



ITTO

International Tropical
Timber Organization

Sustaining Tropical Forests



ITTO Voluntary Guidelines for the Sustainable Management of Natural Tropical Forests

PART I:

**ITTO Management Approaches; Issues for SFM;
Key concepts; Framework for voluntary guidelines;
Objective 1: Providing the enabling conditions for SFM**

**Jürgen Blaser
Cotonou 9 May 2017**

ITTO's management approaches (page 12)

- Sustainability
(“SFM”, “SMF”,
“well-managed forests”)
- C&I as tool for defining SFM,
monitoring progress &
reporting on SFM
- Multipurpose forest
management
- Adaptive forest management
- Pérennité
(“GDF”, “SMF”,
“forêt-bien aménagé”)
- C&I comme outil pour définir la
GDF, pour suivre le progrès et
pour reporter sur la GDF
- Aménagement forestier à
finalités multiples
- Gestion forestière adaptive

What constitutes sustainable forest management? (page 12)

A strategy for sustainable forest management must reflect a variety of objectives:

- continuously satisfy the needs for timber, fiber, and non-timber forest products (“forests goods”);
- ensure conservation of soil, freshwater flow, and carbon stocks;
- conserve biological diversity;
- sustain the resilience of forest ecosystems and renewal capacity of all species;
- support the food security and livelihood needs of local communities; and
- provide a fair sharing of the benefits from forest uses, including financial, cultural, spiritual, and recreation values.

ITTO Core Definitions (pages 20-21)



Natural forest

Forests composed of indigenous trees regenerated naturally

Permanent Forest Estate

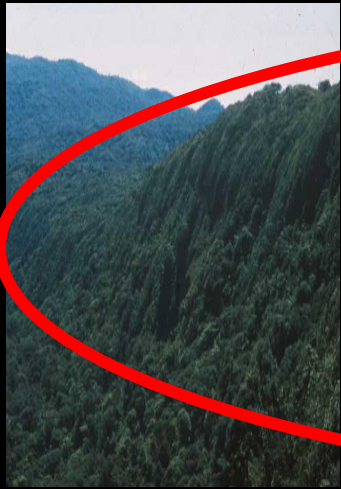
Land, whether public or private, secured by law and kept under permanent forest cover. This includes land for the production of timber and other forest products, for the protection of soil and water, and for the conservation of biological diversity, as well as land intended to fulfil a combination of these functions.

Sustainable Forest Management (ITTO)

Sustainable forest management is the process of managing forest to achieve one or more clearly specified objectives of management with regard to the production of a continuous flow of desired forest products and services without undue reduction of its inherent values and future productivity and without undue undesirable effects on the physical and social environment.

SFM Tropical Natural Forests: what is meant?

420 mm ha



650 mm ha



160 mm ha



280 mm ha



Non-accessible
old-growth forest,
Forest Protected
Areas in the
Tropics
(27% of tropical
Forest area in
2008)

Multiple-Use Forest Area:
Opened-up forests,
Accessible forest reserves,
Degraded old-growth forests,
Secondary forests in
all succession stages...

Timber production
forests

Degraded forest
land,
Forest plantations,
agroforestry, small-
scale agriculture,
etc.

“Natural Tropical Production Forest”

Forest Landscapes Humid Tropics; estimates 2015

420 million ha

160 million ha

650 million ha

280 million ha



12 m ha
CFM

Conservation forests:
including protected forests,
non-accessible forests

Production forests:
partly under
concession
arrangements

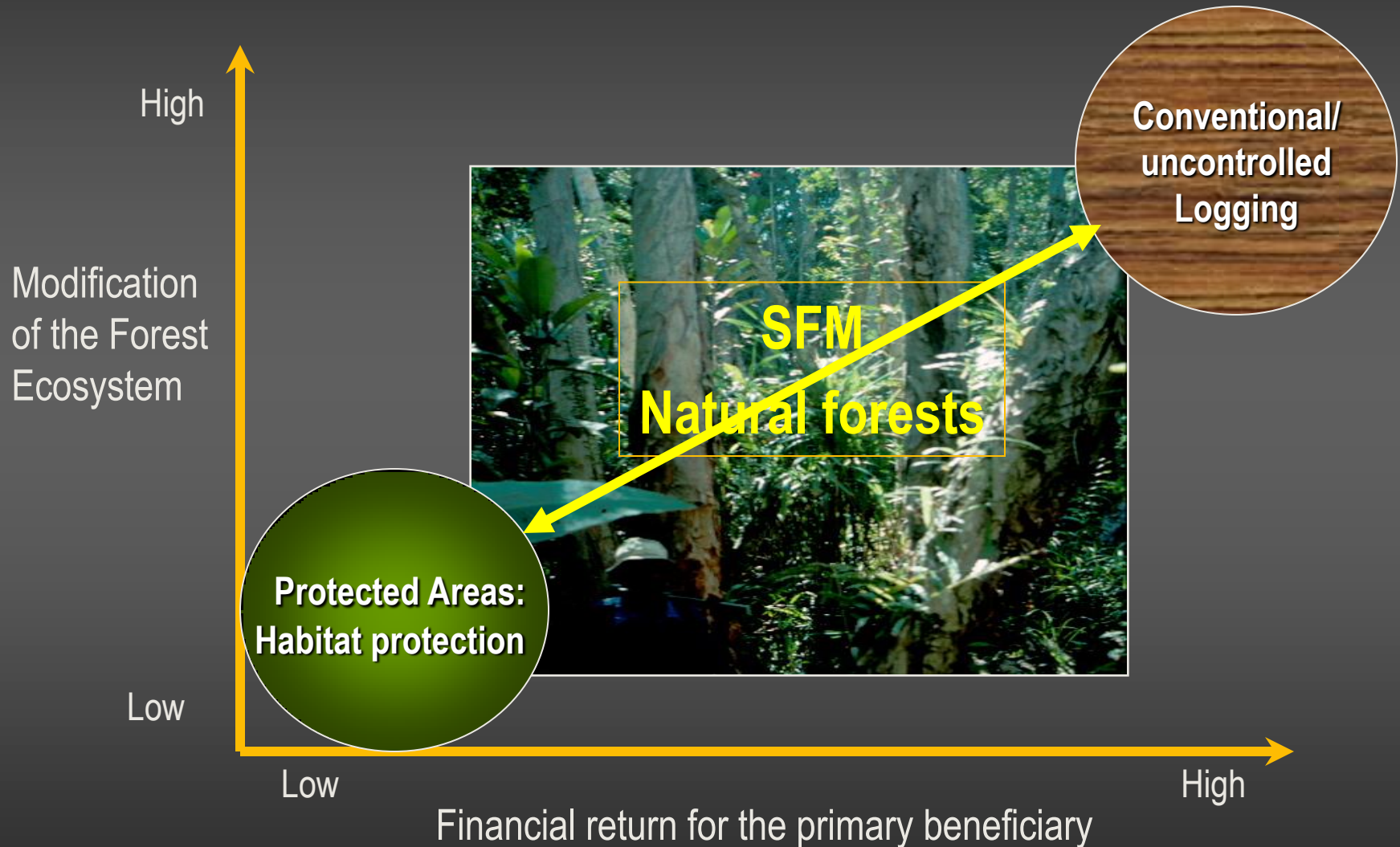
Accessible forests:
Degraded “primary”,
& Secondary forests

Planted forests,
Agroforests,
Commercial
plantations
Mosaic forests

Intact forest landscapes

Degraded/modified forest landscapes

Multipurpose/adaptive: what is meant?



Tropical Forest Management Options: multipurpose forest management

Forest Conservation:
Protective/Protection
management



Multipurpose
management:
Goods & Env. Services



Timber production forests
(concession) management
“sustained yield”



Multipurpose forest management

- Growing demand for G&S from tropical forests
- Create the conditions to diversify forest use, broaden forest productivity and provide incentives to maintain forests (in community forests and forest concessions)
- Forest managers need to learn to continually balance various management objectives that inevitably will change over time as economic and societal needs and values change



Adaptive Management (page 14)

Learning by doing, managing (future) risks

- involves the use of science to support best practices, planning, monitoring results against expected outcomes and then adapting the practices to improve outcomes based on the original expectations (Blaser and Thompson 2010).
- encourages active participation by all stakeholders to improve the effectiveness of management interventions providing a flexible and responsive way to deal with uncertainty and change (IUFRO/WFSE 2010).
- considers and link both, the scientific as well as the traditional knowledge for practical forest management implementation (for instance, to stratify and classify local forest types, lesser known tree species, regeneration and restoration practices, knowledge on NTFP management, etc.)

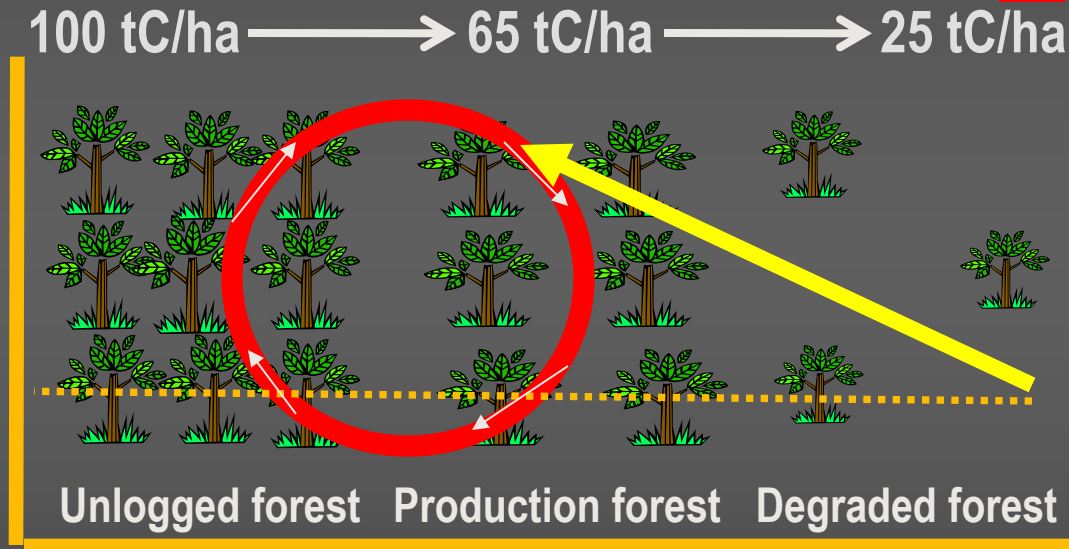
→ Adaptive management is a process by which forest managers adjust their strategies for meeting forest management objectives as conditions change

Issues for SFM in natural tropical forests (pages 14-19)

- SFM in the context of landscape management
- SFM in (“primary”) natural tropical forests (see special illustration PPT (05))
- Forest degradation and restoration
- SFM natural forests and biodiversity conservation
- Protective functions of forests
- REDD+
- SFM and extra-sectoral forces affecting forests

(2) Restoring degraded natural forests

Timber, carbon	+++	→	+	
Protective functions	+++	→	+	
Biodiversity	+++	→	+	Deforestation (land-use change)



Forest Degradation

Forest Restoration Process

 Sustainable Forest Management

Forest Restoration is carbon sequestration in forested areas, an SFM approach

<i>Mitigation option</i>	<i>Mitigation objective</i>	<i>Mitigation policy instrument</i>	<i>Forest/Land Management Option SFM</i>
Reduce GHG Emissions (source)	Reducing deforestation	REDD (“first D”)	(1) Committing forests as carbon pools through e.g. enforcement of law, creation of new protection areas, payments for environmental services in form of contractual agreements to retain forests)
	Reducing degradation	REDD (“second D”)	(2) Restoring lost carbon pools through various forms of sustainable/multiple-use forest management such as sustainable timber yield management, community forest management; PES in the form of credits per ton carbon sequestered, ecological restoration of degraded forests)
Increase CO2 sequestration (sinks)	Enhancing existing (degraded) forests (restoration of lost carbon pools)	REDD Plus	
	Creating new forests and tree cover	CDM A/R (outside forests)	(3) Creating new carbon pools through planted forest; agroforestry; rehabilitation of degraded lands; agro-sylvo-pastoral systems

Framework of the voluntary guidelines SFM objectives for natural tropical forests

- 1** Providing the enable conditions for SFM
- 2** Ensuring forest ecosystem health and vitality
- 3** Maintaining the multiple functions of forests to deliver products and environmental services
- 4** Integrating social, cultural and economic aspects to implement SFM

SFM Objectives and Principles

1. Providing the enabling conditions for SFM

Principle 1: Forest governance and security of tenure

Principle 2: Land-use planning, permanent forest estate and forest management planning

2. Ensuring forest ecosystem health and vitality

Principle 3: Ecological resilience, ecosystem health and climate-change adaptation

3. Maintaining the multiple functions of forests to deliver products and environmental services

Principle 4: Multipurpose forest management

Principle 5: Silvicultural management

4. Integrating social, cultural and economic aspects to implement SFM

Principle 6: Social values, community involvement and forest-worker safety and health

Principle 7: Investment in natural forest management and economic instruments.

Objectives and Principles of SFM and their relationship to C&I

Page 23 of the document:

4 objectives listed that summarize 7 principles of SFM.

Objectives and principles directly relate to the 7 criteria to monitor and report on progress towards SFM (C&I).

Objective	Principles for managing natural tropical forests		Relationship with ITTO C&I for SFM
	Principle	Observations	
1. Providing the enabling conditions for SFM	Principle 1: Forest governance and security of tenure	Political commitment, supportive national policies, strong institutions, laws and regulations, appropriate governance, security of forest tenure and clearly defined access and use rights, including customary and traditional rights, are necessary conditions for SFM	Criterion 1: Enabling conditions for SFM
	Principle 2: Land-use planning, permanent forest estate and forest management planning	Managing tropical forests sustainably requires that land allocation and spatial planning within and outside forests maintain or enhance the economic, social and environmental values of forests at a landscape scale. This requires the adoption of a forest planning framework at the national, subnational or landscape scale	Criterion 1: Enabling conditions for SFM (planning framework) Criterion 2: Extent and condition of forests
2. Ensuring forest ecosystem health and vitality	Principle 3: Ecological resilience, ecosystem health and climate-change adaptation	Resilience is a key tenet of SFM in natural tropical forests; it is essential to maintain or enhance it to reduce risks to sustainability. Climate change is likely to affect tropical forests and the people who depend on them. It is essential to identify, prevent, monitor and manage threats to forests and to protect them from destructive agents and stresses	Criterion 3: Forest ecosystem health
3. Maintaining the multiple functions of forests to deliver products and environmental services	Principle 4: Multipurpose forest management	The role of natural tropical forests as providers of multiple goods and environmental services should be safeguarded by the application of sound planning and management practices that maintain ecosystem functions and the potential of the forest to yield the full range of benefits to society. In timber production forests, it is essential to have an approved management plan with clearly stated objectives and the silvicultural measures to help meet those objectives	Criterion 4: Forest production
	Principle 5: Silvicultural management		Criterion 5: Biodiversity Criterion 6: Soil and water protection
4. Integrating social, cultural and economic aspects to implement SFM	Principle 6: Social values, community involvement and forest-worker safety and health Principle 7: Investment in natural forest management and economic instruments	SFM needs to accommodate forest-based production (particularly of timber), environmental protection and local development concerns. Natural tropical forests perform a wide range of socioeconomic and cultural functions, which must be recognized and maintained	Criterion 7: Economic, social and cultural aspects

Principles, guidelines and recommended actions

Pages 22 to 26 of the document:

7 principles for managing natural tropical forests and the 60 related guidelines:

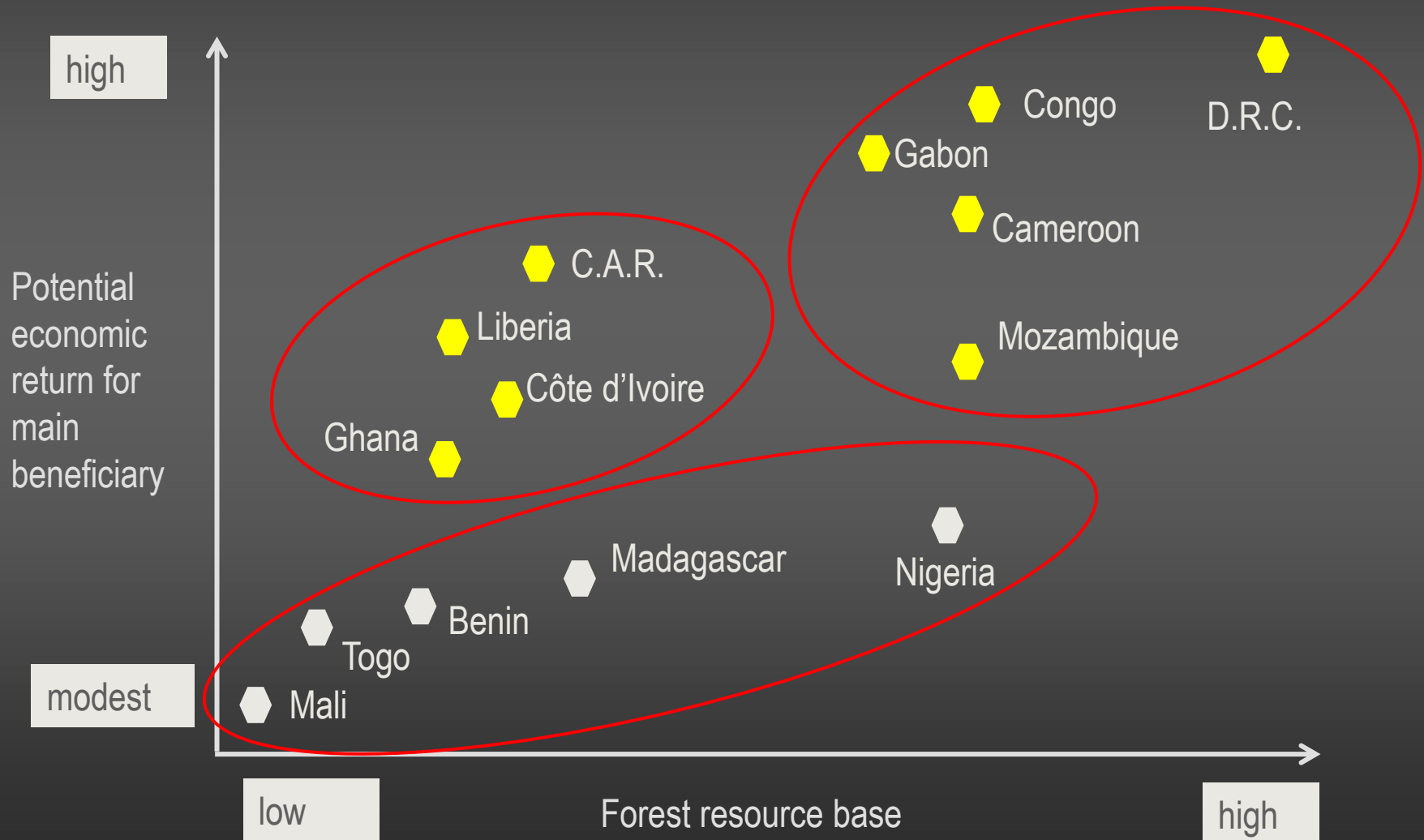
- 1 Forest governance and security of tenure (13)**
- 2 Land-use planning, permanent forest estate and forest management planning (6)**
- 3 Ecological resilience, ecosystem health and climate-change adaptation (8)**
- 4 Multipurpose forest management (5)**
- 5 Silvicultural management (13)**
- 6 Social values, community involvement and forest-workers safety and health (10)**
- 7 Investment in natural forest management and economic instruments (5)**

Principles of SFM differ among ITTO member countries:

Example: forest use in African ITTO member countries

Les principes de la GDF diffèrent entre les pays membres de l'OIBT:

Exemple: utilisation des forêts dans les pays membres africains de l'OIBT



Providing the enable conditions for SFM

Principle 1:

Forest Governance and security of tenure (pages 27-33)

Political commitment, supportive national policies, strong institutions, laws and regulations, appropriate governance, secure forest tenure, and clearly defined access and use rights, including customary and traditional rights, are all necessary for SFM.

Principle 1: Forest Governance and security of tenure

Rationale

- Political commitment
- Forest policy
- Governance
- Legislation and forest law compliance
- Institutional arrangement
- Forest concession as a form of forest tenure
- Gender equity
- Integrating emerging issues



Inherent vulnerability of the forest sector to illegal forestry activities

- ✓ Often large geographical extensions that need to be monitored and controlled;
- ✓ Remoteness of many forest areas from public eyes (before the time of REDD+ readiness)
- ✓ Heterogeneous nature of forest products and services;
- ✓ Multiple actors involved in production, processing, trade, monitoring and control
- ✓ Pressure by other land uses (transitory land use, mining)

Forest Sector: Main Issues to address



**Unauthorized
forest conversion,
tenure issues**

**Corruption
involving officials
and other
stakeholders**



**Illegal activities by
operators:
Illegal timber
harvesting, illegal
activities within legal
concessions**



**Timber theft,
timber smuggling,
illegal trade of
wood and non-
wood forest
products**

New and increasing challenges: Forests and M



Remains an issue: Unauthorized deforestation and forest degradation

Laws often fail to address correctly:

- ⇒ Livelihoods pressure
- ⇒ Informal land-rights
- ⇒ Lack of economic alternatives
- ⇒ Market opportunities for small farmers
- ⇒ Armed conflicts: displacement

Laws should focus on:

- ⇒ Speculative conversion
- ⇒ Money laundering
- ⇒ Ressource plundering
- ⇒ Financing of armed conflicts



Illegal activities of operators

- Illegal timber harvesting of various forms
- legalized, but unsustainable forest management
- movement / trade of wood products without authorization (national, regional, international)
- avoidance of payment of taxes or charges



Corruption* of officials

⇒ Grand corruption

- companies supporting political fractions for concession allocations, harvesting approvals, changes of rules, avoiding prosecution etc.
- politicians, high ranking military, government officials using their status for personal enrichment
- companies bribing local communities

⇒ Petty corruption

- companies bribing low ranking officials to falsify declarations of volume, species, avoiding prosecution for non-compliance etc.

*** The World Bank defines corruption as “the abuse of public office for private gain”**

Illegal activities in the forests...

Allocation of forest tenures

- corruption in the bidding process for concessions,
- allocation of extractive activities in protected areas

Management planning/inventory

- lack of, or insufficient management plans
- irregular inventories
- Irregular reporting

Timber harvesting

- Cutting: protected species, under-oversized trees, above allowable cut, logging in protected areas
- Timber theft



Other aspects

- Illegal hunting, poaching
- Illegal gathering of NWFP
- Dumping of waste...
- Illegal crops in forests

...Illegal activities: commodity chain

Transportation of timber

No permits, falsifying documents, etc.

Processing

- Without license
- Undocumented timber
- Not meeting requirements

Reporting

- False declaration
- Under grading, under-valuing



Export and Import (timber smuggling)

- No respect of CITES regulations
- Against national laws
- Export illegally harvested
- Export volumes in excess of documented export
- Unauthorized movement across borders

Factors contributing to illegal activities (operators)

- ⇒ Tenure issues, e.g. length of timber concessions
- ⇒ Economic issues, e.g. provision of resources at below-market prices
- ⇒ Scale of forestry/forest industry activities
- ⇒ Quality of in-company processes
- ⇒ **However now: International scrutiny and national commitments to tackle the problem**



Principle 1: Forest Governance and security of tenure

Guidelines (1-6)

- 1.1 Reaffirm political commitment and strengthen and implement effective policies and strategies to promote SFM
- 1.2 Establish coherence, effective linkages and coordination of policies and laws between different levels of governance
- 1.3 Formulate regulations and procedures for forest law enforcement
- 1.4 Recognize that it is essential to have appropriate and capable institutions with effective linkages between them
- 1.5 Transfer authority or responsibility from the central government to subnational governments and empower the private sector, communities and civil-society institutions and women to collaborate efficiently in SFM
- 1.6 Identify and analyze the impacts that the policies and laws of other sectors may have on SFM

Principle 1: Forest Governance and security of tenure

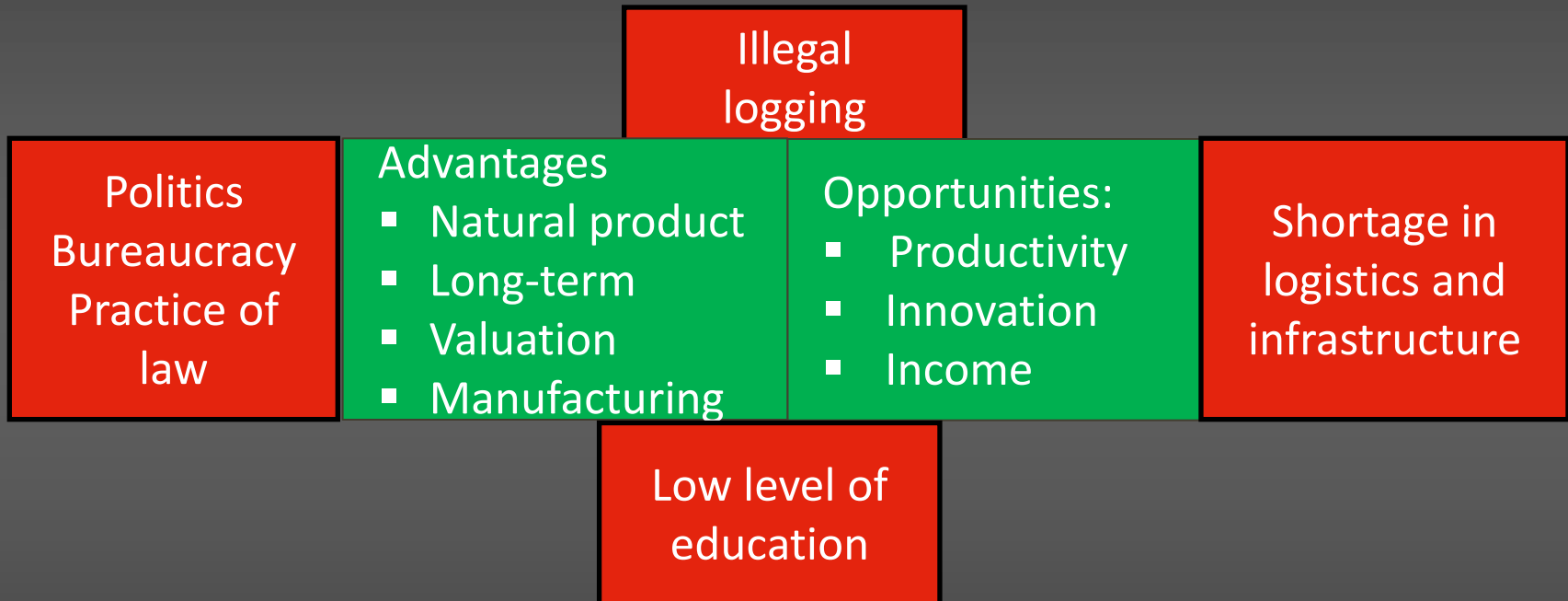
Guidelines (7-13)

- 1.7 Foster accountability/transparency and establish mechanisms for stakeholder participation and involvement in SFM
- 1.8 Identify and integrate relevant emerging issues related to SFM, capture synergies and address possible tradeoffs with existing objectives of forest management
- 1.9 Recognize the implications for SFM of legally and non-legally binding intergovernmental agreements at the regional and global levels
- 1.10 Put in place effective formal systems for ensuring the security of forest tenure
- 1.11 Recognize the importance to SFM of clear rights to forest access and use
- 1.12 Ensure that traditional use rights are clear and respected
- 1.13 Make sure that concession/logging rights are clear and transparent.

Example: Principle 1, Guideline 1.1 and suggested actions under the guideline

Principle 1: Forest governance and security of tenure			
Guidelines		Suggested actions	Indicative stakeholder groups
1.1	Reaffirm political commitment and strengthen and implement effective policies and strategies to promote SFM	Develop a formal forest policy statement that includes a shared vision of and shared goals for SFM and sets out strategies for their achievement	Government and legislators, jointly with all stakeholders in the forest sector and in other sectors with a strong influence on forests
		Revise or update periodically the forest policy and allow flexibility in the methods to be used	
		In revising forest legislation, observe the following: avoid legislative overreaching; avoid unnecessary or superfluous licensing and approval requirements; enhance provisions for transparency and accountability; and enhance the role of stakeholders	Government and legislators, forest managers, private sector, civil society, research and education institutions
		Provide avenues for engagement among stakeholders to allow the continuous adaptation of the forest policy and its implementation	

What needs to be addressed under Principle 1 (particularly in African countries)



Providing the enable conditions for SFM

Principle 2:

Land-use planning, permanent forest estate and forest management planning (pages 34-37)

Land allocation to different uses and spatial planning within and outside forests must ensure that the economic, social and environmental values of forests are maintained or enhanced at a landscape scale. This requires the adoption of a forest management planning framework at the national and/or landscape scales.

Principle 2: Land-use planning, permanent forest estate and forest management planning



Rationale

- Land-use planning
- Permanent forest estate
- Adaptive management
- Research and education
- Continuous forest assessment
- Communication, transparency and public awareness

Land-use mapping, planning and control → rapid development



WorldView2 RGB 50cm (September 2011)

Sentinel-2, Rapid Eye, Lidar, Drones....

Forest and landscape planning: Progress through REDD+: example of Togo

Images Satellitaires
(données brutes)



Interprétation
(exploitation
des images
satellites)

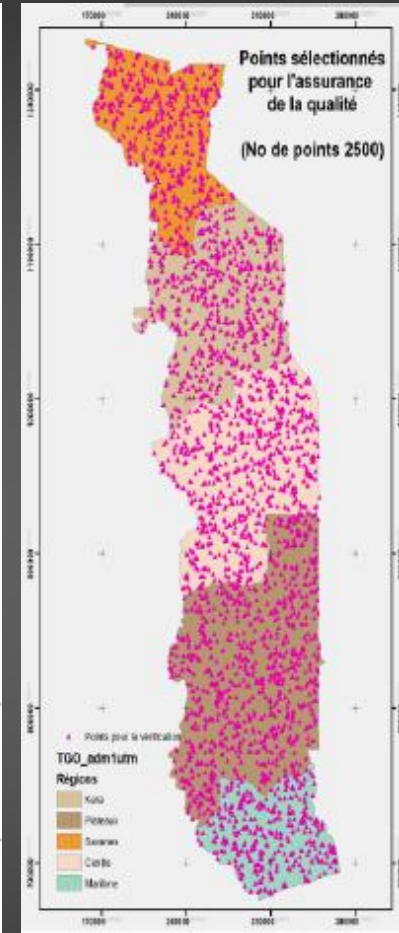


Vérification
des résultats



Schema du Processus de travail

Cartes Thématiques:
(BDOT)



Principle 2: Land-use planning, permanent forest estate and forest management planning




Guidelines (1-6)

- 2.1 Implement national and subnational land-use planning
- 2.2 Establish a PFE by laws that define its demarcation, use and management strategies
- 2.3 Carry out periodic national or subnational forest resource assessments to provide reliable data at the landscape scale
- 2.4 Prepare and implement a national forest management planning framework
- 2.5 Support research and education in natural tropical forest management
- 2.6 Monitor progress in SFM, including through clear and open communication with the public

Example: Principle 2, Guideline 2.2 and suggested actions under the guideline

Forest agencies must also have the capacity to listen to the public and to take its concerns seriously.

Principle 2: Land-use planning, permanent forest estate and forest management planning			
Guidelines		Suggested actions	Indicative stakeholder groups
2.2	Establish a PFE by laws that define its demarcation, use and management strategies	Allocate sufficient and suitable land, whether public or private, to be kept under permanent forest cover as the PFE	Government, private sector, civil society, research and education institutions
		Encourage the use of remote sensing, geographic information systems (GIS) and other up-to-date techniques for forest mapping and zoning to support decision-making	
		Based on initial plans for zoning the PFE at the landscape scale, consult with local people, taking into account their present and future needs for agricultural land and their customary uses of the forest	
		Determine areas of the PFE to be maintained and managed primarily for the protection of soil and water and for other purposes	
		Consider allocating, to the PFE, land for which the use is uncertain until such time as the need for other uses arises	Government



**The trouble with our time is
that the future is not what it used to be**
Paul Valéry

**Le futur appartient à ceux qui croient à la beauté de
leurs rêves**
Eleanor Roosevelt