implementation of rural land with the obligation to issue an act of legal ownership before making any claim to ownership of a land plot and therefore to ownership of naturally grown forest trees.

- Constraints related to the mandatory requirement for smallholders to make applications for logging or thinning.
- Absence of an authorized method of artisanal utilization of timber to allow the valorization of wood and waste from industrial logging.
- The legislation implementing the Forestry Code is still non-existent even though the law has changed since 2014.
- Lack of a mechanism for fixing the price of forest trees, a price which would be notified to the population.
- Minimal supply of timber of legal origin to the local market.
- Constraints associated with maintaining Forest Logging Perimeters (PEFs) without any legal basis.

Recommendations relating to incentives for sustainable forest management

Following consultations with actors in the Ivorian forest sector recommendations were gathered about direct and indirect incentive measures as well as about correcting dissuasive measures that could improve forest management. These are specifically as follows:

- ***Implementing a simplified process of securing land for owners who have or wish to introduce forest trees on their land plot.*** The process will consist of developing and implementing a partnership between producer groups (timber, cocoa, coffee, etc.), an industrial buyer of raw materials and the Government represented by the Rural Land Agency (AFOR). Through this mechanism, the various parties will undertake to make a contribution to financing the land security of the identified land (land title).
- ***Provide funding for the activities of community forest management committees as part of a sustainable land development and management plan, which will incorporate equitable sharing of income from utilization and a complaints and redress mechanism.***
- ***Establish a national trust fund for financing sustainable forest management.*** This fund could incorporate financial incentive mechanisms for each category of actors contributing to sustainable forest management. For small landowners, this could be a PSE mechanism. For forestry administration officers, this will be a performance bonus paid to agents based on goals involving forest restoration or protection. Such a fund could be supplied by three sources of financing: (i) export taxes on the main products responsible for deforestation in Côte d'Ivoire; (ii) carbon revenues from climate finance; and (iii) international and national financial institutions.

Recommendations for indirect incentive measures for sustainable forest management in Côte d'Ivoire

At administrative and legislative level, it would be advantageous to speed up the development of the implementing texts of the new Forestry Code in order to clarify certain legal provisions and facilitate their implementation. At this point, the procedures for obtaining licenses for logging in rural forest plantations will need to be reduced. Forest logging rights are conventionally allocated by ministerial decision specifying the quota for logging timber and the obligations associated with logging control. However, the Forestry Code grants logging rights directly to the landowner. The Forestry Administration should therefore establish new legal conditions for logging in rural forests. The aim will be to develop types of direct contract between forest operators and forest or forest tree owners.

Similarly, the informal timber market should be formalized to improve the organization of the fuelwood-sawn timber sector. This will enable the government to control the various inherent transaction flows and to benefit from them by establishing taxes and duties. In addition, the formal framework will help to improve the monitoring and advisory services associated with the Forestry Administration.

Economically and fiscally, this involves setting a price for a standing tree. The government should define price-setting conditions by guaranteeing a minimum value for the price of the standing tree, defined in a consensual manner, according to species, diameter and conformation of the forest tree species trunk.

Proposed tax measures for the sustainable management of forests in Côte d'Ivoire

- Implementing clearing taxes for activities which result in deforestation over areas of more than 50 hectares (ha)
- Implementing carbon taxes for industries and factories that release greenhouse gases
- Impose an eco-citizen tax on companies benefiting from forest returns (SODEI, CIE, SIR, vehicle manufacturers, etc.).

I. BACKGROUND AND INTRODUCTION

In 2015, the National Office for Technical Studies and Development (BNEDT) estimated that the annual deforestation rate in Côte d'Ivoire was 4.32 per cent between 1990 and 2000 and 2.69 per cent between 2000 and 2015. So the overall forest area fell from 16 million hectares at the beginning of the century to 3.4 million hectares in 2015². Indeed, in the wake of independence, Côte d'Ivoire based its economic development policy on agriculture. The results of this choice were promising, as the foreign earnings generated by export products (cocoa, coffee, rubber tree, oil palm) helped propel the country's economic growth³. Consequently, economic attractiveness was associated with cash crops within a national context of poverty (46.3 per cent), population growth (2.55 per cent per year) and poor enforcement of laws, prompting producers to convert forests into agricultural plantations⁴. Thus the area of the Ivorian natural forest has been lost to export crops in a continuous and constant way. This trend will have disastrous environmental, economic and also social consequences as a result of the tensions caused by the race for illegal land uses.

One of the responses to halt forest loss was to promote the sustainable management of productive forests. The concept of sustainable forest management was proposed in 1993 by the Ministerial Conference on the Protection of Forests in Europe and adopted by the United Nations Food and Agriculture Organization (FAO), which defined it as "management of the use of forests and woodlands, in such a way and at such an intensity as to maintain their biological diversity, productivity, regeneration capacity, vitality and ability to meet, now and for the future, the relevant ecological, economic and social functions at local, national and global level, and to ensure that they do not cause harm to other ecosystems." Thus, like the concept of sustainable development, forest management should integrate ecological, social and economic aspects. In 2004, the United Nations Forum on Forests⁵ identified seven criteria for assessing sustainable forest management, addressing all its functions. These criteria concern (i) the extent of forest resources; (ii) biological diversity; (iii) the health and vitality of forests; (iv) the productive functions of forest resources; (v) the protective functions of forest resources; (vi) socio-economic functions; and (vii) legal, political and institutional frameworks.

Despite three decades of implementation, these strategies for sustainable forest development and management have had little impact on forest conservation. Indeed, they are generally based on indirect incentives, whereby forest protection is the secondary benefit of another activity associated with economic utilization of the forest. So this protective forest activity is neither financially attractive nor ecologically satisfactory.

Following the mixed results of the various policies and strategies for sustainable forest management, in 2018 Côte d'Ivoire adopted the Declaration of Policy for Forest Preservation, Rehabilitation and Extension (PREF), reflected in a strategy whose implementation will cover the period 2019-2030. Through this new forestry strategy, the Government intends to mobilize all public actors, civil society and especially the private sector around the Ivorian forests to ensure environmental preservation, action against climate change and socio-economic development. This strategy focuses on strengthening and strictly complying with the legislative and regulatory framework for the protection of trees and forests, as well as increasing the number of protected areas and gazetted forests, and restoring forests by promoting agroforestry on agricultural plots.

Thus, aware of the fact that establishing appropriate incentive measures can ensure sustainable forest management, the Government of Côte d'Ivoire, through the Ministry of Water and Forests (MINEF), approached the ITTO with a view to conducting a case study specific to Côte d'Ivoire on the situation of incentive mechanisms in Côte d'Ivoire.

The objective of this study is therefore to analyze existing incentive mechanisms for sustainable management before making proposals for improvement. In this context, we will analyze the principles of sustainable forest management, first the policy, legislative and governance frameworks, as well as the economic, institutional and planning framework for sustainable forest management. Then we will (ii) identify the mechanisms for providing incentives/disincentives for sustainable forest management and deforestation-free commodities before (iii) making proposals for improvement.

II. METHODOLOGY

Preparation of this study was guided by two main steps. Firstly, a literature review to understand the national policy, administrative, legislative and tax framework, in relation to incentive mechanisms for forest management. Secondly, a phase of direct and indirect consultations with actors in the forest

² Côte d'Ivoire: Mapping and identification of the drivers of deforestation and forest degradation, UN-REDD, 2016

³ Afrique plurielle, Cogneau and Mesplet-somps, 2002

⁴ Les émissions liées à l'UTCATF et la disparition des forêts: une situation toujours aussi dramatique, Observatoire mondial de l'action climatique non étatique, 2018

⁵ S. Ozinga *Le commerce et la gestion forestière durable...: les effets de la certification sur la gestion forestière durable – l'heure de la vérification?*

sector to gather their advice and recommendations for implementing a mechanism creating greater incentives for sustainable forest management. More specifically, the study methodology was adapted to the three main anticipated outcomes formulated by the client.

Outcome 1: Review of the national framework for sustainable forest management, the national land-use plan and identification of existing incentives for sustainable forest management and "zero-deforestation" agricultural products.

The review of national sustainable forest management frameworks and the identification of existing incentives for sustainable forest management and "zero-deforestation" agricultural products were conducted in two phases: (i) a literature search, then (ii) a consultation phase with the various actors in the forestry and tax sector to collect additional information.

Literature search

The aim of this first step was to collect data about national policy, administrative, legislative and tax frameworks relating to incentive mechanisms for sustainable forest management, as well as the Côte d'Ivoire land-use plan. To this end, paper and digital documents were consulted in order to highlight the major descriptive points about the situation regarding incentive measures in Côte d'Ivoire. Some of these documents were taken from the archives of the Ministry of Water and Forests (*Ministère des Eaux et Forêts*), the Ministry of Planning and Development (*Ministère du Plan et du Développement*) and the Ministry of Economy and Finance (*Ministère de l'Économie et des Finances*), in particular regarding taxation.

Consultations with actors in the forest and tax sectors

This phase involved collecting additional information on paper and digital documents examined in the course of the literature search. Depending on the categories of actors, discussions focused on: (i) procedures for land use planning at national and local level; (ii) avenues for improving national frameworks for sustainable forest management; (iii) texts from the Forestry Code, including articles on establishing forests and tree ownership; (iv) existing incentive measures or those to be introduced in relation to sustainable forest management and zero-deforestation products, as well as the obstacles identified. Due to health restrictions and apart from telephone exchanges with resource contacts for further information, nine actors were in the end interviewed (see annex 1). Specifically, discussions targeted four actors from the public sector, one from the research bodies, one from the international cooperation facilities and three from civil society.

Outcome 2: Identification of disincentives causing economic actors to withdraw and proposals for tax and non-tax incentive measures for sustainable forest management.

At this stage, a data collection sheet was sent to the various actors in the Ivorian forest sector to be filled in and used to create a database. This included collecting data on: (i) incentive measures that should be implemented to ensure sustainable forest management; (ii) dissuasive regulatory and administrative measures limiting the introduction of appropriate incentive mechanisms for forest management; (iii) the appropriate tax and non-tax incentive measures that should be implemented; (iv) inappropriate tax and non-tax measures that should be withdrawn to facilitate sustainable forest management.

The data gathered from the actors was used to formulate clear recommendations about the incentive measures to be introduced or withdrawn to guarantee the participation of all members of society in the sustainable management of Ivorian forests.

Outcome 3: Examination and description of the costs and potential impact of tax and non-tax incentives (multiple scenarios) in favor of sustainable timber and deforestation-free commodities.

On the basis of the documents collected in the course of the literature search, an analysis of the taxes and costs of tax incentives relating to sustainable forest management was conducted. Firstly, an analysis of documents from the Ministry of Economy and Finance on forestry taxation was carried out to highlight the various taxes collected by the Government. In addition, a tax redistribution analysis was carried out to assess their impact on the incentives for actors to implement sustainable forest management. Consequently, the following were analyzed: (i) the structure of taxation costs and forest revenue; (ii) data on production volume and land areas used for logging; (iii) the provisions of the new Forestry Code on taxation; and (iv) tax measures specific to various tropical countries that have contributed to sustainable forest management.

Finally, recommendations on improving the policy, legislative and regulatory framework were formulated by all the actors interviewed.

III. COMPARATIVE ANALYSIS OF NATIONAL SUSTAINABLE FOREST MANAGEMENT FRAMEWORKS

The analysis of national frameworks for sustainable forest management was based on an analysis of the policy, legislative, regulatory and institutional framework.

3.1 Analysis of the policy framework for sustainable forest management

With continued degradation of the forest heritage since independence, the management policy framework has continued to evolve with varied outcomes regarding the success of its implementation.

3.1.1 Past policy framework: 1988 to 2017

A. In April 1988 the government adopted the Forestry Master Plan (*Plan Directeur Forestier—PDF*) for 1988-2015 with five major objectives to assist with urgent restoration of the forest and rehabilitation of the sector, and alongside this, to undertake action to sustain the future of the forest heritage by:

1. maintaining the exploitable potential of the natural forest by reducing timber extraction without compromising the future of the sector;
2. restoring plant cover as a priority in the rural environment, and recovering residual forest areas;
3. managing gazetted forests to mitigate their degradation and carry out sustained logging compatible with the preservation of biodiversity;
4. increasing logging yields by modernizing logging methods and techniques, stopping encroachments and gazetted forest clearance;
5. improving processing and marketing.

B. In July 1994 the Government undertook a logging reform that allowed the production area to be reorganized into larger PEFs and proposed introducing simplified forest management in the rural domain forests;

C. In September 1999, the Government adopted the new forest policy guidelines following a diagnostic assessment of forest policy carried out in 1998 which was based on the experiences of implementing the Forestry Sectoral Project (*Projet Sectoriel Forestier—PSF*), Phase 1 (PSF1) from 1991 to 1996, and were expected to lead to the achievement of sustainable forest production goals. Five major areas have been defined to ensure sustainable forest management:

1. Management of timber resource in the rural domain with the transfer of ownership of natural trees to the farming populations;
2. Making the timber industry operators accountable for supplying their processing units by encouraging them to rebuild their timber resource;
3. Refocusing forest management activities in the best-preserved areas and the contractualization of land uses in gazetted forests;
4. Enhancing the environmental potential of forest environments;
5. Organizing the forestry sector to ensure better efficiency.

Despite the major innovations adopted at that time, the forest policy declaration was not implemented in any meaningful way. A number of fundamental issues, intensified by social unrest and war in the country, have exacerbated difficulties with implementation. These issues, which have been described in various reports, can be grouped into the following points:

- a. The increase in and development of agricultural uses and human settlements, mainly in gazetted forests, with the threat of total loss of forest cover in the long term;
- b. The difficulty in guaranteeing sustainable management of wood resources in the rural estate and the extension of the timber logging front beyond the 8th parallel, a fragile ecosystem, affecting certain national parks with a persistent threat to the supply of processing units;
- c. Lack of investment in the renewal and acquisition of tools suitable for the efficient processing of available wood material;
- d. Uncontrolled hunting of wildlife and lack of appreciation of the biological diversity present in gazetted forests and protected areas;
- e. Lack of scientific and technical support for activities in the forestry sector with forest research having vanished since the 1995 reform;
- f. Inadequacy of human resources training programs to the needs of users who ignore sustainable management concepts;
- g. Lack of adequate funding for the entire forest sector.

After several failures with implementing forest policy, Côte d'Ivoire has engaged in various international sustainable management processes, the most well-known of which are the Forest Law Enforcement, Governance and Trade (FLEGT) process to improve forest governance, and the REDD+ mechanism to combat factors of deforestation and forest degradation.

3.1.2 New forestry policy framework

Strategy for the preservation, rehabilitation and extension of Côte d'Ivoire's forests

In 2017, the Ivorian government made an extremely high-level commitment to deforestation. First of all it redefined the forest as “*land that occupies more than 0.5 hectares with trees reaching over five meters in height and a canopy of more than ten percent, or with trees capable of reaching these*”

*thresholds in situ*⁶. Secondly, it set itself a very ambitious goal of restoring forest cover by increasing it from 10 percent to 20 per cent of the total national area. Moreover, in 2018, it developed a new national policy for the preservation, rehabilitation and extension of forests, which specifies the key points adopted by the government to manage its forest reserves by involving local populations, civil society and the private sector. This policy is based on four principles: (i) voluntarism, reflected in governmental awareness and mobilization of all stakeholders around the interests of the forest; (ii) realism, involving acknowledging the current situation of forests with tough decisions to make; (iii) acknowledgement, which considers that all trees sequester carbon; and (iv) the principle of breaking with the "harvesting logic" and replacing it with a "cultivation logic" to promote forest restoration.

The resulting strategy for the preservation, rehabilitation and extension of the forests of Côte d'Ivoire was presented in February 2019 by the Minister of Water and Forests, Mr Alain Donwahi, before being adopted in the Council of Ministers. This positions the preservation and rehabilitation of Côte d'Ivoire's forests as a national priority, with a goal of restoring forest cover by 20 per cent by 2040 and thus combating the effects of climate change. Indeed, with an overall amount of FCFA 616 billion, covering the period 2019-2030, this strategy is divided into three pillars:

1. Improvement of forest governance
2. Strengthening the protection of residual forests, their extension and sustainable management
3. The restoration of degraded forest areas and adaptation to climate change

3.2 Analysis of the legislative and regulatory framework for sustainable forest management

Forest regulation has evolved significantly with time and the depletion of timber resources.

3.2.1 Forestry regulation prior to 2014

Prior to 2014, forestry regulation was based on the following laws:

- a) Law n° 65-425 of 20 December 1965 establishing the Forestry Code which defines the state Forest Estate and specifies the following categories within this field: (i) gazetted forests; (ii) protected forests; (iii) production areas; (iv) reforestation.
- b) Law n° 65-225 of 4 August 1965 on the protection of wildlife and the exercise of hunting as amended by Law n° 94-442 of 16 August 1994;
- c) Law n° 96-766 of 3 October 1996 establishing the Environment Code; (iv) Law n° 98-750 of 23 December 1998 establishing the rural land tenure, which enshrines the traditional rights of rural communities over the land.
- d) Law n° 2002-102 of 11 February 2002 on the establishment, management and funding of national parks and reserves.

In accordance with these laws, various decrees and orders have been made, including the following:

1. Decree n° 66-422 of 15 September 1966 on the establishment of the SODEFOR and Decree n° 93-206 of 3 February 1993 on the conversion of SODEFOR into a state company in the form of the *Société de Développement des Forêts*;
2. Decree n° 66-428 of 15 September 1966, laying down procedures for gazetting state forests;
3. Decree n° 78-231 of 23 March 1978, made pursuant to Law n° 65-425 of 20 December 1965 establishing the Forestry Code, which lays down the rules for management of the state forest estate, which is subdivided into two, namely, the Permanent Forest Estate (PFE) on the one hand, and the Rural Forest Estate on the other hand. This decree assigns the functions of timber production and the guarantee of ecological balance to the PFE, while the Rural Forest Estate constitutes a reserve of land for agricultural activities.
4. Decree n° 83-743 of 28 July 1983, establishing a Day of the Tree in Côte d'Ivoire;
5. Decree n° 86-378 of 4 July 1986, establishing the Permanent Secretariat of the National Committee for Forest Protection and Control of Wildfires (*Comité National de Défense de la Forêt et de Lutte contre les Feux de Brousse*—CNDLFB);
6. Decree n° 94-368 of 1 July 1994 on forest logging reform;
7. Decree n° 97-130 of 7 March 1997 regulating the halting and prohibition of trade in ivory;
8. Decree n° 2002-359 of 24 July 2002 establishing, organizing and operating the OIPR;
9. Order n° 033/SPN/CAB of 20 February 1974 ending hunting throughout the entire national territory;
10. Decree n° 033/MINAGRA of 13 February 1992 entrusting SODEFOR with the management of all gazetted forests.

In response to the deficiencies of the 1965 Forestry Code for ensuring sustainable forest management, the Ministry of Water and Forests will begin the revision of the 1965 Forestry Code.

⁶ Global Forest Resources Assessment, FAO, 2015

3.2.2 Côte d'Ivoire's 2014 Forestry Code

In 2014 a new Forestry Code was adopted. This new Forestry Code, influenced by international processes such as FLEGT and REDD+, highlighted the challenges and prospects for sustainable management of the Ivorian forest cover. The new law created a framework for "sustainable forest management" and introduced innovations in the conservation and reconstruction of plant cover with "greater involvement of the population". One of the major innovations was recognizing that tree ownership belonged to the owner of the land with the possibility for all citizens to establish forests. Even so, this possibility remains problematic given the low registration rate of land in Côte d'Ivoire and the limited number of land certificates. In addition, the new Forestry Code has strengthened the status of water and forest technical officers, henceforth making them judicial police officers.

3.2.3 Côte d'Ivoire's 2019 Forestry Code

In 2019, after validation of the strategy for the preservation, rehabilitation and extension of forests in Côte d'Ivoire, a new Forestry Code was adopted. This new Forestry Code removed certain ambiguities, particularly in the gazetting of forests as set out in the 2014 Forestry Code and enshrined sustainable forest management as a basic principle. Thus, in its Article 2, it establishes its objectives, in particular, to:

- (i) strengthen, for the benefit of present and future generations, the contribution of the forestry sector to sustainable development by promoting the environmental, socio-economic and cultural functions of forest resources;
 - preserve and enhance biological diversity and contribute to the balance of forest ecosystems and other associated ecosystems;
 - promote the active participation of local populations, non-governmental organizations and associations in the sustainable management of forest resources for the improvement of their incomes and living conditions by taking into account their individual and collective rights in forestry resulting from tradition, the law establishing the Rural Land Code, this law and the extension of the forest policy;
 - promote the establishment of community forests, Local Authority forests, forests belonging to natural persons and private legal entities;
 - enhance forest resources through more extensive timber processing and better profitability of forest products;
 - promote the establishment of a forest cover rate representing at least 20 per cent of the national surface area;
 - promote an eco-citizen culture.
- (ii) A new forest category was created. This concerns the **agroforests**. These are forests which were formerly gazetted with a degradation rate of over 75 per cent designated as Category 3 gazetted forests, and have now been converted into the new status of agroforests. The areas are defined and delimited as such by a statutory instrument, located in the state private forest estate in which agricultural plantations and forest trees coexist. The following table presents the different forest categories according to the land rights of the actors under the new Forestry Law of 2019.

<i>Primary category</i>	<i>Secondary category</i>	<i>Tertiary category</i>	<i>Description</i>
A. Forest estate owned by public legal entities	A1. State forest estate	State public forest estate	Integral nature reserves
			National Parks
			Partial nature reserves
		State private forest estate	Gazetted forests
			Agro-forests
			Forests acquired or created in the rural estate by the state
	A2. Local Authority forest estate	NA	Botanical gardens
			Forests gazetted on behalf of Local Authorities
			Forests licensed by the state
			Forests acquired or established in the rural area by Local Authorities
			Botanical gardens

B. Forest estate owned by private legal entities and private individuals	B1. Forest estate owned by private legal entities	NA	Natural forests or forests established by private legal entities on legally acquired land
			Community forests
			Sacred forests
	B2. Forest land owned by private individuals	NA	Natural forests located on land on which private individuals hold a right of ownership or customary rights in accordance with land law
			Forest plantations established on land on which private individuals hold a right of ownership, customary rights or a lease

Source: 2019 Forestry Code

(iii) Other special features which take into account all rural activities and establish a favorable framework for private investment. Some new concepts have also been introduced such as: agroforestry, ecological public order, forest concessions (formerly Forest Logging Perimeters, *Périmètres d'exploitation forestière*—PEFs), independent monitoring as well as a participatory, multi-actor and transparent approach based on functions of general interest in the forest ecosystems.

In the same year, three decrees, published in the Official Journal n° 102 of 23 December 2019, were adopted by the Government, following up on Law n° 2019-675 of 23 July 2019 which establishes a new Forestry Code in the Republic of Côte d'Ivoire (Official Journal, special edition 18 of 2 October 2019).

Concession for the management of the state private forest estate: The first decree, referenced 2019-978, relates to the concession for the management of the state private forest estate and the Local Authorities. The decree specifies that the concession, which must meet the requirements for sustainable management, utilization, protection and development of the forests concerned, was preceded by a call for expression of interest. To apply for a concession, the company must justify: (i) proven expertise in forest or agro-forest management; (ii) at least five years' experience as a forest or agroforestry company; (iii) financial capacity in relation to the project; (iv) its status as a company governed by Ivorian law. The concession will be granted by a decree issued in the Council of Ministers.

Conditions for the management of agroforests, the utilization of agricultural plantations and the marketing of agricultural products in agroforests. In practical terms, agroforests have been defined as delimited spaces within gazetted forests with a degradation rate of over 80 per cent. Decree n° 2019-979 of 27 November 2019 organizes the conditions for the management of agroforests, the utilization of agricultural plantations and the marketing of agricultural products in agroforests. Conditions differ depending on whether the agroforests are temporary or permanent. Although sustainable production of cocoa associated with forest trees is authorized, building infrastructure and social facilities is prohibited in temporary agroforests. The Decree states that the space reserved for permanent agroforests may not exceed 20 per cent of the total forest area in the gazetted forest. Finally, the Decree states that the utilization of agricultural plantations such as cocoa in agroforests, as well as the marketing of agricultural products in agroforests, are to be carried out according to the conditions specified in the concession agreement which is preceded by the management plan.

Logging in the national forest estate: Decree 2019-980 of 27 November 2019 defines logging conditions in the national forest estate, which comprises the forests in the state private estate and the local authorities, as well as forests owned by private individuals (legal entities or natural persons). It indicates that logging is organized through a management concession. It lays down the principle that logging quotas are set by the Forestry Administration, taking into account, in particular, a forest inventory from less than two years beforehand, and the minimum abundance level to be reached to enable regeneration of the wood resource, calculated on the basis of the results of the forest inventory, and the minimum logging diameter.⁷ This decree differs from Decree n° 94-368 of 1 July 1994, by indicating a logging quota based on a regular inventory. It eliminates the vagueness surrounding logging conditions at the time the concession is granted. With regard to forests owned by private

⁷ Decree n° 2019-980 of 27 November 2019 on forest logging in the national forest estate

individuals, the Decree provided that cutting wood for domestic use can be carried out unrestrictedly by the owner, with due respect for the sustainable management of forests and the provisions relating to protected species.

Other decrees relating, *inter alia*, to participation, independent monitoring, the sharing of benefits from creating carbon sinks, the implementation of national forest policies and strategies were discussed and they were due to be signed in 2020.

3.3 Analysis of the institutional framework

3.3.1 Long-term instability of the Forestry Administration

The Ministry of Water and Forest has always been the main actor with the following structures under its authority: (i) the SODEFOR in charge of the management of gazetted forests; (ii) the JBB; and (iii) the Abidjan Zoo. National parks and nature reserves have been managed since 2002 by the OIPR, which is a structure under the authority of the Ministry of the Environment and Sustainable Development. To fulfill its mandate, in addition to the Cabinet, the Minister of Water and Forests has since 2018 ten Directorates and related Services, two General Directorates subdivided into Central Directorates and 24 Regional Directorates, which the Minister organizes by ministerial rulings.

Since independence in 1960, the Forestry Administration has experienced near-permanent instability with a change of authority every two years. Over thirty-four Ministers have headed this department. This instability has resulted in: (i) a serious handicap in the supervision, monitoring and even continuation of projects and programs initiated in the sector; (ii) the inadequacy of the implementation of certain reforms that should have brought not only structural change but also functional autonomy to provide a response to the management problems within the sector. To this must be added (iii) insufficient numbers of technical staff with less experience of sustainable forest management topics; (iv) insufficient material and financial resources; (v) the lack of a formal governance structure for reforestation (mainly structures responsible for supervising and monitoring reforestation in rural areas); (vi) the malfunctioning of the information system (lack of or inconsistency in forestry statistics which have no longer been produced regularly since 1995); and (vii) the lack of intersectoral coordination, given that there are several sectors of activity in the forests.

3.3.2 Government solutions to improve the institutional framework for sustainable forest management

Despite all these constraints, however, the country has an operational Forestry Administration which attempts to implement forest management policies and strategies. Several changes have been made to strengthen the efficiency of the Forestry Administration. They include:

- The creation of a General Directorate of Forests and Wildlife to better focus efforts on the sector;
- The creation of the Central Directorate attached to the General Directorate of Forests and Wildlife to improve the supervision and career management of the technical officers;
- The creation of the Directorate of Water Resources to implement the 1998 Water Code and reforms related to the Integrated Water Resources Management (GIRE);
- Strengthening the Forestry Administration Communication Service to facilitate access to and dissemination of information;
- Strengthening the Documentation and Archiving Sub-division, to ensure the traceability of administrative actions and sound decision-making;
- The creation of a Special Surveillance and Response Brigade (*Brigade Spéciale de Surveillance et d'Intervention*) to prevent criminal activities affecting forests and other resources, but above all to respond quickly in the event of a violation;
- The creation of Regional and Departmental Directorates, cantonments and additional forest control checkpoints (*poste forestier*), providing a more effective national network to improve the implementation of the national forest policy.

In recent years, the government has made commitments to various international processes for improving forest governance (FLEGT) and to the initiative to reduce greenhouse gas emissions from deforestation and forest degradation (REDD+). Both initiatives promote sustainable forest management through a participatory, inclusive and transparent approach. The revision of the forestry law has taken into account these developments. The new law no longer recognizes the state as the sole entity responsible for forest management. Article 5 of the Law states that, in order to ensure implementation of the national forest policy, the state should bring together various actors in particular: (i) Local Authorities; (ii) research institutions; (iii) private sector operators; (iv) civil society organizations; (v) rural communities and (vi) development partners that the state may approach.

3.4 Analysis of land tenure and influence on forest management

3.4.1 Land tenure analysis

Côte d'Ivoire adopted a law on the rural land estate in 1998 (Law 98-750 of 23 December 1998 on the rural land estate as amended by law 2004-412 – Côte d'Ivoire), which was part of a framework of advanced land laws. It has made significant progress by allowing communities to have their rights officially recognized as customary authorities. Recognition of customary rights should be converted into legal recognition through the provisional land certificate. Article 7 of the Law states that customary rights are recognized following an official investigation by the administrative authorities and councils of the villages concerned culminating in the issuing of a land certificate. This allowed family properties to be legally recognized, as well as the right of communities to own land as a group. So this allows communities to formally designate residual forested and pastoral areas located outside family properties as common assets.

Unfortunately, the law has been hampered in its application by a major obstacle. For land rights to be considered freehold the “land certificates” must be converted into land titles (via registration) within three years according to Article 24. After this time, the land would be declared unowned and it would be registered in the name of the state. Moreover, the applicant has three non-renewable months to request a transfer of registration, i.e. a conversion of the title of public land ownership into private land ownership.

Customary rights, as mentioned in land certificates, are therefore not considered to have the attributes or protection enjoyed by full ownership. Customary rights are considered inferior to ownership, perhaps as mere rights to use and occupy unowned land. To be guaranteed, customary rights recognized through certificates should be transformed into property rights through their conversion into land titles that only Ivorian natural or legal persons may hold. Customary rights of a temporary nature were only valid until a deadline for the compulsory acquisition of certificates and their conversion into property titles. This deadline was set at 2023 (World Bank Group, 2016)⁸. Thus, from 2023, customary owners of land who have not obtained certificates and then property titles for the land held individually (including non-indigenous holders of secondary rights under the customary regime) would be considered landless in the eyes of the law, since traditional land would become unowned land and thus would belong to the state. In this case, the state would then become the owner of the natural trees on this land, as it would be the owner of the land.

In the face of the constraints linked to the implementation of Law n° 98-750 of 23 December 1998 on the rural land estate, (as amended by Law n° 2004-412 of 14 August 2004 and Law n° 2013-655 of 13 September 2013), the Government of Côte d'Ivoire issued Decree n° 2016-590 of 3 August 2016 establishing, assigning, organizing and operating the Rural Land Agency (AFOR). The goal is to accelerate the process of securing land tenure. The law was also amended by Law n° 2019-868 of 14 October 2019. This new law, which amends articles 2, 4, 6, 9, 12, 17, 23, and 26 of Law 98-750 of 23 December 1998, was published in Official Journal n° 96 of 2 December 2019. The main changes made by this new law are described below:

- **Delimitation of the rural land estate:** It is clear from Law 2019-868 of 14 November 2019 that the areas constituting protected areas and duly constituted tourist areas are no longer characterized as land in the rural land estate, just like the public estate, urban areas, duly constituted deferred development areas, and the gazetted forest estate.
- **Procedures and deadlines:** Moreover, the maximum period after which land, subject to individual or collective land certificates, must be registered is no longer set at three years by law. This deadline will be specified by a decree issued in the Council of Ministers. Moreover, the time limits after which certain lands are considered “unowned” are no longer determined by law. They will be established by a decree issued in the Council of Ministers.
- **Untitled bona fide occupants:** Law n° 2019-868 of 14 October 2019 inserted a new Article 8 bis which states that the rights of *bona fide* occupants not benefiting from a land certificate (if a land certificate is issued), are confirmed by the certificate holder in a fair and equitable manner between the parties.
- **Repeal of Articles 20, 24 and 25:** Articles 20, 24 and 25 of the law relating to the rural land estate were repealed. *Article 20 provided that the owners of land in the rural land estate were (apart from the state) subject to the obligation to develop them, with the possibility of being forced to do so according to conditions laid down by decree issued in the Council of Ministers. This repealed provision allows natural forest development to be considered.*
- **Prohibition on the transfer of land without land certificates:** Law n° 2019-868 of 14 October 2019 prohibits the transfer of customary land without land certificates.

⁸ Côte d'Ivoire Land Governance Analysis Framework, World Bank Group, 2016

3.4.2 Interactions between the Land Code and the Forestry Code

Land rights determine the types of occupancy which involve knowing who owns, uses, manages, and makes decisions about forest land. They also determine who is allowed to use the resources, in what way, for what duration and under what conditions, and who can transfer the rights to others and how. The new provisions of the Forestry Code integrated several aspects associated with forest land tenure. The provisions of the Forestry Code relating to land tenure include:

Ownership rights of forests and trees

1. One aim of the law is effective participation of local populations, in particular “by taking into account their individual and collective rights in relation to the forest, arising from customs, the law establishing the Rural Land Code, this law and the extension of forest policy.” (Article 2)
2. Only the state, the Local Authorities, the rural communities, Ivorian natural persons and Ivorian legal entities are allowed to be owners. (Article 19)
3. Private forests (forests owned or tenanted by natural persons or legal entities) include natural forests, forest plantations, and acquired forests (Articles 36 and 37). Private owners shall exercise their right of ownership over products of any type from their forest, excluding mineral products and protected species of fauna and flora (Article 73). They also enjoy a preemptive right in the event of the assignment of rights to natural resources other than forest resources. (Article 74)
4. Forests in rural communities belonging to one or more rural communities include: natural forests located on land over which rural communities enjoy property rights or customary rights; the forest plantations they occupy by virtue of local custom or a lease; forests assigned to rural communities by the state, local authorities, natural persons or legal entities; and the forests they have acquired. (Article 40)
5. Rural communities, as owners of forests, exercise their property right over products of all kinds, apart from mining products and protected wild species of fauna and flora. (Article 77)
6. Forest products on land duly granted under land legislation belong to their concession holders. (Article 20)
7. Trees located, either in a village, in its immediate environment, or in a collective or individual field, are the collective property of the village or that of the person to whom the field belongs. (Article 21)
8. This last point is reinforced by article 32: “*Forest products not located in the national forest estate, especially trees outside forests, belong to natural persons or legal entities whose property rights or customary rights over the land are recognized by the legislation governing land and land titles.*” These trees may be sold by their owner (whether a village or an individual) (Article 21).
9. The gazetted forest estate includes: protected forests, production forests, recreational forests, experimental forests. This may also include forests created or maintained in their natural state for the protection of water, soil, or other elements. (Article 23-24)
10. Forests are gazetted by legal means or by decree. (Articles 23-25)
11. The protected forest estate includes: ungazetted state forests, private forests (on registered land and owned by natural persons or legal entities), and forests on unowned land. (Article 27)
12. Rural estate forests that have not been the subject of a gazetting act are protected forests subject to a legal regime which is less restrictive with regard to rights of use. (Article 28)
13. The state forest estate includes forests gazetted in the name of the state, protected forests located on unregistered land, and protected forests located on unowned land. (Articles 29-31)
14. Rehabilitated forests belong to the owners concerned, but the forest concession owners who carried out the enhancement operations benefit from a preemptive right over ownership of the forest. (Article 38)

Types of occupancy/right of use over forest lands

15. All forests must be registered. (Article 39)
16. Right of use over forests, defined as access to a means of subsistence, do not extend to the subsoil, and do not apply to forests owned by rural communities, forests belonging to private natural persons and legal entities which may establish their own rules of use, with this including suspension of rights of use. (Articles 43-44)
17. Forest products harvested under forest right of use do not give rise to the payment of any taxes or duties to the Forestry Administration. (Article 45)
18. Forest right of use is limited in gazetted forests. (Article 46)
19. Local authorities forests in the public state estate are free from any right of use relating to forest land. Clearing is formally prohibited there. (Article 47)
20. Forests privately owned by natural persons or legal entities must be the subject of a simplified forest management plan, and rural communities can develop simplified management plans and call upon the Forestry Administration to implement them. (Articles 72, 74, 75, 76)

21. Sacred forests are subject to forest right of use accepted by habits and customs (Articles 48 and 75).
22. When registered, they can benefit from assistance from the Forestry Administration. Managers of sacred forests can authorize any organization to protect and manage forests. (Article 78).

3.5 Land use planning and sustainable forest management

3.5.1 National land use planning process

Land use planning is a process of dividing up land from a given landscape according to the different economic, environmental and social uses to be modeled. The goal is to find land use combinations capable of meeting the essential needs of all actors.⁹ Thus, in the long term, planning will allow the activities to be implemented to be visualized, including synergies between the various actors and the different uses of the land.

Regional Land use Planning and Development Scheme (Schéma Régional d'Aménagement et de Développement du Territoire—SRADT)

For a long time the land-use policy in Côte d'Ivoire was designed using five-year plans and was carried out for two decades until the economic crisis that began in the 1980s ended this process with the advent of Structural Adjustment Programs (PAS).

In order to revive past economic performance, the Ministry in charge of Planning felt it would be constructive to relaunch the Land Use Policy (*Politique de l'Aménagement du Territoire*) in 2002 with the establishment of the Local Authorities. This revival was reflected in the establishment of administrative, legal, technical and financial mechanisms essential for the implementation of land-use planning in Côte d'Ivoire on the basis, in particular, of Law n° 2003 of 7 July 2003 on the transfer and distribution of powers from the state to the Local Authorities. To this end, a methodological guide for the preparation and implementation of the SRADT was planned in 2008 with a manual for each region of Côte d'Ivoire. Each of the regions was required to produce a SRADT. After the political crisis of 2011, the decentralization policy was reformed with Ruling n° 2011-262 of 28 September 2011 providing guidance on the general organization of the State Territorial Administration, with the region being elevated to a Local Authority.

The region now represents the level of design, programming, harmonization, support, coordination and control of the economic, social and cultural development actions and operations carried out there with the intervention of all actors (state and non-state). It is also the level for implementing projects of general interest. As such, the region must adopt a coherent framework to coordinate the planning and developmental actions taking place there. This mechanism is the SRADT. The SRADT is a land-planning tool that sets out the fundamental long-term guidelines for the planning and sustainable development of the regional territory. It has a triple aim: development that integrates social progress, environmental protection and economic efficiency. Some regions, such as the Nawa Region, were the first to produce their SRADT. Unfortunately, environmental issues are still poorly addressed.

Local land use planning process

At village level, a Local Development Plan (PDL)¹⁰ is developed with the support of the SEPRED (REDD+ Secretariat) is planned as part of the REDD+ project. This is the offshoot of the SRADT at village level.

3.5.2 Analysis of procedures for establishing permanent forest estates

Formerly known as the permanent state forest estate, state-owned forests have been gazetted as **the forest estate of legal entities governed by public law**. This includes the state forest estate and the local authorities' forest estate. The state forest estate is divided into two categories, the public estate and the private estate.

The state public forest estate (*Article 21*) includes entire nature reserves, national parks and partial nature reserves governed by legislation relating to the management and financing of national parks and nature reserves. **The state private forest estate** (*Article 22*) includes: gazetted forests, agroforests, forests acquired or created in the rural estate by the state and botanical gardens.

The local authorities' forest estate consists of forests gazetted in their name, forests granted by the state, forests they have acquired or created in the rural estate and botanical gardens.

Articles 29, 30, 31, 32 and 33 set out the conditions for gazetting or establishing permanent forest estates.¹¹ For example, forests intended to: satisfy the hydrological regime and climate balance; protect soils and slopes from erosion; protect biological diversity and the human environment; and meet forest product requirements; protect and strengthen the banks of lakes and streams; and protect groundwater and any other purposes deemed useful by the competent authority may be gazetted.

Gazetting procedures are defined by decree issued by the Council of Ministers. According to Decree n° 2019-977 of 27 November 2019 on procedures for gazetting forests and agroforests, any forest in the

⁹ <http://www.fao.org/sustainable-forest-management/toolbox/modules/land-use-planning/basic-knowledge/fr/>

¹⁰ Kossandji Village Local Development Plan, REDD+ CI, 2018

¹¹ Ministry of Water and Forests, 2019 Forestry Code

national forest estate duly acquired by the state, may be gazetted in the private forest estate of the state or of Local Authorities either on the initiative of the Forestry Administration or at the request of a Local Authority.

For this purpose, a gazetting commission chaired by the Regional Prefect is established. The Prefect makes the project for gazetting the forest known to the population using conventional methods of publication. More specifically the Prefect ensures that notice of said project is posted, indicating its precise limits, within the prefectures, subprefectures and villages on which the forest to be gazetted depends. The posting period is ninety days from affixing the posters in the capitals of the prefectures concerned. Thus, any holder of rights of use, or any person may raise an objection, within the time limit set by the investigation into the advantages and disadvantages, regarding all or part of the forest to be gazetted. The gazetting commission is responsible for examining grievances. When the work is complete, the Chairman of the commission forwards the draft gazetting plan and the general minutes of the operations to the Minister of Forests. The Minister of Forests submits the gazetting decree to the Council of Ministers for adoption.

3.5.3 Analysis of the national REDD+ strategy

Côte d'Ivoire embarked on the international REDD+ process in 2011. Subsequently, a series of consultations was initiated ending in the national REDD+ strategy adopted in 2017. This strategy aims to "engage the whole country in a transformational approach through a multisectoral and integrated approach at territorial level, in order to reconcile economic and social development with the goals for the conservation of natural resources while involving all actors in the national development, the various sectors, the multiple actors including the private sector and civil society, at all levels, from the capital to local communities and especially women and vulnerable populations within a framework of improved governance and respect for their rights, for inclusive economic growth."

It is constructed around eight strategic pillars, five of which are sectoral and three transversal: (i) zero-deforestation agriculture in partnership with the private sector; (ii) sustainable domestic energy with valorization of agricultural biomass; (iii) sustainable management of gazetted forests and conservation of protected areas and sacred forests; (iv) afforestation-reforestation, restoration of forests and degraded lands; (v) environmentally friendly mining; (vi) Incentive system of the PSE type; (vii) land use planning and land security; (viii) National Planning and structural reforms for the transition to a green economy. As stated, the national REDD+ strategy promotes sustainable forest management by addressing direct and indirect deforestation factors before proposing policies and measures for improving forest governance and forest restoration.

3.6 Analysis of the forestry taxation structure in Côte d'Ivoire

3.6.1 Presentation of the forestry taxation structure in Côte d'Ivoire

Forestry taxation in Côte d'Ivoire is governed by Articles 1097 and 1134 of the General Tax Code. The first article highlights the annual forest duties and taxes due in respect of forest estate-related revenue. It highlights:¹²

1. Taxes based on the land area of the concession (transfer tax, flat-rate allowance for works of general interest, area tax);
2. Taxes based on tree logging (taxes on log sales, tax for local development contribution, taxes for forest cover restoration costs and special tax on forest preservation and development);
3. Taxes levied on exports of processed products, i.e. single exit duties and quotas for fresh (non-dried) sawn timber;
4. The charge for works of general interest, established at FCFA 48 per hectare.

Otherwise, the Côte d'Ivoire forest tax system is made up of two main categories: applied taxes and non-tax revenues.

A) *Applied taxes*

Determination of *applied taxes* is based on Ruling n° 66-626 of 31 December 1966, as amended by the provisions of Section 5 of Law n° 67-588 of 31 December 1967 and by Article 16 of Law n° 89-1332 of 26 December 1989 establishing the Finance Law for 1990. However, certain taxes have been redefined or amended by decree at different periods. Table 1 shows the various *applied taxes* and their legal basis.

B) *Non-tax revenue*

Non-tax revenue within the Ministry of Water and Forest is in conformity with the provisions of Decree n° 2013-484 of 2 July 2013 institutionalizing non-tax revenue. Non-tax revenue represent a set of provisions in accordance with which the Ministry of Water and Forest des recovers fees and charges.¹³ These are specifically as follows:

- Public or over-the-counter auctions of seized products;

¹² Tax annex to Law n° 2019-1080 of 18 December 2019 establishing the State budget for fiscal year 2020

¹³ Technical note on forestry taxation, Forestry Production and Industry Directorate, 2019

- Fines, settlements and damages imposed as a penalty for violations of forest law or regulations;
- Fees for obtaining approvals for various forestry activities;
- Transfer fees for approvals and renewal fees for licenses and authorizations;
- Sales of data collection, monitoring and control documents for forestry activities;
- Fees recovered for overtime labor (above statutory working time);
- Costs for demarcation of degazetted forests;
- Air and land export charges for all forest products;
- Sales of export quotas of fresh sawn timber;
- Reforestation penalties;
- Special license fees;
- Charges for groundwater and surface water collection;
- Other charges imposed by forest legislation.

Table 3: Presentation and description of applied taxes

PRIMARY TAX	SECONDARY TAXES	DESCRIPTION	LEGAL BASIS	MONETARY VALUE	DIRECT BENEFICIARY
TAXES BASED ON THE FOREST CONCESSION	1.1. Transfer taxes	The transfer tax is collected when temporary logging licenses are granted. This tax was valid for 5 years for individual licenses and 10 to 15 years for sites granted to industrial logging operators	Article 20 of the Tax Annex to Law n° 2019-1080 of 18 December 2019 establishing the Government budget for fiscal year 2020	FCFA 30 /ha/year	Forestry Administration
	1.2. Renewal tax	The renewal tax is collected when the license is re-issued after an initial 5-year allocation period for licenses allocated to individuals and a 10 to 15-year period for licenses allocated to industrialists	1995 forest logging reform	FCFA 200 /ha	Forestry Administration
	1.3. Land area tax	The land area tax is defined as the benefit that a forest operator obtains from taking on a forest plot with a view to securing its supplies. It is paid each year by all operators before they obtain annual authorization to use their license	1995 forest logging reform	FCFA 50 /ha/year	Forestry Administration
	1.4. Flat-rate compensation for works of general interest (TIG)	The purpose of the works of general interest is to compensate local populations for damage caused by forestry work. It is used to support any socio-economic project in the region concerned.	Article 20 of the Tax Annex to Law n° 2019-1080 of 18 December 2019 concerning the Government budget for fiscal year 2020	FCFA 48 /ha/year	70% for the regional councils concerned 20% for Water and Forest management 10% for monitoring committees

TAXES BASED ON THE VOLUME OF LOGGED WOOD	2.1. Tax on sale of raw logs	This is a charge paid by the timber industry operator to dispose of the raw logs taken from its logging license and for which it has obtained logging authorization. The basis for determining this tax is the average cost price per cubic meter of the forest species (fixed at FCFA 20 000).	Article 42 of Tax Annex 2018	5% of the total amount of purchases of factory input logs (logs purchased and logs delivered to self from forest concessions (PEFs))	State
	2.2. Contribution to forest cover restoration	This allows forest capital maintenance and restoration through forest reforestation and development in proportion to the volume of wood extracted to be included in the Terms of Reference of forest logging operators.	1995 forest logging reform	1 ha per 150 m ³ of logged timber in the pre-forest area 1 ha per 250 m ³ of logged timber in the forest area FCFA 300 000 to 600 000 depending on the zones (in the case of subcontracting)	Forest Logging Perimeter (PEFs)
	2.3. Contribution to rural development	This encourages concession holders to carry out social work in the local communities	None	FCFA 1 000 /m ³ logged	Local communities
	2.4. Special tax for forest preservation and development	This applies at the rate of 2.5% on the value of raw log deliveries, including deliveries to self. The proceeds of the tax are paid into a special account called the Special Fund for Forest Preservation and Development (FSFPDF), opened with the National Investment Bank (BNI) and intended to finance forest preservation and development work.	Article 36 of law n° 2018-984 of 28 December 2018 of the tax annex	Rate of 2.5% on the value of raw log deliveries, including deliveries to self on a declarative basis	Forest preservation and development work

EXPORT TAXES OR EXIT TAX	3.1. Single Exit Duty (DUS)	The purpose of this duty is to encourage industry operators to process a larger proportion of forest production in situ. This duty is levied on the export of raw products (boules and roughly squared timber), of unsophisticated products (sawn, peeled, sliced timber and plywood).	Forestry Act, 1990, as amended by decrees issued in 1987, 1990, 1994 and 1996	<ul style="list-style-type: none"> - FCFA 350 000/m³ for undried sawn timber, all forest tree species combined - FCFA 200 000 /m³ for dried sawn timber, all forest tree species combined 	N. A
	3.2. Quotas for undried sawn timber	A national quota of exportable volume has been introduced to encourage more processing in Côte d'Ivoire and to finance demarcation operations for gazetted forests. Quotas are sold at auction by SODEFOR, but volumes are low. According to SODEFOR, low demand is due to the scarcity of the forest resource and mainly to the low investments made by processing units in drying.	N. A	<p>The variation in the prices of quotas is due to the lot-dependent sales mechanism, subject to the quality and diameter of timber</p> <ul style="list-style-type: none"> - FCFA 5 224 to 21 500/m³ for undried sawn iroko timber - FCFA 1 082 to 9 100/m³ for other sawn timber 	SODEFOR

Source: Technical note on forestry taxation, Forestry Production and Industry Directorate, 2019

3.6.2 Analysis of the structure of forest taxation, revenue collected and declared

The current tax system provides for a variety of forestry taxes, including sales tax for raw logs and the special tax for forest preservation and development.

In practice, forest sector operators are faced with difficulties when declaring these two taxes, due to the basis to be used to determine them whenever they involve "delivery to self". With regard to the sales tax on raw logs, determination of the market value, including the average cost price per cubic meter of the forest tree species that forest operators or concession holders of Forest Logging Perimeters (PEFs) has had self-delivered, seems difficult to apply: this has a negative impact on the declaration and the spontaneous payment of the taxes due in respect of these deliveries. With regard to deliveries to self, introducing the establishment by joint decree of the Minister in charge of Budget and the Minister of Water and Forest of a market value per category of forest tree species has been envisaged in order to correct this situation. Another solution would be to regularly bring the market values for different forest tree species in line with FOB values on the international market. Moreover, as regards the tax for forest conservation and development (applied taxes 2.4), the mechanism was considered inadequate by concession holders of Forest Logging Perimeters (PEFs) because of the risks of fund mismanagement (poor redistribution, misappropriation of funds etc.). Concession holders continue to pay forest taxes on the basis of the old rates as defined by Ruling n° 96-181 of 7 March 1996 amending the applicable forest tax rates, which requires them to carry out reforestation according to the volume of timber logged.

IV. EXISTING INCENTIVE/DISINCENTIVE MEASURES FOR SUSTAINABLE FOREST MANAGEMENT AND DEFORESTATION-FREE COMMODITIES

4.1 Approaches for sustainable forest management

Analysis of the incentive mechanisms needed to promote sustainable forest management depends on the type of activity involved in the sustainable management of these forests and the type of actors involved.

Indeed, sustainable forest management is now the only chance to respond effectively to the environmental emergency caused by increasing deforestation in tropical areas, and specifically in Côte d'Ivoire¹⁴. The FAO defines the sustainable management of forests as "management of the use of forests and woodlands, in such a way and at such an intensity as to maintain their biological diversity, productivity, regeneration capacity, vitality and ability to meet, now and for the future, the relevant ecological, economic and social functions at local, national and global level, and to ensure that they do not cause harm to other ecosystems."

The analysis of the seven common thematic elements of sustainable forest management identified by the United Nations Forum on Forests (UNFF)^{15,16} distinguishes different approaches to sustainable management organized according to their impact on forests, as shown in the table below.

¹⁴ La gestion durable des forêts tropicales, Leroy et al., 2013

¹⁵ FAO Archives, Forest Department, Excerpt from *Unasylna* magazine - No. 219 - *le commerce et la gestion forestière durable*

¹⁶ S. Ozinga *Le commerce et la gestion forestière durable...; les effets de la certification sur la gestion forestière durable – l'heure de la vérification ?*

Table 4: Approach for sustainable forest management

IMPACT ON FORESTS	APPROACH FOR SUSTAINABLE FOREST MANAGEMENT	DESCRIPTION	EXAMPLE OF ACTIVITY
Maintenance of forest cover	Conservation of biological diversity	Preservation of existing natural forested areas or promotion of natural extension of existing forest cover	<ul style="list-style-type: none"> • Creation of protected areas that avoid deforestation in existing forests • Legalization of sacred forests • Sustainable land use planning • Forest monitoring
Increase of forest cover	Afforestation	Conversion of land assigned to other uses into forests or increase of forest cover to meet the threshold corresponding to the definition of a forest (30% forest cover)	<ul style="list-style-type: none"> • Plantations of local forest tree species on former agricultural land • Creation of community forests on steep areas not yet forested
	Reforestation	Creating a forest cover on formerly forested land which has become degraded or has been cleared to below the threshold corresponding to the definition of a forest	<ul style="list-style-type: none"> • Plantations of local forest tree species on former agricultural land • Creation of community forests in deforested areas in the rural estate and in the state public estate
	Restoration/ Regeneration	Creating forest cover on formerly forested land which has become degraded or has been cleared to below the threshold corresponding to the definition of a forest	<ul style="list-style-type: none"> • Plantations of indigenous or exogenous forest tree species in forest areas which have been cleared or have become degraded • Assisted natural regeneration to restore biodiversity
	Agroforestry	Method of working agricultural land combining trees and crops or livestock	<ul style="list-style-type: none"> • Introducing forest trees on farms (cocoa, rubber tree, palm, food crops) • Protection of crops with forest trees

Reduction of forest losses	Improved logging	Increased capacity of forests to provide goods/ services while reducing forest degradation and deforestation compared with the laissez-faire scenario (<i>business-as-usual</i>)	<ul style="list-style-type: none"> • Implementation of procedures for more efficient extraction of timber, in particular through reduced impact logging techniques, with less waste of material and less damage arising from log removal • Strengthening timber traceability • Improvement of forest governance
	Intensification of agricultural production	Increased productivity of forest land or land located at the edge of the forest to limit or avoid the degradation or deforestation associated with the laissez-faire (<i>Business as usual</i>) scenario	<ul style="list-style-type: none"> • Implementation of crop rotation cultivation techniques, more efficient irrigation systems and technological solutions that increase yield per hectare so as to avoid the extension of agricultural land • Use of improved plant materials • Strengthening of producer supervision

4.2 Incentive mechanisms for sustainable forest management

4.2.1 Direct incentives

Direct incentives are based on the remuneration of forest conservation, sustainable management or restoration efforts. Several tools exist for ensuring their applicability.

Direct and regulatory incentive mechanism

1. Earnings/benefits sharing, in most cases, economic benefits from forest management only favor a limited number of people (forest owners and managers). This can cause problems in countries such as Côte d'Ivoire where public or community property regimes are widespread. If forest people or those living nearby do not receive a share of the benefits from forest management, and they consider that they possess rights to the land in question, they may be tempted to clear the forest to use the land in accordance with their needs. Benefit/profit sharing consists of continuing to allow forest companies to harvest products from state-granted concessions, but forcing them to share their revenue with the local population. In some cases, sharing benefits may include the obligation for forest concession holders to invest in local community infrastructure or undertake other local development projects. In Côte d'Ivoire, a 15 per cent levy is collected on the value of the contract for logging in gazetted forests for the benefit of the Local Committee Responsible for Gazetted Forest Participatory Management (*Comité Local de Gestion Participative des Forêts Classées*—CLGP-FC). The entire amount from the 15 per cent levy collected is redistributed as follows: 15 per cent for CLGP-FC operation; 10 per cent for the Sub-Prefectural Committee Responsible for Gazetted Forest Participatory Management (*Comité Sous-Préfectoral de Gestion Participative des Forêts Classées*—CSPGP-FC) operation; and 75 per cent for community development projects.

Unfortunately, people do not feel that they are benefiting from the profits of forest management. In addition, in some communities, people feel that they have not been involved in defining the profit-sharing plan.

Incentive mechanism under experimentation in Côte d'Ivoire

1. Payments for Environmental Services (PES), the principle of which is based on compensation for loss of income or loss of earnings for a practice that maintains or provides more ecosystem services.¹⁷ PES can also reward actors who already practice sustainable resource management methods. They can play an important role in agroforestry policies, by encouraging producers to reintroduce forest trees in their plantation to increase carbon stocks. This measure would encourage rural communities and sometimes private companies to restore forests and ensure the conservation of the forests or agroforests under their responsibility. Côte d'Ivoire has already begun the first phases of establishing a national PES system,¹⁸ which has resulted in the adoption of a PES guide and experimentation with PES pilot projects in the field. Ultimately, it will allow small producers and local communities to commit to the implementation of activities in the national REDD+ strategy. This means using the PES to provide a missing investment capacity mainly for small growers and local communities, enabling them to make investments in reforestation and agroforestry, specifically in the case of forest conservation. Defined in the national REDD+ strategy, PESs combine two dimensions with commitments to conservation and restoration on collective or family areas, and investments on individual land (reforestation, agroforestry, etc.). This system also lies at the heart of the new forestry strategy conducted by the Ministry of Forests. It aims to (i) build the capacity to invest in forestry activities (seed production, seedling production); (ii) facilitate the transition to more sustainable agricultural practices that effectively reduce deforestation (market-funded agroforestry); (iii) promote agro-silvo-pastoral practices to increase the resilience of agrarian systems to changes in climate and environmental conditions. To date, the arrangements for funding a national PSE system are under discussion between the MINEF and the MINEDD. However, several PES pilot projects with different funding mechanisms have already been implemented. Through the Nawa project, funding is provided by Mondelez (a private cocoa company) as part of its sustainability program, which subsidizes all stages of the PES (*Nawa PES project, funded by the Mondelez chocolate company in partnership with the REDD Permanent Executive Secretariat—SEP-REDD*). Another approach was developed in the Me REDD+ pilot project. The PES system is funded by a carbon premium, paid by the organic cocoa market. These funding approaches allow what could become a funding mechanism for the national PES system to be sketched out. Indeed, several discussions at national level show a tendency to favor a mixed funding mechanism, depending on whether the project holder is public or private. The idea of a national system financed by additional taxes on the economy has been discarded in favor of establishing a trust fund for financing reforestation, which is struggling to establish itself because no funding mechanism has yet been identified.

2. Market mechanism for timber and NTFPs. One of the market-based mechanisms to promote sustainable forest management is certification. What is commonly known as the “eco-label” consists

¹⁷ Payments for environmental services: some nuts and bolts. CIFOR Occas. Pap., 42, 26 p. www.cifor.cgiar.org/publications/pdf_files/OccPapers/OP-42.pdf, Wunder S., 2005.

¹⁸ Feasibility study: www.euredd.efi.int/documents/15552/254231/PES+feasibility+study.pdf/bd9733fe-5d07-4043-978f-151b6e81bccb

of having a third party verify that the operation meets the criteria for good management. These mechanisms have been applied not only to wood and NTFPs, but also to other basic tropical commodities such as cocoa, oil palm or coffee.¹⁹ Substantial and stable premiums or market shares for certified wood could, in principle, make sustainable timber production more attractive than conventional forestry. In fact, neither of these provisions exists at the moment in Côte d'Ivoire. However, an agreement between Côte d'Ivoire and the European Union within the context of the FLEGT-VPA (Forest Law Enforcement, Governance, and Trade-Voluntary Partnership Agreement) process could ultimately guarantee the legal logging and marketing of timber. The situation is different for commodities such as cocoa, for which growers already receive bonuses as part of the Rainforest Alliance, UTZ or Fairtrade certification processes. New bonuses should be established in favor of new commitments to zero-deforestation.

Direct incentive mechanisms that could be introduced

1. Partnership for the marketing of forest products and NTFPs by landowners, with the technique consisting of increasing forestry profitability by obtaining direct payments from consumers for forest products and non-timber forest products. In the Côte d'Ivoire a clear and fixed price for standing timber and certain NTFPs, defined in a consensual manner by all actors according to the price of timber on the international market and potential markets for each actor, could encourage landowners to undertake sustainable forest activities. Procurement agreements could be signed between landowners and timber industry operators, thereby ensuring market access. Market research may be required for some products not yet marketed.

2. Tax incentive. Tax incentive in the form of an eco-citizen tax that could be levied on companies benefiting from forest returns (SODECI, CIE, SIR, Vehicle manufacturer, Solibra, etc.). The proceeds would be used to fund forest restoration and conservation. This taxation, which is similar to the compensatory reforestation measure applied to timber industry operators, would have the advantage of establishing a broader base in aid of sustainable forest management.

3. Tax exemptions for companies involved in sustainable forest management. The state could exempt or reduce taxes for companies that have contributed to the restoration of a forest of ecological importance. Companies that have met their requirements for rigorous and efficient agroforestry management could also benefit from this after assessment and approval by the Forestry Administration.

4. Conservation easement which consists of establishing a contractual agreement imposing permanent and legally binding restrictions on the use of private land.²⁰ Accordingly, landowners retain legal rights to their land, but waive the right to develop them. In return, they receive compensation that may be in the form of tax breaks or other benefits offered by the government, or financial transfers from third parties, such as environmental NGOs. This approach could also resemble a "conservation" form of PES.

5. A conservation/restoration incentive agreement is one of the ways to sustainably manage forests and compete with the actors responsible for deforestation. This conservation incentive agreement directly compensates the holders of rights and the communities concerned for providing conservation services.²¹ Consequently, the Forestry Administration and local communities forego destructive logging in wooded environments in exchange for an investment capable of initiating the economic and social development of the area. The agreement could be financed by profits from the sale of carbon, the value of which will be calculated on the basis of modeling the resource's carbon storage capacity and the price of carbon on the international market. In this context, funding could come directly from a financial institution with a state guarantee. Consideration of the idea of creating a national forest fund as adopted in forestry law provides an opportunity for funding this type of mechanism.

4.2.2 Indirect incentives

Indirect incentives are legislative, tax or non-tax mechanisms that can lead to more efficient forest management. They must be encouraged and put in place by the government and actors in the Ivorian forest sector.

1. At legislative level, the expected results of sustainable forest management are the elimination of the constraints associated with enhancing the value of wood and NTFPs specific to producers. Under these conditions, producers will find it advantageous to introduce forest trees and will invest more. This could open the field to the definition and publication of timber prices per m³ in order to further encourage rural communities, as a whole, to introduce trees into their plantations or even typically to create forests. Administratively speaking, the administrative provisions associated with Order 480 ought to be revised to facilitate the revitalization of old, fast-growth timber plantations.

¹⁹ Hardner J. et Rice R. (2002), Rethinking green consumerism, *Scientific American*, 286, 89-95.

²⁰ Logging off, Mechanisms to stop or prevent Industrial Logging in Forests of High Conservation Value, Cambridge (MA), Union of Concerned Scientists. Gullison R., Melnyk M. et Wong C., 2001

²¹ Characterization of the conservation concession method, Niesten et al.

In addition, the Forestry Administration in collaboration with the Ministry of Trade should work on formalizing the informal timber market to improve the organization of the fuelwood sector, as well as wood for the local market. Such formalization might not be very attractive to informal operators because of the taxes that will be payable for legal logging. So, the other elements of incentives cited above will have to be combined with this.

2. Political and institutional stability significantly influences private investment in forest plantations. Indeed, investments multiply when risks for the country are low and governments provide favorable support for private-sector participation in forest development and management.

3. Security of land ownership. The goal is to use this measure to encourage farmers to sustainably manage forest resources and plant trees. On the basis of the new legislative provisions on rural land, concrete action can be taken in terms of securing rural land. Indeed, numerous pilot projects have demonstrated the possibility of securing land through pooled approaches that can reduce the (cost of) obtaining land certificates to, on average, FCFA 16 000/ha (REDD+ Ministry of the Environment project). In addition, the repeal of land-use requirements making enhancement of land obligatory removes undesirable incentives that resulted in producers turning their land into agricultural areas. Therefore, the possibility of enhancement through natural forests is legally possible.

4. Infrastructure development. (roads, rail network, modern port facilities, hydroelectric power plants) by the state or private enterprise is an indirect incentive that can offer significant outlets for lumber and thus increase its standing value.

5. National ecological compensation system. Various forms of ecological compensation are advocated by international organizations. However, Côte d'Ivoire could prioritize financial compensation. This form of compensation is based on an estimate of the financial resources required to offset the impacts of industrial activities on forests.²² The money collected can be put back into a green national fund to finance afforestation, reforestation, rehabilitation and protection of Ivorian forests.

Table 3 summarizes the different types of possible incentives for forest management.

²² "La compensation écologique à travers le monde: source d'inspiration?", CDC biodiversité, 2016

Table 5: The different types of incentives for sustainable forest management

Direct incentives	Indirect incentives		
	Variable incentives		Empowering incentives
	Sectoral	Macroeconomic	
<ul style="list-style-type: none"> • Distribution of forest seedlings • Special provision of local infrastructure supporting populations • Donations • Tax Relief • Differential taxes • Subsidized loans • Profit-sharing agreements 	<ul style="list-style-type: none"> • Prices of inputs and production • Commercial restrictions (e.g., pricing) 	<ul style="list-style-type: none"> • Exchange rate • Interest rate policies • Tax and monetary measures (e.g. income taxes) 	<ul style="list-style-type: none"> • Security of land ownership and resources • Improvements in socio-economic conditions • Accessibility and availability of basic infrastructure (ports, roads, electricity, etc.) • Production support services • Market development • Credit mechanisms • Political and macroeconomic stability • National security • Research and extension

4.3 Existing incentive mechanisms for sustainable forest management in Côte d'Ivoire

In response to the ever-increasing destruction of forests in Côte d'Ivoire, the national strategy for the conservation, rehabilitation and extension of forests has set out several incentive measures to promote reforestation and the conservation of natural forests. These incentive mechanisms are summarized in table 4.

Table 6: Incentive measures conceived in Côte d'Ivoire for sustainable management

Direct incentive measures	Indirect incentive measures
Technical and financial support for forest holders and populations (drawing up and signing land leases, supply of seedlings, inputs, training and support for small producers to improve agricultural productivity)	Annual regulation of the price of timber according to species and quality. Prices can be aligned with international timber market prices
Support for the emergence of so-called “sustainable territories” considered to be deforestation-free through a Payment for Environmental Services type of incentive device	Adaptation of the regulatory requirements of procedures and taxation to stimulate private forestry. Encouraging the involvement of banks (green finance, new insurance products, etc.)
Improving the wages of the MINEF and SODEFOR officers with additional reward mechanisms for officers combating deforestation at local level and the imposing of sanctions against unscrupulous officers	Obtaining land certificates for residual forests, old fallow land and forest plantations in the rural estate
Implementation of development projects (e.g. alternative energy) based on the level of local forest preservation or rehabilitation	Exemption from administrative registration fees for all those who want to register their forests

Source: *Stratégie nationale de la politique de préservation, de réhabilitation et d'extension des forêts, 2018.*

4.4 Analysis of incentive measures specific to zero-deforestation products

Zero-deforestation products in Côte d'Ivoire involve the sectors of cocoa, rubber tree, oil palm, Anacardium and food crops. In 2015, Côte d'Ivoire defined a zero-deforestation agricultural policy. This type of agriculture has the following characteristics:

- being productive in the rural land estate;

- preserving parks and reserves, gazetted forests and forests of a particular type such as sacred forests;
- contributing to the restoration of forest cover in order to partially compensate for historical deforestation;
- being resilient to the impacts of climate change and;
- respecting the rights of local communities while improving their livelihoods

In this context, partnership agreements have been signed between the interbranch organizations involved with the sectors of rubber (*Association of Natural Rubber Professionals of Côte d'Ivoire--APROMAC*) and oil palm (AIPH) and the SEP-REDD to ensure implementation of this zero-deforestation agricultural policy.

In the cocoa industry specifically, over 24 cocoa companies led by the World Cocoa Foundation (WCF) and the governments of Côte d'Ivoire and Ghana have signed the *Initiative Cacao et Forêts (Cocoa and Forests Initiative)* Joint Action Framework with the facilitation of the Sustainable Trade Initiative (IDH). The purpose of this Framework is to make use of a public-private partnership to put an end to the deforestation generated by cocoa production generally, but specifically in protected areas and gazetted forests.

The signatories of the Action Framework recognize the urgency and relevance of action to combat deforestation and restore forests by helping to implement the national strategy for the forest conservation, rehabilitation and extension policy.

The signatories have made a commitment to promote agroforestry, conservation and restoration with incentive mechanisms such as PES. Specifically, the governments of Côte d'Ivoire and Ghana, as well as the cocoa industry, have made eight major commitments:²³

1. to prohibit and prevent the activities of the cocoa industry that cause or contribute to the further deforestation or degradation of national parks and reserves, gazetted forests and forests in the protected forest estate (rural estate);
2. to respect the rights of cocoa producers, in particular through the identification and reduction of social risks and the progressive implementation of action to minimize potential adverse impacts on social and economic aspects;
3. to promote the effective restoration and long-term conservation of national parks and reserves as well as gazetted forests;
4. to strengthen supply chain mapping, with the ultimate goal of achieving full traceability to plantation level;
5. to implement tangible actions and set targets with precise deadlines based on reliable data, robust and credible methodologies, stakeholder consultations and a realistic timetable;
6. to implement the actions adopted within the context of a broader territorial approach, creating strong links with similar initiatives involving other types of agricultural production, and in full conformity with the national REDD+ strategy and other relevant national strategies and plans;
7. to work together to implement the actions indicated in the Framework and to mobilize the financial resources and technical expertise required, including by means of a process of continuous engagement of stakeholders around dialog on key issues, the development of an effective implementation plan, and joint actions to share lessons and knowledge in order to strengthen institutional capacity; and
8. to provide effective monitoring and reporting on the progress made in relation to commitments and action to ensure transparency and accountability.

Table 5 summarizes the action plan for the Cocoa and Forest Initiative, whose pilot phase came to an end in 2020. The initial phase of the large-scale implementation phase should be applied in 2021-2025.

Table 7: *Cocoa Industry Action Plan within the framework of the ICF*

AGROFORESTRY AND SUSTAINABLE PRODUCTION
Development of agroforestry systems
Strengthening of research activities
Improved supply of plant material
Improved planting/diversification systems
Strengthening of producer supervision
Restoration of soil fertility
FOREST PRESERVATION AND REHABILITATION

²³ Cadre d'Action Commune Côte d'Ivoire, Cocoa and Forests Initiative, November 2017

Production of updated maps showing forest cover and land use
Collection of socio-economic data on agricultural producers and communities dependent on gazetted forests, parks and reserves
Strengthening of the legislative and regulatory framework
Categorization of gazetted forests according to their level of degradation
Identification of High Carbon Value (HCV) and High Carbon Stock (HCS) areas and their importance to justify specific management of the forests to be protected
Updating or producing development plans and forest management plans
Implementation of development plans and validated management plans
Strengthening of logistics and forest monitoring
Protection of forest remnants in rural areas
Development and implementation of a national reforestation program
Development of the production of forest seeds and seedlings
Rehabilitation of forests in the state public estate (National Parks, Reserves)
Rehabilitation of forests in the state private estate (gazetted forests) Cat 1 FC (gazetted forests): 88 079 ha; Cat 2 FC: 145 771 ha; Cat 3 FC: 329 903 ha
Rehabilitation of forests in the rural estate (approximately 10 000 000 ha)
COMMUNITY COMMITMENT AND SOCIAL INCLUSION
Identification of communities
Promotion of community models for forest protection and restoration
Assessment and consideration of measures for reducing social impacts
Choice of reasonable environmental and social safeguarding standards
Provision of alternative resources and restoration of the lifestyle of affected populations
Strengthening of the management capacities of local communities
TRACEABILITY
Establishment of a traceability system for cocoa of Côte d'Ivoire origin
Improved supply chain mapping
Establishment of a verifiable monitoring system for traceability
FUNDING
Funding of studies
MONITORING-EVALUATION
Validation of ICF's Côte d'Ivoire's monitoring and evaluation manual
Organization of monitoring-evaluation missions and review meetings
Carrying out forest monitoring, measurement and reporting activities
Strengthening of the material capacities of the SEP-REDD+

Source: Implementation plan for the activities of the joint action framework, 2018

4.5 Analysis of dissuasive regulatory and administrative measures for sustainable forest management

It became unanimously clear in discussions with the various categories of actors in civil society and private and governmental structures that there are insufficient incentives for sustainable forest management. For these categories it appears obvious that certain difficulties have a deterrent effect on the sustainable management of Ivorian forests.²⁴ These are specifically as follows:

²⁴ Survey data, ITTO Study on Incentives for Sustainable Forest Management in Tropical Regions, 2020

Table 8: Dissuasive factors for sustainable forest management in Côte d'Ivoire

1	Constraints related to the implementation of rural land with the obligation for the issuance of a legal property act to precede any claim to the ownership of a parcel and therefore over the ownership of natural forest trees. Yet many rural landowners have no legal title to confirm this. Moreover, land clarification seems even more complex for certain farm owners. Finally, although some of these conditions are met, the procedure and cost of the land registration process remain inappropriate for the financial conditions of rural populations.
2	Lack of coordination between the different ministries directly or indirectly related to sustainable forest management. This causes overlaps and often contradictions in sectoral policies and strategies.
3	Constraints related to making applications for logging or thinning mandatory for small owners. The law obliges small landowners carrying out reforestation to apply for a license before carrying out maintenance thinning. This has the effect of limiting maintenance in reforestation programs and of discouraging others interested in this type of reforestation. License applications are also required for development plans and statistical inventories.
4	Absence of an authorized mode of artisanal logging allowing the valorization of timber and waste from industrial operations. Recovering wood from waste from industrial operations or wood from rubber tree plantations is not actually permitted. This contributes to the wastage of wood and encourages illegal logging by artisans. Moreover, the ban on machining rubber tree wood deprives the timber industry of all the potential represented by the 600 000 ha of rubber tree plantations which could supply the local market with quality wood.
5	Legislation implementing the Forestry Code is still non-existent even though the law changed as long ago as 2014. Thus, certain innovations such as (i) ownership of trees; (ii) profit-sharing remain unclear and contribute to the misinformation of rural populations;
6	Lack of a mechanism for fixing the price of forest trees and notifying this price to the population. In Côte d'Ivoire there is stiff competition between the land used for the export crops that occupy most of the area and forestry. The market and prices of these crops are known. In the hierarchy, these crops take prime position when choices are made about land allocation.
7	Poor supply of timber of legal origin to the local market. The majority of the wood produced by the processing units is exported to the European or subregional market. Local demand for wood is increasingly covered by local artisans who source wood only through illegal logging.
8	Constraints related to maintaining PEFs, without any legal basis. Article 34 of the Forestry Code 2019 states that forest rights of use (which include logging rights) do not apply to forests belonging to natural persons and legal entities governed by private law. However, PEFs defined by the forest administration also include land belonging to natural persons and legal entities governed by private law. There is a degree of ambiguity that needs to be clarified under the new law.

Source: Survey data, ITTO Study on Incentives for Sustainable Forest Management in Tropical Regions, 2020

V RECOMMENDATIONS RELATING TO INCENTIVE MEASURES FOR SUSTAINABLE FOREST MANAGEMENT

The environmental history of Côte d'Ivoire shows that there are many opportunities for improving efficiency and effectiveness in the sustainable management of its forests. Recommendations on direct and indirect incentive measures as well as the correction of dissuasive measures that could improve forest management have been gathered following consultations with stakeholders in the Ivorian forest sector.

5.1 Recommendations for direct incentive measures for sustainable forest management in Côte d'Ivoire

1. Implementing a simplified process of securing land for owners who have forest trees on their parcel or who want to introduce them. The various private or public initiatives for the creation of forests or agroforests have shown that their success and sustainability are closely tied to current land tenure. The process will consist of developing and implementing a partnership between producer groups (timber, cocoa, coffee, etc.), an industrial buyer of raw material and the state represented by AFOR. By means of this mechanism, the various parties will undertake to contribute to funding the land security of identified land (land title). This arrangement could be structured around five stages:

Step 1: Identification of the land of members of the process membership group. Two essential criteria must be taken into account when identifying:

- a) only land for which there is no other ongoing initiative or possible alternative is taken into consideration, to avoid conflicts of use from the outset.
- b) It is essential for the land identified to have sufficient economically adequate local production potential to serve as a source of funding while allowing producers to meet their basic needs.

- Step 2: Consultation at village level. The lands identified will be subject to consultation at village level to identify those in relation to which points of contention are appearing. The consultation, which will involve all the large families in the village, will be endorsed by minutes.
- Step 3: Formalization of interest in the creation of forests, the introduction of forest trees or the creation of agroforests. The head of the group will present documentation to the other two parties indicating all the signatory members of the partnership for obtaining the land title.
- Step 4: Technical preparation of parcels. This step will consist of identifying geographic coordinates and collecting topographic data from the different parcels.
- Step 5: Registering parcels with the AFOR so that they can be integrated in the process for obtaining land title.

It is from this point onwards that landowners will be able to develop long-term economic prospects.

2. Ensure funding for Village Forest Management Committees through the sustainable land development and management plan that will incorporate activities for the reforestation of degraded land. These development and management plans must guarantee (i) equitable sharing of income from logging; (ii) a complaint and redress mechanism; and (iii) create the conditions for the economic and social development of local communities, whatever the origins. In this respect, it will be necessary to restore, based on the opportunities for the restoration of forests in Côte d'Ivoire,²⁵ 500 000 hectares of production forests (including in gazetted forests) and 4 million hectares of rural forests. Through this participatory restoration approach, local communities can be associated and empowered by the Forestry Administration or the private sector to carry out various ad hoc or permanent activities within or around managed forests. All activities will be supported by technical and financial partners whose role will depend on the type of land use concerned. The following table presents the potential actors to be mobilized according to the type of land use.

Table 9: Actors involved with funding and implementing sustainable forest management activities

<i>Types of land use identified</i>	<i>Actors at local level</i>	<i>Technical and financial partners</i>
Protected areas, parks and nature reserves	Local parks and reserves management committees (in association with local authorities), NGOs	GiZ, UNEP, UNESCO, state, GIZ, Côte d'Ivoire-Japan Cooperation, C2D, UNEP, World Bank, IUCN, WCF
Gazetted forests	Local authorities, local communities, NGOs	WCF, ITTO, Côte d'Ivoire-Japan Cooperation, ITTO, CNTIG, BNETD, C2D, CORENA, GEF, FAO, GiZ, timber sector operators, NGO
Mosaics and agricultural land, cocoa plantations, coffee plantations, palm groves, etc.	Landowning farmers, NGOs	Rain Forest Alliance, ISO, UTZ, state, AFD, UNDP, GIZ, Agricultural Cooperatives, Certification organization (ISO, etc.), Quality Program, private cocoa, coffee and oil palm enterprises
Private plantations	Individuals, economic operators, NGOs	State, FIRCA, ANADER, BNETD, ITTO
Savannas, wooded savannas and secondary forests	Agricultural cooperatives, local authorities, NGOs, economic operators	State, Agricultural Co-operatives, Local authorities, Private cocoa, coffee and oil palm enterprises
Abandoned mining and mining areas	Local authorities, NGOs, mining artisans	State, ADB, World Bank, IDB, AFD, Niger Basin Authority (ABN), Volta Basin Authority (ABV), National Office of Civil Protection (ONPC)
Forest galleries and riparian forests	Local authorities, NGOs	Ramsar Convention, CDB-Aichi, possibility of involving local authorities, ECOWAS, World Bank, ADB (PIF)
Sacred forests	Local authorities	CDB-Aichi, state, NGOs, Village populations,
Mangroves, coastal and hydromorphic areas	Authorities	RAMSAR (wetlands), GEF, state, GEF, possibility of involving local authorities

Source: IUCN Report on Opportunities for Restoration of Degraded Forests and Landscapes in Côte d'Ivoire, IUCN, 2015

3. Establish a national trust fund for financing sustainable forest management. This fund could incorporate financial incentive mechanisms for each category of actors contributing to sustainable

²⁵ Opportunities for Restoration of Degraded Forests and Landscapes in Côte d'Ivoire, IUCN, 2015

forest management. For small landowners, this could be a PES mechanism. For Forestry Administration officers, it could take the form of a performance bonus paid to officers based on goals for the restoration or protection of forests. Such a fund could be supplied by four sources of funding:

- a) **Export taxes on cocoa from agroforests:** in the context of cocoa cultivation, a tax on cocoa from gazetted agroforests (provided that they are operationalized in the field with the regularization of encroachments by growers) could be applied. Such taxation would be justified by the principle of sustainable forest management, which recommends that the benefits of such management should be shared fairly among the various stakeholders and contribute to its funding. Legislation already provides for such specific taxation on timber and other non-timber forest products from gazetted forests.
 - This taxation on cocoa from agroforests could take the form of a fee for financing the restoration and sustainable management of these agroforests, and for improving the living conditions of communities bordering these forests. It would be paid directly by private cocoa companies (exporters) who will be responsible for proving the origin of their cocoa through a government-recognized traceability system.
- b) At the moment, until the agroforests have been established in the field and are registered with the government, cocoa grown in gazetted forests is not legal. Taxing this cocoa from gazetted forests, a proposal regularly mentioned in Côte d'Ivoire, would legitimize an illegal situation. Forty per cent of Ivorian cocoa is estimated to come from gazetted forests (GIZ, 2012). Pending the effective establishment of agroforests and the regularization of the cocoa production resulting from them, it is proposed that companies that are not able to demonstrate the origin of cocoa through a traceability system approved by the state, pay a **special fee**, allocated to the management of agroforests, **for volumes of untraced cocoa**. This should prompt companies to extend traceability quickly to their entire production so that they do not have to pay this special tax (whose returns will decline as volumes are traced). Ultimately, only cocoa from agroforests will need to contribute to the funding of the restoration and sustainable management of these agroforests, via the charge allocated.
- c) **Export surtax on the main products responsible for deforestation** in Côte d'Ivoire. The proposal would be to establish a **progressive tax differential for the single exit tax (DUS)** in favor of the cocoa which has been traced. Untraced cocoa should attract taxes which increase on a yearly basis, since only traceability can determine whether or not the product is legal. Increase in taxation would encourage legal producers to incorporate a traceability system. On the other hand, producers of illegal cocoa (from gazetted forests) could not, by definition, be involved in these traceability systems. Once agroforests are established and the regularization procedures have been completed by a part of the growers, it will be possible to extend traceability systems to the regularized growers so that they avoid paying a surtax on the DUS.
 - To establish an incentivizing tax differential, two options are possible: either (i) maintaining the rate of DUS for traced cocoa and a surtax (progressively increasing) for untraced cocoa; or (ii) a bonus-malus mechanism through which the additional revenues would be used to lower the rate of DUS for the traced cocoa. This would give a stronger incentive for the adoption of traceability while remaining neutral in terms of state revenue.
 - It will be up to the government to evaluate and select traceability systems, whether proposed by firms, certification organizations or issued by the Coffee and Cocoa Council (CCC), which will be eligible for this mechanism.
 - Alongside this tax, another tax could be collected from companies or industries with a significant negative ecological footprint on forests.
- d) **Carbon revenues from climate finance.** In international processes such as REDD+, the conditions for economic valorization of carbon are becoming increasingly clear. Likewise, the digital industry giants (Google, Microsoft, Amazon, and so on) are now willing to offset their carbon dioxide emissions through investments in forest restoration or sustainable agricultural production, including agroforestry.
- e) **International and national financial institutions.** There are many national and international investment funds and commercial banks that wish to invest in forest restoration activities. To do so, appropriate financing solutions that integrate the specific features of forestry activities, including reforestation and agroforestry, should be put in place. Indeed, it is a matter of considering forest tree species as full-fledged amenities. Business models can thus be defined for the different forest species. Thus, assuming that the mean investment for 1 ha of a forest tree species costs an average of FCFA 600 000, it would be possible to link up with local banks to determine financing conditions involving short, medium and long-term loans. To achieve this, value chains will have to be structured, species for restoration will have to be

selected according to existing markets, and a price will have to be notified on the basis of forest species.

5.2 Recommendations for indirect incentive measures for sustainable forest management in Côte d'Ivoire

1. *At administrative and legislative level*, it would be advantageous to speed up the development of the implementing texts of the new Forestry Code to clarify certain legal provisions and facilitate their implementation. It would also be valuable to make the following arrangements within this dynamic:

- **Reduce the procedures for logging license issuance in rural forest plantations.** By convention, logging rights are granted by ministerial decision specifying the logging quota and the requirements for logging control. However, in this case the Forestry Code grants logging rights directly to the landowner. In view of this allocation, the Forestry Administration should create new legal conditions for logging in rural forests. The aim will be to develop direct contracts between forest operators and forest or tree owners.
- **Formalizing the informal timber market for improved organization of the fuelwood custom sized sawn timber sector.** This will enable the state to control the various inherent transaction flows and to take advantage of them by establishing taxes and duties. Moreover, the formal framework will help to improve the Forestry Administration's monitoring and advisory services. All the actors in the sector will need to be identified promptly and Decree n° 2013-815 of 26 November 2013 prohibiting artisanal logging which fails to reflect social reality should be withdrawn. The second step will be to establish decentralized bodies for managing the sector. They will be made up of representatives from the different categories of actors, including the forestry administration.

2. Economically and fiscally

- **Set a price for a standing tree.** Anyone who plants or protects a tree on their land must be able to sell it at an attractive price. So, the state should define the conditions for price-fixing by guaranteeing a minimum price for a standing tree, at least equal to or greater than that of the basic raw materials such as cocoa, rubber and oil palm. This will need to depend on the species, diameter and conformation of the forest species trunk in order to encourage forest operators to apply sound agroforestry practices through the logging contracts.
- **Pay back a part of the area, transfer and quota taxes** (up to now paid back in full to SODEFOR) and of the single exit duty (DUS) to the Water and Forest officers for their contribution to forest protection.

5.3 Recommendations for dissuasive measures for sustainable forest management in Côte d'Ivoire

Table 10: Dissuasive measures for sustainable forest management in Côte d'Ivoire

1	Implement clearing taxes for activities which result in the deforestation of areas in excess of 50 ha
2	Establish carbon taxes for industries and factories that release greenhouse gases
3	Levy an eco-citizen tax on companies benefiting from forest returns (SODECI, CIE, SIR, Vehicle manufacturers, etc.)

Source: Survey data, ITTO study on incentives for Sustainable Forest Management in Tropical Regions, 2020

5.4 Recommendations for incentive measures for sustainable forest management according to types of activities and actors involved

Table 11: Incentive measures for sustainable forest management according to types of activity and actors involved

Main activities	Key actors	Direct incentives	Indirect incentives
Sustainable forest planning	Forestry Administration	<ul style="list-style-type: none"> - Performance bonus to forest officers 	<ul style="list-style-type: none"> - Clear career profile for officers - Presenting awards to the best officers - Training officers on sustainable management techniques
	Timber industry operators	<ul style="list-style-type: none"> - Tax relief - Tax reduction 	<ul style="list-style-type: none"> - Land clarification - Improvement of forest governance
	Local communities	<ul style="list-style-type: none"> - Sharing of benefits from forest management and logging. These are the direct and indirect benefits of recognizing the rights and roles of communities, regardless of their origin, in forest management 	<ul style="list-style-type: none"> - Dialog framework guaranteeing the participation of local communities - Training and awareness-raising
Forest monitoring	Local communities	<ul style="list-style-type: none"> - Premiums for activities associated with implementing and monitoring reforestation - Clear and guaranteed benefit-sharing plan 	<ul style="list-style-type: none"> - Accessibility and availability of basic infrastructure - Land clarification - Training and awareness-raising
	Forestry Administration	<ul style="list-style-type: none"> - Premiums for the implementation and monitoring of activities in forests 	<ul style="list-style-type: none"> - Clear career profile for officers - Presenting awards to the best officers - Training officers on sustainable management techniques
Sustainable reforestation	Timber industry operators	<ul style="list-style-type: none"> - Conservation concessions - Conservation easement - Agroforestry concessions - Timber certification 	<ul style="list-style-type: none"> - Land clarification - Clarification of the Forestry Code on tree ownership and forest rights - Improvement of the macroeconomic environment
	Local Communities/ Forestry Administration	<ul style="list-style-type: none"> - Payment for environmental services (PES) for reforestation - Premiums for activities associated with implementing and monitoring reforestation - Distribution of forest seedlings - Clear and guaranteed benefit-sharing plan 	<ul style="list-style-type: none"> - Accessibility and availability of basic infrastructure - Strengthening of local community supervision
Agricultural intensification	Producers	<ul style="list-style-type: none"> - Payment for Environmental Services 	<ul style="list-style-type: none"> - Organization of the NTFP market

and agroforestry		(PES) – Premium for the certification of agricultural products from agroforestry systems – Distribution of forest seedlings	– Guaranteed tree price – Land security – Training and awareness-raising of producers
	Cocoa, oil palm and rubber industry operators	– Agroforestry concession allocation – Tax relief – Contribution of forest carbon revenues – Certification of agricultural products (cocoa, rubber, oil palm)	– Land clarification – Clarification of the Forestry Code on tree ownership and forest rights

ANNEXES

Annex 1: List of people consulted

DATE	FULL NAME	EMAIL	TELEPHONE	ORGANIZATION	TYPE OF ORGANISATION
24/06/2020 11.49.27	KOUAME YAO JEAN	kyaojean@yahoo.fr	+22502251117	MINEF/DREF, Abengourou	Government
24/06/2020 13.44.13	BATTO FLORENT	battoflorent2000@yahoo.fr	+22557323212	Direction Régionale des Eaux et Forêts, GOH	Government
25/06/2020 19.01.50	AMAN BAKA LAMBERT	amanbaka05@gmail.com	+22547620649	Direction Régionale des Eaux et Forêts, Cavally	Government
02/07/2020 08.20.34	DECLERE Yanek	y.decleire@cgiar.org	+22578765818	ICRAF/GIZ	Research Center and University
03/07/2020 17/02/2000	BELIGNE Vincent	vincent.beligne@giz.de	+22548079296	GIZ	Government
07/07/2020 18/04/2020	BAÏMEY Aubin Charles	charles.baimey@solidaridadnetwork.org	+22548127725	SOLIDARIDAD West Africa	NGO
09/07/2020 12.29.38	Léon SIAGOUE	siagoueleon1965@gmail.com	+22508666604	SOCIÉTÉ DE DÉVELOPPEMENT DES FORÊTS (SODEFOR)	Government
13/07/2020 17.45.23	SORO SINATA	sinata.soro@gntci.org	+22507554806	GNT-CI	NGO
15/07/2020 11.48.35	VAUDRY Romuald	r.vaudry@nitidae.org	+22587333063	NITIDÆ	NGO

A number of private operators (timber industry) also provided information and expressed views on an informal basis, but did not complete the form sent to them.

Annex 2: National land use planning process

STAGE	GOAL	ACTIVITIES
SECTION 1: DESIGN OF THE PROCESS FOR DEVELOPING THE SRADT		
E1: Program for the developing SRADT	Aims to take into account the study in the activities of the region and to include it in the Local Authority budget	A1: Meeting with Regional Council office (Chairman and Vice-Chairmen) to decide on developing the SRADT
		A2: Adoption and deliberation by the Regional Council
		A3: Approval of the triennial program by the authority
		A4: Adoption of the budget and transfer to the authority
E2: Preparation of the process for the developing SRADT	Set up an organization, logistics and technical working teams	A1: Establishment of Steering Committee
		A2: Establishment of Technical Committee
		A3: Setting up stakeholders
SECTION 2: STUDY PRELIMINARIES		
E1: Choice of consultant	Recruit a consultant	A1: Drafting of technical tender sub-documents (DAO)
		A2: Drafting the DAO
		A3: Registration and publication of the DAO with the Public Procurement Directorate
		A4: Withdrawal of the DAO and tender
		A5: Establishment and composition of the decentralized Tender Opening and Adjudication Commission (COJO)
		A6: Opening and assessment of tenders
		A7: Contract with the successful Consultant. Based on the assessment by the Technical Committee, the Steering Committee selects the Consultant who has been successful in winning the contract.
E2: Mobilization and awareness-raising of key actors and populations	Raise awareness among all key actors and local populations, obtain their involvement in the various phases of the study and make all relevant information available to the study	A1: Identification of relevant communication targets and activities
		A2: Planning of communication activities
		A3: Organization of an inception workshop
		A4: Raising public awareness and consultation process
		A5: Preparation of summary progress report
		A6: Validation of summary progress report

E3: Start of study	Make administrative and financial arrangements for the hired Consultant to start the study	A1: Drafting and transmission of a service notification letter to the Consultant
		A2: Drafting the letters to introduce the Consultant to the services and businesses in the region
		A3: Payment in accordance with the provisions laid down in the contract
		A4: Preparation of summary progress report
		A5: Validation of summary progress report
SECTION 3: STUDY PROGRESS		
E1: Development of retrospective and prospective diagnosis of the land	Identify community development issues comprehensively through a series of retrospective and prospective analyses	A1: Delimitation of the regional system
		A2: Identification of the components (subsystems) of the regional analysis
		A3: Completion of a documentary review
		A4: Completion of field visits and surveys
		A5: Completion of the strategic intelligence matrix
		A6: Production of descriptive and summary maps
		A7: Development of retrospective and prospective diagnosis report on the land
		A8: Validation of report
E2: Structural analysis	Characterize the field of prospective reflection, identify the factors and variables characterizing the system and its environment, acquire an understanding of the global system and of the issue, and identify the determining factors for developing the regional system	A1: Completion of morphology
		A2: Completing the square matrix for structural analysis
		A3: Identification of the different types of variables
		A4: Reconciliation of variables to identify major development issues
		A5: Preparation of summary progress report
		A6: Validation of summary progress report
E3: Construction of scenarios and vision	Systematically explore possible future scenarios in the region and construct the vision of the region	A1: Reformulation of issues in forward-looking themes
		A2: Formulation of the most structuring key questions for each forward-looking theme
		A3: Formulation of progress hypotheses or response modalities
		A4: Construction of thematic scenarios
		A5: Construction of global scenarios
		A6: Reminder of expectations and aspirations of the population
		A7: Development of vision
		A8: Preparation of summary progress report
		A9: Validation of summary progress report

E4: Formulation of strategies	Move from the exploratory phase of the prospective analysis to the strategic phase	A1: Completion of the tree first level of tree
		A2: Formulation of strategic or long-term objectives
		A3: Completion of the tree second level
		A4: Formulation of operational objectives
		A5: Completion of the tree third level
		A6: Formulation of actions
		A7: Identification of objectively verifiable indicators
		A8: Drafting of progress report
E5: Production of the priority program	Identify priority programs/projects to be implemented in association with national development policies (PND, PNP, sectoral policies)	A1: Definition of priority planning and development actions
		A2: Production of project sheets
		A3: Estimate of costs of priority actions
		A4: Preparation of mapping documents for the Regional Land use Planning and Development Scheme (SRADT)
		A5: Drafting of progress report
		A6: Validation of progress report

Annex 3: Results of consultations with actors about incentive measures for sustainable forest management

Type of structure/ organization	What comments do you have about current incentive mechanisms for forest management?	What incentives do you think should be implemented to ensure sustainable forest management?	What do you think are the dissuasive regulatory and administrative measures that limit the establishment of appropriate incentives for forest management?	What incentive regulatory framework do you think should be put in place to ensure a more sustainable management of forests?	What activities could your organization implement to contribute to sustainable forest management?
Government	Insufficient	<ul style="list-style-type: none"> - Disseminate the measures with landowners and traditional chiefs, - Adequately inform local forest services and administrative authorities about the incentive mechanisms put in place - Clearly define and disseminate simple and realistic criteria for sustainable forest management that take into account specific local features 	<ul style="list-style-type: none"> - Current rules governing logging in C.I - Constraints associated with the implementation of rural land 	<ul style="list-style-type: none"> - Effectively transfer ownership of trees to farmers - Lift all constraints associated with the valorization of products from forest tree species planted to encourage our populations to engage in silviculture - Establish a forest product stock exchange system to inform people about the financial benefits associated with forest activities 	<ul style="list-style-type: none"> - Organize information and awareness-raising sessions for governmental and traditional authorities and populations - Identify and inventory forest owners - Supervise forest owners in the sustainable management of their assets - Monitor and assess the implementation of sustainable management measures in forests located in our territorial jurisdiction
Government	Insufficient	<ul style="list-style-type: none"> - Establish a schedule for buying up the cubage of forest tree species planted - Lighten the procedures for obtaining logging licenses for rural forest plantations - Decentralize to regional level the issuing of logging documents in rural forest plantations - Reassure people about ownership of planted trees - Establish village forest management committees with financial support 	<p>The obligation to issue an act of legal ownership to claim ownership of a parcel</p> <ul style="list-style-type: none"> - Forest management is not a cross-cutting issue for the ministries concerned, each ministry conducts its policy within a framework that does not take into account the policies of other ministries; 	<ul style="list-style-type: none"> - Effective implementation of the law establishing the Forestry Code - Operationalization of the Strategy for Forest Preservation, Rehabilitation and Extension 	<ul style="list-style-type: none"> - Awareness-raising of all sectors of society - Provide technical support (seedling production, establishing reforestation, silviculture, monitoring logging) for the sustainable management of forests to various socio-professional groups requesting it
Government	Insufficient	The bonus paid to officers	The legislation setting taxes	- Provide incentives per hectare	- Undertake major reforestation

		issuing infringement reports should be increased from 10% to 25%. In addition, the bonus paid on sales of Forest Secondary Product Movement Booklets (<i>Carnet de Circulation des Produits Secondaires Forestiers</i>) should be increased from 5% to 10%	for forestry (from logging to export of forest products) devotes a small portion of said taxes to Water and forest officers, contrary to what is observed in other sectors of activity	or per number of seedlings planted for reforestation volunteers - Provide reforestation bonuses for water and forest personnel, as are received by officers from the Office of National Parks and Reserves who in addition to receiving the premiums given to all water and forest officers in Côte d'Ivoire, have other in-house bonuses associated with their daily activities	activities. These actions should be subject to the provision of appropriate resources (GPS, material and financial resources for the establishment of nurseries and for the preparation of land for reforestation) for the decentralized services
Research Center and University	Inadequate	<ul style="list-style-type: none"> - Lift the constraints over the valorization, by the producers, of timber and NTFPs in parcels they cultivate - Encourage the use of partnership contracts proposed by AFOR to organize profit sharing from forest logging between the owner and user of the parcel - Train the MINEF department in charge of validating management plans for gazetted forests to ensure that the balance between agricultural production (raw cocoa) and forest cover is taken into account and that the agroforests are adequately sized (before validating their creation within the gazetted forest) - Offer benefits to forest growers such as technical support, recording what they have done for carbon remuneration, tax exemption on the sale of 	<ul style="list-style-type: none"> - Applications for logging or thinning licenses that are obligatory for small owners. They are discouraging with regard to keeping natural regrowth - High complexity of development plans and statistical inventories that are mandatory for small owners - Absence of an authorized method of artisanal logging to enable the valorization of timber (and industrial waste) - Absence of timber recovery licenses for the valorization of wood lying on the ground or rubberwood, for example 	<ul style="list-style-type: none"> - Accelerate the recognition of traditional ownership undertaken by the AFOR including partnership contracts to take into account the users and not simply the owners of land to be registered - Provide tax relief for developers of industrial reforestation for timber, including wood processing companies present in CI (the future of sustainable wood supply in the country lies in plantation timber) 	<ul style="list-style-type: none"> - Promote agroforestry which takes into consideration the rehabilitation of forest landscapes - Improve the genetic material made available to growers

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

		<ul style="list-style-type: none"> - timber to operators - Make available to growers subsidized tree species of verified genetic quality (budwood reserve, seed center) 			
Government	Insufficient	<ul style="list-style-type: none"> (i) Facilitated recognition of ownership of trees and forests both on the basis of traditional rights and in substantive law (ii) Non-binding arrangements for the utilization and marketing of products obtained through planting and/or protective/defensive efforts (iii) Absence of taxation or tax relief for the valorization of products obtained by planting and/or protective/defensive efforts (iv) Absence of taxation or tax relief for the valorization of timber from sustainably managed gazetted forests (effective implementation of development plans and monitoring to counter agricultural occupation) under partnership agreements, in particular for products intended to supply the local market. 		<ul style="list-style-type: none"> (i) Promotion of sustainable management of residual community forests or private forests (ii) Promotion on a participatory basis of agroforestry techniques (creation of pilot sites, support to nursery gardeners, training and instructing trainers) (iii) Support for the development of NTFP value chains (e.g. makoré oil, wild mango, small kola, Garcinia tooth scrub, etc.), in the rural area and/or in gazetted forests (iv) Support for the restoration of forest cover on river banks (extension of the experiment performed on the Hana River). 	
NGO	Insufficient	<ul style="list-style-type: none"> - First of all, a legal framework is needed that provides guarantees for all protective measures. It also requires financial incentives to compete with farms - Tax facilitation measures for individuals and bodies promoting forest conservation - Moreover, the market value of trees should be defined, and a price set for trees so that farmers know the value and protect trees 	<ul style="list-style-type: none"> - The fact that tree ownership is not well thought-out at present and in particular is not definite in accordance with the implementing legislation of law 2019 - Also the fact that the value of trees is not known to rural populations 	<ul style="list-style-type: none"> - The regulatory framework should offer tax benefits and provide for bonuses for those who care about forest preservation 	<ul style="list-style-type: none"> - Our organization acts on several levels. This includes training actors (producers, cooperatives, communities, etc.) about forest preservation, its importance and also the preservation of high value conservation (HVC) areas. We also take action to provide forest tree seedlings and training in the establishment of nurseries. And finally, we work with the actors to influence the policy and regulatory framework through multi-actor processes to take into account forest conservation more successfully - We could therefore improve the above actions and in particular scale them up to reach a wider target
Government	Fairly adequate	<ul style="list-style-type: none"> - Involve local authorities, civil society, NGOs - Strengthen the involvement of local communities, administrative and judicial authorities - Strengthen the capacities of forest officers, administrative 		<ul style="list-style-type: none"> - Establish an interdepartmental structure for mobilizing financial resources for forests - Continue action for protecting gazetted forests - Develop large reforestation areas 	

		<ul style="list-style-type: none"> and judicial authorities, local communities - Develop income generating activities (IGAs) on the periphery of gazetted forests, parks and reserves - Strengthen actions for the protection of gazetted forests and rural estate forests - Reforest degraded areas in gazetted forests - simple forest management plans for rural estate forests - Continue to develop plans for the management of gazetted forests, parks and natural reserves - Create a national forest fund - Establish a sustainable forest funding mechanism 	<ul style="list-style-type: none"> - Continue silviculture associated with reforestation and natural forests - Provide all the gazetted forests with management plans and implement them - Continue creating Participatory Management Committees on the periphery of gazetted forests <p>Contribute:</p> <ul style="list-style-type: none"> - to community development on the periphery of gazetted forests - to the creation of transhumance corridors for livestock in gazetted forests 	
NGO	Fairly adequate	Financial, tax and regulatory measures	<ul style="list-style-type: none"> - Lack of clarification and security of land ownership - Lack of a clear profit-sharing plan - Insufficient quotas for supplying timber of legal origin to the local market; hence the use of timber from custom sawing. 	<ul style="list-style-type: none"> - Facilitate and raise awareness of procedures for land title issuance - Reduce costs for issuance certain administrative documents; - Fight corruption and encroachments by tightening the penalties against the perpetrators of violations (provide for legal fines, non-judicial fines and also for damages, warnings and revocation of logging titles, disqualification from obtaining future licenses or permits, etc.) - Allow referral to courts as a preventive measure in the event of an imminent threat of damage - Give priority to compensation in kind for environmental damage - Awareness-raising activities (concerning the legality of timber, clarification of land tenure, etc.), capacity-building and advocacy activities
NGO	Insufficient	<ul style="list-style-type: none"> - The effective removal of PEFs as soon as possible and the possibility for rural forest holders to valorize timber for their own benefit, through, inter alia, defining the price of standing timber, per species and per quality (as provided for in the draft decrees attached to the 2014 Forestry Code). 	<ul style="list-style-type: none"> - Maintaining PEFs, without any legal basis 	<ul style="list-style-type: none"> - On the basis of the first land certificates issued over forest areas in the region of La Mé, Nitidae intends to encourage and assist owners interested in officially registering their forests and in the development of management and management documents (in close collaboration with the DR MINEF of La Mé and with the DRCF (Sub-Directorate responsible for Private Forestry Development)). - With the above partners, we also intend to organize the marketing of lots of standing timber between owners of organic cocoa from agroforestry (and holders of land certificates) and timber industry operators. This includes an inventory of timber to be marketed by each cocoa farmer, specification of the operating requirements to minimize (or even compensate for) the damage caused to cocoa farmers, and finally, the release for the sale of the lots established. This activity is envisaged within the framework of the Cocoa4Future project, but obviously depends on the marketing arrangements which will eventually be defined (see above comment on defining the price of standing timber). More info on Cocoa4Forest: https://www.nitidae.org/actions/cocoa4future-durabilite-des-systemes-de-production-et-dynamiques-nouvelles-du-secteur-cacaoyer - We will also continue our support for the revitalization of old plantations (especially teak), most of which are now more or less abandoned, for various reasons (Order 480 pending revision, MINEF's

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

				strengthening capacity in terms of managing such plantations, necessary awareness-raising of bakeries which can be an excellent outlet for first-thinning timber)
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Type of structure/organization	What appropriate tax incentive measures do you think should be implemented to allow you to implement without difficulty measures mentioned earlier?	What inappropriate tax measures do you think should be removed to facilitate your contribution to sustainable forest management?	What appropriate non-tax incentives should be introduced to ensure sustainable forest management?	What inappropriate non-tax incentive measures do you think should be removed from the current incentive mechanism for sustainable forest management?
Government	<ul style="list-style-type: none"> - Clearing tax for activities that result in deforestation in areas of over 50 ha - Carbon tax for industries and factories that emit greenhouse gases 	<ul style="list-style-type: none"> - Transfer and surface taxes for Forest Logging Perimeters (PEFs) 		<ul style="list-style-type: none"> - General interest taxes (TIG)
Government	<ul style="list-style-type: none"> - Establishment of a green fund to provide financial assistance to actors owning forest parcel(s) for over two years registered in the forest administration registers - Disseminate the schedule for purchasing standing trees 		<ul style="list-style-type: none"> - Provide each industrial unit with at least one PEF for supplying its factory - Eliminate the existence of forest logging operators' groups. 	
Government	<ul style="list-style-type: none"> - A portion of the surface, allocation and quota tax (up to now paid back in full to SODEFOR) and DUS (single exit duty) should be paid to water and forest officers 		<ul style="list-style-type: none"> - Reforestation premiums to water and forest officers 	
Research Center and University	<ul style="list-style-type: none"> - Tax relief for owners who allocate part of their land to forests 		<ul style="list-style-type: none"> - Simplify the obligations of small timber producers who can contribute at least as much as large ones to the effort to restore forest cover conducive to agriculture, including certification 	<ul style="list-style-type: none"> - Approval of silviculture operations for small forest owners or even approval issuance almost free of charge and without complicated application procedures as a reward for their contribution to the national effort to restore the forest cover
Government	<ul style="list-style-type: none"> - Reduced exemptions or levies for owners, private forest holders and operators working to optimize forest products from sustainable management 		<ul style="list-style-type: none"> (i) Formal recognition of efforts to renew the resource to facilitate future logging (planting certificates, forest holder portfolio, purchase guarantees, etc.) (ii) Payments for environmental services promoting community or private actions for maintaining or creating forest cover (v) Development of appropriate advisory structures (e.g. extending ANADER's skills to rural forestry and 	<ul style="list-style-type: none"> - What are the current incentives? In the implementing texts of the Forestry Code, avoiding the complexity or impracticality of certain envisaged measures (e.g. inventories and management plans for small owners, professional approvals, etc.) would be advisable

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

			agroforestry) (vi) Simplification of administrative and regulatory provisions for private forest holders and owner communities	
NGO	- Tax Reduction. Premium forest protection	- As far as we are concerned, as a civil society organization, we're not subject to any inappropriate tax measures, however the conversion of certain taxes into forest protection premiums could be a significant support in our activities	- Creating infrastructure for communities. By doing this, communities themselves would feel empowered collectively to protect forests if they are aware that hospitals, schools, and so on will result from their forest conservation efforts	- Some incentive measures, such as planting, have failed to produce good results. Producers feared that after tree harvest, their plantations would be destroyed. So they often set fire to the trees
Government	- Grant SODEFOR privileged tax status - Finance the National Forestry Fund through levies: - on exports of agricultural products (coffee, cotton, cocoa, rubber, etc.): - impose an eco-citizen tax on companies benefiting from forest returns (SODEI, CIE, SIR, Vehicle manufacturer, etc.).	- Exempt SODEFOR from VAT which it pays on purchase invoices even though it cannot retrieve it because its tax system does not allow it	Nothing to report	- Prohibition of teak log export
NGO	- Review taxes that increase the cost of legal timber on the local market - A surtax on timber for export - Review taxes that make it difficult for forestry small and medium-sized enterprises to operate legally (obtaining approval)	- Taxes that increase the cost of legal timber on the local market - Taxes that make it difficult for forestry small and medium-sized enterprises to operate legally (obtaining approval)	- Encourage the development of environmental expertise - Strengthen the management and control capacity of environmental and forest structures - Strengthen the monitoring, control and supervisory system, encouraged by financial rewards - Develop and disseminate a transparent profit-sharing plan - Better valorization of forest waste - Improved enforcement of existing texts for better governance - Formalization of the informal timber market for better organization of the fuelwood sector; raising its awareness of forest legality - Promote techniques to save wood (better wood carbonization) - Increase the local market supply quota for legally sourced wood - Reduce the cost of timber of legal origin on the local market to limit the use of timber from custom sawing - Include a module on ecosystems in the training of decision-makers; - Increase the local market supply quota for legally sourced wood - Reduce the costs of wood of legal origin on the local market to limit the use of timber from custom sawing - Include a module on ecosystems in the training of decision-makers	
NGO	In the context of the effective removal of PEFs, it is necessary to rethink all the forestry taxation that is now levied	- Tax provisions related to Order 480 should be revised as soon as possible to	In addition to the effective elimination of PEFs, the administrative provisions relating to Order 480 should be revised as soon as	

	<p>exclusively on PEF holders and which could also affect timber producers in the future. A comprehensive tax overhaul should therefore be foreseen as soon as possible so that the MINEF does not suffer major shortfalls and is able to maintain its operational capabilities on the ground</p>	<p>facilitate the revitalization of old teak and other plantations</p>	<p>possible to facilitate the revitalization of old teak and other plantations</p>	
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Annex 4: Fact sheet for collecting views and proposals from private sector actors on appropriate incentive measures for sustainable forest management in Côte d'Ivoire

As part of the International Tropical Timber Organization (ITTO) study on incentive measures for sustainable forest management, we seek your cooperation by requesting you to respond to this questionnaire.

SECTION I: IDENTIFICATION OF THE STRUCTURE	
1. Name of the structure	
2. Email	
SECTION II: OPINIONS AND RECOMMENDATIONS	
3. What are your comments about current incentive mechanisms for forest management?	
4. What do you think are the regulatory and dissuasive administrative measures that limit the establishment of appropriate incentive mechanisms for forest management?	
5. What regulatory framework do you think should be put in place as an incentive to ensure sustainable forest management?	
6. How, with what and from whom should this framework be constituted?	
7. What administrative framework do you think should be put in place as an incentive to ensure sustainable forest management?	
8. What appropriate tax incentive measures do you think should be introduced in the current incentive mechanism for sustainable forest management?	
9. What inappropriate tax incentive measures do you think should be removed from the current incentive mechanism for sustainable forest management?	
10. What appropriate non-tax incentive measures do you think should be introduced in the current incentive mechanism for sustainable forest management?	
11. What inappropriate non-tax incentive measures do you think should be removed from the current incentive mechanism for sustainable forest management?	

Etudes sur les Mesures Incitatives a la Gestion Durable des Forêts en Côte d'Ivoire

AKA JEAN PAUL AKA

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LISTE DES ABRÉVIATIONS

AFD	: Agence Française de Développement
AFOR	: Agence Foncière Rural
AIPH	: Association Interprofessionnelle de la filière Palmier à Huile
APROMAC	: Association des Professionnels du Caoutchouc Naturel de Côte d'Ivoire
BAU	: Services tout en réduisant la dégradation des forêts et le déboisement par rapport au scénario du laisser-faire
BNI	: Banque Nationale d'Investissement
CEDEAO	: Communauté économique des États de l'Afrique de l'Ouest
CICPPF	: Comité Interministériel de Coordination et de Pilotage de la Politique Forestière
CIE	: Compagnie Ivoirienne d'Electricité
CNDLFB	: Comité National de Défense de la Forêt et de Lutte contre les Feux de Brousse
COJO	: Commission décentralisée d'Ouverture des plis et de Jugement des Offres
CTP	: Cellule Technique Pluridisciplinaire
DAO	: Dossiers d'Appel d'Offre
DARH	: Direction de l'Administration et des Ressources Humaines
DCM	: Direction commerciale et marketing
DFP	: Domaine Forestier Permanent
DFR	: Droit Foncier Rural
DPPF	: Direction de la planification, des projets et des financements
DT	: Direction Technique
DUS	: Droits uniques de sortie
ECOSOC	: Forum des Nations unies sur les forêts
FAO	: Organisation des Nations Unies pour l'Alimentation et l'Agriculture
FC	: Forêt Classée
FLEGT	: Forest Law Enforcement Governance and Trade/ Processus Internationaux pour l'Amélioration de la Gouvernance Forestière
FNUF	: Forum des Nations Unies sur les forêts
FSPDF	: Fonds Spécial pour la Préservation et le Développement Forestier
GAR	: Gestion Axée sur les Résultats
GIRE	: Gestion Intégrée des Ressources en Eau
GIZ	: Deutsche Gesellschaft für Internationale Zusammenarbeit/ Agence Allemande de Coopération Internationale
ICF	: Initiative Cacao et Forêts
IDH	: The Sustainable Trade Initiative
KFW	: Kreditanstalt Für Wiederaufbau
MAT	: Ministère en charge de l'Aménagement du Territoire
MINEDD	: Ministère de l'Environnement et du Développement Durable
MINEF	: Ministère des Eaux et Forêts
ODD	: Objectifs de Développement Durable
OIBT	: Organisation internationale pour les Bois tropicaux
OIPR	: Office Ivoirien des Parcs et Réserves
ONG	: Organisation Non Gouvernementale

PAS	: Programmes d'Ajustement Structurel
PDF	: Plan Directeur Forestier
PDL	: Plan de Développement Local
PEF	: Périmètres d'Exploitation Forestière
PFNL	: Produits Forestiers Non Ligneux
PND	: Politique Nationale de Développement
PNP	: Parti Nationale de Population
PREF	: Politique de Préservation, de Réhabilitation et d'Extension des Forêts
PS	: Politique Sectorielle
PSE	: Paiement pour Services Environnementaux
PSF1	: Projet Sectoriel Forestier phase 1
REDD+	: Réduction des Emissions issues de la Déforestation et de la Dégradation des Forêts
SEPREDD	: Secrétariat Exécutif Permanent REDD
SIR	: Société Ivoirienne de Raffinerie
SODECI	: Société de Distribution d'Eau de Côte d'Ivoire
SODEFOR	: Société de Développement des Forêts
SRADT	: Schéma Régional d'Aménagement et de Développement du Territoire
T. I. G	: Travaux d'Intérêt Général
UE	: Union Européenne
WCF	: World Cocoa Foundation

RÉSUMÉ EXÉCUTIF

La Côte d'Ivoire a longtemps souffert et continue de souffrir des effets néfastes de la déforestation dues essentiellement à l'agriculture, l'exploitation forestière illégale, l'urbanisation, les mines, mais également de facteurs plus indirects comme, entre autres, l'immigration, l'insécurité foncière rurale et la pauvreté généralisée. Les nombreuses initiatives pour stopper la déforestation et reconstituer le couvert forestier n'ont jamais réussi à inverser la tendance. Ce document analyse les mécanismes d'incitation existants pour la gestion durable et fait des propositions pour leur amélioration. Cette analyse concerne les cadres de politiques, législatifs, institutionnel ainsi le cadre de planification et la fiscalité pour la gestion durable des forêts. Par la suite nous allons y (ii) déceler les mécanismes d'incitations/ dissuasions pour la gestion durable des forêts et les produits de base exempts de déforestation avant de (iii) faire des propositions d'amélioration

Nouveau cadre politique de gestion des forêts

Le cadre politique forestier actuel de la Côte d'Ivoire est régi par une nouvelle politique *de préservation, de réhabilitation et extension des forêts de Côte d'Ivoire*, adopté en 2018. Elle fondée sur quatre principes: (i) le volontarisme, qui se traduit par une prise de conscience du gouvernement et une mobilisation de l'ensemble des acteurs autour de l'intérêt de la forêt; (ii) le réalisme, qui concerne la reconnaissance de la situation actuelle des forêts avec des choix forts à faire; (iii) la reconnaissance, qui considère que tous les arbres séquestrent du carbone et enfin (iv) le principe de sortir de la « logique de cueillette » et son remplacement par une « logique de culture » pour promouvoir la restauration des forêts. La stratégie de préservation, de réhabilitation et extension des forêts de Côte d'Ivoire qui en découle a été adoptée en conseil des Ministres en février 2019 pour un coût total de 616 milliards FCFA, couvrant la période 2019-2030. L'objectif est de reconstituer le couvert forestier à hauteur de 20% à horizon 2040 et lutter ainsi contre les effets du changement climatique selon trois axes que sont: 1) l'amélioration de la gouvernance forestière; 2) le renforcement de la protection des massifs forestiers résiduels, leur extension et leur gestion durable; 3) la reconstitution des zones forestières dégradées et l'adaptation aux changements climatiques.

Cadre législatif et réglementaire adapté au principe de gestion durable des forêts

Au niveau du cadre législatif et réglementaire forestier, celui-ci a beaucoup évolué avec le temps et l'épuisement de la ressource forestière. Avant 2014 la réglementation forestière s'appuyait sur différentes lois dont la plus importante était la loi n° 65-425 du 20 décembre 1965 portant code forestier qui définissait en deux domaines, le domaine forestier rural et le domaine forestier de l'État (les forêts classées, les forêts protégées, les périmètres de production et les reboisements). Dans cette loi, les communautés rurales ne sont pas associées à la gestion des forêts de l'Etat et les arbres sont la propriété de l'Etat, quel que soit le propriétaire du foncier.

Face aux insuffisances du code forestier de 1965 pour une gestion durable des forêts, un nouveau code forestier a été adopté en 2014. Il sera par la suite modifié en 2019 par la Loi n°2019-675 du 23 juillet 2019 portant Code forestier. Ce nouveau code forestier, influencé par les processus internationaux comme FLEGT et REDD+ a mis en avant les enjeux et les perspectives d'une gestion durable du couvert forestier ivoirien. Cette nouvelle loi a créé un cadre de « gestion durable de la forêt » et introduit des innovations en matière de conservation et de reconstruction du couvert végétal avec « *une plus grande implication des populations* ». Une des innovations majeures fut la reconnaissance de la propriété de l'arbre reconnu au propriétaire de la terre avec la possibilité à tous les citoyens de créer des forêts, quand bien même cette possibilité demeure problématique compte tenu du faible taux d'immatriculation des terres en Côte d'Ivoire et le nombre limité de certificats fonciers. De plus, le nouveau code a renforcé le statut des agents techniques des Eaux et Forêts, en faisant d'eux, désormais, des officiers de police judiciaire. Une nouvelle catégorie de forêt a été également créée. Il s'agit des agroforêts. Ce sont les anciennes forêts classées avec un taux de dégradation supérieur à 75%. Dans cette nouvelle catégorie de forêt, les plantations agricoles peuvent coexister avec les forêts. Les agroforêts peuvent être concédées à un agro-industriel pour y pratiquer de l'agriculture avec des techniques d'agroforesterie.

Cadre institutionnel marqué par une longue instabilité de l'Administration forestière

Le Ministère en charge des Eaux et Forêts est le principal acteur de gestion des forêts avec des structures sous tutelle que sont: la Société de Développement des Forêts (SODEFOR) en charge de la gestion des forêts classées, le Jardin botanique de Bingerville (JBB) et le Zoo d'Abidjan. Les parcs nationaux et réserves naturelles sont gérés depuis 2002 par l'OIPR qui est une structure sous tutelle du ministère en charge de l'Environnement et du Développement Durable. Depuis l'indépendance en 1960, l'administration forestière a connu une instabilité quasi permanente avec un changement de tutelle toutes les deux années. Plus de trente-quatre Ministres se sont succédé à la tête de ce département. À cela, il faut ajouter le personnel technique en nombre insuffisant et moins expérimenté sur les thématiques de gestion durable des forêts; les moyens matériels et financiers insuffisants;

l'absence d'une structure formelle d'encadrement des reboisements; le mauvais fonctionnement du système d'information. Ces dernières années, à la faveur des divers processus internationaux pour l'amélioration de la gouvernance forestière (FLEGT) ainsi que dans l'initiative de réduction des émissions des gaz à effet de serre lié à la déforestation et la dégradation des forêts (REDD+) dans lesquels l'État s'est engagé, ce dernier n'est plus reconnu comme seule gestionnaire des forêts. En effet la loi indique en son article 5 que pour assurer la mise en œuvre de la politique forestière nationale, l'État associe différents acteurs notamment: (i) les collectivités territoriales; (ii) les institutions de recherche; (iii) les opérateurs du secteur privé; (iv) les organisations de la société civile; (v) les communautés rurales ainsi que (vi) les partenaires au développement que l'état peut solliciter.

Le régime foncier et influence sur la gestion de forêts

Face aux contraintes liées à la mise en œuvre de la loi 98-750 du 23 décembre 1998 relative au domaine foncier rural modifiée par la loi 2004-412 – Côte d'Ivoire, l'État ivoirien va créer l'Agence Foncière Rurale (AFOR) afin d'accélérer le processus de sécurisation des terres avec une modification de la loi en ses articles 2, 4, 6, 9, 12, 17, 23, et 26 (la loi n° 2019-868 du 14 octobre 2019). Une des modifications majeures est l'abrogation des articles 20, 24 et 25. L'article 20 disposait que les propriétaires de terres du domaine foncier rural étaient (hormis l'Etat) soumis à l'obligation de les mettre en valeur, avec la possibilité de les y contraindre selon des conditions édictées par décret pris en Conseil des Ministres. Cette disposition abrogée permet de considérer de formes de mise en valeur forestière s'appuyant sur des processus naturels. De plus, le délai maximal au terme duquel les terres, objet de certificats fonciers individuels ou collectifs, doivent faire l'objet d'immatriculation n'est plus fixé à trois ans par la loi. Ce délai sera précisé par un décret pris en Conseil des Ministres. En outre, les délais à l'issue desquels certaines terres sont considérées comme « sans maître » ne sont plus déterminés par la loi. Ils seront fixés par un décret pris en Conseil des Ministres. Cette innovation dans le code foncier permet de lever une inquiétude identifiée dans le code forestier sur la propriété de l'arbre. En effet, les droits fonciers déterminant les modes de faire-valoir forestier, il s'agit de savoir qui possède les terres forestières, qui les utilisent, les gèrent et prennent les décisions les concernant. Les nouvelles dispositions du code forestier contiennent ainsi plusieurs éléments relevant du régime foncier forestier.

Structure de la fiscalité forestière en Côte d'Ivoire

La fiscalité forestière en Côte d'Ivoire est régie dans le code général des impôts à travers les articles 1097 et 1134. Le premier article met en lumière les redevances et taxes forestières dues annuellement au titre du revenu du domaine forestier que sont¹ :

- Les taxes basées sur la superficie de la concession (la taxe d'attribution, l'indemnité forfaitaire pour travaux d'intérêt général, la taxe de superficie);
- Les taxes basées sur l'exploitation des arbres (les taxes sur les ventes de grumes, la taxe pour la contribution au développement local, les taxes sur les frais de la restauration du couvert forestier et la taxe spéciale pour la préservation et le développement forestier);
- Les taxes perçues sur les exportations des produits transformés, c'est-à-dire les droits uniques de sortie et les quotas de sciage frais (non-séchés);
- La redevance au titre des travaux d'intérêt général, fixée à 48 FCFA par hectare.

En plus des taxes, il existe également des recettes non fiscales. Elles sont alignées sur les dispositions du décret n°2013-484 du 02 juillet 2013 portant institution des recettes non fiscales. Ces recettes non fiscales sont généralement constituées de ventes aux enchères, des frais pour l'obtention de certains documents administratifs, des pénalités et de diverses redevances.

Les mécanismes d'incitation directs et indirects pour la gestion durable des forêts en Côte d'Ivoire

Nous pouvons distinguer deux types d'incitations pour la gestion durable des forêts. Ce sont les incitations directes qui sont fondées sur la rémunération des efforts de conservation, de gestion durable ou de restauration des forêts. Les incitations indirectes sont les mécanismes législatifs, fiscaux ou non, pouvant entraîner une gestion plus efficiente des forêts.

Les incitations directes pour la gestion durable des forêts

Il existe des outils règlementaires liés **aux partages des bénéfices et avantages économiques** découlant de la gestion forestière, qui sont utilisés depuis longtemps. Malheureusement, les populations n'ont pas le sentiment de bénéficier des bénéfices de la gestion des forêts. C'est pourquoi le nouveau code forestier a insisté sur la mise en place d'un mécanisme de partage des bénéfices pour la gestion durable de toutes les forêts ivoiriennes et qui sera précisé par un décret en cours de signature.

D'autres mécanismes d'incitation sont expérimentés en Côte d'Ivoire.

¹ Annexe fiscale a la loi n° 2019-1080 du 18 décembre 2019 portant budget de l'Etat pour l'année 2020

- **Les Paiements pour Services Environnementaux (PSE)** dont le principe est basé sur la compensation d'une perte de revenus ou d'un manque à gagner pour une pratique qui maintient ou fournit davantage de services écosystémiques.
- **Mécanisme de marché pour les produits issus de la gestion durable des forêts**, comme la certification avec le paiement de primes ou des parts de marché importantes et stables. En Côte d'Ivoire il existe une bonne expérience des programmes de certification pour les produits comme le cacao et le palmier à huile.

Il sera possible d'introduire d'autres mécanismes d'incitation, comme:

- **Partenariat pour la commercialisation des produits forestiers et PFNL par les propriétaires fonciers avec** un prix clair et fixe pour le bois sur pieds et certains PFNL, défini de manière consensuelle par l'ensemble des acteurs en fonction du prix du bois sur le marché international et des marchés potentielles pour chaque acteur, pourrait encourager les propriétaires fonciers dans des activités forestières durables.
- **Incitation fiscale sous forme** de taxe écocitoyenne qui serait imposée aux entreprises bénéficiant des retombées de la forêt (SODECI, CIE, SIR, Constructeur de véhicules, Solibra, etc.). Cette idée est en discussion dans un groupe de travail gouvernemental.
- **Exonérations fiscales** en faveur des entreprises qui participent à la gestion durable des forêts. L'État pourrait exonérer ou réduire les taxes et impôts pour les entreprises qui auront contribué la restauration d'une forêt d'importance écologique.
- **La servitude de conservation** qui s'apparente au PSE de conservation et qui consiste à établir un accord contractuel en imposant des restrictions permanentes et légalement contraignantes à l'utilisation des terres privées.
- **Accord incitatif de conservation/restauration** est une des voies pour gérer durablement les forêts et concurrencer les acteurs responsables de la déforestation. Il s'agit là aussi d'une variante des PSE qui pourraient être financés par les bénéfices issus de la vente du carbone ou du fonds forestier national envisagés par l'Etat de Côte d'Ivoire.

Les incitations indirectes pour la gestion durable des forêts

Il y a aujourd'hui un certain nombre de contraintes associées à la gestion des forêts en Côte d'Ivoire qui pourraient être levées afin de les transformer en incitations. Il s'agit:

- **Au plan législatif**, la levée des contraintes liées à la valorisation du bois par les producteurs. Ainsi, ces derniers seront plus intéressés par la réintroduction d'arbres forestiers et s'investiront davantage.
- **Au plan administratif** les dispositions administratives liées à l'arrêté 480, lesquelles sont très contraignantes et dissuasives pour les planteurs, devraient être révisées pour faciliter la redynamisation des vieilles plantations de bois à croissance rapide.
- **La sécurité de la propriété foncière**. À travers cette mesure, l'objectif est d'encourager les agriculteurs à gérer les ressources forestières de façon durable et à planter des arbres.
- **Le développement des infrastructures** (routes, réseau ferroviaire, installations portuaires modernes, centrales hydroélectriques) par l'État ou l'entreprise privée est une mesure incitative indirecte qui peut offrir des débouchés importants pour le bois d'œuvre et accroître ainsi sa valeur sur pied.
- **Au niveau politique c'est la stabilité** qui influence largement les investissements privés dans les plantations forestières.

Facteurs dissuasifs pour la gestion durable des forêts

Sur la base des consultations menées, on voit qu'il existe plusieurs facteurs dissuasifs pour la gestion durable des forêts :

- L'absence de coordination entre les différents ministères liés directement ou indirectement à la gestion durable des forêts. Cela provoque un chevauchement et souvent des contradictions dans les politiques et stratégies sectorielles.
- Contraintes liées à la mise en œuvre du foncier rural avec l'obligation de la délivrance d'un acte de propriété juridique avant toute revendication de la propriété d'une parcelle et donc sur la propriété de l'arbre forestier poussé naturellement.
- Contraintes liées à l'imposition de demandes d'autorisation d'exploitation ou d'éclaircie aux petits propriétaires.
- Absence d'un mode autorisé d'exploitation artisanale du bois pour permettre la valorisation des bois et rebuts d'exploitation industrielle.
- Les textes d'application du code forestier sont encore inexistant bien que la loi ait changé depuis 2014.
- Absence d'un mécanisme de fixation du prix des arbres forestiers, prix dont les populations seraient informées.
- Faiblesse de l'approvisionnement du marché local en bois d'origine légale.
- Contraintes liées au maintien des Périmètres d'Exploitation forestière (PEF), sans aucune base légale.

Recommandations sur les mesures incitatives pour la gestion durable des forêts

Les consultations réalisées auprès des acteurs du secteur forestier ivoirien ont permis de recueillir des recommandations sur les mesures d'incitation directes et indirectes ainsi que la correction des mesures dissuasives qui pourraient améliorer la gestion des forêts. Il s'agit notamment de :

- ***Mettre en place un processus simplifié de sécurisation foncière des terres de propriétaires ayant des arbres forestiers sur leur parcelle ou désireux d'en introduire.*** Le processus consistera à développer et mettre en œuvre un partenariat entre des groupements de producteurs (bois, cacao, café, etc.), un industriel acheteur de matière première et l'État représenté par l'AFOR. À travers ce dispositif, les différentes parties s'engageront à contribuer au financement de la sécurisation foncière des terres identifiées (titre foncier).
- ***Assurer le financement des activités des comités villageois de gestion des forêts dans le cadre d'un plan d'aménagement et de gestion durable des terres, qui intégrera un partage équitable des revenus issus de l'exploitation ainsi qu'un mécanisme de plaintes et de recours.***
- ***Mettre en place un fonds national fiduciaire pour le financement de la gestion durable des forêts.*** Ce fond pourrait intégrer des mécanismes d'incitations financières pour chaque catégorie d'acteurs qui contribuent à la gestion durable des forêts. Pour les petits propriétaires fonciers, il pourrait s'agir d'un mécanisme de PSE. Pour les agents de l'administration forestière, il s'agira d'une prime de performance payée aux agents en fonction des objectifs de restauration ou de protection des forêts. Un tel fonds pourrait être alimenté par trois sources de financement: i) Taxes sur l'exportation des principaux produits responsables de la déforestation en Côte d'Ivoire; ii) Revenus carbonés de la finance climatique et iii) Institutions financières internationales et nationales.

Recommandations sur les mesures d'incitations indirectes pour la gestion durable des forêts en Côte d'Ivoire

Au plan administratif et législatif, il serait utile d'accélérer l'élaboration des textes d'application du nouveau code forestier afin de clarifier certaines dispositions de loi et faciliter leur mise en œuvre. À cette occasion, il faudra alléger les procédures d'obtention de permis d'exploitation des plantations forestières dans le domaine rural. De façon conventionnelle, l'attribution des droits d'exploitation forestière se fait par décision ministérielle qui précise le quota de bois exploitable et les obligations faites pour le contrôle de l'exploitation. Or, le code forestier donne le droit d'exploitation directement au propriétaire terrien. L'administration forestière doit donc créer de nouvelles conditions légales d'exploitation des forêts du domaine rural. Il s'agira de développer des types de contrats directs entre les exploitants forestiers et les propriétaires de forêts ou d'arbres forestiers.

De même il faut formaliser le marché informel du bois pour une meilleure organisation de la filière bois-énergie-sciage à façon. Cette démarche permettra à l'État de contrôler les différents flux de transaction inhérents et d'en tirer profit à travers la fixation d'impôts et taxes. Par ailleurs, le cadre formel permettra de contribuer à l'amélioration des services de surveillance et de conseil de l'administration forestière.

Au plan économique et fiscal, il s'agit de fixer un prix de l'arbre sur pied. L'État devrait définir des modalités de fixation de prix en garantissant une valeur minimale du prix de l'arbre sur pied définie de manière consensuel et en fonction de l'espèce et du diamètre et de la conformation du fût de l'essence forestière.

Mesures fiscales proposées pour la gestion durable des forêts en Côte d'Ivoire

- Mettre en place des taxes de défrichement pour les activités qui entraînent des déboisements sur des superficies de plus de 50 ha
- Mettre en place des taxes carbone pour les industries et manufactures qui rejettent des gaz à effet de serre
- Imposer une taxe écocitoyenne aux entreprises bénéficiant des retombées de la forêt (SODECI, CIE, SIR, Constructeur de véhicules, etc.)

I. CONTEXTE ET INTRODUCTION

En 2015 le BNEDT estimait que le taux de déforestation annuel de la Côte d'Ivoire est successivement passé à 4,32% de 1990 à 2000 et à 2,69% entre 2000 et 2015. La superficie globale des forêts est ainsi passée de 16 millions d'hectares au début du siècle à 3,4 millions d'hectares en 2015². En effet, au lendemain des indépendances, la Côte d'Ivoire a basé sa politique de développement économique sur l'agriculture. Les résultats de ce choix ont été prometteurs, puisque les devises générées par les produits d'exportation (cacao, café, hévéa, palmier à huile) ont propulsé la croissance économique du pays³. Dès lors, une attractivité économique est née autour des cultures de rente dans un contexte national de pauvreté (46,3%), de croissance démographique (2,55% par an) et de mauvaise application des lois, poussant les producteurs à transformer les forêts en plantations agricoles⁴. Ainsi, de manière continue et constante, la forêt naturelle ivoirienne a perdu ses surfaces au profit des cultures d'exportation. Cette tendance aura des conséquences désastreuses écologiques, économiques, mais aussi sociales du fait des tensions provoquées par la course à l'occupation illégale des terres.

Une des réponses pour stopper la disparition des forêts a été de promouvoir l'aménagement durable des forêts de production. Le concept de gestion durable des forêts a été proposé en 1993 par la Conférence ministérielle sur la protection des forêts en Europe, puis adopté par la FAO qui l'a défini comme « une gestion de l'utilisation des forêts et des terrains boisés, d'une manière et à une intensité telle qu'elles maintiennent leur diversité biologique, leur productivité, leur capacité de régénération, leur vitalité et leur capacité à satisfaire, actuellement et pour le futur, les fonctions écologiques, économiques et sociales pertinentes au niveau local, national et mondial, et qu'elles ne causent pas de préjudices à d'autres écosystèmes ». Ainsi tout comme la notion de développement durable, la gestion des forêts devrait intégrer les aspects écologiques, sociaux et économiques. En 2004, le Forum des Nations unies sur les forêts⁵ identifiait sept critères qui permettent d'évaluer la gestion durable des forêts en abordant toutes ses fonctions. Ces critères concernent (i) l'étendue des ressources forestières; (ii) la diversité biologique; (iii) la santé et vitalité des forêts; (iv) les fonctions productives des ressources forestières; (v) les fonctions de protection des ressources forestières; (vi) les fonctions socio-économiques et (vii) les cadres juridiques, politiques et institutionnels.

Malgré trois décennies d'application, ces stratégies d'aménagement et de gestion durable des forêts ont eu peu d'impact sur la préservation des forêts. En effet elles s'appuient en général sur des incitations indirectes, par lesquelles la protection des forêts constitue le bénéfice secondaire d'une autre activité d'exploitation économique de la forêt. Ainsi, cette activité de protection des forêts n'est ni financièrement attrayante ni écologiquement satisfaisante.

Après les résultats mitigés des différentes politiques et stratégies de gestion durable des forêts, la Côte d'Ivoire a adopté en 2018 la Déclaration de Politique de Préservation, de Réhabilitation et d'Extension des Forêts (PREF), traduite en stratégie dont la mise en œuvre couvrira la période 2019-2030. À travers cette nouvelle stratégie forestière, le Gouvernement entend mobiliser l'ensemble des acteurs publics, de la société civile et surtout du secteur privé autour des forêts ivoiriennes, pour assurer la préservation l'environnement, la lutte contre le changement climatique et le développement socio-économique. Cette stratégie met l'accent sur le renforcement et le strict respect du dispositif législatif et réglementaire de protection des arbres et des massifs forestiers ainsi que sur l'augmentation du nombre des aires protégées et des forêts classées et la restauration des forêts à travers la promotion de l'agroforesterie dans les parcelles agricoles.

Ainsi, conscient que la mise en place de mesures d'incitation appropriées permet de garantir une gestion durable des forêts, le gouvernement ivoirien à travers le Ministère des Eaux et Forêts (MINEF) a sollicité l'OIBT en vue de réaliser une étude de cas spécifique à la Côte d'Ivoire sur l'état des lieux des mécanismes d'incitation en Côte d'Ivoire.

La présente étude a donc pour objectif d'analyser les mécanismes d'incitation existants pour la gestion durable avant de faire des propositions pour leur amélioration. Dans ce contexte, nous analyserons selon les principes de gestion durable des forêts, d'abord les cadres de politiques, de lois et de gouvernance, mais également le cadre économique, le cadre institutionnel et le cadre de planification pour la gestion durable des forêts. Par la suite nous allons y (ii) déceler les mécanismes d'incitation/dissuasion pour la gestion durable des forêts et les produits de base exempts de déforestation avant de (iii) faire des propositions d'amélioration.

² Côte d'Ivoire : cartographie et identification des moteurs de la déforestation et de la dégradation des forêts, UN-REDD, 2016

³ Afrique plurielle, Cogneau et Mesplé-somps, 2002

⁴ Les émissions liées à l'UTCATF et la disparition des forêts : une situation toujours aussi dramatique, OBSERVATOIRE MONDIAL DE L'ACTION CLIMATIQUE NON-ÉTATIQUE, 2018

⁵ S. Ozinga *Le commerce et la gestion forestière durable...*; [les effets de la certification sur la gestion forestière durable – l'heure de la vérification ?](#)

II. MÉTHODOLOGIE

La réalisation de la présente étude a été guidée par deux principales étapes. D'abord une analyse bibliographique afin de comprendre le cadre politique, administratif, législatif et fiscal, national, sur les mécanismes d'incitation à la gestion des forêts. Ensuite, une phase d'entretien direct et indirect avec les acteurs du secteur forestier dans le but de recueillir leur avis et recommandation pour la mise en place d'un mécanisme plus incitatif à la gestion durable des forêts. De manière plus spécifique, la méthodologie de l'étude a été adaptée aux trois principaux résultats attendus formulés par le maître d'ouvrage.

Résultat 1: Examen du cadre national de gestion durable des forêts, du plan national d'aménagement du territoire et identification des incitations existantes pour la gestion durable des forêts et les produits agricoles « zéro déforestation ».

L'examen des cadres nationaux de gestion durable des forêts et l'identification des incitations existantes pour la gestion durable des forêts et les produits agricoles « zéro déforestation » ont été faits en deux phases: (i) une recherche bibliographique, puis (ii) une phase de consultation des différents acteurs du secteur forestier et fiscal pour collecter des informations complémentaires.

Recherche bibliographique

L'objectif de cette première étape était de collecter les données sur les cadres nationaux politiques, administratifs, législatifs et fiscaux relatifs aux mécanismes d'incitation à la gestion durable des forêts, ainsi que sur le plan d'aménagement du territoire ivoirien. À cet effet, des documents physiques et numériques ont été consultés afin de faire ressortir les grandes lignes descriptives de l'état des lieux sur les mesures incitatives en Côte d'Ivoire. Ces documents ont été tirés, en partie, des archives du Ministère des Eaux et Forêts, du Ministère du plan et du développement et du Ministère de l'Économie et des Finances notamment sur la fiscalité.

Consultation des acteurs du secteur forestier et fiscal

Il était question, dans cette phase, de collecter les informations supplémentaires sur documents physiques et numériques étudiés lors de la recherche bibliographique. Ainsi, en fonction des catégories d'acteurs, les discussions ont porté sur: (i) les procédures de planification de l'utilisation des terres au niveau national et local; (ii) les pistes d'amélioration des cadres nationaux de gestion durable des forêts; (iii) les textes du code forestier notamment les articles sur la création des forêts et la propriété de l'arbre; (iv) les mesures d'incitation existantes ou à introduire pour la gestion durable des forêts et pour les produits zéro déforestation, ainsi que les obstacles identifiés. En raison des restrictions sanitaires et au-delà des échanges téléphoniques effectuées auprès de personnes ressources pour l'approfondissement des informations, neuf acteurs ont été finalement enquêtés (voir annexe 1). De manière spécifique, les discussions ont visé quatre acteurs du secteur public, un des structures de recherche, un des structures de coopération internationale et trois de la société civile.

Résultat 2: Identification des éléments dissuasifs pour les acteurs économiques à retirer et propositions de mesures incitatives fiscales et non fiscales favorables à la gestion durable des forêts.

À cette étape, une fiche de collecte de données a été transmise aux différents acteurs du secteur forestier ivoirien afin qu'elle soit renseignée pour servir ensuite pour le développement d'une base de données. Il s'agissait notamment de collecter les données, sur: (i) les mesures incitatives qui devraient être mises en œuvre pour assurer une gestion durable des forêts; (ii) les mesures réglementaires et administratives dissuasives qui limitent la mise en place de mécanismes d'incitation appropriés à la gestion des forêts; (iii) les mesures incitatives fiscales et non fiscales appropriées devraient être mises en œuvre; (iv) mesures fiscales et non fiscales inappropriées qui devraient être supprimées pour faciliter la gestion durable des forêts.

Les données recueillies auprès des acteurs ont permis de formuler des recommandations claires sur les mesures incitatives à introduire ou à retirer pour assurer la participation de toutes les composantes de la société à la gestion durable des forêts ivoiriennes.

Résultats 3: Examen et description des coûts et de l'impact potentiel des incitations fiscales et non fiscales (scénario multiple) en faveur du bois durable et des produits de base exempts de déforestation.

Sur la base des documents collectés lors de la recherche bibliographique, une analyse des taxes et coûts des incitations fiscales liée à la gestion durable des forêts a été faite. D'abord, une analyse des documents du Ministère de l'Économie et des Finances sur la fiscalité forestière a été faite afin de faire ressortir les différentes taxes collectées par l'Etat. De plus, une analyse de la redistribution des taxes a été réalisée afin d'évaluer leur impact sur l'incitation des acteurs à la gestion durable des forêts. Ainsi, ont été analysés: (i) la structure des coûts de la fiscalité et des recettes forestières, (ii) les données de volume de production et les superficies exploitées (iii) les dispositions du nouveau code forestier sur la fiscalité et (iv) les mesures fiscales spécifiques à divers pays tropicaux ayant contribué à une gestion durable des forêts.

Pour terminer, les recommandations sur l'amélioration du cadre politique, législatif et réglementaire, ont été formulées par l'ensemble des acteurs rencontrés.

III. ANALYSE COMPARATIVE DES CADRES NATIONAUX DE GESTION DURABLE DES FORÊTS

L'analyse des cadres nationaux de gestion durable des forêts sera faite à partir d'une analyse du cadre politique, le législatif et réglementaire, et le cadre institutionnel.

3.1 Analyse du cadre politique pour la gestion durable des forêts

Avec une dégradation persistante du patrimoine forestier depuis l'indépendance, le cadre politique pour la gestion n'a pas cessé d'évoluer avec des fortunes diverses quant au succès dans la mise en œuvre.

3.1.1 Cadre politique passée: 1988 à 2017

A. En avril 1988 le gouvernement adoptait le Plan Directeur Forestier (PDF) 1988-2015 avec cinq objectifs majeurs visant à aider à la reconstitution de la forêt et à la réhabilitation du secteur en urgence et parallèlement à engager des actions de pérennisation du patrimoine forestier par:

1. Le maintien du potentiel exploitable de la forêt naturelle en réduisant les prélèvements sans compromettre l'avenir de la filière;
2. La restauration du couvert végétal en priorité dans le milieu rural et la reconquête des formations forestières résiduelles;
3. L'aménagement des forêts classées pour remédier à leur dégradation et procéder à une exploitation soutenue compatible avec la préservation de la biodiversité;
4. L'augmentation des rendements d'exploitation en modernisant les méthodes et techniques d'exploitation, l'arrêt des infiltrations et l'apurement des forêts classées;
5. L'amélioration de la transformation et la commercialisation.

B. En juillet 1994 le gouvernement a entrepris une réforme de l'exploitation forestière qui a permis de réorganiser l'espace de production en Périmètres d'Exploitation Forestière (PEF) de superficies plus importantes et de proposer d'introduire l'aménagement forestier simplifié dans les forêts du Domaine Rural;

C. En septembre 1999, le Gouvernement a adopté les nouvelles orientations de politique forestière à la suite d'un bilan diagnostique de la politique forestière réalisé en 1998 qui lui s'inspirait des expériences de la mise en œuvre du Projet Sectoriel Forestier phase 1 (PSF1) de 1991 à 1996 qui devaient conduire à l'atteinte des objectifs de production durable des forêts. Cinq axes majeurs ont été définis pour garantir la gestion durable des forêts:

1. La gestion de la ressource ligneuse dans le domaine rural avec le transfert de la propriété de l'arbre naturel aux populations paysannes;
2. La responsabilisation des industriels du bois dans l'approvisionnement de leurs unités de transformation en les encourageant à reconstituer leur gisement de bois d'œuvre;
3. Le recentrage des activités de gestion forestière sur les espaces les mieux conservés et la contractualisation des occupations dans les forêts classées;
4. La valorisation des potentialités environnementales des milieux forestiers;
5. L'organisation du secteur forestier pour assurer une meilleure efficacité.

Malgré les innovations importantes adoptées à cette époque, la déclaration de politique forestière n'a pas connu de mise en œuvre véritable. Un certain nombre de problèmes de fond, accentués par les troubles sociaux et la guerre intervenue dans le pays, ont exacerbé les difficultés de mise en œuvre. Ces problèmes qui ont été caractérisés par divers rapports peuvent être regroupés en ces points suivants:

- a. La progression et le développement des occupations agricoles et humaines principalement dans les forêts classées, avec la menace d'une disparition totale du couvert forestier à terme;
- b. La difficulté d'assurer une gestion durable du capital ligneux dans le domaine rural et l'extension du front de l'exploitation de bois d'œuvre au-delà du 8ème parallèle, écosystème fragile, touchant certains parcs nationaux avec une menace persistante sur l'approvisionnement des unités de transformation;
- c. Le manque d'investissement dans le renouvellement et l'acquisition d'outils adaptés à la transformation rationnelle de la matière ligneuse disponible;
- d. Le prélèvement incontrôlé de la faune et le manque de valorisation de la diversité biologique présente dans les forêts classées et dans les aires protégées;
- e. L'absence de soutien scientifique et technique aux activités du secteur forestier avec la disparition de la recherche forestière depuis la réforme de 1995;
- f. L'inadaptation des programmes de formation des ressources humaines aux besoins des utilisateurs qui ne tiennent pas compte des concepts de gestion durable;
- g. Le manque de financement adéquat de l'ensemble du secteur forestier.

Après plusieurs échecs dans la mise en œuvre des politiques forestières, la Côte d'Ivoire s'est engagée dans divers processus internationaux de gestion durable dont les plus connus sont le processus FLEGT

(*Forest Law Enforcement Governance and Trade*) pour l'amélioration de la gouvernance forestière ainsi que le mécanisme REDD+ pour lutter contre les facteurs de la déforestation et de la dégradation des forêts.

3.1.2 Nouveau cadre de politique forestière

Stratégie de préservation, de réhabilitation et extension des forêts de Côte d'Ivoire

En 2017, le gouvernement ivoirien s'est engagé au plus haut niveau sur la question de la déforestation. Ainsi, il a d'abord redéfini la forêt en la considérant comme une « *terre occupant une superficie de plus de 0,5 hectares avec des arbres atteignant une hauteur supérieure à cinq mètres et un couvert arboré de plus de dix pour cent, ou avec des arbres capables d'atteindre ces seuils in situ*⁶ ». Ensuite, il s'est fixé comme objectif très ambitieux de restaurer la couverture forestière en la faisant passer de 10% à 20% de la superficie totale nationale. Par ailleurs, Il a développé en 2018 une nouvelle politique nationale de préservation, de réhabilitation et d'extension des forêts, qui précise les grands axes adoptés par le gouvernement pour gérer ses réserves forestières en impliquant les populations locales, la société civile et le secteur privé. Cette politique est fondée sur quatre principes: (i) le volontarisme, qui se traduit par une prise de conscience du gouvernement et une mobilisation de l'ensemble des acteurs autour de l'intérêt de la forêt; (ii) le réalisme, qui concerne la reconnaissance de la situation actuelle des forêts avec un choix fort à faire; (iii) la reconnaissance, qui considère que tous les arbres séquestrent du carbone et enfin (iv) le principe de sortir de la « logique de cueillette » et son remplacement par la « logique de culture » pour promouvoir la restauration des forêts.

La stratégie de préservation, de réhabilitation et extension des forêts de Côte d'Ivoire qui en découle a été présentée en février 2019 par le Ministre des Eaux et Forêts, M. Alain Donwahi avant d'être adopté en conseil des Ministres. Elle permet de placer la préservation et la réhabilitation des forêts de Côte d'Ivoire au rang de priorité nationale, avec un objectif de reconstitution du couvert forestier à hauteur de 20% à horizon 2040 et lutter ainsi contre les effets du changement climatique. En effet d'un montant global de 616 milliards FCFA, couvrant la période 2019-2030, cette stratégie se décline en trois axes que sont :

1. L'amélioration de la gouvernance forestière;
2. Le renforcement de la protection des massifs forestiers résiduels, leur extension et leur gestion durable
3. La reconstitution des zones forestières dégradées et l'adaptation aux changements climatiques

3.2 Analyse du cadre législatif et réglementaire pour la gestion durable des forêts

La réglementation forestière a beaucoup évolué avec le temps et l'épuisement de la ressource ligneuse.

3.2.1 Règlementation forestière avant 2014

En effet avant 2014, la réglementation forestière s'appuyait sur les lois suivantes :

- a) La loi n° 65-425 du 20 décembre 1965 portant code forestier qui définit le Domaine Forestier de l'État et précise au titre de ce Domaine les catégories suivantes: (i) Les forêts classées; (ii) Les forêts protégées; (iii) Les périmètres de production; (iv) Les reboisements.
- b) La loi n° 65-225 du 4 août 1965 relative à la protection de la faune et à l'exercice de la chasse telle que modifiée par la loi n°94-442 du 16 août 1994;
- c) La loi n° 96-766 du 3 octobre 1996 portant Code de l'Environnement; (iv) la loi n°98-750 du 23 décembre 1998 portant régime foncier rural qui consacre le droit coutumier des communautés rurales sur la terre.
- d) La loi n°2002-102 du 11 février 2002 relative à la création, à la gestion et au financement des parcs nationaux et réserves.

En application de ces lois, différents décrets et arrêtés ont été pris parmi lesquels on peut citer:

1. Le décret 66-422 du 15 Septembre 1966 portant création de la SODEFOR (Société pour le Développement des Plantations Forestières) et le décret n°93-206 du 03 février 1993 relatif à la transformation de la SODEFOR en société d'État et qui devient Société de Développement des Forêts;
2. Le décret 66-428 du 15 septembre 1966, définissant les procédures de classement des forêts domaniales;
3. Le décret n°78-231 du 23 mars 1978, pris en application de la loi n° 65-425 du 20 décembre 1965 portant code forestier, qui fixe les modalités de gestion du Domaine Forestier de l'État, qui est subdivisé en deux à savoir, le Domaine Forestier Permanent (DFP) d'une part, et le Domaine Forestier Rural d'autre part. Ce décret assigne les fonctions de production de bois et de garantie de l'équilibre écologique au DFP tandis que le Domaine Forestier Rural constitue une réserve de terres pour les opérations agricoles.
4. Le décret n° 83-743 du 28 juillet 1983, instituant en Côte d'Ivoire une journée de l'arbre;

⁶ Évaluation des ressources forestières mondiales, FAO, 2015

5. Le décret n° 86-378 du 04 juillet 1986, portant création d'un Secrétariat Permanent du Comité National de Défense de la Forêt et de Lutte contre les Feux de Brousse (CNDLFB);
6. Le décret n°94-368 du 01 juillet 1994, portant réforme de l'exploitation forestière;
7. Le décret n°97-130 du 07 mars 1997, portant réglementation de la détention et de l'interdiction du commerce de l'ivoire;
8. Le décret n° 2002-359 du 24 juillet 2002, portant création, organisation et fonctionnement de l'Office Ivoirien des Parcs et Réserves (OIPR);
9. L'arrêté n°033/SPN/CAB du 20 février 1974 portant fermeture de la chasse sur toute l'étendue du territoire national;
10. L'arrêté n°033/MINAGRA du 13 février 1992 confiant à la SODEFOR la gestion de l'ensemble des forêts classées.

Face aux insuffisances du code forestier de 1965 pour une gestion durable des forêts, le Ministère des Eaux et forêts va entamer la révision du code forestier de 1965.

3.2.2 Le Code forestier ivoirien de 2014

En 2014 un nouveau code forestier a été adopté. Ce nouveau code forestier, influencé par les processus internationaux comme FLEGT et REDD+ a mis en avant les enjeux et les perspectives d'une gestion durable du couvert forestier ivoirien. Cette nouvelle loi a créé un cadre de « gestion durable de la forêt » et introduit des innovations en matière de conservation et de reconstruction du couvert végétal avec « *une plus grande implication des populations* ». Une des innovations majeures fut la reconnaissance de la propriété de l'arbre reconnu au propriétaire de la terre avec la possibilité à tous les citoyens de créer des forêts, quand bien même cette possibilité demeure problématique compte tenu du faible taux d'immatriculation de des terres en Côte d'Ivoire et du nombre limité de certificats fonciers. De plus, le nouveau code a renforcé le statut des agents techniques des Eaux et Forêts, en faisant d'eux, désormais, des officiers de police judiciaire.

3.2.3 Le Code forestier ivoirien de 2019

En 2019, après la validation de la stratégie de préservation, la réhabilitation et l'extension des forêts en Côte d'Ivoire préservation et d'extension des forêts, un nouveau code forestier a été adopté. Ce nouveau code permet de lever certaines ambiguïtés notamment dans la classification des forêts telles qu'exposées dans le code de 2014 et consacre la gestion durable des forêts comme principe de base. Ainsi, en son article 2, il fixe les objectifs, notamment:

- (i) renforcer, au profit des générations présentes et futures, la contribution du secteur forestier au développement durable par la promotion des fonctions environnementales, socio-économiques et culturelles des ressources forestières;
 - Préserver et valoriser la diversité biologique et contribuer à l'équilibre des écosystèmes forestiers et autres écosystèmes associés;
 - Promouvoir la participation active des populations locales, des Organisations Non Gouvernementales et des associations à la gestion durable des ressources forestières pour l'amélioration de leurs revenus et de leurs conditions de vie, par la prise en compte, en matière forestière de leurs droits individuels et collectifs qui découlent des coutumes, de la loi portant Code Foncier Rural, de la présente loi ainsi que par la vulgarisation de la politique forestière;
 - Promouvoir la création des forêts communautaires, des forêts des collectivités territoriales, des forêts des personnes physiques et des personnes morales de droit privé;
 - Valoriser les ressources forestières par une transformation plus poussée du bois et une meilleure rentabilité des produits forestiers;
 - Favoriser la constitution d'un taux de couverture forestière représentant au moins 20% de la superficie du territoire national;
 - Promouvoir une culture écocitoyenne.
- (ii) Une nouvelle catégorie de forêt est créée. Il s'agit des **agroforêts**. Ce sont anciennement les forêts classées avec un taux de dégradation supérieur à 75% reconnus comme des forêts classées de catégories 3 et qui sont désormais transformés en agroforêts avec un nouveau statut. Ce sont des espaces définis et délimités comme tels, par un texte réglementaire, situé dans le domaine forestier privé de l'État et dans lequel coexistent des plantations agricoles et des arbres forestiers. Le tableau suivant présente les différentes catégories de forêt en fonction des droits fonciers des acteurs selon la nouvelle loi forestière de 2019.

Catégorie primaire	Catégorie secondaire	Catégorie tertiaire	Désignation
A. Domaine forestier des personnes morales de	A1. Domaine forestier de l'Etat	Domaine public de l'Etat	Réserves naturelles intégrales
			Parcs nationaux
			Réserves naturelles partielles

droit public		Domaine forestier privé de l'Etat	Forêts classées
			Agro-forêts
			Forêts acquises ou créées dans le domaine rural par l'Etat
			Jardins botaniques
	A2. Domaine forestier des collectivités territoriales	NA	Forêts classées au nom des collectivités territoriales
			Forêts concédées par l'Etat
			Forêts acquises ou créées dans le domaine rural par les collectivités territoriales
			Jardins botaniques

B. Domaine forestier des personnes morales de droit privé et des personnes physiques	B1. Domaine forestier des personnes morales de droit privé	NA	Forêts naturelles ou créées par des personnes morales de droit privé sur des terres régulièrement acquises
			Forêts communautaires
			Forêts sacrées
	B2. Domaine forestier des personnes physiques	NA	Forêts naturelles situées sur des terres sur lesquelles ces personnes jouissent d'un droit de propriété ou de droits coutumiers conformément à la législation foncière
			Plantations forestières créées sur des terres sur lesquelles ces personnes jouissent d'un droit de propriété, de droits coutumiers ou d'un bail

Source : code forestier 2019

(iii) D'autres spécificités qui prennent en compte l'ensemble des activités rurales et mettent en place un cadre favorable à l'investissement privé. Certaines notions nouvelles ont aussi été introduites comme: l'agroforesterie, l'ordre public écologique, la concession forestière (anciennement les périmètres d'exploitation forestière, ou PEF), l'observation indépendante ainsi qu'une approche participative, multi-acteurs et transparente fondée sur les fonctions d'intérêt général des écosystèmes forestiers.

Cette même année trois décrets, parus au journal officiel numéro 102 du 23 décembre 2019, ont été adoptés par le Gouvernement, dans le prolongement de la loi numéro 2019-675 du 23 juillet 2019 qui institue un nouveau Code Forestier en République de Côte d'Ivoire (journal officiel numéro spécial 18 du 02 Octobre 2019).

Concession de la gestion du domaine forestier privé de l'État: Le premier décret, référencé 2019-978, est relatif à la concession de la gestion du domaine forestier privé de l'État et des collectivités territoriales. Ce décret précise que la mise en concession, qui doit répondre à un besoin d'aménagement, d'exploitation, de protection et de mise en valeur de façon durable des forêts concernées, est précédée d'un appel à manifestation d'intérêt. Pour solliciter une concession, l'entreprise doit justifier: (i) une expertise avérée en aménagement forestier ou agro-forestier; (ii) une expérience d'au moins cinq années en tant qu'entreprise forestière ou agroforestière; (iii) une capacité financière en rapport avec le projet; (iv) sa qualité d'entreprise de droit ivoirien. La concession étant octroyée par décret pris en Conseil des Ministres.

Modalités d'aménagement des agroforêts, d'exploitation des plantations agricoles et de commercialisation des produits agricoles dans les agroforêts. De manière pratique, les agroforêts ont été définies comme des espaces délimités au sein des forêts classées avec un taux de dégradation de plus de 80%. Le décret n° 2019-979 du 27 novembre 2019 organise les modalités d'aménagement des agroforêts, d'exploitation des plantations agricoles et de commercialisation des produits agricoles dans les agroforêts. Ces modalités divergent selon que les agroforêts revêtent un caractère temporaire, ou un caractère permanent. Ainsi, bien que soit autorisée la production durable de cacao associé aux arbres forestiers, il est interdit, dans les agroforêts temporaires, de réaliser des infrastructures et des aménagements sociaux. Le décret précise que l'espace réservé aux agroforêts permanentes ne peut excéder 20% de la superficie totale de la forêt de la forêt classée. Enfin, le décret indique que l'exploitation des plantations agricoles comme le cacao dans les agroforêts, ainsi que la commercialisation des produits agricoles dans les agroforêts sont réalisés selon les conditions indiquées dans la convention de concession qui est précédée par le plan d'aménagement.

Exploitation forestière dans le domaine forestier national: Le décret 2019-980 du 27 novembre 2019 définit les modalités de l'exploitation forestière dans le domaine forestier national, qui est composé des forêts du domaine privé de l'État et des collectivités territoriales, ainsi que des forêts des personnes privées (morales ou physiques). Il indique que l'exploitation est opérée au moyen d'une concession de gestion. Il pose le principe selon lequel les quotas d'exploitation sont fixés par l'Administration forestière, considération prise, notamment, d'un inventaire forestier datant de moins de deux ans, et du seuil de richesse minimum à atteindre pour permettre la régénération de la ressource ligneuse, qui est calculé sur la base des résultats de l'inventaire forestier, et du diamètre minimum

d'exploitabilité⁷. Ce décret se différencie du décret n°94-368 du 1er juillet 1994, en faisant mention d'un quota d'exploitation basé sur un inventaire périodique. Il enlève le flou entourant les conditions d'exploitation au moment de l'attribution. S'agissant des forêts appartenant à des personnes privées, le décret prévoit que la coupe de bois à usage domestique se fait librement par le propriétaire, dans le respect de la gestion durable des forêts, et des dispositions relatives aux espèces protégées. D'autres décrets relatifs entre autres à la participation, l'observation indépendante, le partage des bénéfices issus de la constitution de puits de carbone, à la mise en œuvre des politiques et des stratégies forestières nationales sont discutés et leur signature devaient intervenir en 2020.

3.3 Analyse du cadre institutionnel

3.3.1 Longue instabilité de l'Administration forestière

Le Ministère en charge des Eaux et Forêts a toujours été le principal acteur avec des structures sous tutelle que sont: (i) la Société de Développement des Forêts (SODEFOR) en chargé de la gestion des forêts classées, (ii) le Jardin botanique de Bingerville (JBB) et (iii) le Zoo d'Abidjan. Les parcs nationaux et réserves naturelles sont gérés depuis 2002 par l'OIPR qui est une structure sous tutelle du ministère en charge de l'Environnement et du Développement Durable. Pour l'exercice de ses attributions, le Ministre des Eaux et Forêts dispose depuis 2018, outre le Cabinet, de dix Directions et de Services Rattachés, de deux Directions Générales organisées en Directions Centrales et de vingt-quatre Directions régionales, qu'il est chargé d'organiser par arrêté.

Depuis l'indépendance en 1960, l'administration forestière a connu une instabilité quasi-permanente avec un changement de tutelle toutes les deux années. Plus de trente-quatre Ministres se sont succédés à la tête de ce département. Cette instabilité a eu pour conséquence: (i) un sérieux handicap dans le contrôle, le suivi et même la poursuite des projets et programmes initiés dans le secteur, (ii) l'insuffisance de la mise en œuvre de certaines réformes qui auraient dû non seulement apporter un changement structurel mais aussi une autonomie fonctionnelle pour apporter une réponse aux problèmes de gestion du secteur. À cela, il faut ajouter (iii) le personnel technique en nombre insuffisant et moins expérimenté sur les thématiques de gestion durable des forêts; (iv) les moyens matériels et financiers insuffisants; (v) l'absence d'une structure formelle d'encadrement des reboisements (essentiellement les structures chargées de l'encadrement et du suivi des reboisements dans le milieu rural), (vi) le mauvais fonctionnement du système d'information (absence ou une incohérence dans les statistiques forestières qui ne sont plus produites régulièrement depuis 1995) ainsi que (vii) l'absence de coordination intersectorielle, compte tenu du fait que les forêts regroupent plusieurs secteurs d'activités.

3.3.2 Les solutions du gouvernement pour améliorer le cadre institutionnel de gestion durable des forêts

En dépit de toutes ces contraintes, le pays dispose néanmoins d'une administration forestière opérationnelle qui essaie de mettre en œuvre les politiques et stratégies de gestion des forêts. Plusieurs modifications ont été faites pour renforcer l'efficacité de l'administration forestière. Il s'agit entre autres de:

- La création d'une Direction générale des Forêts et de la Faune, permettant de mieux concentrer l'effort sur le secteur;
- La création d'une Direction centrale rattachée à la Direction générale des Forêts et de la Faune, destinée à améliorer l'encadrement et la gestion des carrières des Agents techniques;
- La création d'une Direction générale des Ressources en Eau en vue de rendre opérationnel le Code de l'eau de 1998 ainsi que les réformes relatives à la Gestion intégrée des Ressources en Eau (GIRE);
- Le renforcement du Service de Communication de l'administration forestière afin pour faciliter l'accès et la diffusion des informations;
- Le renforcement de la Sous-direction de la Documentation et des Archivages, gage de la traçabilité de l'action administrative et de la prise de décisions judicieuses;
- La création d'une Brigade spéciale de Surveillance et d'Intervention chargée de prévenir les activités criminelles affectant les forêts et autres ressources, mais surtout d'intervenir rapidement en cas d'infraction;
- La création de Directions régionales, de Directions départementales, de cantonnements et de postes forestiers supplémentaires en vue d'assurer un meilleur maillage du territoire pour une meilleure exécution de la politique forestière nationale.

Ces dernières années le gouvernement s'est engagé dans divers processus internationaux pour l'amélioration de la gouvernance forestière (FLEGT) ainsi que dans l'initiative de réduction des émissions des gaz à effet de serre lié à la déforestation et la dégradation des forêts (REDD+). Ces deux initiatives font la promotion de la gestion durable des forêts à travers une approche participative,

⁷ Décret N°2019-980 du 27 novembre 2019 relatif à l'exploitation forestière dans le domaine forestier national

inclusive et transparente. La révision de la loi forestière a pris en compte ces évolutions. Dans cette nouvelle loi, l'état n'est plus reconnu comme seule gestionnaire des forêts. En effet la loi indique en son article 5 que pour assurer la mise en œuvre de la politique forestière nationale, l'État associe différents acteurs notamment: (i) les collectivités territoriales; (ii) les institutions de recherche; (iii) les opérateurs du secteur privé; (iv) les organisations de la société civile; (v) les communautés rurales ainsi que (vi) les partenaires au développement que l'état peut solliciter.

3.4 Analyse du régime foncier et influence sur la gestion de forêts

3.4.1 Analyse du régime foncier

La Côte d'Ivoire a adopté une Loi relative au domaine foncier rural en 1998 (Loi 98-750 du 23 décembre 1998 relative au domaine foncier rural modifiée par la loi 2004-412 – Côte d'Ivoire), qui s'inscrivait dans un cadre de législations foncières avancées. Elle a réalisé d'importants progrès en permettant aux communautés de voir leurs droits reconnus officiellement sur une base coutumière en tant que collectivités. Cette reconnaissance coutumière devrait être transformée en reconnaissance légale à travers le certificat foncier à titre transitoire. En son article 7, la loi précise que les droits coutumiers sont constatés au terme d'une enquête officielle réalisée par les autorités administratives et les conseils des villages concernés couronnés par la délivrance d'un certificat foncier. Ceci permettait une reconnaissance juridique des propriétés familiales, ainsi que le droit des communautés à posséder des terres en tant que groupe. Ceci permet ainsi aux communautés de qualifier officiellement de biens communs des zones boisées et pastorales résiduelles situées en dehors des propriétés familiales.

Malheureusement, dans son application, la loi a été entravée par un obstacle majeur. Pour que les droits fonciers soient constitués en pleine propriété les « certificats fonciers » doivent être transformés en titres de propriété foncière (via l'immatriculation) dans un délai de 3 ans selon l'article 24. Passé ce délai, la terre serait déclarée sans maître et l'immatriculation sera faite au nom de l'Etat. Par ailleurs, le requérant dispose de 3 mois non renouvelables pour solliciter un transfert d'immatriculation, c'est-à-dire une transformation du titre de propriété foncier public en titre de propriété foncier privé.

Les droits coutumiers, tels que mentionnés dans les certificats fonciers ne sont donc pas considérés comme dotés des attributs ou de la protection dont bénéficie la propriété pleine et entière. Ils sont considérés comme inférieurs à la propriété, peut-être comme des simples droits d'occupation et d'usage sur des terres sans maître. Pour être garantis, les droits coutumiers reconnus avec le certificat devraient être transformés en droits de propriété par le biais de leur conversion en titres fonciers que seules des personnes physiques ou morales ivoiriennes peuvent détenir. Les droits coutumiers de nature temporaire n'étaient valables que jusqu'à une date butoir pour l'acquisition obligatoire de certificats et leur conversion en titres de propriété. Cette date butoir a été fixée à 2023 (World Bank Group, 2016)⁸. Ainsi, à partir de 2023, les propriétaires coutumiers de terres qui n'auraient pas obtenu de certificats puis de titres de propriété pour les terres détenues à titre individuel (y compris les titulaires non autochtones de droits dérivés dans le cadre du régime coutumier) seraient considérés comme dépourvus de terres aux yeux de la loi, dans la mesure où les terres traditionnelles deviendront des terres sans maître et donc appartiendraient à l'État. Dans cette hypothèse, l'État deviendrait donc propriétaire des arbres naturels sur ces terres, puisque propriétaire de la terre.

Face aux contraintes liées à la mise en œuvre de la loi n°98-750 du 23 décembre 1998 relative au domaine foncier rural, (telle que modifiée par les lois n°2004-412 du 14 août 2004 et n°2013-655 du 13 septembre 2013), l'État ivoirien a pris le décret n° 2016-590 du 03 août 2016 portant création, attributions, organisation et fonctionnement de l'Agence Foncière Rurale (AFOR). L'objectif étant d'accélérer le processus de sécurisation des terres. La loi a aussi fait l'objet de modification par la loi n° 2019-868 du 14 octobre 2019. Cette nouvelle loi, qui modifie les articles 2, 4, 6, 9, 12, 17, 23, et 26 de la loi 98-750 du 23 décembre 1998, est parue au Journal officiel n°96 du 2 décembre 2019. Les principales modifications apportées par cette nouvelle loi sont décrites ci-après:

- **Délimitation du domaine foncier rural:** Il ressort de la loi 2019-868 du 14 novembre 2019 que les espaces constitutifs d'aires protégées et de zones touristiques dûment constituées n'ont plus la caractéristique de terres du domaine foncier rural, au même titre que le domaine public, les périmètres urbains, les zones d'aménagement différé dûment constituées, et le domaine forestier classé.
- **Procédures et délais:** Le délai maximal dans lequel les terres objet de certificats fonciers individuels ou collectifs doivent faire l'objet d'immatriculation n'est plus fixé à trois ans par la loi. Ce délai sera précisé par un décret pris en Conseil des Ministres. En outre, les délais à l'issue desquels certaines terres sont considérées comme sans maître ne sont plus déterminés par la loi. Ils seront fixés par un décret pris en Conseil des Ministres.
- **Occupants de bonne foi sans titre:** La loi n° 2019-868 du 14 octobre 2019 insère un nouvel article 8 bis qui indique que les droits des occupants de bonne foi non admis au bénéfice du

⁸ Cadre d'analyse de la gouvernance foncière de la Côte d'Ivoire, World Bank Group, 2016

certificat foncier sont (en cas de délivrance d'un certificat foncier), confirmés par le titulaire du certificat de façon juste et équitable entre les parties.

- **Abrogation des articles 20, 24 et 25:** Les articles 20, 24 et 25 de loi relative au domaine foncier rural sont abrogés. *L'article 20 disposait que les propriétaires de terres du domaine foncier rural étaient (hormis l'Etat) soumis à l'obligation de les mettre en valeur, avec la possibilité de les y contraindre selon des conditions édictées par décret pris en Conseil des Ministres. Cette disposition abrogée permet de considérer les mises en valeur forestière naturelle.*
- **Interdiction de cession de terres dépourvues de certificats fonciers:** La loi n° 2019-868 du 14 octobre 2019 interdit la cession de terres coutumières dépourvues de certificats fonciers.

3.4.2 Interactions entre le code foncier et le code forestier

Les droits fonciers déterminent les modes de faire-valoir forestier qui concernent donc la question de savoir qui possède les terres forestières et qui les utilisent, les gèrent et prend les décisions les concernant. Ils déterminent aussi qui est autorisé à utiliser les ressources, de quelle manière, pour quelle durée et dans quelles conditions, et qui peut transférer les droits à autrui et comment. Les nouvelles dispositions du code forestier ont ainsi intégré plusieurs éléments relevant du régime foncier forestier.

Les dispositions du Code forestier liées au régime foncier comprennent:

Droit de propriété des forêts et des arbres

1. La participation effective des populations locales est l'un des objectifs de la loi, notamment « par la prise en compte, en matière forestière, de leurs droits individuels et collectifs qui découlent des coutumes, de la loi portant Code Foncier Rural, de la présente loi et par la vulgarisation de la politique forestière. » (Article 2)
2. Seuls l'État, les Collectivités territoriales, les communautés rurales, les personnes physiques ivoiriennes et les personnes morales ivoiriennes sont admis à en être propriétaires. (Article 19)
3. Les forêts privées (les forêts dont les personnes physiques ou morales sont propriétaires ou locataires) comprennent les forêts naturelles, les plantations forestières, et les forêts acquises (Article 36 et 37). Les propriétaires privés exercent leur droit de propriété sur les produits de toute nature de leur forêt, à l'exclusion des produits miniers et des espèces de faune et de flore protégées (Article 73). Ils bénéficient également d'un droit de préemption en cas de cession des droits sur les ressources naturelles autres que les ressources forestières. (Article 74)
4. Les forêts des communautés rurales appartenant à une ou plusieurs communautés rurales comprennent: les forêts naturelles situées sur des terres sur lesquelles les communautés rurales jouissent d'un droit de propriété ou de droits coutumiers; les plantations forestières qu'elles occupent en vertu de la coutume locale ou d'un bail; les forêts cédées aux communautés rurales par l'Etat, les collectivités territoriales ou les personnes physiques ou morales; et les forêts qu'elles ont acquises. (Article 40)
5. Les communautés rurales, propriétaires de forêts, exercent leur droit de propriété sur les produits de toute nature, à l'exception des produits miniers et des espèces de faune et de flore sauvages protégées. (Article 77)
6. Les produits issus des forêts sur les terres régulièrement concédées en vertu de la législation foncière appartiennent à leurs concessionnaires. (Article 20)
7. Les arbres situés, soit dans un village, soit dans son environnement immédiat, soit dans un champ collectif ou individuel, sont la propriété collective du village ou celle de la personne à laquelle appartient le champ. (Article 21)
8. Ce dernier point est renforcé par l'article 32: "*Les produits forestiers non situés dans le domaine forestier national, notamment les arbres hors forêts, appartiennent aux personnes physiques ou morales à qui la législation domaniale et foncière reconnaît un droit de propriété ou de droits coutumiers sur la terre*". Ces arbres peuvent être vendus par leur propriétaire (qu'il s'agisse d'un village ou d'un individu) (Article 21).
9. Le domaine forestier classé comprend: les forêts de protection, les forêts de production, les forêts de récréation, les forêts d'expérimentation. Ceci peut également inclure les forêts créées ou maintenues en l'état pour la protection de l'eau, des sols, ou autres. (Article 23-24)
10. Les forêts sont classées par voie légale ou par décret. (Articles 23-25)
11. Le domaine forestier protégé comprend: les forêts non classées de l'État, les forêts privées (sur les terres immatriculées et propriétés de personnes physiques ou morales), et les forêts situées sur des terres sans maîtres. (Article 27)
12. Les forêts du domaine rural qui n'ont pas fait l'objet d'un acte de classement sont des forêts protégées soumises à un régime juridique moins restrictif sur les droits d'usage. (Article 28)
13. Le domaine forestier de l'État comprend les forêts classées au nom de l'État, les forêts protégées situées sur des terres non immatriculées, et les forêts protégées situées sur des terres sans maîtres. (Article 29-31)

14. Les forêts reconstituées appartiennent aux propriétaires concernés, mais les concessionnaires forestiers qui ont réalisé les opérations de mise en valeur bénéficient d'un droit de préemption sur la propriété de la forêt. (Article 38)

Mode de faire-valoir/droits d'usages sur les terres forestières

15. Toute forêt doit faire l'objet d'un enregistrement. (Article 39)
16. Les droits d'usage forestier, définis comme accès à un moyen de subsistance, ne s'étendent pas au sous-sol, et ne s'appliquent pas aux forêts des communautés rurales, aux forêts des personnes physiques et aux forêts des personnes morales de droit privé qui peuvent établir leurs propres règles d'usage, ce qui comprend la suspension des droits d'usage. (Article 43-44)
17. Les produits forestiers prélevés en vertu des droits d'usage forestier ne donnent lieu au paiement d'aucune taxe ou redevance à l'Administration forestière. (Article 45)
18. Les droits d'usage forestier sont limités dans les forêts classées. (Article 46)
19. Les forêts du domaine public de l'État des Collectivités territoriales sont affranchies de tout droit d'usage portant sur le sol forestier. Les défrichements y sont formellement interdits. (Article 47)
20. Les forêts appartenant à des personnes physiques ou morales de droit privé doivent faire l'objet d'un plan d'aménagement forestier simplifié, et les communautés rurales peuvent élaborer des plans d'aménagement simplifiés, et faire appel à l'administration forestière pour les réaliser. (Article 72, 74, 75, 76)
21. Les forêts sacrées font l'objet de droits d'usage forestier admis par les us et coutumes (Article 48 et 75).
22. Lorsqu'elles sont enregistrées, elles peuvent bénéficier d'une assistance de l'Administration forestière. Les gestionnaires des forêts sacrées peuvent autoriser toute organisation à protéger et gérer les forêts. (Article 78).

3.5 Planification de l'utilisation des terres et gestion durable des forêts

3.5.1 Processus national de planification de l'utilisation des terres

La planification de l'utilisation des terres est un processus consistant à découper la terre d'un paysage donné en fonction des différents usages économiques, environnementaux et sociaux à modeler. L'objectif est de trouver des combinaisons d'utilisation foncière capables de répondre aux besoins vitaux de l'ensemble des acteurs⁹. Ainsi à terme, la planification permettra de visualiser les activités à implémenter y compris les synergies entre les différents acteurs et les différents usages de la terre.

Schéma Régional d'Aménagement et de Développement du Territoire (SRADT)

En Côte d'Ivoire, la politique d'Aménagement du Territoire en Côte d'Ivoire a été pendant longtemps conçue au travers des plans quinquennaux et menés durant deux décennies jusqu'à la crise économique survenue à partir des années 1980, laquelle va mettre un terme à cette dynamique avec l'avènement des Programmes d'Ajustement Structurel (PAS).

Dans un souci de renouer avec les performances économiques passées, le Ministère chargé du Plan a jugé utile de relancer la Politique de l'Aménagement du Territoire en 2002 avec la naissance des collectivités territoriales. Cette relance s'est matérialisée par la mise en place d'outils administratifs, juridiques, techniques et financiers indispensables à la mise en œuvre de l'aménagement du territoire en Côte d'Ivoire sur la base notamment de la loi n° 2003 du 07 Juillet 2003 portant transfert et répartition de compétences de l'État aux Collectivités territoriales. À cet effet, un guide méthodologique d'élaboration et de mise en œuvre du Schéma Régional d'Aménagement et de Développement du Territoire (SRADT) a été conçu en 2008 avec un manuel pour chaque région de la Côte d'Ivoire. Ainsi, chacune des régions était tenue de réaliser un Schéma Régional d'Aménagement et de Développement du Territoire (SRADT). Après la crise politique de 2011, la politique de la décentralisation va connaître une réforme avec l'Ordonnance no 2011-262 du 28 septembre 2011 d'orientation sur l'organisation générale de l'administration territoriale de l'État avec l'érection de la région en Collectivité Territoriale.

La région constitue désormais le niveau de conception, de programmation, d'harmonisation, de soutien, de coordination et de contrôle des actions et des opérations de développement économique, social et culturel qui s'y réalisent avec l'intervention de l'ensemble des acteurs (étatiques et non étatiques). Elle est également l'échelon d'exécution des réalisations d'intérêt général. À ce titre, la région doit se doter d'un cadre cohérent pour coordonner les actions d'aménagement et de développement qui s'y déroulent. C'est le Schéma Régional d'Aménagement et de Développement du Territoire (SRADT). Il s'agit d'un outil de planification territoriale qui fixe les orientations fondamentales à long terme en matière d'aménagement et de développement durable du territoire régional. Il poursuit un triple objectif: un développement intégrant le progrès social, la protection de l'environnement et l'efficacité économique. Certaines régions comme celle de la Nawa ont été les premières à élaborer leur SRADT. Malheureusement les questions environnementales restent faiblement abordées.

⁹ <http://www.fao.org/sustainable-forest-management/toolbox/modules/land-use-planning/basic-knowledge/fr/>

Processus local de planification de l'utilisation des terres

À l'échelle des villages il est prévu le développement d'un Plan de Développement Local (PDL)¹⁰ développé avec l'appui du SEPRED dans le cadre du projet REDD+. Il s'agit de la déclinaison du SRADT à l'échelle du village.

3.5.2 Analyse des procédures de création de domaines forestiers permanents

Autrefois appelé forêt du domaine permanent de l'État, les forêts dont la propriété est détenue par l'État ont été classées en **domaine forestier des personnes morales de droit public**. Il comprend le domaine forestier de l'État et le domaine forestier des collectivités territoriales. Le domaine forestier de l'État est subdivisé en deux catégories, le domaine public et le domaine privé.

Le domaine public de l'État (article 21) comprend les réserves naturelles intégrales, les parcs nationaux et les réserves naturelles partielles régis par la législation relative à la gestion et le financement des parcs nationaux et réserves naturelles. Quant au **domaine forestier privé de l'État (article 22)**, il comprend: les forêts classées, les Agroforêts, les forêts acquises ou créées dans le domaine rural par l'État et les jardins botaniques.

Le domaine forestier des collectivités territoriales est constitué des forêts classées au nom de celles-ci, des forêts concédées par l'État, des forêts acquises ou créées dans le domaine rural par celles-ci et de jardins botaniques.

Les articles, 29, 30, 31, 32 et 33 définissent les modalités de classement ou de création de domaines forestiers permanents¹¹. Ainsi, peuvent faire l'objet de classement les forêts destinées à: la satisfaction du régime hydrique et du climat; la protection des sols et des pentes contre l'érosion; la protection de la diversité biologique et de l'environnement humain; la satisfaction des besoins en produits forestiers; la protection et le renforcement des berges des plans et des cours d'eau; la protection des eaux souterraines et toutes autres fins jugées utiles par l'autorité compétente.

Les modalités de classement sont définies par décret pris en Conseil des Ministres. D'après le décret N° 2019-977 du 27 novembre 2019 portant procédures de classement des forêts et des agroforêts, toute forêt du domaine forestier national régulièrement acquise par l'État, peut être classée dans le domaine forestier privé de l'État ou des collectivités territoriales soit à l'initiative de l'Administration forestière ou soit à la demande d'une collectivité territoriale.

Pour cela, une commission de classement présidée par le Préfet de région est mise en place. C'est celui-ci qui porte le projet de classement de la forêt à la connaissance des populations par moyens habituels de publicité. Il assure en particulier l'affichage dudit projet, avec indication des limites précises, aussi bien dans les préfectures que dans les sous-préfectures et villages dont dépend la forêt à classer. Le délai d'affichage est de quatre-vingt-dix (90) jours à compter de l'apposition des placards aux chefs-lieux des préfectures concernées. Ainsi tout titulaire de droits d'usage, toute personne peut former une opposition, dans le délai imparti par l'enquête de *commodo* et *incommodo*, sur tout ou partie de la forêt à classer. La commission de classement est en charge de l'examen des réclamations. À l'issue des travaux, le Président de la commission transmet le projet de classement et le procès-verbal général des opérations au Ministre chargé des forêts. C'est celui-ci qui soumet le décret de classement au Conseil des Ministres, pour adoption.

3.5.3 Analyse de la stratégie nationale REDD+

La Côte d'Ivoire s'est engagée dans le processus international REDD+ en 2011. Par la suite, un ensemble de consultations a été entamé afin d'aboutir à la stratégie nationale REDD+ adoptée en 2017. Cette stratégie vise à « engage l'ensemble du pays dans une démarche transformationnelle à travers une approche multisectorielle et intégrée au niveau du territoire, afin de concilier développement économique et social et les objectifs de conservation des ressources naturelles tout en y associant tous les acteurs du développement national, les différents secteurs, les multiples parties prenantes y compris le secteur privé et la société civile, à toutes les échelles, de la capitale aux communautés locales et particulièrement les femmes et les populations vulnérables dans un cadre de gouvernance amélioré et de respect de leurs droits, pour une croissance économique inclusive ».

Elle est construite autour de huit axes stratégiques dont cinq sectoriels et trois transversaux: (i) Agriculture zéro-déforestation en partenariat avec le secteur privé; (ii) Énergie domestique durable avec valorisation de la biomasse agricole; (iii) Gestion durable des forêts classées et conservation des aires protégées et des forêts sacrées; (iv) Boisement-reboisement, restauration des forêts et des terres dégradées; (v) Exploitation minière respectueuse de l'environnement; (vi) Système d'incitation de type paiement pour services environnementaux (PSE); (vii) Aménagement du territoire et sécurisation foncière; (viii) Planification nationale et réformes structurelles pour la transition vers une économie verte. Tel que libellé, la stratégie nationale REDD+ promeut la gestion durable des forêts en s'attaquant aux facteurs directs et indirects de déforestation avant de proposer des politiques et mesures pour l'amélioration de la gouvernance forestière et la restauration des forêts.

¹⁰ Plan de Développement Local du village de Kossandji, REDD+ CI, 2018

¹¹ Ministère des Eaux et Forêts, Code Forestier 2019

3.6 Analyse de la structure de la fiscalité forestière en Côte d'Ivoire

3.6.1 Présentation de la structure de la fiscalité forestière en Côte d'Ivoire

La fiscalité forestière en Côte d'Ivoire est régie dans le code général des impôts par les articles 1097 et 1134. Le premier article met en lumière les redevances et taxes forestières dues annuellement au titre du revenu du domaine forestier. Ainsi, il met en relief¹² :

1. Les taxes basées sur la superficie de la concession (la taxe d'attribution, l'indemnité forfaitaire pour travaux d'intérêt général, la taxe de superficie);
2. Les taxes basées sur l'exploitation des arbres (les taxes sur les ventes de grumes, la taxe pour la contribution au développement local, les taxes sur les frais de la restauration du couvert forestier et la taxe spéciale pour la préservation et le développement forestier);
3. Les taxes perçues sur les exportations des produits transformés, c'est à dire les droits uniques de sortie et les quotas de sciage frais (non séchés);
4. La redevance au titre des travaux d'intérêt général, fixée à 48 FCFA par hectare.

Par ailleurs, le régime fiscal forestier ivoirien est constitué de deux grandes catégories: les taxes appliquées et les recettes non fiscales.

A) Taxes appliquées

La détermination des *taxes appliquées* est basée sur l'ordonnance n°66-626 du 31 décembre 1966 modifiée par les dispositions du titre 5 de la loi n°67-588 du 31 décembre 1967 et par l'article 16 de la loi n°89-1332 du 26 décembre 1989 portant loi des Finances pour l'exercice 1990. Cependant, certaines taxes ont été redéfinies ou modifiées par décret à différentes périodes. À cet effet, le tableau 3 présente les différentes *taxes appliquées* ainsi que leur base juridique.

B) Les recettes non fiscales

Les recettes non fiscales au sein du Ministère des Eaux et Forêts sont alignées sur les dispositions du décret n°2013-484 du 02 juillet 2013 portant institution des recettes non fiscales. Elles représentent un ensemble de dispositions sur lesquelles le Ministère des Eaux et Forêts assure le recouvrement des droits et redevances¹³. Il s'agit notamment:

- Des ventes aux enchères publiques ou de gré à gré des produits saisis;
- Des amendes, transactions et dommages-intérêts prononcés à titre de sanction pour infractions à la législation ou à la réglementation forestière;
- Des frais d'obtention d'agrément pour diverses activités forestières;
- Des frais de transfert des agréments et les frais de renouvellement des permis et autorisations;
- Des ventes des documents de collecte de données, de suivi et de contrôle des activités forestières;
- Des redevances perçues au titre du travail en heure extra légale (temps supplémentaire);
- Des frais de bornage des forêts déclassées;
- Des frais d'exportation de tous produits forestiers par voies aérienne et terrestre;
- Des ventes des quotas à l'exportation des sciages frais;
- Des pénalités de reboisement;
- Des redevances issues des permis spéciaux;
- Des redevances relatives au prélèvement des eaux souterraines et superficielles;
- Des autres redevances instituées par la réglementation forestière.

¹² Annexe fiscale a la loi n° 2019-1080 du 18 décembre 2019 portant budget de l'Etat pour l'année 2020

¹³ Note technique sur la fiscalité forestière, Direction de la production et de l'industrie forestière, 2019

Tableau 12: Présentation et description des taxes appliquées

TAXE PRIMAIRE	TAXES SECONDAIRES	DESCRIPTION	BASE JURIDIQUE	VALEUR MONETAIRE	BENEFICIAIRE DIRECT
TAXES BASÉES SUR LA CONCESSION DE LA FORÊT	1.1. Taxes d'attribution	La taxe est perçue lors de l'octroi des permis temporaires d'exploitation. La validité de cette taxe était de 5 ans pour les permis individuels et 10 à 15 ans pour les chantiers concédés aux industriels exploitants forestiers	Article 20 de l'annexe fiscale à la loi n° 2019-1080 du 18 décembre 2019 portant budget de l'État pour l'année 2020	30 FCFA/ha/an	Administration forestière
	1.2. Taxe de renouvellement	Cette taxe est perçue dans le cadre du renouvellement de l'attribution du permis après une première période d'attribution de 5 ans pour les permis alloués aux individuels et de 10 à 15 ans pour les permis alloués aux industriels	La réforme de l'exploitation forestière de 1995	200 FCFA/ha	Administration forestière
	1.3. Taxe de superficie	La taxe de superficie se définit comme l'intérêt qu'un exploitant forestier a à s'approprier une parcelle de forêt en vue de sécuriser ses approvisionnements. Elle est versée chaque année par tout exploitant avant d'obtenir l'autorisation annuelle d'exploiter son permis	La réforme de l'exploitation forestière de 1995	50 FCFA/ha/an	Administration forestière
	1.4. Indemnité forfaitaire pour travaux d'intérêt général (T. I. G)	Les T.I.G. ont pour objectif d'indemniser les populations locales pour les dégâts causés par les travaux forestiers. Elle est utilisée au soutien de tout projet socio-économique de la région concernée.	Article 20 de l'annexe fiscale à la loi n° 2019-1080 du 18 décembre 2019 portant budget de l'État pour l'année 2020	48 FCFA/ha/an	70% pour les conseils régionaux concernés 20% pour la régie des Eaux et Forêts 10 % pour les comités de suivi

TAXES BASÉES SUR LE VOLUME DE BOIS EXPLOITÉS	2.1. Taxe sur les ventes de bois en grume	C'est une redevance payée par l'industriel du bois afin de disposer de bois en grume extraits de son PEF et pour lesquels il a obtenu l'autorisation d'exploiter. La base à retenir pour la détermination de cette taxe est constituée par le prix moyen de revient du mètre cube de l'essence forestière (fixé à 20.000 FCFA).	Annexe fiscale 2018 en son article 42	5% du montant total des achats de grumes entrées-usine (grumes achetées et grumes livrées à soi-même à partir des concessions forestières (PEF))	État
	2.2. Contribution à la restauration du couvert forestier	Il permet d'inscrire dans le cahier de charge des exploitants forestiers, l'entretien et la restauration du capital forestier par des reboisements et des aménagements de forêts proportionnellement au volume de bois prélevés.	La réforme de l'exploitation forestière de 1995	1 ha pour 150 m ³ de bois exploité en zone pré forestière 1 ha pour 250 m ³ de bois exploité en zone de forêt 300 000 à 600 000 FCFA selon les zones (dans le cas d'une sous-traitance)	Périmètre d'Exploitation forestière
	2.3. Contribution au développement rural	Il encourage les concessionnaires à réaliser des œuvres sociales dans les villages riverains	Aucun	1.000 FCFA /m ³ exploité	Villages riverains exploités
	2.4. Taxe spéciale pour la préservation et le développement forestier	Elle s'applique au taux de 2,5% sur la valeur des livraisons de bois en grumes, y compris les livraisons à soi-même. Le produit de la taxe est reversé sur un compte spécial dénommé « Fonds Spécial pour la Préservation et le Développement Forestier (FSPDF) » ouvert à la BNI et destiné au financement des travaux de préservation et de développement forestier.	Article 36 de la loi n°2018-984 du 28 décembre 2018 de l'annexe fiscale	Taux de 2,5% sur la valeur des livraisons de bois en grumes, y compris les livraisons à soi-même sur base déclarative	Travaux de préservation et de développement forestier

TAXES D'EXPORTATION OU TAXE DE SORTIE	3.1. Droits uniques de sortie (DUS)	L'objectif de ces droits est d'inciter les industriels de la filière à transformer sur place une plus grande part de la production forestière. Ces droits sont perçus lors de l'exportation des produits bruts (plots et équarris), des produits peu élaborés (sciages, déroulages, tranchages et aux contre-plaqués).	Loi forestière de 1990 modifiée par les décrets pris en 1987, 1990, 1994 et 1996	<ul style="list-style-type: none"> - 350.000 FCFA/m3 pour les sciages non séchés, toutes essences confondues - 200.000 FCFA/m3 pour les sciages séchés, toutes essences confondues 	N. A
	3.2. Quotas relatifs aux sciages non séchés	Un quota national de volume exportable a été instauré pour, encourager une transformation plus poussée en Côte d'Ivoire et financer les opérations de délimitation des forêts classées. Ces quotas sont vendus aux enchères par la SODEFOR, mais les volumes sont faibles. Cette faible demande découle, d'après la SODEFOR, de la raréfaction de la ressource forestières mais surtout des investissements réalisés par les unités de transformation dans le séchage.	N. A	<p>La variation des prix des quotas découle du mécanisme de vente qui se fait selon lots, en fonction de la qualité et au diamètre du bois</p> <ul style="list-style-type: none"> - 5.224 à 21.500 FCFA/m3 pour le sciage d'iroko non séché - 1.082 à 9.100 FCFA/m3 pour les autres sciages 	SODEFOR

Source : Note technique sur la fiscalité forestière, Direction de la production et de l'industrie forestière, 2019

3.6.2 Analyse de la structure de la fiscalité forestière, des recettes collectées et déclarées

Le dispositif fiscal en vigueur prévoit diverses taxes forestières dont notamment la taxe sur les ventes de bois en grume et la taxe spéciale pour la préservation et le développement forestier.

En pratique, les opérateurs du secteur forestier sont confrontés au moment de la déclaration de ces deux taxes, à des difficultés liées à la base à retenir pour leur détermination chaque fois qu'ils sont dans un cas de "livraison à soi-même". En effet, concernant la taxe sur les ventes de bois en grume, la détermination de la valeur marchande, notamment le prix moyen de revient du mètre cube de l'essence forestière que l'opérateur forestier ou le concessionnaire de périmètres d'exploitation forestière s'est livré à lui-même, paraît difficile d'application: ce qui a pour conséquence d'impacter négativement la déclaration et le paiement spontanés des taxes dues au titre de ces livraisons. Afin de corriger cette situation, il est envisagé d'introduire, en ce qui concerne les livraisons à soi-même, la fixation par arrêté conjoint du Ministre en charge du Budget et du Ministre en charge des Eaux et Forêts, d'une valeur mercuriale par catégorie d'essence forestière. Une autre solution serait d'aligner régulièrement les valeurs mercuriales pour les différentes essences forestières sur les valeurs FOB du marché international. Par ailleurs, en ce qui concerne la taxe pour la préservation et le développement forestier (taxes appliquées 2.4), le dispositif a été jugé inadapté par les concessionnaires de périmètres d'exploitation forestière à cause des risques de mauvaise gestion du fonds (mauvaise redistribution, détournements de fonds etc...). Les concessionnaire continuent de s'acquitter des taxes forestières sur la base des anciens tarifs tels que définis par l'ordonnance n° 96-181 du 07 mars 1996 portant modification des tarifs applicables en matière de fiscalité forestière qui prescrit qu'ils doivent réaliser des reboisements en fonction du volume de bois exploité.

IV. MESURES D'INCITATION/FACTEURS DISSUASIFS EXISTANTS POUR LA GESTION DURABLE DES FORÊTS ET LES PRODUITS DE BASES EXEMPTS DE DÉFORESTATION

4.1 Approches de gestion durable des forêts

L'analyse des mécanismes d'incitations nécessaires pour promouvoir la gestion durable des forêts est fonction du type d'activité concerné par la gestion durable de ces forêts et du type d'acteurs impliqués. En effet la gestion durable des forêts se présente aujourd'hui comme la seule opportunité capable de répondre efficacement à l'urgence environnementale causée par la déforestation grandissante en zone tropicale, et plus particulièrement en Côte d'Ivoire¹⁴. Selon la FAO, « La gestion durable des forêts signifie la gestion et l'utilisation des forêts et des terrains boisés d'une manière et à une intensité telle qu'elles maintiennent leur diversité biologique, leur productivité, leur capacité de régénération, leur vitalité et leur capacité à satisfaire, actuellement et pour le futur, les fonctions écologiques, économiques et sociales pertinentes au niveau local, national et mondial, et qu'elles ne causent pas de préjudices à d'autres écosystèmes ».

L'analyse des sept éléments thématiques communs de la gestion forestière durable identifiés par le Forum des Nations Unies sur les forêts (FNUF)¹⁵¹⁶ permet de distinguer différentes approches de gestion durable organisées en fonction de leur impact sur les forêts comme présenté dans le tableau ci-dessous.

¹⁴ La gestion durable des forêts tropicales, Leroy et al, 2013

¹⁵ Archives FAO, Département de la Forêt, extrait de la revue [Unasylya](#) - No. 219 - [le commerce et la gestion forestière durable](#)

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Tableau 13: Approche de gestion durable des forêts

IMPACT SUR LA FORÊT	APPROCHE DE GESTION DURABLE DES FORÊTS	DESCRIPTION	EXEMPLE D'ACTIVITE
Maintien de la couverture forestière	Conservation de la diversité biologique	Préservation de zones naturelles boisées existantes ou favorisation de l'extension naturelle de la couverture forestière existante	<ul style="list-style-type: none"> • Création d'Aires protégées qui évitent le déboisement dans les forêts existantes • Légalisation des forêts sacrées • Aménagement durable du territoire • Surveillance des forêts
Augmentation de la couverture forestière	Boisement	Transformation en forêt de terres dévolues à d'autres usages ou augmentation du couvert boisé pour atteindre le seuil correspondant à la définition d'une forêt (30% de couverture forestière)	<ul style="list-style-type: none"> • Plantations d'essences locales sur d'anciennes terres agricoles Création de forêt communautaires sur les zones pentues non encore boisées
	Reboisement	Constitution d'un couvert forestier sur des terres autrefois boisées ayant été dégradées ou déboisées jusqu'à passer en dessous du seuil correspondant à la définition d'une forêt	<ul style="list-style-type: none"> • Plantations d'essences indigènes ou exogènes sur d'anciennes terres agricoles • Création de forêts communautaires sur des zones déboisées dans le domaine rural comme dans le domaine public de l'État
	Restauration/Régénération	Constitution d'un couvert forestier sur des terres autrefois boisées ayant été dégradées ou déboisées jusqu'à passer en dessous du seuil correspondant à la définition d'une forêt	<ul style="list-style-type: none"> • Plantations d'essences indigènes ou exogènes dans des zones de forêt déboisées ou dégradées • Régénération naturelle assistée pour restaurer la biodiversité

	Agroforesterie	Mode d'exploitation des terres agricoles associant des arbres et des cultures ou de l'élevage	<ul style="list-style-type: none"> • Introduire des arbres forestiers dans les exploitations agricoles (cacao, hévéa, palmier, cultures vivrières) • Protection des cultures avec des arbres forestiers
Réduction des pertes forestières	Amélioration de l'exploitation forestière	Augmentation de la capacité des forêts à fournir les biens/ services tout en réduisant la dégradation des forêts et le déboisement par rapport au scénario du laisser-faire (<i>business-as-usual</i>)	<ul style="list-style-type: none"> • Mise en place de procédures pour un enlèvement plus performant des bois, notamment par des techniques d'exploitation forestière à impact réduit, avec moins de gaspillage de matière et moins de dégâts de vidange • Renforcement de la traçabilité du bois • Amélioration de la gouvernance forestière
	Intensification de la production agricole	Augmentation de la productivité des terres boisées ou de celles situées en lisière de forêt pour limiter ou éviter la dégradation ou le déboisement par rapport au scénario du laisser-faire (<i>Business as usual</i>)	<ul style="list-style-type: none"> • Mise en place de techniques culturales de rotation culturale, de systèmes d'irrigation plus performants et de solutions technologiques qui augmentent le rendement à l'hectare de façon de façon à éviter l'extension des terres agricoles • Utilisation de matériels végétaux améliorés • Renforcement de l'encadrement des producteurs

4.2 Mécanismes d'incitation pour la gestion durable des forêts

4.2.1 Incitations directes

Les incitations directes sont fondées sur la rémunération des efforts de conservation, de gestion durable ou de restauration des forêts. Plusieurs outils existent et permettent d'assurer leur applicabilité.

Mécanisme d'incitation directs et réglementaires

1. Partages des bénéfices/avantages, dans la plupart des cas, les avantages économiques découlant de la gestion forestière ne favorisent qu'un nombre limité de personnes (les propriétaires et gestionnaires forestiers). Cela peut poser des problèmes dans des pays comme la Côte d'Ivoire où les régimes de propriété publique ou communautaire sont répandus. Si les habitants de la forêt ou ceux vivant aux alentours ne reçoivent pas une part des avantages de la gestion forestière, et qu'ils estiment avoir des droits sur la terre en question, ils pourraient être tentés de défricher la forêt pour utiliser la terre conformément à leurs besoins. Le partage des avantages/bénéfices consiste à continuer à permettre aux entreprises forestières de récolter les produits dans les concessions octroyées par l'État, mais à les obliger à en partager les revenus avec la population locale. Dans certains cas, le partage des avantages peut comprendre l'obligation pour les concessionnaires forestiers d'investir dans des infrastructures communautaires locales ou d'entreprendre d'autres projets de développement local. En Côte d'Ivoire un prélèvement de 15% de la valeur du contrat d'exploitation d'une forêt classée au bénéfice d'un comité local de gestion participative des forêts (CLGP-FC). La totalité du montant issu des 15% prélevés est redistribuée selon le schéma suivant: 15% pour le fonctionnement des CLGP-FC; 10% pour le fonctionnement des CSPGP-FC; 75% pour les projets de développement communautaire.

Malheureusement sur que le terrain que les communautés locales n'ont pas le sentiment de profiter des bénéfices de la gestion des forêts. De plus dans certaines communautés les populations estiment qu'ils n'ont pas été associé à la définition du plan de partage de bénéfices.

Mécanisme d'incitation en cours d'expérimentation en Côte d'Ivoire

1. Les Paiements pour Services Environnementaux (PSE) dont le principe est basé sur la compensation d'une perte de revenus ou d'un manque à gagner pour une pratique qui maintient ou fournit davantage de services écosystémiques¹⁷. Les PSE peuvent également rémunérer des acteurs qui pratiquent déjà des modes de gestion durables des ressources. Ils peuvent jouer un rôle important dans les politiques agroforestières, en incitant les producteurs à réintroduire des arbres forestiers à l'intérieur de leur plantation afin d'accroître les stocks de carbone. Cette mesure permettrait d'inciter les communautés rurales et parfois les sociétés privées à restaurer les forêts, assurer la conservation des forêts ou des agroforêts qui sont sous leur responsabilité. La Côte d'Ivoire a déjà entamé les premières phases de la mise en place d'un Système national de Paiements pour Services Environnementaux (PSE)¹⁸ qui se sont traduits par l'adoption d'un guide PSE et l'expérimentation de projets pilotes PSE sur le terrain. A terme, il permettra d'engager les petits producteurs et les communautés locales dans la mise en œuvre des activités de la stratégie nationale REDD+. Il s'agit donc à travers les PSE de fournir une capacité d'investissement manquante principalement aux petits planteurs et aux communautés locales, leur permettant de réaliser des investissements dans le reboisement et l'agroforesterie, spécifiquement dans le cas de la conservation des forêts. Définis dans la stratégie nationale REDD+, les PSE combinent deux dimensions avec des engagements à la conservation et à la restauration sur les espaces collectifs ou familiaux, et des investissements sur des terres individuels (reboisement, agroforesterie, etc.). Ce dispositif est aussi au cœur de la nouvelle stratégie forestière conduite par le Ministère des forêts. Il vise à (i) construire la capacité d'investissement dans les activités forestières (production de semences, production de plants); (ii) Faciliter la transition vers des pratiques agricoles plus durables qui réduisent effectivement la déforestation (agroforesterie, financée par le marché); (iii) Promouvoir des pratiques agrosylvo-pastorales pour accroître la résilience des systèmes agraires aux modifications du climat et des conditions de l'environnement. À ce jour les modalités de financement d'un système national de PSE sont en discussions entre le MINEF et le MINEDD. Toutefois plusieurs projets pilote de PSE ont déjà mis en place avec différents mécanismes de financement. Dans le cadre du projet de la Nawa, le financement est assuré par Mondelēz (une entreprise privée de cacao) dans le cadre de son programme de durabilité qui subventionne toutes les étapes des PSE (*Projet PSE de la Nawa, financé par le Chocolatier Mondelēz en partenariat avec le SEPRED*). Une autre approche a été développée dans le projet pilote REDD+ de la Me. Le système de PSE est financé grâce à une prime carbone, payé par le marché du cacao Bio. Ces approches de financement permettent de dessiner ce qui pourrait être un mécanisme de financement pour le système national PSE. En effet plusieurs discussions au niveau national tendent à aboutir à un mécanisme de financement mixte, fonction du porteur de projet qu'il soit public ou privé. L'idée d'un système national financé par des taxes supplémentaires sur

¹⁷ Payments for environmental services: some nuts and bolts. CIFOR Occas. Pap., 42, 26 p. www.cifor.cgiar.org/publications/pdf_files/OccPapers/OP-42.pdf, Wunder S., 2005.

¹⁸ Etude de faisabilité : www.euredd.efi.int/documents/15552/254231/PES+feasibility+study.pdf/bd9733fe-5d07-4043-978f-151b6e81bccb

l'économie ayant été écartée au profit de la mise en place d'un fonds fiduciaire pour le financement du reboisement, qui peine à se mettre en place faute de mécanisme de financement encore identifié.

2. Mécanisme de marché pour le bois et les PFNL, un des mécanismes fondés sur le marché destiné à promouvoir la gestion durable des forêts est la certification. Ce qu'il est convenu d'appeler « label écologique », consiste à faire vérifier, par un tiers, que l'exploitation remplit des critères de bonne gestion. Ces mécanismes ont été appliqués non seulement au bois et PFNL, mais également à d'autres produits tropicaux de base tels que le cacao, palmier à huile ou le café¹⁹. Des primes ou des parts de marché importantes et stables pour des bois certifiés pourraient, en principe, rendre la production durable de bois plus attrayante que l'exploitation forestière conventionnelle. En réalité aucune de ces deux dispositions n'existe à ce jour en Côte d'Ivoire. Toutefois, un accord Côte d'Ivoire et l'Union Européenne dans le cadre du processus APV FLEGT pourraient contribuer, à terme, à assurer une exploitation et une commercialisation légale du bois. La situation est différente pour les produits de base comme le cacao, pour lesquels les planteurs bénéficient déjà de primes dans le cadre des processus de certification Rainforest Alliance, UTZ ou Fairtrade. De nouvelles primes devraient être établies en faveur de nouveaux engagements zéro déforestation

Mécanismes d'incitation direct qui pourraient être introduits

1. Partenariat pour la commercialisation des produits forestiers et PFNL par les propriétaires fonciers, la technique consistant à accroître la rentabilité de la foresterie en obtenant des consommateurs des paiements directs pour des produits forestiers et les produits forestiers non ligneux. Dans le cadre de la Côte d'Ivoire, un prix clair et fixe pour le bois sur pieds et certains PFNL, définit de manière consensuelle par l'ensemble des acteurs en fonction du prix du bois sur le marché international et des marches potentielles pour chaque acteur, pourrait encourager les propriétaires fonciers dans des activités forestières durables. Des accords d'achats pourraient être signés entre les propriétaires fonciers et les industriels du bois garantissant ainsi un accès au marché. Pour certains produits non encore commercialisés, des études de marché pourraient être nécessaires.

2. Incitation fiscale. Le principe pourrait prendre la forme d'une taxe écocitoyenne qui pourrait être imposée aux entreprises bénéficiant des retombées de la forêt (SODECI, CIE, SIR, Constructeur de véhicules, Solibra, etc.). Les recettes serviraient à financer la restauration et la conservation des forêts. Cette taxation, qui s'apparente à la mesure de reboisement compensatoire appliquée aux industriels de bois, aurait le mérite d'établir une assiette plus large au bénéfice de la gestion durable des forêts.

3. Exonérations fiscales en faveur des entreprises qui participent à la gestion durable des forêts. L'État pourrait exonérer ou réduire les taxes et impôts pour les entreprises qui auront contribué la restauration d'une forêt d'importance écologique. Les entreprises ayant rempli leur cahier de charges lié à la gestion rigoureuse et efficace des agroforêts pourraient également en bénéficier après évaluation et approbation de l'administration forestière.

4. La servitude de conservation qui consiste à établir un accord contractuel en imposant des restrictions permanentes et légalement contraignantes à l'utilisation des terres privées²⁰. Dans cette logique, le propriétaire foncier conserve les droits légaux sur ses terres, mais cède le droit de les développer. En contrepartie, ce dernier reçoit une indemnisation qui peut être sous forme d'allègements fiscaux ou autres avantages offerts par le gouvernement, ou de transferts financiers de la part de tierces parties, telles que les ONG environnementales. Cette méthode pourrait aussi s'apparenter à un PSE de la modalité « conservation ».

5. Accord incitatif de conservation/restauration est une des voies pour gérer durablement les forêts et concurrencer les acteurs responsables de la déforestation. Cet accord incitatif de conservation dédommage directement les ayants droit et les collectivités concernées pour la fourniture de services de conservation²¹. Par conséquent, l'administration forestière et les communautés locales renoncent à l'exploitation destructrice des milieux arborés, en échange d'un investissement capable d'amorcer le développement économique et social de la zone. Cet accord pourrait être financé par les bénéfices issus de la vente du carbone dont la valeur sera calculée sur la base d'une modélisation de la capacité de stockage de carbone de la ressource et du prix carbone sur le marché international. Dans ce contexte, le financement pourrait provenir directement d'une institution financière avec la garantie de l'État. La réflexion sur la création d'un fonds national forestier telle que retenu dans la loi forestière offre une opportunité pour le financement de ce type de mécanisme.

4.2.2 Les incitations indirectes

Au niveau des incitations indirectes, il s'agit de mécanismes législatifs, fiscaux ou non, pouvant entraîner une gestion plus efficiente des forêts. Elles doivent être encouragées et mises en place par le gouvernement et les acteurs du secteur forestier ivoirien.

¹⁹ Hardner J. et Rice R. (2002), Rethinking green consumerism, Scientific American, 286, 89-95.

²⁰ Logging off, Mechanisms to stop or prevent Industrial Logging in Forests of High Conservation Value, Cambridge (MA), Union of Concerned Scientists. Gullison R., Melnyk M. et Wong C., 2001

²¹ La caractérisation de la méthode de la concession de conservation, Niesten et al.

1. Au plan législatif, les résultats escomptés par la gestion durable des forêts résident sur la levée des contraintes liées à la valorisation du bois et des PFNL spécifiques aux producteurs. Sous ces conditions, les producteurs trouveront un intérêt à l'introduction des arbres forestiers et s'investiront davantage. Cette action pourrait ouvrir le champ à la définition et à la publication des prix du m³ du bois afin d'inciter davantage les communautés rurales, dans leur entièreté, à introduire des arbres dans leur plantation ou même à créer typiquement des forêts. Au plan administratif les dispositions administratives liées à l'arrêté 480 devraient être révisées pour faciliter la redynamisation des vieilles plantations de bois à croissance rapide. De plus, l'administration forestière en collaboration avec le Ministère du Commerce devrait travailler à la formalisation du marché informel du bois pour une meilleure organisation de la filière bois-énergie, mais également du bois pour le marché local. Cette formalisation pourrait être peu attractive pour les exploitants informels du fait des taxes qui seront dues dans le cadre d'une exploitation légale. Ainsi, il faudra y associer les autres éléments d'incitations cités plus haut.

2. La stabilité politique et institutionnelle influence largement les investissements privés dans les plantations forestières. En effet lorsque les risques pays sont faibles et que les gouvernements apportent un appui favorable à la participation du secteur privé au développement et à la gestion des forêts, les investissements se multiplient.

3. La sécurité de la propriété foncière. À travers cette mesure, l'objectif est d'encourager les agriculteurs à gérer les ressources forestières de façon durable et à planter des arbres. Sur la base des nouvelles dispositions législatives en matière de foncier rural, des actions concrètes peuvent être menées dans le sens de la sécurisation des terres rurales. En effet de nombreux projets pilotes ont démontré la possibilité de sécuriser le foncier à travers des approches groupées pouvant réduire les d'obtention du certificat foncier, à en moyenne 16.000 FCFA/ha (Projet REDD+ la Me). De plus, l'abrogation des dispositions portant obligation de mettre la terre en valeur permet de supprimer les incitations non souhaitables qui poussaient les producteurs à transformer leurs terres en des espaces agricoles. Par conséquent, la possibilité d'effectuer une mise en valeur en forêt naturelle est juridiquement possible.

4. Le développement des infrastructures (routes, réseau ferroviaire, installations portuaires modernes, centrales hydroélectriques) par l'État ou l'entreprise privée est une mesure incitative indirecte qui peut offrir des débouchés importants pour le bois d'œuvre et accroître ainsi sa valeur sur pied.

5. Le système national de compensation écologique. Il existe diverses formes de compensation écologique prônées par les organisations internationales. Cependant, la Côte d'Ivoire pourrait privilégier la compensation financière. Cette forme de compensation est basée sur une estimation des ressources financières nécessaires à la compensation des impacts des activités industrielles sur les forêts²². Les devises récoltées pourront être reversées dans un fonds national vert afin de financer les activités de boisement, de reboisement, de réhabilitation et de protection des forêts ivoiriennes.

Le tableau 3 résume les différents types d'incitations possibles pour la gestion des forêts.

Tableau 14: Les différents types d'incitations pour la gestion durable des forêts

Incitations directes	Incitations indirectes		
	Incitations variables		Incitations habilitantes
	Sectorielles	Macroéconomiques	
<ul style="list-style-type: none"> • Distribution de Plants forestiers • Fourniture spéciale d'infrastructures locales à l'appui des populations • Dons • Allègements fiscaux • Taxes différentielles • Prêts subventionnés • Accords de partage des bénéfices 	<ul style="list-style-type: none"> • Prix des intrants et de la production • Restrictions commerciales (tarifs, par exemple) 	<ul style="list-style-type: none"> • Taux de change • Politiques relatives aux taux d'intérêt • Mesures fiscales et monétaires (impôts sur le revenu, par exemple) 	<ul style="list-style-type: none"> • Sécurité de la propriété foncière et des ressources • Améliorations Conditions socioéconomiques • Accessibilité et disponibilité d'infrastructures de base (ports, routes, électricité, etc.) • Services de soutien à la production • Développement des marchés • Mécanismes de crédit • Stabilité politique et macroéconomique • Sécurité nationale • Recherche et vulgarisation

²² « La compensation écologique à travers le monde : source d'inspiration ? », CDC biodiversité, 2016

4.3 Mécanismes d'incitations existants pour la gestion durable des forêts en Côte d'Ivoire

Pour faire face à la destruction de plus en plus prononcée de la forêt en Côte d'Ivoire, la stratégie nationale de la politique de préservation, de réhabilitation et d'extension des forêts a énoncé plusieurs mesures d'incitation pour la promotion du reboisement et la conservation des forêts naturelles. Ces mécanismes d'incitation sont résumés dans le tableau 4.

Tableau 15: Mesures d'incitations imaginées en Côte d'Ivoire pour la gestion durable des forêts

Mesures d'incitation directes	Mesures d'incitations indirectes
Accompagnement technique et financier des sylviculteurs et des populations (élaboration et signature des contrats de bail foncier, fourniture de plants, intrants, formation et soutien aux petits producteurs pour l'amélioration de la productivité agricole)	Régulation annuelle du prix du bois selon l'essence et la qualité. Les prix pourront être alignés aux prix internationaux du marché du bois.
Soutien à l'émergence des territoires dits « territoires durables » réputés sans déforestation à travers un dispositif d'incitation de type paiement pour services environnementaux (PSE)	Adaptation des exigences réglementaires des procédures et de la fiscalité pour stimuler la sylviculture privée. Encouragement de l'implication des banques (finance verte, nouveaux produits d'assurance, etc.)
Amélioration de la rémunération des agents du MINEF et de la SODEFOR avec en plus des mécanismes de récompense pour les agents performants dans la lutte contre la déforestation au niveau local et la prise de sanctions contre les agents indéclicats	Obtention des certificats fonciers pour les forêts résiduelles, les vieilles jachères et les plantations forestières dans le domaine rural
Réalisation de projets de développement (Exemple: alternatives énergétiques) basés sur le niveau de préservation ou de réhabilitation des forêts dans les territoires	Exonération des frais administratifs d'enregistrement à tous ceux qui veulent enregistrer leurs forêts

Source : Stratégie nationale de la politique de préservation, de réhabilitation et d'extension des forêts, 2018.

4.4 Analyse des mesures incitatives spécifiques aux produits zéro déforestation

Les produits zéro déforestation en Côte d'Ivoire concernent les filières du cacao, de l'hévéa, du palmier à huile, de l'anacarde et des cultures vivrières. La Côte d'Ivoire a défini en 2015 une politique d'agriculture zéro déforestation. Il s'agit d'une agriculture répondant aux caractéristiques suivantes :

- Être productive dans le domaine foncier rural;
- Qui préserve les Parcs et réserves, les forêts classées, les forêts de type particulier telles que les forêts sacrées;
- Qui contribue à la restauration du couvert forestier afin de compenser en partie la déforestation historique;
- Qui soit résiliente aux impacts du changement climatique et;
- Qui respecte les droits des communautés locales tout en améliorant leurs moyens de subsistance

Dans ce cadre les conventions de partenariats ont été signées entre les interprofessions des filières hévéa (APROMAC) et Palmier à huile (AIPH) avec la Secrétariat Exécutif de la REDD+ (SEP-REDD) pour assurer la mise en œuvre de cette politique d'agriculture zéro déforestation.

Dans la filière cacao spécifiquement, plus de 24 entreprises du secteur cacao conduites par le *World Cocoa Foundation* (WCF) et les gouvernements de la Côte d'Ivoire et du Ghana ont signé le cadre d'action commune de l'Initiative Cacao et Forêts avec la facilitation de IDH (*The Sustainable Trade Initiative*). L'objectif de ce cadre est de mettre fin à travers, un partenariat public-privé, à la déforestation générée par la production du cacao de manière générale, mais spécifiquement dans les aires protégées et les forêts classées.

Dans ce plan d'action, les signataires reconnaissent l'urgence et une pertinence et la pertinence de l'action pour lutter contre la déforestation et restaurer les forêts en contribuant à la mise en œuvre de la stratégie nationale de la politique de préservation, de réhabilitation et d'extension des forêts.

Les signataires se sont engagés à promouvoir l'agroforesterie, la conservation et la restauration avec des mécanismes incitatifs de types paiements pour services environnementaux (PSE). De manière

spécifique les gouvernements de la Côte d'Ivoire et du Ghana ainsi que les entreprises de l'industrie du cacao ont pris huit engagements principaux²³ :

1. Interdire et prévenir les activités de la filière du cacao qui causent ou contribuent à la poursuite de la déforestation ou dégradation des Parcs Nationaux et Réserves, Forêts Classées et forêts du domaine forestier protégé (domaine rural);
2. Respecter les droits des producteurs de cacao, en particulier au travers de l'identification et la réduction des risques sociaux et de la mise en œuvre progressive des actions afin de minimiser les impacts préjudiciables potentiels sur les aspects sociaux et économiques;
3. Promouvoir la restauration efficace et la conservation sur le long terme des parcs nationaux et réserves ainsi que des forêts classées;
4. Renforcer la cartographie de la chaîne d'approvisionnement, avec pour objectif final l'obtention d'une traçabilité totale jusqu'au niveau de la plantation;
5. Mettre en œuvre des actions tangibles et établir des objectifs assortis de délais précis sur la base de données fiables, de méthodologies robustes et crédibles, de consultations de parties prenantes et d'un calendrier réaliste;
6. Mettre en œuvre les actions adoptées dans le contexte d'une approche territoriale plus vaste, en créant des liens forts avec des initiatives similaires sur d'autres productions agricoles, et en s'alignant pleinement sur la stratégie nationale REDD+ et les autres stratégies et plans nationaux pertinents.
7. Travailler de concert à la mise en œuvre des actions du Cadre ainsi qu'à la mobilisation des ressources financières et de l'expertise technique requises, entre autres via un processus d'engagement continu des parties prenantes autour d'un dialogue sur les questions clés, le développement d'un plan efficace de mise en œuvre, et les actions conjointes de partage des enseignements et des connaissances afin de renforcer les capacités institutionnelles; et
8. fournir un suivi et un reporting efficaces sur les progrès réalisés au niveau des engagements et actions afin d'assurer transparence et responsabilité.

Le tableau 5 résume le plan d'action de l'initiative cacao et forêts dont la phase pilote a pris fin en 2020. La phase de mise en œuvre à grande échelle devrait être mise en œuvre de 2021-2025 pour une première phase.

Tableau 16: Plan d'action de l'industrie du cacao dans le cadre de l'ICF

AGROFORESTERIE ET PRODUCTION DURABLE
Développement de systèmes agroforestiers
Renforcement des activités de recherche
Fourniture du matériel végétal amélioré
Amélioration des systèmes de plantation/diversification
Renforcement de l'encadrement des producteurs
Restauration de la fertilité des sols
PRESERVATION & REHABILITATION DES FORETS
Réalisation des cartes actualisées du couvert forestier et de l'utilisation des terres
Recueil des données socio-économiques sur les producteurs agricoles et les communautés dépendant des forêts classées, des parcs et des réserves
Renforcement du cadre législatif et réglementaire
Catégorisation des forêts classées en fonction de leur niveau de dégradation
Identification des zones HCV HCS et leur importance pour justifier un aménagement spécifique des forêts à protéger
Actualisation ou élaboration des plans d'aménagement et des plans de gestion des forêts
Mise en œuvre des plans d'aménagement et plans de gestion validés
Renforcement de la sécurisation et la surveillance des forêts
Protection des reliques de forêts dans le domaine rural
Elaboration et mise en œuvre d'un programme national de reboisement
Développement de la production de semences et de plants forestiers

²³ Cadre d'Action Commune Côte d'Ivoire, Cocoa and Forests Initiative, Novembre 2017

Réhabilitation des forêts du domaine public de l'État (Parcs nationaux, Réserves)
Réhabilitation des forêts du domaine privé de l'État (Forêts classées) FC de Cat 1: 88 079 ha; FC de Cat 2: 145 771 ha; FC de Cat 3: 329 903 ha
Réhabilitation des forêts du domaine rural (environ 10 000 000 ha)
ENGAGEMENT DES COMMUNAUTES ET INCLUSION SOCIALE
Identification des communautés
Promouvoir des modèles communautaires de protection et de restauration des forêts
Evaluation et prise en compte de mesures pour réduire les impacts sociaux
Choix de standards raisonnables de sauvegarde environnementale et sociale
Fourniture des ressources alternatives et la restauration du niveau de vie des populations affectées
Renforcement des capacités de gestion des communautés locales
TRAÇABILITE
Mise en place d'un système de traçabilité du Cacao d'origine Côte d'Ivoire
Amélioration de la cartographie de la chaîne d'approvisionnement
Mise en place d'un système de suivi vérifiable pour la traçabilité
FINANCEMENT
Financement des études
SUIVI-EVALUATION
Validation du manuel de suivi-évaluation de ICF Côte d'Ivoire
Organisation des missions de suivi-évaluation et des réunions bilans
Réalisation des activités de surveillance, de mesure et de notification des forêts
Renforcement des capacités matérielles du SEP REDD+

Source : Plan de mise en œuvre des activités du cadre d'action commune, 2018

4.5 Analyse des mesures réglementaires et administratives dissuasives pour la gestion durable des forêts

Il ressort de manière unanime dans les discussions engagées avec les différentes catégories d'acteurs de la société civile, des structures privées et gouvernementales, que les mesures incitatives pour la gestion durable des forêts sont insuffisantes. En effet pour ceux-ci il apparaît évident que certaines difficultés ont un effet dissuasif sur la gestion durable des forêts ivoiriennes²⁴. Il s'agit notamment :

Tableau 17: Facteurs dissuasifs pour la gestion durable des forêts en Côte d'Ivoire

1	Contraintes liées à la mise en œuvre du foncier rural avec l'obligation de la délivrance d'un acte de propriété juridique avant toute revendication à la propriété d'une parcelle et donc sur la propriété de l'arbre forestier naturelle. Pourtant une grande partie des propriétaires terriens ruraux n'ont aucun titre légal pour le confirmer. De plus pour certains propriétaires d'exploitation la clarification du foncier semble encore plus complexe. Enfin si certaines de ces conditions sont remplies, la procédure et le coût du processus d'immatriculation des terres demeurent non adaptés aux conditions financières des populations rurales.
2	Absence de coordination entre les différents ministères liés directement ou indirectement à la gestion durable des forêts. Cela provoque un chevauchement et souvent des contradictions dans les politiques et stratégies sectorielles.
3	Contraintes liées à l'imposition de demandes d'autorisation d'exploitation ou d'éclaircie aux petits propriétaires. En effet pour le petit propriétaire terrain qui réalise un reboisement, la loi l'oblige à demander une autorisation avant d'effectuer une éclaircie d'entretien. Cela a pour conséquence de limiter les entretiens dans les reboisements et de décourager les autres personnes intéressées par ces reboisements. Ces demandes d'autorisation concernent également les plans d'aménagement et les inventaires statistiques.

²⁴ Données d'enquêtes, Etude OIBT sur les incitations à la gestion durable des forêts en région tropicale, 2020

4	Absence d'un mode autorisé d'exploitation artisanale du bois pour permettre la valorisation des bois et rebuts d'exploitation industrielle. En effet il n'est pas permis de récupérer le bois issu de rebuts de l'exploitation industrielle ni le bois issu des plantations d'hévéa. Cela contribue au gaspillage du bois et favorise l'exploitation illégale par les artisans. Par ailleurs l'interdiction d'usiner le bois d'hévéa prive l'industrie du bois de tout le potentiel que représente, les 600 000 ha de plantation d'hévéa qui pourrait alimenter le marché local de bois de qualité.
5	Les textes d'application du code forestier encore inexistant bien que la loi ait changé dès 2014. Ainsi ,certaines innovations intervenues comme (i) la propriété de l'arbre; (ii) le partage des bénéfices reste encore flou et contribue à la désinformation des populations rurales;
6	Absence d'un mécanisme de fixation du prix des arbres forestiers et communiqué aux populations. En Côte d'Ivoire il existe une forte concurrence foncière entre les cultures d'exportations qui occupent la majeure partie des superficies, et la foresterie. Ces cultures le marché et les prix sont connus. Dans la hiérarchie, ces cultures arrivent en première position du choix d'affectations des terres.
7	Faiblesse de l'approvisionnement du marché local en bois d'origine légale. La majorité du bois produit par les unités de transformation est exporté vers le marché Européen ou sous-régional. La demande locale de bois de plus en grande est couverte par les artisans locaux qui ne s'approvisionnent en bois qu'à travers l'exploitation forestière illégale.
8	Contraintes liées au maintien des Périmètres d'Exploitation forestière (PEF), sans aucune base légale. En effet l'article 34 du code forestier 2019 précise que les droits d'usage forestier (qui comprennent les droits d'exploitation) ne s'appliquent pas aux forêts des personnes physiques et des personnes morales de droit privé. Or les PEF définis par l'administration forestière comprennent également des terres de personnes physiques et des personnes morales de droit privé. Il existe une certaine ambiguïté qui nécessite une précision dans le cadre de la nouvelle loi.

Source : Données d'enquêtes, Etude OIBT sur les incitations à la gestion durable des forêts en région tropicale, 2020

V- RECOMMANDATIONS SUR LES MESURES D'INCITATION POUR LA GESTION DURABLE DES FORÊTS

L'histoire environnementale de la Côte d'Ivoire montre que de nombreuses opportunités existent afin d'améliorer l'efficacité et l'efficience dans la gestion durable de ses forêts. Les consultations réalisées auprès des acteurs du secteur forestier ivoirien ont permis de recueillir des recommandations sur les mesures d'incitation directes et indirectes ainsi que la correction des mesures dissuasives qui pourraient améliorer la gestion des forêts.

5.1 Recommandations sur les mesures d'incitation directes pour la gestion durable des forêts en Côte d'Ivoire

1. Mettre en place un processus simplifié de sécurisation foncière des terres de propriétaires ayant des arbres forestiers sur leur parcelle ou désireux d'en introduire. Les différentes initiatives privées ou publiques de création de forêts ou d'agroforêts ont montré que leur succès et leur durabilité étaient intimement liés au régime foncier en vigueur. Ainsi, le processus consistera à développer et mettre en œuvre un partenariat entre des groupements de producteurs (bois, cacao, café, etc.), un industriel acheteur de matière première et l'État (AFOR). À travers ce dispositif, les différentes parties s'engageront à contribuer au financement de la sécurisation foncière des terres identifiées (titre foncier). Ce dispositif pourrait s'articuler autour de cinq étapes :

Étape 1: identification des terrains des membres appartenant au groupement d'adhérents au processus. Deux critères essentiels devront pris en compte lors de l'identification :

- a) Seuls les terrains, pour lesquels il n'existe aucune autre initiative en cours ou alternative possible, sont considérés afin d'éviter dès le départ des conflits d'utilisation.
- b) Le terrain identifié doit nécessairement avoir un potentiel local de production économiquement suffisant pour servir de source de financement tout en permettant au producteur de satisfaire ses besoins de base.

Étape 2: consultation au niveau du village. Les terrains identifiés seront soumis à une consultation au niveau du village afin d'identifier ceux sur lesquels apparaissent des signes de litige. Cette consultation à laquelle participeront toutes les grandes familles du village sera sanctionnée d'un procès-verbal.

Étape 3: officialisation de l'intérêt porté à la création de forêts, à l'introduction d'arbres forestiers ou à la création d'agroforêts. Le chef du groupement présente un dossier aux deux autres parties sur laquelle est inscrit l'ensemble des membres signataires du partenariat d'obtention des titres fonciers.

Étape 4: préparation technique des parcelles. Cette étape consistera à relever les coordonnées géographiques et à recueillir des données topographiques des différentes parcelles.

Étape 5: inscription des parcelles auprès de l'AFOR afin qu'ils puissent être intégrés au procédé d'obtention des titres fonciers.

C'est à partir de cet instant que les propriétaires terriens seront en mesure de développer des perspectives économiques à long terme.

2. Assurer le financement des activités des comités villageois de gestion des forêts à travers le plan d'aménagement et de gestion durable des terres qui intégrera des activités de reboisement des terres dégradées. Ces plans d'aménagement et de gestion devront garantir (i) un partage équitable des revenus issus de l'exploitation; (ii) un mécanisme de plaintes et de recours et (iii) créer les conditions d'épanouissement économique et sociale des communautés locales quel que soit les origines. Sur cette dernière, il s'agira de restaurer, sur la base des opportunités de restauration des forêts en Côte d'Ivoire²⁵ en raison de 500 000 hectares de forêts de production (notamment dans les forêts classées) et 4 millions d'hectares de forêts du domaine rural. À travers cette démarche de restauration participative, les communautés locales pourront être associées et responsabilisées par l'administration forestière ou le secteur privé pour la réalisation de diverses activités ponctuelles ou permanentes à l'intérieur ou autour des forêts aménagées. L'ensemble des activités sera appuyé par les partenaires techniques et financiers dont le rôle dépendra du type d'utilisation des terres concerné. Le tableau suivant présente les potentiels acteurs à mobiliser en fonction du type d'utilisation des terres.

Tableau 18: Acteurs de financement et de mise en œuvre activités de gestion durable des forêts

Types d'utilisation des terres identifiées	Acteurs au niveau local	Partenaires techniques et financiers
Les aires protégées, parcs et réserves naturelles	Comités locaux de gestion des parcs et réserves (en liaison avec les collectivités territoriales), ONG	GiZ, PNUE, UNESCO, Etat, GIZ, Coopération Ivoir-Japonnaise, C2D, PNUE, Banque Mondiale, UICN, WCF
Les forêts classées	Collectivités territoriales, communautés locales, ONG	WCF, OIBT, Coopération Ivoir-Japonnaise, OIBT, CNTIG, BNETD, C2D, CORENA, FEM, FAO, GiZ, Opérateurs de la filière bois, ONG
Mosaïques et terres agricoles, cacaoyères, caféières, Palmeraies, etc.	Paysans propriétaires, ONG	Rain Forest Alliance, ISO, UTZ, Etat, AFD, PNUD, GIZ, Coopératives agricoles, Organisme de certification (ISO, etc.), Programme-Qualité, Entreprises privées du cacao, du café et du palmier à huile

²⁵ Opportunités de Restauration des Forêts et Paysages Dégradés en Côte d'Ivoire, IUCN, 2015

Plantations privées	Particuliers, Opérateurs économiques, ONG	Etat, FIRCA, ANADER, BNETD, OIBT
Savanes, Savanes boisées et forêts secondaires	Coopératives agricoles, Collectivités territoriales, ONG, opérateurs économiques	Etat, Coopératives agricoles, Collectivités territoriales, Entreprises privées du cacao, du café et du palmier à huile
Zones d'exploitation minières et mines abandonnées	Collectivités territoriales, ONG, Artisans miniers	Etat, BAD, Banque Mondiale, BID, AFD, Autorité du Bassin du Niger (ABN), Autorité du Bassin de la Volta (ABV), ONPC (Office National de la Protection Civile)
Forêts galeries et forêts ripicoles	Collectivités territoriales, ONG	Convention RAMSAR, CBD-Aichi, Possibilité d'associer les collectivités territoriales, CEDEAO, Banque Mondiale, BAD (PIF)
Forêts Sacrées	Collectivités territoriales	CBD-Aichi, Etat, ONG, Populations villageoises,
Mangroves, Zones côtières et hydromorphiques	Collectivités	RAMSAR (zones humides), FEM, Etat, FEM, Possibilité d'associer les collectivités territoriales

Source : Rapport IUCN sur Opportunités de Restauration des Forêts et Paysages Dégradés en Côte d'Ivoire, 2015

3. Mettre en place un fonds national fiduciaire pour le financement de la gestion durable des forêts.

Ce fond pourrait mettre en place des mécanismes d'incitation financière pour chaque catégorie d'acteurs qui contribuent à la gestion durable des forêts. Pour les petits propriétaires fonciers, il pourrait s'agir d'un mécanisme PSE. Pour les agents de l'administration forestière, il s'agira d'une prime de performance payée aux agents en fonction des objectifs de restauration ou de protection des forêts. Un tel fonds pourrait être alimenté par quatre sources de financement:

- a) **Taxes sur l'exportation du cacao issu des agroforêts:** dans le cadre de la culture du cacao, une fiscalité sur le Cacao issue des agroforêts classées (à condition de leur opérationnalisation sur le terrain avec la régularisation des planteurs infiltrés) pourrait être appliquée. Cette fiscalité serait justifiée par le principe de gestion durable des forêts qui recommande que les bénéfices issus de cette gestion fasse l'objet d'un partage équitable entre les différentes parties prenantes et contribue à son financement. La législation prévoit déjà le cas d'une telle fiscalité spécifiques pour le bois et les autres produits forestiers non ligneux issus des forêts classées.
 - Cette fiscalité sur le cacao provenant des agroforêts pourrait prendre la forme d'une redevance affectée au financement de la restauration et à la gestion durable de ces agroforêts, et pour l'amélioration des conditions de vie des communautés riveraines de ces forêts. Elle serait payée directement par les entreprises privées de l'industrie du cacao (exportateurs) qui auront à charge de prouver l'origine de leur cacao à travers un système de traçabilité reconnu par l'État.
- b) A l'heure actuelle, tant que les agroforêts n'ont pas été établies sur le terrain et fait l'objet d'enregistrement auprès de l'administration, le cacao cultivé dans les forêts classées n'est pas légal. Taxer ce cacao issu des forêts classées, proposition régulièrement évoquée en Côte d'Ivoire, reviendrait à légitimer une situation illégale. On estime à 40% le cacao ivoirien issu des forêts classées (GIZ, 2012). En attendant la mise en place effective des agroforêts et la régularisation de la production cacaoyère qui en sera issue, il est proposé que les entreprises qui ne sont pas en mesure de démontrer l'origine du cacao à travers un système de traçabilité agréé par l'État, acquittent **une taxe spéciale**, affectée à la gestion des agroforêts, **pour les volume de cacao non tracés**. Ceci devrait inciter les entreprises à étendre rapidement la traçabilité à l'ensemble de leur production afin de ne pas à avoir à payer cette taxe spéciale (dont le rendement diminuera avec l'augmentation des volumes tracés). À terme, seul le cacao provenant des agroforêts devra contribuer au financement de la restauration et de la gestion durable de ces agroforêts, à travers la redevance affectée .
- c) **Surtaxe à l'exportation des principaux produits responsables de la déforestation en Côte d'Ivoire.** La proposition serait d'établir un **différentiel fiscal progressif pour les DUS** (la taxe à l'exportation) en faveur du cacao tracé. Le cacao non tracé devrait supporter des taxes croissantes année après année, puisque seule la traçabilité permet de déterminer si le produit est légal ou non. Cette taxation croissante pousserait les producteurs légaux à intégrer un système de traçabilité. En revanche, les producteurs de cacao illégal (celui issu des forêts classées) ne pourraient pas, par définition, entrer dans ces systèmes de traçabilité. Quand les agroforêts seront établies et que les procédures de régularisation d'une partie des planteurs

auront été menées à terme, il sera possible d'étendre les systèmes de traçabilité aux planteurs régularisés afin que ceux-ci échappent à la surtaxation au niveau des DUS.

- Pour établir un différentiel fiscal incitatif, deux options sont possibles: (i) soit le maintien du taux de DUS pour le cacao tracé et une surtaxe (s'accroissant progressivement) pour le cacao non tracé (ii) soit un mécanisme de bonus-malus à travers lequel les recettes supplémentaires serviraient à baisser le taux de DUS pour le cacao tracé, ce qui donnerait une incitation plus forte à l'adoption de la traçabilité tout en étant neutre au niveau des recettes de l'État.
 - Il reviendra au gouvernement d'évaluer et de sélectionner les systèmes de traçabilité, qu'ils soient proposés par les firmes, par des organisations de certification ou qu'ils émanent du CCC, qui seront éligibles à ce mécanisme.
 - Parallèlement à cette taxe, une autre taxe pourrait être collectée sur les entreprises ou les industries à forte empreinte écologique négative sur les forêts.
- d) **Revenus carbonés de la finance climatique.** Dans le cadre des processus internationaux comme la REDD+, les conditions de valorisation économique du carbone se précisent de plus en plus. De même avec l'arrivée des géants du numérique (Google, Microsoft, Amazon, etc.) qui sont maintenant disposés à compenser leur émission de CO₂ à travers des investissements dans les activités de restauration forestières ou de production agricole durable, qui incluent l'agroforesterie.
- e) **Institutions financières internationales et nationales.** Il existe de nombreux fonds d'investissement et de banques commerciales nationaux et internationaux qui souhaitent investir dans les activités de restauration des forêts. Pour se faire, il s'agit de mettre en place des solutions de financement adapté qui intègre les spécificités des activités forestières notamment le reboisement et l'agroforesterie. En effet il s'agit d'imaginer les essences forestières comme des commodités à part entière. Des modèles d'affaires pourront ainsi être définis pour les différentes essences forestières. Ainsi, si l'on considère que l'investissement moyen pour la réalisation d'1 ha d'une essence forestière est en moyenne 600 000 FCFA, il sera possible en lien avec les banques locales de définir des conditions de financement avec des prêts à court, moyen et long terme. Pour y arriver, les chaînes de valeurs devront être structurées, le choix des essences pour la restauration devra être fait en fonction des marchés existants et un prix devra être communiqué selon les essences forestières.

5.2 Recommandations sur les mesures d'incitations indirectes pour la gestion durable des forêts en Côte d'Ivoire

1. **Au plan administratif et législatif**, il serait utile d'accélérer l'élaboration des textes d'application du nouveau code forestier afin de clarifier certaines dispositions de loi et faciliter leur mise en œuvre. Dans cette dynamique il serait utile également de prendre les dispositions suivantes:

- **Alléger les procédures d'obtention de permis d'exploitation des plantations forestières en domaine rural.** De façon conventionnelle, l'attribution des droits d'exploitation forestière se fait par décision ministérielle qui précise le quota de bois exploitable et les obligations faites pour le contrôle de l'exploitation. Or, dans le cas d'espèce, le code forestier donne le droit d'exploitation directement au propriétaire terrien. Au regard de cette attribution, l'administration forestière doit créer de nouvelles conditions légales d'exploitations des forêts du domaine rural. Il s'agira de développer des types de contrats directs entre les exploitants forestiers et les propriétaires de forêts ou d'arbres forestiers.
- **Formaliser le marché informel du bois pour une meilleure organisation de la filière bois-énergie-sciage à façon.** Cette démarche permettra à l'État de contrôler les différents flux de transaction inhérents et d'en tirer profit à travers la fixation d'impôt et taxe. Par ailleurs, le cadre permettra de contribuer à l'amélioration des services de surveillance et de conseil de l'administration forestière. Ainsi, dans les meilleurs délais, il s'agira de recenser tous les acteurs de la filière et de retirer le décret n°2013-815 du 26 novembre 2013 portant interdiction de l'exploitation artisanale qui ne correspond pas à la réalité sociale. La seconde étape consistera à mettre en place des organes décentralisés de gestion de la filière. Ils seront composés de représentants des différentes catégories d'acteurs, dont l'administration forestière.

2. Au plan économique et fiscal

- **Donner un prix de l'arbre sur pied.** Toute personne qui plante ou protège un arbre sur ses terres doit pouvoir le vendre à un prix attractif. Ainsi l'État devrait définir des modalités de fixation de prix en garantissant une valeur du prix minimale de l'arbre sur pied, au moins équivalente et supérieure à celle des matières premières de base comme le cacao, l'hévéa et le palmier à huile. Elle devra être fonction de l'espèce et du diamètre et de la conformation du fût

de l'essence forestière afin d'encourager les exploitants forestiers à appliquer une sylviculture rationnelle à travers des contrats d'exploitation.

- **Reverser une partie des taxes** de superficie, d'attribution, de quota (jusque-là entièrement reversé à la SODEFOR) et du DUS (droit unique de sortie) devrait être reversée aux agents des Eaux et Forêts pour leur contribution à protection des forêts.

5.3 Recommandations sur les mesures dissuasives pour la gestion durable des forêts en Côte d'Ivoire

Tableau 8: Mesures dissuasives pour la gestion durable des forêts en Côte d'Ivoire

1	Mettre en place des taxes de défrichement pour les activités qui entraînent des déboisements sur des superficies de plus de 50 ha
2	Mettre en place des taxes carbone pour les industries et manufactures qui rejettent des gaz à effet de serre
3	Imposer une taxe écocitoyenne aux entreprises bénéficiant des retombées de la forêt (SODECI, CIE, SIR, Constructeur de véhicules, etc.)

Source : Données d'enquêtes, Etude OIBT sur les incitations à la gestion durable des forêts en région tropicale, 2020

5.4 Recommandations sur les mesures d'incitations pour la gestion durable des forêts en fonction du type d'activités et des acteurs impliqués

Tableau 9: Mesures d'incitations pour la gestion durable des forêts en fonction du type d'activités et des acteurs impliqués

Principales activités	Principaux acteurs	Incitations directes	Incitations indirectes
Aménagement durable forestier	Administration forestière	– Prime de performance aux agents forestiers	– Profil de carrière claire pour les agents – Décoration des meilleurs agents – Formation des agents sur les techniques de gestion durables
	Industriels du bois	– Allègements fiscaux – Réduction de taxes	– Clarification foncière – Amélioration de la gouvernance forestière
	Communautés locales	– Partage des avantages issus de l'aménagement forestier et de l'exploitation forestière. Il s'agit ici des bénéfices directs et indirects liés à la reconnaissance des droits et rôles des communautés, quelle que soit leur origine, dans la gestion des forêts	– Cadre de dialogue garantissant la participation des communautés locales. – Formation et sensibilisation
Surveillance des forêts	Communautés locales	– Primes relatives aux activités de mise en œuvre et de suivi du reboisement – Plan partage des bénéfices clair et garanti	– Accessibilité et disponibilité d'infrastructures de base – Clarification foncière – Formation et sensibilisation
	Administration forestière	– Primes relatives aux activités de mise en œuvre et de suivi des forêts	– Profil de carrière clair pour les agents – Décoration des meilleurs agents – Formation des agents sur les techniques de gestion durables
Reboisement durable	Industriels du bois	– Concessions de conservation – Servitude de	– Clarification foncière – Clarification du code forestier sur la

		<ul style="list-style-type: none"> - conservation - Concessions agroforestières - Certification du bois 	<ul style="list-style-type: none"> - propriété de l'arbre et droit forestier - Amélioration de l'environnement macro-économique
	Communautés locales/ Administration forestières	<ul style="list-style-type: none"> - Paiement pour services environnementaux (PSE) pour le reboisement - Primes relatives aux activités de mise en œuvre et de suivi du reboisement - Distribution de Plants forestiers - Plan partage des bénéfices clair et garanti 	<ul style="list-style-type: none"> - Accessibilité et disponibilité d'infrastructures de base - Renforcement de l'encadrement des communautés locales
Intensification agricole et Agroforesterie	Producteurs	<ul style="list-style-type: none"> - Paiement pour Services Environnementaux (PSE) - Prime de certification des produits agricoles issus des systèmes agroforestiers - Distribution de Plants forestiers 	<ul style="list-style-type: none"> - Organisation du marché des PFNL - Prix garanti de l'arbre - Sécurisation foncière - Formation et sensibilisation des producteurs
	Industriels cacao, palmier à huile et hévéa	<ul style="list-style-type: none"> - Attribution de concession agroforestière - Allègements fiscaux - Contribution des revenus carbone forestiers - Certification des produits agricoles (cacao, hévéa, palmier à huile) 	<ul style="list-style-type: none"> - Clarification foncière - Clarification du code forestier sur la propriété de l'arbre et droit forestier

ANNEXES

Annexe 5: Liste des personnes consultés

DATE	NOM & PRENOMS	EMAIL	TELEPHONE	ORGANISATION	TYPE D'ORGANISATION
24/06/2020 11.49.27	KOUAME YAO JEAN	kyaojean@yahoo.fr	+22502251117	MINEF/ ABENGOUROU DREF	Gouvernement
24/06/2020 13.44.13	BATTO FLORENT	battoflorent2000@yahoo.fr	+22557323212	DIRECTION REGIONALE DES EAUX ET FORETS GOH	Gouvernement
25/06/2020 19.01.50	AMAN BAKA LAMBERT	amanbaka05@gmail.com	+22547620649	Direction régionale des Eaux et Forêts du Cavally	Gouvernement
02/07/2020 08.20.34	DECLERE Yanek	y.decleire@cgiar.org	+22578765818	ICRAF/GIZ	Centre de recherche et Université
03/07/2020 17.02.00	BELIGNE Vincent	vincent.beligne@giz.de	+22548079296	GIZ	Gouvernement
07/07/2020 18.04.20	BAIMEY Aubin Charles	charles.baimey@solidaridadnetwork.org	+22548127725	SOLIDARIDAD West Africa	ONG
09/07/2020 12.29.38	Léon SIAGOUE	siagoueleon1965@gmail.com	+22508666604	SOCIETE DE DEVELOPPEMENT DES FORETS (SODEFOR)	Gouvernement
13/07/2020 17.45.23	SORO SINATA	sinata.soro@gntci.org	+22507554806	GNT-CI	ONG
15/07/2020 11.48.35	VAUDRY Romuald	r.vaudry@nitidae.org	+22587333063	NITIDÆ	ONG

Des opérateurs privés (industrie du bois) ont également apporté de manière informelle des informations et exprimé des points de vue, sans toutefois remplir le formulaire qui leur a été envoyé.

Annexe 6: Processus national de planification de l'utilisation des terres

ETAPE	OBJECTIF	ACTIVITES
PARTIE 1 : CONCEPTION DU PROCESSUS D'ELABORATION DU SRADT		
E1: Programme de l'élaboration du SRADT	Viser à prendre en compte l'étude dans les activités de la région et à l'inscrire au budget de la collectivité territoriale	A1: Réunion avec le bureau du Conseil Régional (Président et Vice-présidents) pour arrêter l'idée d'élaborer le SRADT A2: Adoption et prise de délibération par le Conseil Régional A3: Approbation du programme triennal par la tutelle A4: Adoption du budget et transmission à la tutelle
E2: Préparation du processus d'élaboration du SRADT	Mettre en place une organisation, une logistique et des équipes techniques de travail	A1: Mise en place du Comité de pilotage A2: Mise en place du Comité technique A3: Mise en place des parties prenantes
PARTIE 2 : PRELIMINAIRES DE L'ETUDE		
E1: Choix du consultant	Recruter un consultant	A1: Rédaction des sous-dossiers techniques d'appel d'offre (DAO) A2: Rédaction du DAO A3: Enregistrement et publication du DAO à la Direction des Marchés Publics A4: Retrait du DAO et soumission A5: Mise en place et composition de la Commission décentralisée d'Ouverture des plis et de Jugement des Offres (COJO) A6: Dépouillement et évaluation des offres A7: Contrat avec le Consultant adjudicataire au regard de l'évaluation du Comité technique, le Comité de pilotage choisit le Consultant adjudicataire du marché.
E2: Mobilisation et sensibilisation des acteurs clés et des populations	Sensibiliser tous les acteurs clés et les populations locales, obtenir leur implication dans les différentes phases de l'étude et tenir toutes les informations utiles à disposition de l'étude	A1: Identification des cibles et des activités pertinentes de communication A2: Planification des activités de communication A3: Organisation d'un atelier de lancement A4: Sensibilisation des populations et processus de concertation A5: Elaboration du rapport de synthèse de l'étape A6: Validation du rapport de synthèse de l'étape
E3: Démarrage de l'étude	Prendre les dispositions administratives et financières permettant le démarrage de l'étude par le Consultant recruté.	A1: Rédaction et transmission d'une lettre de notification de service au Consultant A2: Rédaction des lettres d'introduction du Consultant auprès des services et entreprises de la région A3: Paiement conformément aux dispositions prévues dans le marché A4: Elaboration rapport de synthèse de l'étape A5: Validation du Rapport de synthèse de l'étape
PARTIE 3 : DEROULEMENT DE L'ETUDE		
E1: Elaboration de la rétrospective et du	Cerner de manière exhaustive les enjeux de développement de la collectivité à travers	A1: Délimitation du système régional A2: Identification des composantes (sous-systèmes) de l'analyse régionale

diagnostic prospectif du territoire	une série d'analyses rétrospective et prospective.	A3: Réalisation d'une revue documentaire
		A4: Réalisation de visites et d'enquêtes de terrain
		A5: Réalisation de la matrice d'intelligence stratégique
		A6: Elaboration des cartes descriptives et de synthèse
		A7: Etablissement du rapport de l'étape de la rétrospective et du diagnostic prospectif du territoire
E2: Analyse structurelle	Caractériser le champ de la réflexion prospective, identifier les facteurs et variables caractérisant le système et son environnement, acquérir une intelligence du système global et de la problématique et identifier les facteurs déterminants de l'évolution du système régional	A8: Validation du rapport
		A1: Réalisation de la morphologie
		A2: Remplissage de la matrice carrée d'analyse structurelle
		A3: Identification des différents types de variables
		A4: Rapprochement des variables pour l'identification des grands enjeux de développement
		A5: Réalisation du rapport de synthèse de l'étape
E3: Construction des scénarios et de la vision	Explorer de manière systématique les futurs possibles de la région et construire la vision de la région	A6: Validation du Rapport de synthèse de l'étape
		A1: Reformulation des enjeux en thèmes prospectifs
		A2: Formulation des questions-clés les plus structurantes pour chaque thème prospectif
		A3: Formulation des hypothèses d'évolution ou modalités de réponse
		A4: Construction des scénarios thématiques
		A5: Construction des scénarios globaux
		A6: Rappel des attentes et des aspirations des populations
		A7: Construction de la vision
		A8: Elaboration d'un rapport de synthèse de l'étape
A9: Validation du Rapport de synthèse de l'étape		

E4: Formulation des stratégies	Passer de la phase exploratoire de la prospective à la phase stratégique	A1: Réalisation du premier niveau de l'arbre
		A2: Formulation des objectifs stratégiques ou de long terme
		A3: Construction du deuxième niveau de l'arbre
		A4: Formulation des objectifs opérationnels
		A5: Construction du troisième niveau de l'arbre
		A6: Formulation des actions
		A7: Identification des indicateurs objectivement vérifiables
		A8: Rédaction du rapport de l'étape
E5: Elaboration du programme prioritaire	Identifier les programmes/projets prioritaires à réaliser en lien avec les politiques nationales de développement (PND, PNP, Politiques sectorielles)	A1: Définition des actions prioritaires d'aménagement et de Développement
		A2: Elaboration des fiches projets
		A3: Estimation des coûts des actions prioritaires
		A4: Elaboration des documents cartographiques du Schéma Régional d'Aménagement et de Développement du Territoire
		A5: Rédaction du rapport de l'étape
		A6: Validation du rapport de l'étape

Annexe 7: Résultats des consultations des acteurs sur les mesures d'incitations pour la gestion durable des forêts

Type de structure/organisation	Quels commentaires faites-vous sur les mécanismes d'incitation actuels sur la gestion des forêts ?	Selon vous quelles sont les mesures incitatives qui devraient être mis en œuvre pour assurer une gestion durable des forêts ?	Quelles sont selon vous, les mesures réglementaires et administratives dissuasives qui limitent la mise en place de mécanismes d'incitation appropriés à la gestion des forêts ?	Quels sont selon vous le cadre réglementaire incitatif qui devrait être mis en place pour assurer une gestion plus durable des forêts ?	Quelles les activités que votre organisation pourrait faire pour contribuer à la gestion durable des forêts ?
Gouvernement	Insuffisantes	<ul style="list-style-type: none"> - Vulgariser les mesures auprès des propriétaires terrien et chef coutumier, - Informer suffisamment les services forestiers locaux et les autorités administratives sur les mécanismes d'incitation mises en place définir clairement et vulgariser des critères simples et réalistes de gestion durable des Forêts qui prennent en compte les spécificités locales. 	<p>Les règles actuelles qui régissent l'exploitation forestière en C.I,</p> <ul style="list-style-type: none"> - les contraintes liées à la mise en œuvre du foncier rural 	<ul style="list-style-type: none"> - Transférer effectivement la propriété de l'arbre au paysan, - Lever toutes les contraintes liées à la valorisation des produits d'essences plantées pour encourager nos populations à s'adonner à la sylviculture - Mettre en place un système de bourse des valeurs des produits forestiers pour faire connaître aux populations les avantages financiers liés aux activités forestières 	<ul style="list-style-type: none"> - Organiser des séances d'information et de sensibilisation des autorités administratives, coutumières et des populations - Identifier et inventorier les propriétaires de Forêts - Encadrer les propriétaires de Forêts dans la gestion durables de leur patrimoine - Suivre et évaluer la mise en œuvre des mesures de gestion durable des Forêts situées dans notre ressort territoriale
Gouvernement	Insuffisantes	<ul style="list-style-type: none"> - Etablir un barème d'achat du cubage des essences forestières plantées - Alléger les procédures d'obtention de permis d'exploitation des plantations forestières en domaine rural; - Déconcentrer au niveau régional la délivrance 	<p>L'obligation de délivrer un acte de propriété juridique pour revendiquer la propriété d'une parcelle;</p> <ul style="list-style-type: none"> - la gestion forestière n'est pas une question transversale pour les ministères concernés, chaque ministère mène sa politique dans un canevas sans tenir 	<ul style="list-style-type: none"> - la mise en œuvre effective de la Loi portant code forestier; - L'opérationnalisation de la Stratégie de la Politique de Préservation, de Réhabilitation et d'extension des Forêts; 	<ul style="list-style-type: none"> - Sensibilisation de toutes les couches de la société; -- Assurer l'appui technique (productions de plants, mise en place de reboisement, sylviculture, suivi de l'exploitation) en matière de gestion durable des forêts aux différents groupes socio-professionnels requérants.

		<p>de documents d'exploitation des plantations forestières en domaine rurale;</p> <ul style="list-style-type: none"> - Rassurer les populations sur la propriété des arbres plantés; - Mettre en place des comités villageois de gestion des forêts avec un appui financier. 	<p>compte de la politique des autres ministères;</p>		
Gouvernement	Insuffisantes	<p>La ristourne qui revient à l'agent rédacteur d'un procès-verbal devrait être rehaussée de 10 à 25%. Par ailleurs les ristournes de vente des carnets de produits secondaires devraient passer de 5 à 10%</p>	<p>Les textes fixant les taxes en matière forestière (de l'exploitation jusqu'à l'exportation des produits forestiers) consacrent une faible partie desdites taxes mobilisées aux agents des Eaux et Forêts, contrairement à ce qui est observé dans d'autres secteurs d'activités.</p>	<ul style="list-style-type: none"> - prévoir des mesures incitatives par hectare ou par nombre de plants mis en terre pour les volontaires au reboisement; - prévoir des primes de reboisement pour le personnel des Eaux et Forêts à l'instar des agents de l'Office des Parcs Nationaux et Réserves qui ont en plus des primes données à tous les agents des Eaux et Forêts de Côte d'Ivoire, d'autres primes en interne relativement à leur activités quotidiennes 	<p>Entreprendre d'importantes activités de reboisement. Ces actions à mener devraient être subordonnées à la mise à disposition de moyens appropriés (GPS, moyens matériels et financiers pour la création des pépinières et pour les travaux de préparation des terrains pour le reboisement) aux services déconcentrés.</p>

Centre de recherche et Université	Insuffisantes	<ul style="list-style-type: none"> - Lever les contraintes à la valorisation, par les producteurs, des bois et PFNL dans les parcelles qu'ils cultivent - Encourager l'utilisation des contrats de partenariat proposé par l'AFOR pour organiser le partage des bénéfices de l'exploitation des produits forestiers entre propriétaire et utilisateur de la parcelle - Former le service du MINEF en charge de la validation des plans d'aménagement des forêts classées pour assurer une prise en compte des équilibres entre productions agricoles (cacao stt) et couvert forestier et dimensionner adéquatement les agroforêts (avant de valider leur création au sein des FC) - Proposer des avantages aux planteurs de forêt comme un accompagnement technique, l'enregistrement de leur réalisation pour une 	<p>Les demandes d'autorisation d'exploitation ou d'éclaircie qui sont imposées aux petits propriétaires. Elles découragent jusqu'au maintien des recrues naturels</p> <ul style="list-style-type: none"> - Les plans d'aménagement trop compliqués et les inventaires statistiques qui sont imposés aux petits propriétaires - l'absence d'un mode autorisé d'exploitation artisanal du bois pour permettre la valorisation des bois (et rebus d'exploitation industrielle) - l'absence de permis de récupération de bois pour la valorisation des bois abandonnés ou bois d'hévéa par exemple 	<ul style="list-style-type: none"> - Accélérer la reconnaissance de la propriété traditionnelle engagée par l'AFOR y compris les contrats de partenariat pour prendre en compte les utilisateurs et non seulement les propriétaires des terres à enregistrer - Prévoir une fiscalité allégée pour les promoteurs de reboisement industriel de bois, y compris les entreprises de transformation du bois présente en CI (l'avenir de l'approvisionnement durable en bois du pays est dans les bois de plantation) 	<ul style="list-style-type: none"> - Promouvoir une agroforesterie soucieuse de la réhabilitation des paysages forestiers - Amélioration du matériel génétique mis à la disposition des planteurs
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		<p>rétribution carbone, l'exonération de taxe sur la vente des bois à un exploitant</p> <ul style="list-style-type: none"> - Mettre à disposition des planteurs des essences forestières de qualité génétique vérifiée subventionnée (parc à bois de greffe, centre de semences) 			
Gouvernement	Insuffisantes	<ul style="list-style-type: none"> (i) Une reconnaissance facilitée de la propriété des arbres et des forêts tant sur la base des droits coutumiers que dans le droit positif; (ii) Des modalités non contraignantes pour l'exploitation et la commercialisation de produits obtenus par des efforts de plantation et/ou de protection/mise en défens; (iii) Une absence ou une légèreté de taxation pour la valorisation de produits obtenus par des efforts de plantation et/ou de protection/mise en défens; (iv) Une absence ou une légèreté de taxation pour la valorisation de bois d'œuvre issu de forêts classées gérées durablement (mise en œuvre effective des plans d'aménagement et surveillance contre les occupations agricoles) dans le cadre de conventions de partenariat, en particulier pour des produits destinés à l'approvisionnement du marché local. 		<ul style="list-style-type: none"> (i) La promotion de la gestion durable de forêts communautaires résiduelles ou de forêts privées; (ii) La promotion sur base participative de techniques agroforestières (création de sites-pilotes, appui à des pépiniéristes, formations et formation de formateurs); (iii) L'appui au développement de chaînes de valeur de PFNL (p.ex. huile de makoré, mangue sauvage, petit cola, frotte-dents de Garcinia ...), dans le domaine rural et/ou en forêts classées; (iv) L'appui à la restauration d'un couvert forestier sur des berges de rivières (extension de l'expérience menée sur la Hana). 	

ONG	Insuffisantes	<p>Il faut dans un premier temps un cadre juridique qui offre des garanties à toutes mesures de protection.</p> <p>Il faut également des incitations financières à mesure de rivaliser avec les exploitations agricoles. Des mesures de facilitation des taxes pour les personnes et entités qui font la promotion de la conservation des forêts.</p> <p>De plus il faut que la valeur mercurielle de l'arbre soit définie, et qu'un prix soit fixé pour l'arbre de sorte que le paysan connaisse la valeur et protège l'arbre.</p>	<p>Le fait que la propriété de l'arbre ne soit pas bien élaborée actuellement et surtout acquise avec des textes d'application de la loi 2019.</p> <p>Aussi le fait que la valeur de l'arbre ne soit pas connue des populations rurales.</p>	<p>Le cadre réglementaire doit proposer des facilités fiscales et prévoir des bonus pour ceux qui ont à cœur la préservation des forêts</p>	<p>Notre organisation agit à plusieurs niveaux notamment la formation des acteurs (producteurs, coopératives, communautés, etc.) sur la préservation de la forêt, de son importance et la préservation également des HVC. Nous agissons aussi au niveau de la mise à disposition des plants d'arbres forestiers et de la formation à la mise en place des pépinières. Et en fin nous travaillons avec les acteurs à influencer le cadre politique et réglementaire à travers des processus multi-acteurs pour une meilleure prise en compte de la préservation des forêts.</p> <p>Nous pourrions donc améliorer ces actions ci-dessus et surtout les mettre à échelle afin de toucher une plus grande cible.</p>
Gouvernement	Moyennement suffisantes	<p>Impliquer les Collectivités territoriales, la société civile, les ONG</p> <p>Renforcer l'implication des communautés locales, des autorités administratives et judiciaires</p> <p>Renforcer les capacités des agents forestiers, des autorités administratives et judiciaires, des Communautés locales</p> <p>Développer des AGR à la périphérie des forêts classées, parcs et réserves</p> <p>Renforcer les actions de protection des forêts classées et celles du domaine rural</p> <p>Reboiser les zones dégradées dans les forêts classées</p> <p>Rédiger les plans simples de gestion des forêts du domaine rural</p> <p>Poursuivre la rédaction des plans d'aménagement des forêts classées, parcs et réserves naturelles</p> <p>Créer un fonds forestier national</p> <p>Mettre en place un mécanisme durable de financement</p>	<p>Mettre en place une structure interministérielle de mobilisation des ressources financières destinées à la forêt</p> <p>Poursuivre les actions de protection des forêts classées</p> <p>Développer des pôles de grands reboisements</p> <p>Poursuivre la sylviculture des reboisements et des forêts naturelles</p> <p>Doter toutes les forêts classées de plans d'aménagement et les mettre en œuvre</p> <p>Poursuivre la création des Comités de Gestion Participative à la périphérie des forêts classées</p> <p>Contribuer :</p> <ul style="list-style-type: none"> - au développement communautaire à la périphérie des forêts classées - à la création de couloirs de transhumance du bétail dans les forêts classées 		

		de la forêt	
ONG	Moyennement suffisantes	Mesures financières, fiscales et réglementaires	<p>Défaut de clarification et de sécurisation de la propriété foncière;</p> <ul style="list-style-type: none"> - Absence d'un plan de partage des bénéfices clair; - Quota insuffisant pour l'approvisionnement du marché local en bois d'origine légale; d'où le recours au bois issu du sciage à façon.
			<ul style="list-style-type: none"> - Faciliter et sensibiliser sur les procédures d'obtention des titres fonciers, - Alléger les coûts pour l'obtention de certains documents administratifs; - Lutter contre la corruption et les infiltrations en durcissant les sanctions à l'encontre des auteurs de violation (prévoir des amendes judiciaires, des amendes amiables et aussi des condamnations à réparation des dommages, avertissement et révocation de titres d'exploitation, la disqualification pour obtenir de futurs permis ou licences...) - Permettre la saisine du juge à titre préventif, en cas de menace imminente de dommage; - Rendre prioritaire la réparation en nature du dommage environnementale. <p>Activités de sensibilisation (sur la légalité du bois, clarification du régime foncier...), de renforcement de capacités et activités de plaidoyer</p>
ONG	Insuffisantes	La suppression effective des PEF dans les meilleurs délais et la possibilité pour les sylviculteurs du domaine rural de valoriser les bois à leur bénéfice, via, entre autres, la définition du prix du bois sur pied, par essence et par qualité (comme prévu par les projets de décrets attachés au CF de 2014).	<p>Le maintien des PEF, sans aucune base légale</p> <p>Sur la base des premiers certificats fonciers délivrés sur des espaces forestiers de la région de la Mé, Nitidae entend inciter et accompagner les propriétaires intéressés dans l'enregistrement officiel de leurs forêts et dans l'élaboration des documents d'aménagement et de gestion (en étroite collaboration avec la DR MINEF de la Mé et avec la Sous-Direction en charge du développement de la foresterie privée - DRCF). Avec les partenaires précités, nous entendons également aboutir à la commercialisation de lots de bois sur pied entre propriétaires de cacao bio agroforestier (et détenteurs de certificats fonciers) et industriels du bois. Cela implique l'inventaire des bois à commercialiser chez chacun des cacaoculteurs, la rédaction d'un cahier des charges d'exploitation pour limiter au maximum (voire compenser) les dégâts occasionnés dans les cacaoyères et enfin, la mise en vente des lots constitués. Cette activité est envisagée dans le cadre du projet Cocoa4Future, mais dépend bien entendu des modalités de commercialisation qui seront finalement définies (cf remarque précitée sur la définition du prix du bois sur pied). Plus d'infos sur Cocoa4Forest ici: https://www.nitidae.org/actions/cocoa4future-durabilite-des-systemes-de-production-et-dynamiques-nouvelles-du-secteur-cacaoyer</p> <p>Nous allons par ailleurs poursuivre notre soutien à la redynamisation</p>

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

				des vieilles plantations (teck notamment) dont la majeure partie est aujourd'hui plus ou moins abandonnée, et ce, pour diverses raisons (arrêté 480 en attente de révision, capacités du MINEF à renforcer en termes de conduite de telles plantations, sensibilisation à mener auprès des boulangeries pouvant constituer un excellent débouché pour les bois de première éclaircie)
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Type de structure/organisation	Selon vous, quelles mesures incitatives fiscales appropriées devraient être mises en œuvre pour vous permettre de réaliser aisément les mesures évoquées plus haut ?	Selon vous, quelles mesures fiscales inappropriées devraient être supprimées pour faciliter votre contribution à la gestion durable des forêts ?	Quelles mesures incitatives non fiscales appropriées devraient être introduites pour assurer la gestion durable des forêts ?	Selon vous, quelles mesures incitatives non fiscales inappropriées devraient être supprimées dans le mécanisme incitatif actuel de gestion durable des forêts ?
Gouvernement	<ul style="list-style-type: none"> - Taxe de défrichement pour les activités qui entraînent des déboisements sur des superficies de plus de 50 ha - Taxe carbone pour les industries et manufactures qui rejettent des gaz à effet de serre 	Taxes d'attribution et de superficie des Périmètres d'exploitation Forestière		Taxes d'Intérêt Général (TIG)

Gouvernement	<ul style="list-style-type: none"> - mise en place d'un fond vert pour accompagner financièrement les acteurs détenteurs de parcelle(s) forestières de plus de deux ans enregistrés dans les registres de l'administration forestière; - Vulgariser les barèmes d'achat des arbres sur pieds. 		<ul style="list-style-type: none"> - Doter chaque unité industrielle d'au moins un (1) PEF pour l'alimentation de son usine; - supprimer l'existence des groupements d'exploitants forestiers. 	
Gouvernement	Une partie des taxes de superficie, d'attribution, de quota (jusque-là entièrement reversé à la SODEFOR) et du DUS (droit unique de sortie) devrait être reversée aux agents des Eaux et Forêts.		Des primes de reboisement aux agents des Eaux et Forêts	
Centre de recherche et Université	Alléger la fiscalité des propriétaires qui allouent une partie de leur terre à la forêt		Simplifier les obligations des petits producteurs de bois qui peuvent contribuer au moins autant que les grands à l'effort de reconstitution d'un couvert forestier propice à l'agriculture, notamment l'agrément	Agrément sylviculteur pour les petits propriétaires de forêt ou alors son obtention quasi sans frais, ni dossier compliqué en récompense de sa contribution à l'effort national de reconstitution du couvert forestier
Gouvernement	Des exonérations ou taxations réduites pour les propriétaires, sylviculteurs privés, opérateurs œuvrant à une valorisation optimale des produits forestiers gérés durablement.		<ul style="list-style-type: none"> (i) La reconnaissance formelle des efforts de renouvellement de la ressource pour en faciliter l'exploitation ultérieure (attestations de plantation, carnet du sylviculteur, garanties d'achat ...); (ii) Les paiements pour services environnementaux en faveur des actions communautaires ou privées de maintien ou de création de couvert forestier; (iii) Le développement de structures de conseil appropriées (p.ex. avec l'extension des compétences de l'ANADER à la foresterie rurale et à l'agroforesterie); (iv) La simplification des dispositions 	<p>Quels mécanismes incitatifs existe-t-il actuellement ?</p> <p>Il s'agirait dans la formulation des textes d'application du Code forestier d'éviter la lourdeur ou l'irréalisme de certaines mesures envisagées (p.ex. les inventaires et plans de gestion pour les petits propriétaires, les agréments professionnels ...).</p>

FISCAL AND NON-FISCAL INCENTIVES FOR SUSTAINABLE FOREST MANAGEMENT

			administratives et réglementaires pour les sylviculteurs privés et les communautés propriétaires.	
ONG	Réduction des impôts. Prime pour la protection des forêts.	En ce qui nous concerne, en tant qu'organisation de la société civile, nous n'avons pas de mesure fiscale inappropriée, cependant la conversion de certaines taxes en bonus pour la protection de la forêt pourrait être d'un soutien significatif dans le cadre de nos activités.	La réalisation d'infrastructure pour les communautés. Par cet acte les communautés elles-mêmes de manière collective se sentiraient investies du rôle de protection des forêts lorsqu'elles sauront que l'hôpital, l'école, etc. proviennent des efforts de conservation des forêts qu'elles font.	Certaines mesures d'incitations comme la complantation n'ont pas donné de résultats probants. Les producteurs craignent qu'au moment de la récolte des arbres leurs plantations ne soient détruites. Ainsi ils mettaient souvent le feu aux arbres.
Gouvernement	Accorder à la SODEFOR un statut fiscal privilégié Alimenter le Fonds forestier national par des prélèvements : - sur les exportations des productions agricoles (café, coton, cacao, hévéa, etc.) : - d'une taxe écocitoyenne imposée aux entreprises bénéficiant des retombées de la forêt (SODECI, CIE, SIR, Constructeur de véhicules, etc.)	Exempter la SODEFOR de la TVA car elle la paye sur ces factures d'achat alors qu'elle ne peut la récupérer parce que son régime fiscal ne le lui permet pas	RAS	Interdiction de l'exportation des grumes de Teck
ONG	- Revoir les taxes qui augmentent le coût du bois légal sur le marché local; - Une surtaxe sur le bois destiné à l'exportation; - Revoir les taxes qui rendent difficiles les PMEF d'exercer en toute légalité (obtention de l'agrément)	Les taxes qui augmentent le coût du bois légal sur le marché local; - Les taxes qui rendent difficiles les PMEF d'exercer en toute légalité (obtention de l'agrément)	- Encourager le développement de l'expertise environnementale; - Le renforcement des capacités de gestion et de contrôle des structures en charge de l'environnement et de la forêt; - Renforcer le système de suivi, de contrôle et de surveillance; encouragé par des gratifications financières; - Élaborer et vulgariser un plan de partage transparent sur le partage des bénéfices; - Une meilleure valorisation des déchets forestiers; - Une meilleure application des textes déjà existants pour une meilleure gouvernance; - La formalisation du marché informel du bois pour une meilleure organisation de la filière bois-énergie; les sensibiliser sur la légalité en matière forestière; - Promouvoir les techniques permettant d'économiser le bois (meilleure	

			<p>carbonisation du bois);</p> <ul style="list-style-type: none"> - Augmenter le quota de l'approvisionnement du marché local en bois d'origine légale - Réduire les coûts du bois légal sur le marché local pour limiter le recours au bois issu du sciage à façon - Inclure dans la formation des décideurs un module sur les écosystèmes; - Augmenter le quota de l'approvisionnement du marché local en bois d'origine légale - Réduire les coûts du bois légal sur le marché local pour limiter le recours au bois issu du sciage à façon - Inclure dans la formation des décideurs un module sur les écosystèmes; <p>Le quota sur l'approvisionnement du marché local en bois légal.</p>
ONG	<p>Dans le cadre de la suppression effective des PEF, il convient de repenser toute la fiscalité forestière qui pèse aujourd'hui uniquement sur les détenteurs de PEF et qui pourraient également porter à l'avenir sur les producteurs de bois. Une refonte complète de la fiscalité est donc certainement à prévoir dans les meilleurs délais pour que le MINEF ne subisse pas d'importants manques à gagner et puisse maintenir ses capacités opérationnelles de terrain.</p>	<p>Les dispositions fiscales liées à l'arrêté 480 devraient être révisées dans les plus brefs délais pour faciliter la redynamisation des vieilles plantations de teck et autres.</p>	<p>Outre la suppression effective des PEF, les dispositions administratives liées à l'arrêté 480 devraient être révisées dans les plus brefs délais pour faciliter la redynamisation des vieilles plantations de teck et autres.</p>

Annexe 8: Fiche de collecte des avis et propositions des acteurs du secteur privé sur les mesures d'incitation adaptées à une gestion durable des forêts en Côte d'Ivoire

Dans le cadre de l'étude de l'Organisation internationale pour les Bois tropicaux (OIBT), sur les mesures incitatives à la gestion durable des forêts, nous sollicitons votre collaboration en répondant au présent questionnaire.

PARTIE I : IDENTIFICATION DE LA STRUCTURE	
1. Nom de la structure	
2. Email	
PARTIE II : AVIS ET RECOMMANDATIONS	
3. Quels sont vos commentaires sur les mécanismes d'incitation actuels sur la gestion des forêts ?	
4. Selon vous, quelles sont les mesures réglementaires et administratives dissuasives qui limitent la mise en place de mécanismes d'incitation appropriés à la gestion des forêts ?	
5. Selon vous, quel cadre réglementaire incitatif devrait être mis en place pour assurer une gestion durable des forêts ?	
6. Comment, de quoi et de qui ce cadre devrait-il être constitué ?	
7. Selon vous, quel cadre administratif incitatif devrait être mis en place pour assurer une gestion durable des forêts ?	
8. Selon vous, quelles mesures incitatives fiscales appropriées devraient être introduites dans le mécanisme incitatif actuel de gestion durable des forêts ?	
9. Selon vous, quelles mesures incitatives fiscales inappropriées devraient être supprimées dans le mécanisme incitatif actuel de gestion durable des forêts ?	
10. Selon vous, quelles mesures incitatives non fiscales appropriées devraient être introduites dans le mécanisme incitatif actuel de gestion durable des forêts ?	
11. Selon vous, quelles mesures incitatives non fiscales inappropriées devraient être supprimées dans le mécanisme incitatif actuel de gestion durable des forêts ?	

This is the annex of an ITTO report prepared by Alain Karsenty and national consultants analysing incentives and disincentives for sustainable forest management in the tropics with a view to assisting ITTO producer member countries to put effective incentives in place. The report is part of ITTO's ongoing effort to provide knowledge and learning on potential frameworks for incentivizing investments in the sustainable management of natural tropical forests; it makes 22 recommendations for designing incentives that can make a difference in the adoption of sustainable practices in the tropical forest sector.

This annex comprises comprehensive case studies in Brazil, Cambodia, the Congo, Côte d'Ivoire, Myanmar, Peru, Thailand and Viet Nam prepared by national consultants.



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