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**PROGRESS REPORT ON THE IMPLEMENTATION OF  
THE ITTO THEMATIC PROGRAMMES**

(Item 10 of the Provisional Agenda)



List of Acronyms

ACTO	Amazon Cooperation Treaty Organization
ATIBT	International Association for Tropical Timber Technologies
BWP	Biennial Work Programme
CFME	Community Forest Management and Enterprises
CIRAD	International Agronomic Research Cooperation Centre for Development
CITES	Convention on International Trade in Endangered Species
CTFT	Technical Centre for Tropical Forestry
EU	European Union
FFPRI	Forestry and Forest Products Research Institute
FLEGT	Forest Law Enforcement, Governance and Trade of the European Union
IDE	Industrial Development and Efficiency
INPE	National Institute for Space Research, Brazil
INAB	National Institute of Forests, Guatemala
ITTC	International Tropical Timber Council
ITTO	International Tropical Timber Organization
JLIA	Japan Lumber Importers Association
MoU	Memorandum of Understanding
MP	Monitoring Protocol
NOL	No Objection Letter
NTFP	Non Timber Forest Products
OLMS	Online Monitoring System
PSC	Project Steering Committee
REDD	Reducing Emissions from Deforestation and Forest Degradation
REDDES	Reducing Deforestation and Forest Degradation and Enhancing Environmental Services
TFLET	Forest Law Enforcement, Governance and Trade
TLAS	Timber Legality Assurance System
TMT	Trade and Market Transparency
TP	Thematic Programme
TPP	Thematic Programme Profile
UNFCCC	United Nations Framework Convention on Climate Change
YPO	Yearly Plan of Operation

## 1. Introduction

This document is prepared pursuant to Decision 8 (XLIV) on the Thematic Programmes subaccount under the Special Account, Decision 9 (XLIV) on the Operational Procedures and Guidelines of the Thematic Programmes on a Pilot Basis, and Decision 10 (XLIV) on the Thematic Programme Profiles, requesting the Executive Director to prepare annual progress reports on the implementation of the ITTO Thematic Programmes for the Council's review.

The Thematic Programmes (TPs) approved by the Council are:

- Forest Law Enforcement, Governance and Trade (TFLET)
- Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES)
- Community Forest Management and Enterprises (CFME)
- Trade and Market Transparency (TMT)
- Industry Development and Efficiency (IDE).

In keeping with the above Decisions, this document reports on the status of TP implementation and the progress made since the 52<sup>nd</sup> Session of the Council held in Yokohama, Japan, 7-12 November 2016; therefore, the reporting period of this document is nominally from 12 November 2016 to 31 October 2017, when this document was prepared.

Under the TPs, 79 projects have been approved for funding: 29 under TFLET; 31 under REDDES; 5 under CFME; and 14 under TMT. As of October 2017, 65 projects have been completed including 14 projects in 2017, seven projects were ongoing, four projects had lapsed into "sunset" and three projects had been terminated in accordance with the provision under Decision 6(LII). Chapter 4 of this document highlights selected achievements and impacts of projects completed during the reporting period.

Annex I provides an overview on the status of the projects that are ongoing and projects that have been completed during the reporting period. It also includes three projects that have been terminated during the reporting period in accordance with the provisions under Decision 6(LII).

## 2. Thematic Programme financing

No new pledges were received for the TPs during the reporting period. Table 1 summarizes the pledges received by programme. In accordance with the provisions under Decision 6(LII), the funds remaining in the TP Pooled Account have been utilized to address the funding shortfall due to the impairment of ITTO funds. Consequently there are currently no funds remaining in the Thematic Programme Pooled Account. Table 2 provides an overview of the pledges made to the Thematic Programme by donor, divided into pledges received in the period 2009–2012 and those received following the approval of the Strategic Action Plan 2013–2018 at the 48<sup>th</sup> ITTC. In total, US\$21,922,662 have been pledged to the Thematic Programmes. The major portion (85%) of the funding has been pledged for REDDES and TFLET, with the remaining portion (15%) for TMT and CFME. To date, the IDE programme has not received any pledges from donors. Table 4 provides an overview of the TP projects by country and region.

Table 1. TP Funding

Programme	a) Pledges	b) Committed	TP Pooled Account (a – b)*
TFLET	\$9,079,307	\$8,570,721	(\$508,586)
REDDES	\$9,532,742	\$9,341,770	(\$190,972)
CFME	\$1,100,000	\$958,469	(\$141,531)
TMT	\$2,210,613	\$2,210,613	NIL
IDE	n/a	n/a	n/a

*\*In accordance with Decision 6(LII) the funds remaining in the TP Pooled Account have been utilized to address the funding shortfall due to the impairment of ITTO funding. There are no funds remaining in the account.*

The CFME programme has not received any pledges since the 46<sup>th</sup> ITTC in December 2010 and only one call for proposals was launched 2010 under the programme. Of the five projects approved under CFME, one has lapsed into sunset and the other four have been reported completed at earlier sessions of the Council.

Recalling Decision 4(XLVIII) on "Strengthening the Thematic Programmes" and its Operative Clause 4, which is

to “urge members to contribute to the Thematic Programmes Sub-Account in order to fully implement ongoing Thematic Programmes as soon as possible”, the Council may wish to re-emphasize the urgent need for additional financial pledges to continue the implementation of the Thematic Programmes.

Table 2: TP Pledges by Donor

<b>TP pledges 2009-2012</b>						
<b>Donor</b>	<b>Total</b>	<b>TFLET</b>	<b>REDDES</b>	<b>CFME</b>	<b>TMT</b>	<b>IDE</b>
<b>Norway</b>	8,228,960	15,000	8,173,960	40,000		
<b>Netherlands</b>	3,000,000	3,000,000				
<b>Japan</b>	2,275,953	991,235	483,782	635,000	165,936	
<b>Australia</b>	280,608	280,608				
<b>Switzerland</b>	1,883,040	683,040	400,000	100,000	700,000	
<b>USA</b>	1,532,456	757,456	175,000	300,000	300,000	
<b>UK</b>	949,380	949,380				
<b>EU/CITES</b>	356,356				356,356	
<b>Finland</b>	132,888	35,199			97,689	
<b>Germany</b>	77,761	77,761				
<b>JLIA</b>	50,000	50,000				
<b>New Zealand</b>	37,530	37,530				
<b>Sweden</b>	25,000			25,000		
<b>Korea</b>	10,000	10,000				
<b>Sub-total</b>	<b>18,839,932</b>	<b>6,887,209</b>	<b>9,232,742</b>	<b>1,100,000</b>	<b>1,619,981</b>	<b>NIL</b>
<b>TP pledges after approval of Strategic Action Plan 2013–2018</b>						
<b>Australia</b>	<b>1,942,098</b>	1,942,098				
<b>EU/CITES</b>	<b>490,632</b>				490,632	
<b>Switzerland</b>	<b>300,000</b>		300,000			
<b>Japan</b>	<b>200,000</b>	200,000				
<b>USA</b>	<b>150,000</b>	50,000			100,000	
<b>Sub-total</b>	<b>3,082,730</b>	<b>2,192,098</b>	<b>300,000</b>		<b>590,632</b>	<b>NIL</b>
<b>Total</b>						
<b>Total</b>	<b>21,922,662</b>	<b>9,079,307</b>	<b>9,532,742</b>	<b>1,100,000</b>	<b>2,210,613</b>	<b>NIL</b>

### 3. Calls for Proposals under the Thematic Programmes

During the reporting period no calls for proposals have been launched due to a lack of funding and the utilization of the remaining funds to address the funding shortfall due to the impairment of ITTO funding in accordance with Decision 6(LII). The last call for proposals under the Thematic Programmes was launched under TMT in November 2014.

### 4. Impact of the impairment of ITTO funds on TP projects

The impairment of ITTO funds has affected eight projects under the Thematic Programmes. The actions taken in accordance with the provisions under Decision 6(LII) are listed in Table 3. Also in accordance with Decision 6(LII), the funds remaining in the Thematic Programme Pooled Account (US\$ 0.84 million) have been utilized to address the funding shortfall due to the impairment. Detailed information on the impairment of ITTO funds is provided in the ‘Summary Report of the Implementation of Decisions Dealing with the Impairment of ITTO Funds’, Document ITTC(LIII)/12.

Table 3 TP Projects affected by the impairment of ITTO funds.

Project ID	Title	Action taken in accordance with Decision 6(LII)
TFL-SPD 043/13 Rev.1 (M)	Chain of custody verification for timber operators in PNG (Papua New Guinea)	Terminated – project had not started for at least two years following funding
RED-SPD 058/11 Rev.2 (F)	Developing REDD+ES in the Brazilian Atlantic rainforest (Brazil)	Terminated – project had not started for at least two years following funding
TFL-PD014/09 Rev.1 (M)	Reduction of illegal logging through better governance of community forests in Lorn et Djerem Division, East Region (Cameroon)	Terminated – project has failed to meet reporting requirements
TFL-PD 032/13 Rev.2 (M)	Strengthening the capacity of local institutions to sustainably manage community forestry in Sanggau for improving livelihoods (Indonesia)	Project recommenced with 10% cut
TFL-PD 033/13 Rev.2 (M)	Strengthening the governance of community forest through improved capacity to adequately perform timber administration in Java and Nusa Tenggara region in Indonesia (Indonesia)	Project recommenced with 10% cut
TFL-PD 037/13 Rev.2 (M)	Implementing a DNA timber tracking system in Indonesia (Australia)	Project recommenced with 10% cut
TFL-PD 044/13 Rev.2 (M)	Strengthening of ANAM's management capacity to reduce illegal logging and trade in the eastern region of Panama (Bayano and Darien) through monitoring and control mechanisms (Panama)	Project recommenced with 10% cut
RED-PD 029/09 Rev.1 (F)	Monitoring deforestation, logging and land use change in the Pan Amazonian Forest – PANAMAZON II (Brazil)	Project recommenced with 17% cut due to having only one instalment left

## 5. Achievements, Impacts and Lessons Learned

The main achievements of projects completed during the reporting period are summarized below. For more detailed information, please refer to the respective project summary in Annex I.

Projects reported completed to earlier sessions of the Council or lapsed into sunset are not included in Annex I. A list of those projects is included as Annex II.

Detailed information on all TP projects, including project documents, completion reports, technical reports, ex-post evaluation reports and other materials (e.g. videos, posters and brochures), is available via the ITTO online project search tool at [www.itto.int/project\\_search/](http://www.itto.int/project_search/). Documents (in the original language of submission) are posted as they become available.

## TFLET

Three projects have been completed under TFLET during the reporting period, including two in Guatemala and one in Indonesia:

- 1) 'Development of a program to strengthen the traceability of legally sourced forest products in Guatemala', TFL-PPD 040/13 Rev.2 (M).

Out of the 1,543 sites within communities in areas with the greatest loss of forest (fronts/foci of deforestation) identified by the pre-project studies, 246 are located in deforestation fronts in a condition of medium to very high risk and 696 are located in pockets of deforestation that are in a hazardous condition. The pre-project identified 43 municipalities as 'vulnerable communities', where deforestation is concentrated. 15 of these municipalities were identified with forests primarily supplying wood to the industrial centers of Guatemala City, Chimaltenango and San Agustín Acasaguastlán. However, in the municipalities of Chimaltenango, Guatemala City and Antigua there are no industries registered as sourcing products from these municipalities. This suggests that there may be issues of traceability and legal origin for wood from these municipalities. The pre-project found that costs of forestry legality/traceability place a very high pressure on the profitability of small scale producers. Therefore, it is necessary to develop programs of technical and legal assistance to these small scale producers who will otherwise be unlikely to embrace legality/traceability systems. The comparative analysis of maize production versus forest production showed that the income derived from logging is much higher, but few peasants have access to finance to purchase equipment and undertake other measures required to operate legally. It is necessary to develop access to credit to finance operations management and sustainable forest management. The project developed under this pre-project will seek to address the issues of access to finance, training and environmental awareness in vulnerable communities.

- 2) 'Improving forest product monitoring and efficiency through the development of a program to enhance the performance of the primary forest processing industry', Guatemala, TFL-PPD 045/13 Rev. 2 (M).

A database with information obtained has been created and the information from the tracking systems used by INAB have been utilized to determine relevant legal and technical parameters. Both the methodology and the results of the performance study of primary processing in the forest industry have been validated and socialized with various priority stakeholders, including industries that were participants in the study, as entities of public institutions related to the forestry sector. The guide for the development of performance studies of primary processing in the forest industry in Guatemala also has been disseminated and validated in the areas prioritized by the study. However, representatives from other regions have also applied to participate in validation of the manual. The implementation of the project allowed the direct involvement of 32 forest industries from four areas where processing of forest products is concentrated to improve their ability to promote industrial forestry development. Furthermore, as a direct impact, the exchange of experiences between industries led to the creation of capacities to improve performance and technology, as well as wider use of available technological tools. A standardized procedure for yield estimation was developed to promote improvement in primary processing efficiency and thereby the sustainable use of forests, at the same time promoting better forest governance for both the private and public sectors. The pre-project has allowed 50% of the country's forest sector to increase efficiency in the legal processing and marketing of wood as well as to improve the control and monitoring of primary sawing. It is hoped that the remainder of the country's forest industry will benefit from the follow-up project developed under the pre-project.

- 3) 'Strengthening the governance of community forest through improved capacity to adequately perform timber administration in Java and Nusa Tenggara region in Indonesia', TFL-PD 033/13 Rev. 2.

The project has produced practical manuals regarding Ministerial Regulation No.30/2012 concerning wood administration of timber harvested from community forest in form of posters, video and as guideline for dissemination. Group discussions and training sessions have been conducted and a scheme of incentives has been developed by a consultant. A technical report has been prepared explaining alternative incentives based on communities' requests. The project carried out an assessment on the existing regulations concerning timber administration for wood/timber coming from community forests, and has revised the regulation based on inputs from three forest group discussions

The contribution of the three completed projects to the TFLET programme is mainly to the following specific objectives:

- Strengthen forest law compliance and governance through improved national policy and legal frameworks, strengthened enforcement and other institutions, improved data and knowledge, strengthened partnerships and improved cooperation among the private sector, civil-society organizations and other stakeholders;
- Improve transparency and the effective management of supply chains and increased domestic and international trade in legally produced tropical timber.
- Improve the capacity of community and small and medium sized enterprises to implement and demonstrate that timber produced and traded comes from legal sources contributing to sustainable livelihoods. T

## REDDES

Two projects have been completed under REDDES during the reporting period including one in Ghana and one in Mexico each.

- 1) 'Rehabilitation of degraded forests for sustainable wood fuel production and climate change mitigation in the forest-savanna transition zone of Ghana', RED-SPD 077/12 Rev.1 (F)

The project has documented baseline information on woodfuel species, local knowledge on their uses and ecological characteristics, regeneration potential, availability and distribution in community land use systems, nature of supply and value chains, silviculture as well as resource management options. The capacity of smallholder farmers to establish multipurpose woodfuel woodlots with a mix of native and exotic species in food crop fields has been built. Other project components included installation of test plots and capacity building. The results of the test of biomass and carbon production potential of the wood fuel species indicate that an above ground biomass range from 80 tons/ha for *Pterocarpus* spp to 160 tons/ha for *Acacia* sp. Laboratory tests on the suitability of the woodfuel tree species for either fuelwood or charcoal were also conducted. Based on the properties assessed, indigenous species would be good species to be combined with the exotic species for use in agroforestry or wood fuel plantation to advance environment issues while improving biodiversity conservation. Results from field trials are relevant for the implementation of the Ghana Forest Plantation Development Strategy (GFPDS) 2016-2040. The GFPDS has recommended establishment of woodlots for charcoal and firewood using *Senna siamea*, *Acacia* and *Azadirachta* in the savannah and transition zones to meet the high demand for wood energy in the country. Results from field trials indicated that site-species matching should be critical in wide spread promotion of energy woodlots in communities. It is recommended that *Senna siamea*, *Azadirachta indica* and *Anogeissus leiocarpus* be promoted in this zone since these species can withstand extreme weather conditions and pest incidence.

- 2) 'Environmental assessment and economic valuation of ecosystem services provided by coastal forests (mangrove forests, flood forests, rain forests and scrub forests on dunes) and their agricultural replacement systems on the central coastal plain of Veracruz, Mexico', RED-PD 045/11 Rev.2 (M)

The project results indicate that it is extremely important for Mexico to put in place policies and programmes for the conservation and restoration of wetlands. Project activities have heavily involved the participation of local communities, who are the owners of the forests that provide several environmental services on the coastal plains of Veracruz, Mexico and who have benefitted from training provided and have improved their forest management and rural practices. Such involvement has already created awareness among the locals about the benefits derived from the forest, the importance of its preservation and its sustainable management. In fact, the authors of the publication on medicinal plants are the women from the community of Jamapa. While forest owners in the municipalities of Jamapa and La Guadalupe have organized their own reforestation campaigns and have increased the number of trees in their fields, other members of the communities have organized themselves into ecotourism enterprises and now disseminate information about environmental services and restoration to their visitors. The government both at regional and national level have now information on the value of the environmental services provided by the coastal forest. the National Institute of Ecology and Climate Change (INECC) has now incorporated wetlands as a priority ecosystem of its policy making on climate change mitigation, and has adopted the concept of connectivity as a climate change adaptation strategy. The project produced a large number of outreach materials including videos, maps, technical reports and scientific papers.

The contribution of the above two projects to the REDDES programme is mainly to the following specific objectives:

- Reduce forest degradation
- Maintain and enhance climate change mitigation and other environmental services of tropical forests

- Contribute to the social and economic sustainability and wellbeing of forest-dependent communities by increasing forest values through forest restoration and rehabilitation, as well as payments for forest-based environmental services

### TMT

Nine projects have been completed under TMT during the reporting period, including projects from Cameroon, China, Republic of Congo, France, Guatemala, Guyana, two from Ghana and one global project. All projects, except the project in Guatemala were funded as part of the ITTO – CITES programme, which providing part of the funds for projects with objectives relevant to both, TMT and ITTO-CITES. With this all projects funded under TMT have been completed.

1. 'Support for ANAFOR for optimum operation of the database management of *Pericopsis elata* (Assamela) in Cameroon', TMT-SPD 020/15 (M).

The project has developed the standard format for data collection on Assamela. The database on Assamela is operational and the user manual of the database is providing techniques for importing, consulting and querying data. In order to maintain these achievements, a follow-up activity would be desirable to ensure annual stocking of the database at the end of each financial year and consequently actual annual updating of data recorded in the NDF. The training for data managers in forestry sites should ultimately ensure harmonization of information to be collected and an interconnection between data production sites and database installed at ANAFOR. It would be possible for Cameroon to have necessary means to ensure that this database can be adapted for other species to manage species similar to Assamela such as Bubinga. As a part of update of non-detriment findings for Assamela, the project's contribution in setting of quotas by plant and by title has been effective to great satisfaction of all stakeholders in Assamela's management in Cameroon.

2. 'Supporting SMEs and importers of tropical timber for better understanding of CITES and the need to comply with CITES rules in China', TMT-SPD 023/15 Rev.1 (M).

The project has established a CITES WeChat mobile webpage, which updates information on CITES every two weeks and enables dialogue between small and medium-sized enterprises (SMEs) and importers and exporters on CITES-related issues. The site is linked to another ITTO project, which established the FPI WeChat mobile webpage to maximize impact and dissemination and provide more information to relevant stakeholders. The communication platform provides the opportunity and means for timber SMEs and importers to communicate with related management departments on policy and market developments. Currently there are over 4930 users who can access the site to obtain a wide range of market, trade and policy information. The State Forestry Administration has initiated further works through new projects focusing on tropical timber trade and SMEs, some involved the EA. In addition many industry and trade associations in China are willing to cooperate with the EA to request the information services made available by this project.

3. 'Establishment of a Monitoring Centre for the Industrial Use of *P. Elata* in the Republic of Congo', TMT-SPD 021/15 (I).

A total of three experts were recruited with the assistance of the ITTO-CITES Programme Regional Coordinator for Africa namely, (i) an expert on the state-of-the-art of the current control system; (ii) an expert on geographic information systems; and (iii) a database specialist. The database developed is based on Excel and rather simple and easy to use. A training workshop on the use of the database was organized at Ouessou, Northern Congo in February 2016.

4. 'Preparation of the publication "Atlas of tropical timber species – 1st Edition: Technological characteristics and uses of 273 tropical timber species (and 17 temperate species)', France, TMT-SPD 010/12 Rev.1 (M).

The Atlas of tropical wood is an essential reference and a key tool and a major interest for actors of tropical timber industries internationally and the project had received a favorable reaction from all private or public operators informed of its existence, some of which are involved in the project work. The Atlas was highly anticipated and a number of operators spontaneously volunteered to participate by providing relevant data and information on timbers as well as pictures to illustrate the technical descriptions in the Atlas. The number of species described in the Atlas has been increased from initially 290 species to 330 species as it was considered of major interest to cover a wider range tropical species involved in regular trade. The Atlas is available to operators of the timber industry in hard copy and e-version. It is widely distributed and many operators use it as a reference tool for their work of buying and selling of tropical timber. In particular, the

Atlas contains descriptions of species that arrive in the market and the operators use the Atlas as a tool for promotion and dissemination of information and knowledge on these new timber.

5. 'Improving intra-African trade and market transparency in timber and timber products', Ghana, TMT-SPD 012/12 Rev.1 (M).

The project has developed a website for an online timber marketplace, and the design of the African Timber Newsletter and social pages has been finalized. The online marketplace will promote trade and increase awareness of market information among traders in the region. The newsletter will convey relevant and timely information to actors in the marketplace and the marketing training undertaken will enhance the ability of companies to craft effective marketing strategies. The translation of the website into French has been completed and is operational.

6. 'Improving Sustainable *Pericopsis elata* Conservation and Trade Regulation in Ghana', TMT-SPD 017/15 Rev. 2 (M).

The action under this project was aligned with the Government of Ghana's policy of sustainable forest management and resource utilization. It also conformed with NDF's mission of contributing to the complementarities of development and nature conservation. The studies undertaken under the project made important revelations including that a number of measures have been put in place by the Government of Ghana in addition to the CITES requirements to protect the species from local extinction. Another It is also worth mentioning that there is on-going trading of the species in the local market, which is illegal, but further highlights the precarious and vulnerable state of the species. The information produced and the data are invaluable to ensure adequate policy responses by forest authorities and also would give civil society organizations and other non-state actors the required evidence to develop advocacy programs with the aim of supporting government in the protection of the species. Training was conducted for about twenty-five field staff of the Forestry Commission, including Forest Guards, Range Supervisors and Technical Officers, of the Forestry Commission within the range districts of *P. elata* to update them on identification, conservation measures and the recording procedure required for inventory and monitoring teams and particular with regard to the conservation status of the species. The training was also important to build capacity to ensure that relevant data on the species are included in management plans for forest reserves where the species occurs. Current efforts by the Government of Ghana to develop management plans for all the forest reserves in compliance with FLEGT VPA requirements have benefited from the data collected as part of this project. This was essential to sustain effort in the conservation of the species and to ensure management directives on *P. elata* are reflected on the ground. The project also included a major effort to create general public awareness by producing a ten minute video documentary to aid advocacy and public education on the impact of unsustainable logging and trade in the species and the likely consequence of causing its local extinction in Ghana. It was broadcasted on national TV and uploaded on YouTube and Facebook. The project also produced 3000 stickers and 500 "Save *P. elata*"-branded t-shirts.

7. 'Establishment of a fully documented reference sample collection and identification system for all CITES-listed *Dalbergia* species and a feasibility study for *Diospyros* and look-alike species', Guatemala, Madagascar, Switzerland, TMT-SPD 022/15 Rev.2 (M).

The project produced the first ever fully vouchered reference collection that is suitable for analyses using different genetic techniques. By comparing results from different techniques the team finally has the possibility to propose an identification system for precious timber species. The newly developed and field-approved sampling protocol will be useful for future efforts to establish reference collections for timber species other than those studied during this project. The valuable involvement of partners in Madagascar increased capacity in taxonomy and wood anatomy within the country. Two students received training in wood anatomical analysis as part of their master theses work. The field collection allowed MBG field botanists to refine their identification skills for species of *Dalbergia*, *Diospyros* and look-alike species in other genera, which is important for future projects and training of young botanists. A key lesson learned concerning the overall implementation of this project is that for such a time-restricted project it would be wise to include only partners that have worked together before. It was also concluded that any future projects need to examine more closely the problem of look-alike species. The scope of this project was too broad, which led to a substantial slowing down of the sampling work done at each site. The list of target species should be narrowed down as much as possible to the species level and should not include entire groups at the genus level. With the established reference sample collection, additional samples and species can now be easily included in the future to expand the available database further.

8. 'Strengthening of the forest information system of Guatemala to improve market and trade transparency and decision-making in the forest sector', Guatemala, TMT-PD 004/11 Rev.2 (M).

This project is a follow-up on PD 340/05 Rev.1 (M), which created the Forest Statistical Information System of Guatemala (Sistema de Información Forestal de Guatemala—SIFGUA). SIFGUA is an important tool for all forest-sector stakeholders in Guatemala because it provides them with free access to accurate, up-to-date information for decision-making. SIFGUA also makes available information on domestic trade of forest products, which before the year 2014 was not available. In the longer term it is supposed to help increase forest investment by improving data on the contributions of the forest sector to gross domestic product; market trends; forest production; the socioeconomic impacts of forest activities; and the dynamics and legal origin of forest products. This project is aimed at enhancing SIFGUA. The enhanced SIFGUA seeks to automate forest-related processes, minimize response times, standardize forms, clarify procedures, avoid data duplication, minimize human error, limit officers' discretionary powers and bureaucracy, and meet the deadlines established by law to process requests and applications. This follow-up project consists of a new portal for SIFGUA, plus of three information systems: 1) the Electronic Forest Enterprises Information System (Sistema Electrónico de Información de Empresas Forestales—SEINEF); 2) the Electronic Forest Administration System in Protected Areas (Sistema Electrónico de Administración Forestal en Áreas Protegidas—SEAF-CONAP); and 3) the Electronic Forest Management System (Sistema Electrónico para la Gestión Forestal—SEGEFOR—for forests outside protected areas). Other donors have looked favorably at the outputs delivered under this project and have extended financial support to INAB for further expansion of its electronic timber traceability systems. In particular, the European Union (EU), through IUCN, is financing a new module under SEINEF for auditing of forest enterprises. Other donors which have approached INAB are FAO-FLEGT and the World Bank. Other countries in the region, including Colombia, Costa Rica, Chile, Ecuador, Honduras, Mexico and Panama have expressed interest in getting to know the system. An exchange of experiences has happened with Chile, Costa Rica, Ecuador, Honduras, Mexico and Panama. CONAP has seen the benefits and the value of the SEAF-CONAP system, and has expressed that it will expand the system to automate other processes under its mandate. This project also worked closely with project TFL-PD 024/10 Rev.2 (M) 'Improvement of forest law enforcement at the national level to promote forest governance in Guatemala'—completed in 2016—and has been able to achieve substantial results. The implementation of Electronic Information System for Forest Enterprises, SEINEF has allowed the National Forest Institute to have positive impacts on the regulation and control of trade in forest products.

9. 'Enhancing the sustainable management and commercial utilization of the CITES-listed species *Cedrela odorata* (red cedar) in Guyana', TMT-SPD 014/13 Rev.1 (M).

The project has completed the first Resource Assessment and Forest Management Plan for *Cedrela odorata* (red cedar) in Guyana, providing comprehensive information on the species. The report provides all the information necessary for Guyana to decide whether to list red cedar in CITES Appendix III.

Eight of the nine projects completed under TMT have been funded under the ITTO-CITES programme, which had made available a portion of the funding received for projects relevant to both TMT and ITTO-CITES. The projects have contributed to all three TMT specific objectives, i.e., strengthening information systems on markets and the forest sector; filling gaps in the market transparency of tropical timber and timber products; and enhanced market access and trade promotion of tropical timber. The main contribution has however been to strengthening information systems on markets and the forest sector, where all projects have contributed. Production of data and information on conservation, sustainable management and use of *Pericopsis elata* has been the subject of three projects in Africa. The project on strengthening the forest information system in Guatemala has built on the results of a previous ITTO project and worked closely with another project under TFLET on forest law enforcement. Other countries in the region have expressed interest in the system.

Table 4: TP Projects by country/region and Programme

Country/Region	TFLET	REDDES	CFME	TMT	Funded projects	Funding US\$
Cameroon	2	3		1	6	1,038,082
Congo				1	1	130,000
DRC		1			1	476,820
Gabon				(1)*	(1)*	(138,996)*
Ghana	2	3	1	2	8	1,799,480
Liberia		1			1	149,922
Mali	1				1	149,707
Togo		2			2	628,798
<b>Africa Total</b>	<b>5</b>	<b>10</b>	<b>1</b>	<b>4(1)</b>	<b>20(1)</b>	<b>4,372,809</b>
Australia	1				1	518,833
China	1	2		1	4	766,896
Indonesia	4	3	1		8	3,489,425
Malaysia		1			1	590,922
Myanmar		1			1	571,890
PNG	1		1		2	269,320
Thailand	(1)*	(1)*	(1)*		(3)*	(201,447)*
<b>Asia Pacific Total</b>	<b>7(1)</b>	<b>7(1)</b>	<b>2(1)</b>	<b>1</b>	<b>17(3)</b>	<b>6,207,286</b>
Brazil		2			2	1,266,894
Colombia	1				1	91,498
Ecuador		1			1	149,922
Guatemala	3	2		1	6	1,293,414
Guyana		1		2	3	858,240
Honduras/Guatemala		1			1	144,650
Mexico		1			1	470,682
Panama	1				1	412,556
Peru	2	2			4	1,041,080
<b>Latin America Total</b>	<b>7</b>	<b>10</b>		<b>3</b>	<b>20</b>	<b>5,728,936</b>
TFLET pre-cursor	8				8	2,792,998
France				1	1	138,033
Germany	1				1	155,522
Global				1	1	200,000
ITTO Secretariat		3	1	3	7	1,053,926
<b>Others Total</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>5</b>	<b>18</b>	<b>4,340,479</b>
	<b>28(1)</b>	<b>30(1)</b>	<b>4(1)</b>	<b>13(1)</b>	<b>75(4)</b>	<b>20,649,510</b>

\* projects lapsed into sunset (not counted in the totals)

## ANNEX I

### STATUS OF APPROVED ACTIVITIES, PRE-PROJECTS, SMALL PROJECTS AND PROJECTS

(Projects reported completed to earlier sessions of the ITTC and projects lapsed under ITTO's 'sunset' clause due to not commencing implementation within 26 months of approval/funding are not included)

#### List of projects included in Annex I (ongoing, completed during the report period or terminated in accordance with Decision 6(LII))

Submitted by	Project ID	TFLET PROJECTS	ITTO Funding	Status (reported at)
Australia	TFL-PD 037/13 Rev. 2 (M)	Implementing a DNA timber tracking system in Indonesia	\$518,833	Ongoing
Cameroon	TFL-PD 014/09 Rev.1 (M)	Reduction of illegal logging through better governance of community forests in the Lom et Djerem Division, East region, Cameroon	\$302,562	Terminated Decision 6(LII)
Guatemala	TFL-PPD 040/13 Rev.2 (M)	Development of a program to strengthen the traceability of legally sourced forest products in Guatemala	\$74,586	Completed (53 <sup>rd</sup> ITTC)
Guatemala	TFL-PPD 045/13 Rev. 2 (M)	Improving forest product monitoring and efficiency through the development of a program to enhance the performance of the primary forest processing industry	\$66,942	Completed (53 <sup>rd</sup> ITTC)
Indonesia	TFL-PD 032/13 Rev. 2 (M)	Strengthening the Capacity of Local Institutions to Sustainably Manage community Forestry in Sanggau for Improving Livelihood	\$456,680	Ongoing
Indonesia	TFL-PD 033/13 Rev. 2 (M)	Strengthening the governance of community forest through improved capacity to adequately perform timber administration in Java and Nusa Tenggara region in Indonesia	\$495,880	Completed (53 <sup>rd</sup> ITTC)
Panama	TFL-PD 044/13 Rev.2 (M)	Strengthening of ANAM's management capacity to reduce illegal logging and trade in the eastern region of Panama (Bayano and Darien) through monitoring and control mechanisms	\$412,556	Ongoing
PNG	TFL-SPD 043/13 Rev. 1 (M)	Chain of Custody Verification for Timber Processors in Papua New Guinea	\$147,280	Terminated Decision 6(LII)

Submitted by	Project ID	REDD+ PROJECTS	ITTO Funding	Status (reported at)
Brazil	RED-PD 029/09 Rev.1 (F)	Monitoring deforestation, logging and land use change in the Pan Amazonian Forest - PANAMAZON II	\$1,124,784	Ongoing
Brazil	RED-SPD 058/11 Rev.2 (F)	Developing REDD+ES in the Brazilian Atlantic Rain Forest	\$142,110	Terminated Decision 6(LII)
Ghana	RED-SPD 077/12 Rev.1 (F)	Rehabilitation of degraded forests for sustainable wood fuel production and climate change mitigation in the forest-savanna transition zone of Ghana	\$121,662	Completed (53 <sup>rd</sup> ITTC)
Ghana	RED-PD 093/12 Rev.3 (F)	Advancing REDD+ in Ghana: preparation of REDD+ pilot schemes in off-reserve forests and agro-forests	\$297,205	Ongoing
Guatemala	RED-SPD 079/12 Rev.1 (F)	Strengthening of governance and sustainable management of mangrove ecosystems in Guatemala as a climate change adaptation measure	\$146,751	Ongoing
Liberia	RED-SPD 084/12 Rev.1 (F)	Improving efficacy of forestry policies and activities in Liberia through REDD+ demonstration projects	\$149,922	Ongoing
Mexico	RED-PD 045/11 Rev.2 (M)	Environmental assessment and economic valuation of ecosystem services provided by coastal forests (mangrove forests, flood forests, rain forests and scrub forests on dunes) and their agricultural replacement systems on the central coastal plain of Veracruz, Mexico	\$470,682	Completed (53 <sup>rd</sup> ITTC)

Submitted by	Project ID	TMT PROJECTS	ITTO Funding	Status (reported at)
Cameroon	TMT-SPD 020/15 (M)	Support to ANAFOR for the Optimal Operation of the <i>P. Elata</i> (Assamela) Management Data Base in Cameroon	\$113,400	Completed (53 <sup>rd</sup> ITTC)
China	TMT-SPD 023/15 Rev.1 (M)	Supporting SMEs and Importers of Tropical Timber for Better Understanding of CITES and the need to Comply with CITES Rules in China	\$150,000	Completed (53 <sup>rd</sup> ITTC)
Congo	TMT-SPD 021/15 (I)	Establishment of a Monitoring Centre for the Industrial use of <i>P. Elata</i> in the Republic of Congo	\$130,000	Completed (53 <sup>rd</sup> ITTC)

Submitted by	Project ID	TMT PROJECTS	ITTO Funding	Status (reported at)
France	TMT-SPD 010/12 Rev.1 (M)	Preparation of the publication "Atlas of tropical timber species – 1 <sup>st</sup> Edition: Technological characteristics and uses of 273 tropical timber species (and 17 temperate species)"	\$138,033	Completed (53 <sup>rd</sup> ITTC)
Ghana	TMT-SPD 012/12 Rev.1 (M)	Improving intra-African trade and market transparency in timber and timber products	\$111,931	Completed (53 <sup>rd</sup> ITTC)
Ghana	TMT-SPD 017/15 Rev. 2 (M)	Improving Sustainable <i>Pericopsis elata</i> Conservation and Trade Regulation in Ghana	\$149,997	Completed (53 <sup>rd</sup> ITTC)
Global	TMT-SPD 022/15 (M)	Establishment of a fully documented reference sample collection and identification system for all CITES-listed <i>Dalbergia</i> species and a feasibility study for <i>Diospyros</i> and look-alike species	\$200,000	Completed (53 <sup>rd</sup> ITTC)
Guatemala	TMT-PD 004/11 Rev.2 (M)	Strengthening of the forest information system of Guatemala to improve market and trade transparency and decision-making in the forest sector.	\$359,716	Completed (53 <sup>rd</sup> ITTC)
Guyana	TMT-SPD 014/13 Rev.1 (M)	Enhancing the Sustainable Management and Commercial Utilization of the CITES-listed Species <i>Cedrela odorata</i> (Red Cedar) in Guyana	\$136,640	Completed (53 <sup>rd</sup> ITTC)

## TFLET

**Implementing a DNA timber tracking system in Indonesia**

Project number:	TFL-PD 037/13 Rev. 2 (M)	
Project country:	Australia	
Budget:	Total:	US\$ 549,763
	ITTO Contribution:	US\$ 518,833
	UoA	US\$ 30,793
Submitted by:	Government of Australia	
Executing Agency:	University of Adelaide, UoA, Australia	
Original Duration:	24 months	
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)	
Status:	Ongoing	

**Summary:**

Illegal logging and associated trade are the cause of many economic and ecological problems both in timber producer and timber consumer countries. The key problem to be addressed by this project is the weak capacity in forest law enforcement. DNA marker methods use characters inherent in the timber (i.e. impossible to falsify) and guarantee a method, which is cost effective and statistically robust, for controlling the origin of wood and wood products. The project will develop a species identification and timber tracking system using DNA methods for important Indonesian timber tree species, the red meranti group; and light red Meranti. For two of these species leaf, cambium and wood samples will be collected from across their distribution area and gene markers will be developed that differentiate genetically between trees of different locations and also work for processed timber. The samples will be screened for DNA markers and provide a genetic reference data base to control the region of origin. Using DNA-fingerprints a tree by tree approach to control the chain of custody will also be applied for light red meranti in cooperation with timber companies in Indonesia. As measures of capacity building and technology transfer, staff from the Indonesian partners will be trained to apply DNA-techniques to perform simple DNA tests to check origin. The University of Adelaide in Australia is the executive agency and will work closely with CFBTI in FORDA and other institutes from Indonesia, Germany and USA.

**Progress:**

The project agreement has been signed in September 2014 and implementation has started on 12 August 2015. The first PSC meeting was held in Yogyakarta, Indonesia on 24 November 2015. The project has made excellent progress, but has been impacted by the suspension due to the impairment of ITTO funds.

All field work has been completed and novel barcoding markers have been developed through a double digest Restriction-site Associated DNA (ddRAD) approach. 70+ Dipterocarpaceae species were included in the development process and analysis of the resulting DNA sequencing outputs are being interpreted using the genome of *Shorea laevis* as a reference genome which has also been sequenced as part of the project. This analysis approach will allow identification of specific genomic loci within the Dipterocarpaceae that provide the genus and species level discrimination required to identify traded timber.

Training of scientists has occurred both in Indonesia and Australia. A national workshop was held in March 2016 in Yogyakarta, Java which was well attended by industry and government representatives. In March 2017 the project team presented at the 4-day INTERPOL and US Department of Justice's National Enforcement Training on Illegal Logging, Land Encroachment and Related Financial Crimes held in Balikpapan, Kalimantan and again at a second training held in Medan, North Sumatra in November 2017. Both were well attended by law enforcement and judicial personnel from Indonesia, and each were presented with an overview of the project and training on the capabilities of DNA timber identification.

**Achievements, impacts and lessons learned:**

While excellent progress has been made with the sampling efforts exceeding expectations and delivering more species and samples than was originally planned, the project has been impacted by the impairment of ITTO funds. A modified agreement has been signed with University of Adelaide to accommodate the reduced budget and the project outputs have been adapted to facilitate completion. A new timeframe has also been agreed. In addition the University of Adelaide has agreed to increase their in-kind contribution. With this the project is back on track.

### **Reduction of illegal logging through better governance of community forests in the Lom and Djerem Division, east region, Cameroon**

Project number:	TFL-PD 014/09 Rev.1 (M)	
Project country:	Cameroon	
Budget:	Total:	US\$ 355,062
	ITTO Contribution:	US\$ 302,562
	Government of Cameroon:	US\$ 52,500
Submitted by:	Government of Cameroon	
Executing Agency:	Forestry Department, Ministry of Forestry and Wildlife (MINFOF)	
Original Duration:	24 months	
Financed at:	TFLET 2 <sup>nd</sup> Cycle (2009)	
Status:	Terminated in accordance with Decision 6(LII)	

#### **Summary:**

This project seeks to reduce illegal logging and poverty in the Lom and Djerem Division through better governance and development of community forestry. The specific objectives include to sufficiently satisfy the demand of wood in the north and neighboring countries through better organization of timber markets and promotion of the creation and implementation of legal timber titles; and to reduce poverty at the community level through good governance in managing existing community forest and micro-development projects in the Lom and Djerem Division. The expected outputs are:

- to assist 6 communities in obtaining and managing community forests;
- to sensitize the Lom and Djerem councils on the creation of council forests;
- to supply the Northern markets with sawmill residues;
- to better understand and disseminate the timber market chain from Lom and Djerem to the Northern regions;
- to put in place a wood tracking system from the Koundi community forest;
- to reinforce the capacities of members of the Koundi community in increasing and better managing revenues from their forest;
- to sensitize all actors on legal wood trade; and
- to install and have a functional Coordination Unit in place.

#### **Progress:**

Following the project implementation in January 2011, the project experienced a delay in project implementation due to various factors, including the transfer/re-assignment of several officials (in charge of the project) within the Ministry of Forestry and Wildlife and difficulties to comply with reporting requirements. In addition some negative impacts of bad weather particularly at the project site in the Eastern Region.

The following project activities have been carried out:

- Two sensitization meetings held with strong representation and very active participation of the local communities, organized by both MINFOF and Forum in Diang and Belabo respectively.
- The six local communities selected to participate in the project include: Moundi, Mbeth II and Kanda (in the Diang Sub-Division); Ndjangané-Adiah, Belabo -Ekak-Yoa village and Mambaya (in the Belabo Sub-Division).
- Six management entities were created by the selected local communities. These include the TANG BALA CIG in Moundi, the BWOK CIG in Mbeth II, the FOFFA CIG in Kanda, the NA CIG in Ndjangané-Adiah, the BEY CIG in Ekak-Yoa Village (Belabo) and the NYALODJO'O CIG in Mambaya. These groupings have to date, all gained legal recognition under the adopted appellation of 'Community Initiative Group' (CIG).
- The species inventory of the community forest allocated to the FOFFA CIG in Kanda has been completed.
- The communes/counties of Lom and Djerem are sensitized for the creation commune's/county's forests;
- Northern regions are supplied with residues of sawmills.
- The trade channel of timber products from Lom and Djerem to northern regions is identified and disseminated/publicized.
- The chain-of-custody system for timber products from the existing community forest of the village of Koundi is established.

- The capacity of the member of the advisory committee of the village of Koundi is reinforced for the management of revenue from their community forest.
- All stakeholders are sensitized on legal timber trade.
- A coordination structure is established.
- Assist 06 communities (FOFA GIC, GIC BWOK of MBETH II, TANG GIC, GIC NYIALODJO'O, GIC and GIC NA BEY) to develop simple management plan for the forest.
- Organized training workshops on economic opportunities to use wood waste plants.
- Facilitated collaboration between communities and logging companies on the recovery of wood residues from plants.
- Sensitized communities and traders on the results of the detailed study of marketing channels between Lom and Djerem and the Region.
- Established an information system on the timber market.
- A system of traceability of wood from the community forest Koundi is established.
- Created a database for the community forest Koundi.
- Established a system of traceability of the community forest Koundi.
- Trained communities on better utilization of non-timber forest products.
- Strengthened the capacity of members of the management office of the community forest Koundi, financial management and management of micro-projects.

The first and second installments of funds US\$180,000 were made in December 2010 and December 2012 respectively. The final installment in the amount of US\$65,150 is pending. The project has suffered significant delays in its implementation due to various reasons and reporting on the project effectively ceased in mid-2014. The ITTO Secretariat sent a number of reminders to the EA, including electronic letters in December 2014 and January, June, December of 2015, requesting the submission of the up-to-date progress report and the audit report with the financial and cash flow statements without receiving any reply. Subsequently, in April 2016, the Secretariat informed the EA that further delays in the reporting may have negative consequences on the further execution of the project and the release of any further funding. In December 2016, the Secretariat officially notified the EA that unless the up to date progress and audited financial reports for this project could be received by 15 January 2017, this project would be terminated under the rules governing ITTO's thematic programmes and no further payments would be made to the EA. As none of the required reports from the EA had been received before the deadline, the Secretariat informed the Focal Point of Cameroon and the EA on 27 January 2017, that this project had been officially terminated and no further payments would be made to the EA accordingly. The Secretariat also reminded the EA that despite the termination of this project, the EA was still required to submit all reports required under the project agreement before it would be eligible for any future ITTO funding. The completion report has been received by the end of May 2017 however, at the time of preparing this report, the final audit report has not yet been submitted by the EA.

#### **Achievements, impacts and lessons learned:**

The Government of Cameroon received information for the formulation and elaboration of the appropriate policy aiming to mitigate the problem of illegal logging in Cameroon in compliance with international regulations. Regions and Departments near Lom and Djerem benefited from the chain-of-custody system established for timber products trade to address similar problems.

Local communities received fairer access and rights to forest resources, contributing to poverty reduction in Lom and Djerem through good governance and good management of community forests with a significant impact on local development. Communities had their capacity to negotiate with timber traders improved. Northern regions and neighboring countries will be supplied with legal timber products.

During the implementation of the project, training workshops on economic opportunities to use wood waste plants, better utilization of non-timber forest products, and capacity of members of the management office of the community forest were carried out. In the meantime, the information system on the timber market, the system of traceability of wood from the community forest Koundi, the database for the community forest Koundi, and the system of traceability of the community forest Koundi were established. These achievements will contribute to addressing the problem of illegal logging in this country.

Nevertheless, the serious delay of implementation and ultimate termination of the project have significantly undermined the achievements of the development and specific objectives of the project as well as the outcomes of project outputs and activities, several of which remain incomplete (although the exact situation is difficult to assess due to the lack of reporting by the EA). The impacts and sustainability of this project have also been weakened by the termination accordingly. No further ITTO funding will be provided to the Executing Agency until all reporting requirements (including an acceptable final audit of project finances) are met.

### Development of a program to strengthen the traceability of legally sourced forest products in Guatemala

Project number:	TFL-PPD 040/13 Rev.2 (M)	
Project country:	Guatemala	
Budget:	Total:	US\$ 94,350
	ITTO Contribution:	US\$ 74,586
	INAB	US\$ 19,764
Submitted by:	Government of Guatemala	
Executing Agency:	National Institute of Forests - INAB	
Original Duration:	11 months	
Financed at:	5 <sup>th</sup> TFLET Cycle (2013)	
Status:	Completed	

#### Summary:

It is estimated that more than 95% of forest product flows in Guatemala, or approximately 28.6 million m<sup>3</sup> out of the 30.7 million m<sup>3</sup> harvested in 2006, are extracted out of the control of the government (URL, IARNA, 2009: *Integrated Forest Accounting*). The lack of information on the domestic market for forest products is widespread and leads to a lack of transparency. The domestic market for forest products is not very developed and the general public has a limited knowledge of timber uses, which is reflected in low product quality and a lack of coordination in the secondary processing industry (FAO, 2003: *Forest Sector Trends to 2020*). This pre-project was designed to achieve the following objectives:

- Improve the traceability and legality of forest products from Guatemalan forests;
- Analyze the traceability and legality conditions of forest products in Guatemala and develop a project proposal to establish effective monitoring and control mechanisms.

#### Progress:

Activities commenced in November 2014 following signature of the pre-project agreement. The pre-project was expected to be completed by the end of 2015 but a 6 month no-cost extension was requested and approved in March 2016. All disbursements of pre-project funds had been made by the end of 2015 so the pre-project was not impacted by the loss of ITTO funds that was brought to Council's attention at its 51<sup>st</sup> Session.

The pre-project consultant selection process was completed and work on activities under Output 1 commenced by the end of 2014. The project team was constituted and a stakeholder consultation meeting took place in early 2015 under the auspices of CONESFORGUA (the agency implementing the project) to ensure different actors knew their roles in the project. A cooperation agreement was signed between INAB (the government forestry agency) and CONESFORGUA. The study of the local forest products market was completed in early 2015 by a consultant in consultation with INAB, major industry representatives and other stakeholders. A second study on the traceability of forest products (market chain, socio-economic impact, and product flow in three priority regions) was also completed in early 2015. The main outputs of this study included identification of the ten forest products with the largest trade volumes in the three areas and determination of the variables to be measured for each of the main products (volume; type of enterprise; origin of the primary material entering the enterprise; destination (of products); and possible supply routes). A third study of the most critical deforestation areas (defined as >25% loss of forest cover), including analysis of population pressure and other proximate causes, was completed in mid-2015. This study also assessed the vulnerability of local populations living near these critical deforestation areas. A fourth study assessed the costs of legal compliance in the forest sector (including costs of legal wood, management, extraction, transport, etc.) and compared these with costs of illegal forest operations. This study also assessed the impacts of the costs of legal compliance on vulnerable communities identified in the deforestation study. Finally, a project proposal to implement improved legal controls and monitoring in Guatemala's forests has been prepared and shared with relevant stakeholders. The final reports of these studies were submitted to CONESFORGUA and the pre-project completion report was submitted to the ITTO Secretariat together with the new project proposal in 2016. The audit of pre-project finances was received and approved by ITTO in 2017. The new project PD 832/16 Rev.2 was approved under the time-bound no-objection procedure following review by ITTO's Expert Panel in 2017 and will seek funding at the 53<sup>rd</sup> ITTC session. All pre-project reports are available on request from the Secretariat (Spanish only). This pre-project is now considered successfully completed.

**Achievements, impacts and lessons learned:**

1,543 sites within communities in areas with the greatest loss of forest (fronts/foci of deforestation) were identified by the pre-project studies. Of these, 246 are located in deforestation fronts in a condition of medium to very high risk and 696 are located in pockets of deforestation that are in a hazardous condition. The pre-project was able to identify 43 municipalities in which deforestation is concentrated as “vulnerable communities”. 15 of these municipalities were identified with forests primarily supplying wood to the industrial centers of Guatemala City, Chimaltenango and San Agustín Acasaguastlán. However, in the municipalities of Chimaltenango, Guatemala City and Antigua there are no industries registered as sourcing products from these municipalities. Therefore, there may be issues of traceability and legal origin for wood from these municipalities.

The pre-project found that costs of forestry legality/traceability place a very high pressure on the profitability of small scale producers. Therefore, it is necessary to develop programs of technical and legal assistance to these small scale producers who will otherwise be unlikely to embrace legality/traceability systems. Of the total costs to demonstrate legality, fixed costs represent up to 85 percent at a production level of 16 m<sup>3</sup> or less (consistent with many small-scale production levels) but only 45 percent at a production level of 150 m<sup>3</sup> or greater in the same area. This problem may be partially overcome by encouraging small-scale producers to group together to meet the costs of legality and traceability.

The comparative analysis of maize production versus forest production showed that the income derived from logging is much higher, but few peasants have access to finance to purchase equipment and undertake other measures required to operate legally. It is necessary to develop access to credit to finance operations management and sustainable forest management.

The results of the pre-project show that stricter forest law enforcement in vulnerable communities tends to affect the livelihoods of subsistence small-holders from exploitation of forests. This, in turn, can cause socio-environmental conflicts in these communities. The project developed under this pre-project will seek to address the issues of access to finance, training and environmental awareness in vulnerable communities.

**Improving forest product monitoring and efficiency through the development of a program to enhance the performance of the primary forest processing industry**

Project number:	TFL-PPD 045/13 Rev. 2 (M)	
Project country:	Guatemala	
Budget:	Total:	US\$ 87,030
	ITTO Contribution:	US\$ 66,942
	INAB	US\$ 20,088
Submitted by:	Government of Guatemala	
Executing Agency:	National Institute of Forests - INAB	
Original Duration:	8 months	
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)	
Status:	Completed	

**Summary:**

In Guatemala, it is widely recognized that illegal activities in the forest sector lead to significant loss not only for the sector but also for Guatemalan society as a whole. Uncontrolled harvesting of firewood and timber is one of the main causes of the reduction in forest resource volumes. In order to improve forest industry efficiency, skilled personnel is also needed to develop efficient production lines for existing and innovative products, to conduct studies on yield, timelines and flows, to optimize processing techniques based on optimal wood cutting and feed speeds, and to develop work programs. The pre-project is expected to achieve the following objectives:

- Contribute to improving forest product monitoring and efficiency and enhancing sustainable forest management in Guatemala.
- Provide a standardized methodology to establish primary sawmilling yield levels in the processing of major forest species in Guatemala so as to develop a project proposal aimed at improving primary sawmilling monitoring and control and enhancing processing efficiency and legal marketing of timber.

**Progress:**

The pre-project was approved under the 6<sup>th</sup> TFLET Cycle (2013). The project agreement was signed and the inception report received by the Secretariat in September 2014. The consultant firm to conduct the study and develop the technical manual was identified by the end of 2014.

The following project activities have been carried out:

- Information from the tracking systems used by INAB has been utilized to determine relevant legal and technical parameter to be considered for the estimation of efficiency in the forest industries.
- The methodology has been validated with the forest industries in the four selected regions of Guatemala and with governmental representatives in each region in charge of the legal aspects of marketing of forest products.
- In this way a series of observations was obtained regarding the implementation of the methodology to be considered for developing the manual and the analysis of information for the study.
- Visits have been made to selected forest industries together with staff of the National Institute of Forests in each region to verify the correct application of the methodology designed.
- It has obtained a performance study of primary processing in the forest industry in Guatemala, focusing on four priority areas. In this study the performance of the industries is identified, the technology used for different processes and production indicators are measured.
- It has also obtained a draft guide for the development of performance studies of primary processing in the forest industry in Guatemala which is expected to allow standardize the methodology between the different actors in the forestry sector and improve governance.
- In addition, a pilot tool was developed complementary to the guide for the preparation of performance studies, A Mobile Application (Rendimadera) for Android operating system, which allows the collection of data, statistical analysis and calculation of performance, as well as synchronized information with a web page.
- A project proposal for improvement of processing performance in the forest industry in Guatemala has been prepared. The information and preliminary analysis were generated in the performance study to formulate a proposal according to the needs and feedbacks from industries. This proposal is being revised in 2017 following comments from ITTO's Expert Panel.

The Executing Agency has submitted the completion report, the technical reports and the final audit report. The project may be declared duly completed.

**Achievements, impacts and lessons learned:**

A database with information obtained has been created and the information from the tracking systems used by INAB have been utilized to determine relevant legal and technical parameters.

Both the methodology and the results of the performance study of primary processing in the forest industry have been validated and socialized with various priority stakeholders, including industries that were participants in the study, as entities of public institutions related to the forestry sector.

The guide for the development of performance studies of primary processing in the forest industry in Guatemala also has been disseminated and validated in the areas prioritized by the study. However, representatives from other regions have also applied to participate in validation of the manual.

The implementation of the project allowed the direct involvement of 32 forest industries from four areas where processing of forest products is concentrated to improve their ability to promote industrial forestry development. Furthermore, as a direct impact, the exchange of experiences between industries led to the creation of capacities to improve performance and technology, as well as wider use of available technological tools.

A standardized procedure for yield estimation was developed to promote improvement in primary processing efficiency and thereby the sustainable use of forests, at the same time promoting better forest governance for both the private and public sectors. The pre-project has allowed 50% of the country's forest sector to increase efficiency in the legal processing and marketing of wood as well as to improve the control and monitoring of primary sawing. It is hoped that the remainder of the country's forest industry will benefit from the follow-up project developed.

The sustainability of the products has been directly linked to the applicability of the yield estimations and the integration of a mobile application with existing regulations and strategies of development. In addition, the study has established a baseline of the performance situation and technology in wood processing in Guatemala's forest sector with parameters for the sector's development strategies in the country.

The objectives of the project have been fulfilled, with the development of products with the involvement of diverse stakeholder groups (private and public sector). The activities implemented during project implementation involved the private sector, civil society and government, creating a dialogue that strengthened forest governance and transparency of the forestry sector. Furthermore, a project proposal for improvement of processing performance in the forest industry in Guatemala has been prepared according to the needs and feedbacks from industries.

**Strengthening the Capacity of Local Institutions to Sustainably Manage Community Forestry in Sanggau for Improving Livelihood**

Project number:	TFL-PD 032/13 Rev. 2 (M)	
Project country:	Indonesia	
Budget:	Total:	US\$ 511,730
	ITTO Contribution:	US\$ 456,680
	Government of Indonesia	US\$ 55,050
Submitted by:	Government of Indonesia	
Executing Agency:	Center for Climate Change and Policy Research, Forestry Research and Development Agency (FORDA)	
Original Duration:	24 months	
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)	
Status:	Ongoing	

**Summary:**

The project supports policy on social forestry that opens up legal access for local community to manage state forest areas, including by applying the scheme of community forestry. It helps the policy to meet its target set in year 2019 to have forest-based community management up to 12.7 million hectares. It selected District Sanggau of West Kalimantan Province as a site of the project due to availability of the permits granted by local government in year 2012/2013 that cover up to 5100 hectares. Through series of trainings, group discussions, business meetings and analytical works, the project strengthens capacity of local institutions to sustainably manage forests and to improve livelihoods of local community. It applies participatory method to support economical development in the region among others by establishing eco-tourism destination at protected forests, producing organic fertilizer to promote organic farming and to improve productivity of soil at production forest, and supporting the development of market for non-timber forest products. The project expects to contribute to attaining better mechanism of benefits sharing, better governance in managing forests and enforcing the laws by gaining deeper understanding on key factors that influence successful implementation of policy on social forestry to meet the target.

**Progress:**

At present, the project is ongoing and carrying out activities under its three outputs of 1) developing local institutions in community forestry, 2) improving access on information to develop economic resources for community forestry, 3) strengthening support from local government to develop community forestry.

- Developing local institutions in community forestry

In developing the institutions, the project categorizes three main activities, each supported by sub-activities. The first category focusses on knowledge about rules and regulation on community forestry and its implementation at field level. The second category of activities focuses on developing institutions with entrepreneurship capacity in order to make use of business opportunities provided by the scheme. The third cluster of activities focuses on institutions that capable for designing management plans for long-term and operational purposes. The design shall involve strategies for both sustaining forests also for improving livelihoods of local community. Different methods are being applied by the project, depending on the message to convey and target group to receive particular messages. In delivering output number 1, the project in total has organized 12 trainings, 19 meetings, and two exhibitions. It involves members from five villages in every activity. It also facilitates local people to participate in comparative studies outside the island of Kalimantan three times. The project also conducts field survey and publishes information materials in the forms of booklets, and brochures. These numbers of event organized by the project in fact much higher than it was targetted in the document. As interactions among stakeholders of community forestry become frequent, it diminishes emergence of conflict as communication become smooth for the members.

- Improving access on information to develop economic resources for community forestry

The project developed its strategy to improve access on information for local community based on three clusters of activities, namely: (i) collection of data and information on social and economical situation about project area, and data on bio-physical condition in the area, (ii) market analysis for forestry products, and (iii) improvement of knowledge on market access and micro financing. The project in total collect data and information on 10 communities, which include those data and information for five groups of communities who

already have the permits on community forestry on 5100 ha area. Other five groups of communities being facilitated by the project to get the permit on 5000 ha area, and have already been granted by the Ministry Environment and Forestry, recently. Thus the project contributed for speeding up the policy on social forestry in achieving its target. Analysis on market situation has already been reported by national consultants who have been assigned to conduct surveys and to organize group discussions with resource persons. Potential products have been identified together with strategies to penetrate market. Recommendations from the report being used as inputs for conducting trainings and meetings which are needed for building capacity of local community in business related activities. Other analysis are still ongoing and being conducted by team of researchers. Accessibility of timber market has been identified and that restricted for those located at production forest. Provision of micro finance has already been identified from *Credit Union of Lintang Tipo and Mora Kapa*, and its accessibility was presented at trainings for local community. Other trainings were organized to help producers meet buyers, whereby supports were given for local communities to meet buyers from *Dekranasda* and its corporate partner of *Bank KalBar*. The meeting resulted in a business contract for local community from 10 different villages to produce local handicrafts from non-timber forest products to be promoted in provincial and national exhibitions.

- Strengthening support from local government to develop community forestry

Three main activities were identified as dissemination of information, trainings and workshops, also formulation of local policy to support implementation of community forestry. Under this cluster of activities, the project supports and organizes several meetings, data collections, exhibitions and data analysis. The project produces and disseminates a number of information packages in the forms of brochures, leaflets and policy papers about lessons learned from activities of the project. The disseminations were conducted through numbers of exhibitions, trainings and informal communication with government and other parties. The project supported the involvement of villages' leader and also villages' members to participate in trainings and in exhibitions for promoting the works of community forestry. At least five trainings were organized at village level and reports on the activities were presented together with numbers of participants attended each of the meetings. Other support was provided by the Ministry of Environment and Forestry who approved a proposal from the project to grant permits on community forestry for five locations that cover up to 5000 hectares. Hence, up to 10,100 of state forest area at the District Sanggau are being managed under the scheme of community forestry. The project contributes to the achievement of national policy to expand forest areas to be managed by local community.

**Achievements, impacts and lessons learned:**

In pursuit of the project's objective, the project undertook analytical work, trainings, field data collections and business meetings involving local communities as well as other stakeholders from field level up to national level. Activities of the project made important revelations. First, implementation of the scheme of community forestry depends on many factors, of which the extent or presence of assistance for communities has played an important role given most community forestry is located at remote region. Constraints and opportunities provided by the scheme shall be communicated to the communities and they shall be consolidated with available resources at each location. Second, many factors and diverse interests of actors need to be taken into account in strengthening institutions of community forestry. Multi-stakeholder approach provides opportunities to collaborate and consolidate those interests into sustaining forest resources. Third, changes of regulatory regimes at national level influence interpretation on how the scheme of community forestry can be implemented and local institutions can be strengthened. Consistent policies are needed and should be supported with harmonious programs from other sectors or ministries. Fourth, implementation of community forestry encompasses farming system practices, so clarity of governance on overall land-use and access to agricultural markets are equally important as clear and fair governance in forestry.

**Strengthening the governance of community forest through improved capacity to adequately perform timber administration in Java and Nusa Tenggara region in Indonesia**

Project number:	TFL-PD 033/13 Rev. 2 (M)	
Project country:	Indonesia	
Budget:	Total:	US\$ 545,230
	ITTO Contribution:	US\$ 495,880
	Government of Indonesia	US\$ 49,350
Submitted by:	Government of Indonesia	
Executing Agency:	Directorate of Forest Revenues and Forest Product Distribution, Ministry of Forestry	
Original Duration:	24 months	
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)	
Status:	Completed	

**Summary:**

The role of timber produced from community forests is increasingly important due mainly to the dwindling supply of wood from natural forests. The Ministry of Forestry is strengthening forest governance and reducing leakage of state tax revenues through the issuance of the Ministerial Decree number No 30/Menhut-II/2012 (June 2012) outlining a timber administration system from community forestry to primary industry. It regulates the usage of documents of origin (Surat Keterangan Asal Usul, SKAU) as a tracking system to ensure timber legality. The spirit of these regulations is to simplify the administrative requirements for wood originating from community forests by making village heads eligible to issue transport documents, which also legalize the harvested timber. The project was designed to improve the administration of timber produced from community forest in the Java and Nusa Tenggara regions. The expected outputs of the project are: 1) Ministerial Regulation (Permenhut) No. 30/Menhut-II/2012 is properly implemented; 2) Support of beneficiaries (land owners/farmers, traders and users of timber produced, local government) by timber administration increased. The effective implementation of the new regulation will help to sustain the forest while at the same time increase collection of forest revenues. The long-term goal of the project intervention is to improve local economies of forest dependent communities in Java and Nusa Tenggara and to reduce illegal logging and illegal timber in Indonesia.

**Progress:**

There were 3 activities planned for execution under each output; while definition of the activities remained the same throughout the project implementation period. All 3 indicators of Output 1 have been fully satisfied; in fact, the achievements have considerably exceeded the respective indicators. Also the three defined indicators of Output 2 have been fully met. The six planned project activities have been fully executed and eight additional activities during an approved extension period were identified and implemented with the prior endorsement of the Project Steering Committee (PSC). Improvements of local capacity in the implementation of timber administration system did not only cover Java and Nusa Tenggara regions but also six other provinces, namely North Sumatra, West Sumatra, Jambi, Lampung, East Kalimantan and Central Sulawesi. The original project duration was 24 months, but received three extensions totaling 10 months. The project was smoothly implemented and successfully completed to achieve its defined specific objective. The detailed completion report is available from the ITTO website through the project search. The project is considered completed.

**Achievements, impacts and lessons learned:**

Achievements under Output 1 can be summarized as follows:

- Practical manuals of MR no. 30/2012 produced and distributed in 2 forms: i) posters, video graphic film, and 2) practical guideline for dissemination activities.
- The dissemination of the MR no. 30/2012 concerning wood administration of timber harvested from community forest had been carried out three times represented two provinces and 35 districts, attended by 113 participants.
- Activity 1.2 was carried out to review the Ministerial Regulation no. P 30/Menhut-II/2012 and the activity was conducted in the form of FGDs (Focus Group Discussions). Three FGDs had been carried out with 134 participants in total:
- For Activity 1.3, Six training sessions carried out with total participants 250 persons comprising village leaders and staff. Training locations included: Malang - East Java two times with 60 participants, Garut - West Java

province with 30 participants, Banyumas –Purwokerto- Central Java with 30 participants, Serang -Banten Province with 30 participants, as well as Bima and Dompu with 50 participants each in West Nusa Tenggara.

Achievements under Output 2 can be summarized as follows:

- Developed a scheme of incentives and disincentives in the implementation of MR No. P.21/2015. The project has hired a consultant to develop scheme of incentives. The result was written in the separated technical report explaining several alternatives of incentives based on communities' request.
- Assessment/evaluation has been undertaken by consultant for improving the implementation of Ministry regulations no. P. 30/2012, P. 21/2015, and P. 85/201. Detail activities as follows:
- Activities 2.3 consist of one training workshop that was undertaken in November 2015 in West Sumatra province, a training for village's leaders in implementing MR no. P. 30/2012 and its revised no. P.21/2015. Three other training activities were carried out in March and May 2016.

All six defined outcome indicators had been satisfied; therefore it is reasonable to declare that the specific objective has been fully achieved.

At project identification and design, important lessons learned include:

- Project design contributed to the success in achieving the specific objectives and project outputs. It was very important to identify main problems faced by the communities in implementing government regulation on timber distribution. Project strategies were then developed to achieve the specific objective contributing to the achievement of Development Objective;
- Additional arrangements that could improve cooperation between the relevant parties interested in the project was through FGDs and workshops involving all stakeholders.
- Implementation strategy that consists of defining outputs, activities to be done, time allocation as well as the target outputs and inputs needed, were most contributed to the success in achieving the project's objectives. Logical framework was also important tool that was formulated to see the link between the project objectives, output, and activities. Some indicators have to be defined to measure the success of project achievement. Assumptions were very important too, to consider circumstances that prevent the achievement of project's target/objective.

Additional lessons learned during project implementation can be summarized as follows:

- The roles of Directorate of Forest Revenues and Product Distribution related to timber administration and timber legality are formulating regulation, facilitating local government and communities in implementing policy/regulation as well as improving capacity of relevant stakeholders in timber legality aspect.
- To implement the project, the Executing Agency had established a small Project Management Team (PMT) comprising three project key personnel. The small PMT proved able to adequately perform project management tasks in an efficient manner.
- The monitoring and evaluation of progress in implementation had been performed through three PSC meetings and monthly technical meetings of the PMT. Such meetings had greatly contributed to the smooth project operations.
- The strategy pursued in implementing the project was defined during the project formulation stage consistent with the project elements specified and operationalized in a collaborative manner by working closely with the primary beneficiaries, relevant institutions and national consultants; the strategy proved effective in achieving the specific objective.
- Flow of funds went smoothly. Withdrawal of funds were in accordance with the schedule arranged in Project Agreement.
- The roles and responsibilities of the institutions involved in the Project implementation were well elaborated in the respective terms of reference which had facilitated accomplishment of assigned tasks in an effective fashion.
- The project was managed in full compliance with existing ITTO rules and procedures; all of the documents required by ITTO including YPOs, bi-annual progress reports, financial audit reports and documents of particular were submitted to ITTO in a timely manner and facilitated immediate issuance of any approvals requested by the Executing Agency.

**Strengthening of ANAM’s management capacity to reduce illegal logging and trade in the eastern region of Panama (Bayano and Darien) through monitoring and control mechanisms**

Project number:	TFL-PD 044/13 Rev.2 (M)		
Project country:	Panama		
Budget:	Total:	US\$ 730,309	
	ITTO Contribution:	US\$ 412,556	
	WWF Panama	US\$ 132,403	
	ANAM	US\$ 185,350	
Submitted by:	Government of Panama		
Executing Agency:	WWF Panama		
Original Duration:	24 months		
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)		
Status:	Ongoing		

**Summary:**

The aim of this project is to follow up on one of the outputs of the ITTO-financed project PD 405/06 Rev.3 (F): “Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama”, which conducted an analysis and described the institutional, administrative and socio-economic factors leading to illegal logging in the Eastern Region of Panama (Bayano and Darien) and produced a framework document on guidelines and strategies which require immediate institutional action to arrest incremental forest degradation caused by illegal logging practices and other unsustainable activities. Therefore, the main purpose of this project is to contribute to the prevention and control of illegal logging and trade in the Eastern Region of Panama (Bayano and Darien) by strengthening ANAM's capacity to ensure efficient and effective forest sector management and increased community awareness on forest degradation as a result of illegal logging and related illegal trade in forest products. The project is also complementary to ITTO project ‘Tropical Forest Governance in the Region of Darien, Panama’ PD 602/11 Rev.3 (F), which was approved at the 49<sup>th</sup> ITTC and commenced in 2014.

**Progress:**

The project was approved under the 6<sup>th</sup> TFLET Cycle (2013). Following its financing, the project experienced a significant delay in signing the project agreement due to the revision and finalization of project document and the changes of the responsible ministry of Panama. The project agreement regulating the implementation of the project was finally signed in January 2016 and after the approval of the inception report, the first instalment of funds was made in April 2016 which marked the official start of the implementation of this project.

Since its inception, the project has achieved significant results in capacity assessment and development of a strategic plan for the Directorate of Forests (DIFOR) created in the Ministry of Environment (MiAmbiente), in the design of the Traceability System and Forest Control, and continuity of the communications strategy initiated by the project PD 602/11 R3 (F) “Forest governance in tropical forests of the Darien region, Panama”.

The first instalment of funds made in April 2016 was US\$113,354. The other three planned instalments of funds total US\$220,000 according to the project agreement. The suspension of ITTO funding caused delays in releasing the second instalment and therefore in the implementation of project activities. The Executing Agency had to prioritize the use of funds to cover the contract for the design and Forestry Traceability System Control. However, after some adjustments to the work plan, in coordination with the Ministry of Environment, the EA managed to get support from WWF and the FAO FLEGT Programme to continue the implementation of the planned activities through the first half of 2017. In mid-2017 an agreement was reached to reduce the remaining project budget by 10% and a revised work plan submitted so that the ITTO funding could be normalized and reactivated. The project is now making good progress and is expected to be successfully completed in 2018. A project steering committee meeting and monitoring visit by ITTO will occur in late 2017.

**Achievements, impacts and lessons learned:**

Despite the delay of inception, the implementation of this project, particularly the positive progress in the design and implementation of Traceability System and Forest Control, further attracted the interest of MiAmbiente and other sectors and players.

The communications strategy that is being developed is contributing to a positive debate on the needs of the sector, stressing the need for incentives to promote forest management and responsible procurement. The role of civil society and consumers, as a powerful market force which begets change, can be enhanced through this communication strategy. Project implementation recommenced in full with release of the second instalment of ITTO funds in September 2017 and the project is expected to achieve all foreseen outputs and objectives under the revised budget and work plan.

### Chain of Custody Verification for Timber Processors in Papua New Guinea

Project number:	TFL-SPD 043/13 Rev. 1 (M)	
Project country:	Papua New Guinea	
Budget:	Total:	US\$ 163,160
	ITTO Contribution:	US\$ 147,280
	PNGFIA	US\$ 15,880
Submitted by:	Government of Papua New Guinea	
Executing Agency:	Papua New Guinea Forest Industries Association (PNGFIA)	
Original Duration:	12 months	
Financed at:	6 <sup>th</sup> TFLET Cycle (2013)	
Status:	Terminated in accordance with Decision 6(LII)	

#### Summary:

The project will develop and pilot a Chain of Custody (CoC) system based on the international standard managed by the Programme for the Endorsement of Forest Certification (PEFC), customised for use by PNG timber processors. This customised standard will facilitate access to international markets for PNG timber processors. The project will build on the outputs of ITTO project PD 449/07 Rev.2 (M) ("Enhancing Forest Law Enforcement in PNG"). PD 449/07 Rev.2 (M) has established a generic legality standard for PNG; however this standard does not incorporate a Chain of Custody component. The project will provide a CoC component, such that together the outputs of the two projects will provide PNG timber companies with the tools needed to meet regulatory requirements of key international export markets.

#### Progress:

The project was approved and financed in March 2014 and the project agreement was signed in October 2014. As the inception of this project was linked to the completion of PD 449/07 Rev.2 (M), it was seriously affected by the delayed completion of that project due to the late submission and approval of the final audit report, and the project had not commenced implementation by late 2016.

On 16 December 2016, the Secretariat informed the focal point of PNG and the EA that, in accordance with Decision 6(LII) which stipulates that the ED "consider recommending projects for termination that have not started for at least two years following funding" in order to allow more resources to be used for other projects/activities, this project would therefore be terminated under this provision.

#### Achievements, impacts and lessons learned:

Although no project activities were carried out, the EA finally submitted the required reports for the related project PD 449/07 Rev. 2 (M) and is now aware of the consequences of not complying with ITTO's reporting requirements in a timely manner.

**REDDES****Monitoring deforestation, logging and land use change in the Pan Amazonian Forest, PANAMAZON II**

Project number:	RED-PD 029/09 Rev.1 (F)	
Project country:	PanAmazonian (ACTO member countries)	
Budget:	Total:	US\$ 6,262,784
	ITTO Contribution:	US\$ 1,124,784
	ACTO Contribution:	US\$ 1,389,600
	ACTO Member Countries:	US\$ 3,748,400
Submitted by:	Government of Brazil	
Executing Agency:	Amazon Cooperation Treaty Agency (ACTO)	
Original Duration:	48 months	
Financed at:	REDDES 2 <sup>nd</sup> Cycle (2009)	
Status:	Ongoing	

**Summary:**

The project will address constraints that are limiting the use of the Indicator of the Forest Cover by implementing national monitoring systems as a key element so as to increase the governance in the Amazon. In order to facilitate countries interaction and integrated action in boundary zones the project will strengthen the dialogue and coordination platforms linked to the Amazon Cooperation Treaty Organization (ACTO). The project is divided in three components:

- Coordination of participatory processes for the development of Forest Cover National Monitoring Systems;
- Implementation of Forest Cover National Monitoring Systems; and
- Strengthening of the existing platforms for regional dialogue and coordination on forest management, with focus on forest cover monitoring with the possibility to include other criteria and indicators for sustainable forest management.

The systems will make use of the technology platform developed by the Government of Brazil and the methodology already adopted in this country will be considered for the implementation of the National Systems. Furthermore, the project will contribute to the improvement of knowledge in the sector, to share new technologies, to prioritize lines of action for the regional cooperation and to share experiences on the enforcement of forest laws.

**Progress:**

The installation of the Observation Rooms (ORs) in each country has been completed and the ORs are operational. The preparation and validation of national plans to monitor forest cover is in progress. The capacity building components (training courses) have been completed, while the technical assistance provided to system users is a permanent activity. The monitoring of regional activities and promotion of information exchange is a permanent activity initialized and supported by the project. The production of regional deforestation maps is ongoing with input from the participating countries, depending on availability of images. At the national level countries are evaluating the causes of deforestation and forest degradation. With the approval of the additional resources from the National Bank for Economic and Social Development (BNDES), for the continuation of the project activities initialized under this project, the operation of the established national observation rooms has become a permanent activity. That funding also provides for adequate regional forums for technical discussions among technical staff of the ORs and regular 'Regional Encounters' are held. The Project Regional Coordination Unit, together with the national coordination agencies is permanently coordinating and supporting regional discussions. The project was affected by the impairment of ITTO funds. A new budget and timeline has been agreed with the Executing Agency. A PSC meeting was held in Brasilia at PS/ACTO in June 2017.

**Achievements, impacts and lessons learned:**

In May 2013, the Board of the National Bank for Economic and Social Development (BNDES), through the Amazon Fund approved an amount of Brazilian Reais R\$ 23 million or approximately US\$ 11.8 million to ACTO to ensure the continuation and expansion of the activities initialized under RED-PD 029/09 Rev.1 (F). Over a five year period, the new ACTO project on 'Monitoring of forest cover in the Amazon Region' will continue the structuring and implementation of the established observation rooms, provide access to forest cover monitoring technology, support the development of national monitoring plans, and foster the improvement, harmonization

and standardization of institutional capacities to assess land use changes in the participating countries. Continuing the efforts under RED-PD 029/09 Rev.1 (F) and utilizing the infrastructure established under the ITTO project, it will support regional cooperation to combat illegal logging and exchange of experiences related to public policy instruments to reduce deforestation. The expected project results are a direct contribution to the objectives of the UN-REDD programme through improved control of deforestation and forest degradation, and through the strengthening of monitoring systems and provision of data from all participating countries.

The ORs established under the project are fully operational, basic equipment has been provided and/or upgraded and continued training has been provided with the help of INPE, Brazil. At present, regional maps have been produced for 2000-2010, 2010-2013 and 2013-2014. A new Map for 2014 -2015 is being prepared.

Among the main results of the project are those related to the sustainability of the actions and activities of the project aimed to develop and implement participatory systems for monitoring of forest cover in the Amazon; as well as to strengthen existing platforms for forest management and regional coordination. The project has contributed to a collaborative and collective work of national entities regarding the production of information on the Amazon forests on deforestation and has improved significantly the decision-making in forest management, in respect to:

- Interaction between the Amazon countries allowing joint actions within the framework of dialogue and coordination platforms linked to ACTO.
- Capacity building at country level to monitor deforestation, land tenure, changes in land use in the Amazon region, as an essential tool for forest governance in the Amazon.
- Disseminate knowledge and experiences in the region according to local particularities of remote sensing technologies for monitoring deforestation and changes in land use in all ACTO member countries.
- Incorporate the various instruments of public policies aimed at sustainable development of the Amazon region.
- Design specific instruments to address the challenges of the region such as the preparation of regional maps of the Amazon deforestation and soon the land use maps.
- Knowledge sharing between technical staff from the Observation Rooms and governments in regional meetings.

## Developing REDD+ES in the Brazilian Atlantic Rain Forest

Project number:	RED-SPD 058/11 Rev.2 (F)	
Project country:	Brazil	
Budget:	Total:	US\$ 164,610
	ITTO Contribution:	US\$ 142,110
	Instituto BioAtlantica (IBio)	US\$ 3,750
	Fibra, Brazil	US\$ 18,750
Submitted by:	Government of Brazil	
Executing Agency:	Instituto Terra	
Original Duration:	12 months	
Financed at:	REDD+ 3 <sup>rd</sup> Cycle (2011)	
Status:	Terminated in accordance with Decision 6(LII)	

### Summary:

Due to its exceptional biological diversity, the Brazilian Atlantic Rain Forest is among the five top priority conservation areas in the world. The biome hosts 80% of the Brazilian GNP and is home to more than 110 million people (or 60% of the Brazilian population), who depend on key environmental services produced by forests, such as fresh water, clean air, and climate stability. Due to deforestation activities, only 7% of the Atlantic Forest original vegetation is left. To further protect and recover the forest, additional incentives and financial resources, including sales of carbon credits, must be identified and channeled to landowners and local communities. REDD+ is a promising mechanism with the potential to assist the conservation and recovery of forests, however requirements for the development of on-the-ground projects are very technical and complex. This proposal aims to identify the potential of using the REDD+ mechanism to help restore and preserve the Atlantic Forest.

### Progress:

The project has been approved under the REDD+ 3<sup>rd</sup> Cycle (2011). Following difficulties due to the fact that the key collaborating agency had unexpectedly declined to participate in the project, Instituto Terra had eventually been identified and approved as Executing Agency for the project. At the time the project agreement had been signed by the Executing Agency and the Brazilian Government in April 2016, it could not be countersigned by ITTO due to the impairment of ITTO funds.

In December 2016, the Secretariat informed the focal point of Brazil and the EA that, in accordance with Decision 6(LII) which stipulates that the ED 'consider recommending projects for termination that have not started for at least two years following funding' in order to allow more resources to be used for other projects/activities, this project was terminated under that provision.

### Achievements, impacts and lessons learned:

Nothing to report

**Rehabilitation of degraded forests for sustainable wood fuel production and climate change mitigation in the forest-savanna transition zone of Ghana**

Project number:	RED-SPD 077/12 Rev.1 (F)	
Project country:	Ghana	
Budget:	Total:	US\$ 169,360
	ITTO Contribution:	US\$ 121,662
	Government of Ghana:	US\$ 47,698
Submitted by:	Government of Ghana	
Executing Agency:	FORIG	
Original Duration:	24 months	
Financed at:	REDDDES 4 <sup>th</sup> Cycle (2012)	
Status:	Ongoing	

**Summary:**

The project aimed at contributing to reduction in rural poverty and improved income and employment while reducing deforestation and degradation and contributing to carbon sequestration in the forest savanna transition zone of Ghana. The project achievements were made through sensitizing and building the capacity of commercial charcoal and firewood producers in the transition zone on planting and/or managing wood fuel plantations sustainably.

Participatory approaches were employed at all stages of the project to ensure that stakeholder needs are adequately incorporated in the choice and design of plantation regimes. Management plans were produced to guide communities for efficient utilization of wood fuel resources. The government of Ghana benefited through improved resource base and sectoral information for policy decisions. Other benefits derived from this project include building up of the capacity of resource managers to support forest communities to sustainably utilize and manage wood fuel resources and to reduce pressure on the natural forest estate.

**Progress:**

a) Administrative aspects:

The Project Agreement regulating the implementation of the project was duly signed on 06 February 2013. An Inception Report and related first Detailed Work Plan were submitted in April 2013 and were approved by the ITTO Secretariat. The project implementation began with the disbursement of the first installment of ITTO TP funds on 14 May 2013. The ITTO budget modification was approved in November 2015 in relation to the project extension until April 2016. An acceptable version of the project completion report was received in November 2017 with the project technical operation period having lasted 53 months instead of 24 initially designed by the Executing Agency (FORIG). Upon receipt of an acceptable final financial audit report, this project could be documented for the completion and closure procedures.

b) Technical aspects:

The main project outcomes, in relation to the expected outputs and associated activities, can be summarized as follows:

- Baseline information documented on woodfuel species, local knowledge on their uses and ecological characteristics, regeneration potential, availability and distribution in community land use systems, nature of supply and value chains, silviculture as well as resource management options.
- Capacity of smallholder farmers built in establishing multipurpose woodfuel woodlots with a mix of native species (*Pterocarpus erinaceus*, *Anogeissus leiocarpus*, *Khaya senegalensis*) and exotic species (*Senna siamea*, *Acacia spp.*, and *Azadirachta indica*) in food crop fields.
- Fifty test plots of wood fuel species were installed with farmers in six communities in the Kintampo North and Nkoranza Districts. A total of 18,200 seedlings covering 18 ha were inter-planted with food crops from 2014-2016 with 70% success. The 30% loss was a result of harsh weather conditions, wildfire, termite and livestock damage.
- Capacity of 3 Ghanaian undergraduate students of the Faculty of Renewable Natural Resources (FRNR), Kwame Nkrumah University of Science and Technology of Kumasi, were built through their involvement in research design, field data collection processing and report preparation to produce 3 dissertation/thesis documents.

- The biomass and carbon production potential of the wood fuel species on test/trial plots. Results indicate that above ground biomass range between 80 tons/ha for *Pterocarpus spp* to 160 tons/ha for *Acacia sp*. *Acacia* and *Cassia* though exotic species have the best potential for both biomass and carbon storage ability for a five years rotation plantation. *Khaya senegalensis* and *Anogeissus spp* that are indigenous species were the next with potential for biomass (136 tons/ha, 132 tons/ha).
- Laboratory tests on the suitability of the woodfuel tree species for either fuelwood or charcoal were conducted. The calorific values of *Azadrachta indica*, *Senna siamea*, *Anogeissus leiocarpus*, *Azalia africana*, *Pterocarpus erinaceus* and *Khaya senegalensis* and their gravimetric or charcoal yields have been determined. Results indicates that *Azalia africana*, *Khaya senegalensis*, *Pterocarpus erinaceus*, *Azadrachta indica* have the highest green moisture content (mc), volatile matter (vm), ash content and fixed carbon content respectively. *Pterocarpus erinaceus* gave the highest gravimetric yield for carbonization, which correlated very well with green density of the tree species. Of the 6 tree species studied *Azalia africana* has the highest calorific value of 5.17 kcal/g for fuel wood and *Azadrachta indica*, the highest value of 6.79 kcal/g for charcoal. The indigenous tree species performed very well comparable to the exotic species based on the above properties. The indigenous species would be good species to be combined with the exotic species for use in agroforestry or wood fuel plantation to advance environment issues while improving biodiversity conservation.

#### **Achievements, Impacts and lessons learned:**

The main project achievements, impacts and lessons learned, in relation to the expected outputs and associated activities could be summarized as follows:

- Results from field trials are relevant for the implementation of the Ghana Forest Plantation Development Strategy (GFPDS) 2016-2040. The GFPDS has recommended establishment of woodlots for charcoal and firewood using *Senna siamea*, *Acacia* and *Azadirachta* in the savannah and transition zones to meet the high demand for wood energy in the country. Results from field trials indicated that site-species matching should be critical in wide spread promotion of energy woodlots in communities in the savannahs of Ghana due to long drought, high temperatures, wildfire and cattle browsing. Also high costs of weed management is critical to plant growth and would require innovative planting designs based on security of tenure and cropping systems. It is recommended that *Senna siamea*, *Azadirachta indica* and *Anogeissus leiocarpus* be promoted in this zone since these species can withstand extreme weather conditions and pest incidence. These species grow quite fast with limited rain and are also not susceptible to browsing by cattle. Wider spacing from 4ft x 4ft to 6ft x 6ft would need to be adopted in order to allow longer integration of food crops such as pepper, maize, millet and sorghum till the wood is harvested for fuel. This allows for maintenance of the plot to enhance tree growth.
- The ethno-ecological study indicated that wood fuel species have multiple uses - fuel, timber for construction and furniture, medicine, utensils, etc. It was observed that shorter rotations of 5 years for fuelwood production from fast growing tree species increases the frequency of food crop integration enhancing income from the woodlot production system. Integration of fast growing timber producing species diversifies income sources. However, it is imperative that woodlots are designed to appropriately fit into smallholder production systems and within their resource constraints.

This project established 50 trial plots comprising a mix of indigenous and exotic tree species on smallholder fields to demonstrate the possibility of integrating wood energy production in agricultural landscapes. Results indicate that multipurpose woodlots of *Senna siamea*, *Acacia spp*, *Azadrachta indica*, *Anogeissus leiocarpus* and *Khaya segalensis* can be planted for energy and other uses in small holdings. It would be recommended that *Senna siamea*, *Azadirachta indica* and *Anogeissus leiocarpus* be promoted in this zone since these species can withstand extreme conditions.

**Advancing REDD+ in Ghana: preparation of REDD+ pilot schemes in off-reserve forests and agro-forests**

Project number:	RED-PD 093/12 Rev.3 (F)	
Project country:	Ghana	
Budget:	Total:	US\$ 366,954
	ITTO Contribution:	US\$ 297,205
	Government of Ghana:	US\$ 69,749
Submitted by:	Government of Ghana	
Executing Agency:	Ghanaian National REDD+ Secretariat	
Original Duration:	12 months	
Financed at:	REDD+ 4 <sup>th</sup> Cycle (2012)	
Status:	Ongoing	

**Summary:**

The project is preparing a major support component to Ghana's Readiness Preparation Proposal (RPP) and aims at strengthening Ghana's capacities to prevent and reduce deforestation and forest degradation and enhancing carbon stocks (REDD+). The specific objective of the REDDES project is to lay out the ground work for the development or enhancement of off-reserve production systems under REDD+ schemes, in line with its efforts to reduce GHG emissions in forests. The project is a preparatory step for an additional support component for the implementation of Ghana's R-PP and is mainly concerned with developing a number of analytical works and the definition of REDD+ pilots in off-reserve areas. It is also aimed at developing a framework to guide the implementation of REDD+ from the national to the local level. This shall allow Ghana to take stock of existing initiatives that have the potential to be considered under REDD+, as well as to concretely analyze promising REDD+ activities, which will be an integral part of the RPP. The information produced through this project shall prepare the further implementation of agricultural and secondary forest production schemes that feature climate smart practices.

**Progress:**

Despite of several reminders from the ITTO Secretariat, the completion report has not been received by the end October 2017 from the Executing Agency (Ghanaian National REDD+ Secretariat) and Collaborating Agency (Forestry Research Institute of Ghana /FORIG).

**Achievements, impacts and lessons learned:**

The ITTO Secretariat is continuing to request the submission of the completion report from the Executing Agency (Ghanaian National REDD+ Secretariat) and Collaborating Agency (Forestry Research Institute of Ghana /FORIG). If the completion report is not submitted by August 2018, this project could be subject to termination procedure at the next Council (ITTC-54).

**Strengthening of governance and sustainable management of mangrove ecosystems in Guatemala as a climate change adaptation measure**

Project number:	RED-SPD 079/12 Rev.1 (F)	
Project country:	Guatemala	
Budget:	Total:	US\$ 215,223
	ITTO Contribution:	US\$ 146,751
	INAB:	US\$ 58,320
	ARCAS:	US\$ 10,152
Submitted by:	Government of Guatemala	
Executing Agency:	INAB	
Original Duration:	24 months	
Financed at:	REDDDES 4 <sup>th</sup> Cycle (2012)	
Status:	Ongoing	

**Summary:**

The lack of actions aimed at mangrove forest protection and management has led to the loss and degradation of mangrove ecosystems outside of protected areas; weak mangrove forest management and governance; food insecurity; and limited economic opportunities for the local communities. This project will help address these problems. It will produce increased knowledge about the dynamics and contribution of mangrove forests so as to improve their management and rehabilitation and it will strengthen and consolidate a sustainable community forest management model. At least 15 sites directly linked to the protection and management of mangrove ecosystems in the seven prioritized departments will be actively promoting the restoration, management and special protection of at least 700 hectares of mangrove forests, with the effective participation of local partners. It is expected that the development and systematization of the project experience will help strengthen and consolidate the Mangrove Forest Regulations, which include agreed guidelines for the prioritization of mangrove forests, and the management, restoration and conservation mechanisms to be implemented through the effective participation of local and government stakeholders. Through improvement of mangrove forest management and restoration, the project will create new economic opportunities and improved food security for the local communities, while contributing to the conservation of mangrove ecosystems.

**Progress:**

The Project Agreement regulating the implementation of the project was duly signed on 10 March 2013. The Project Inception Report and the YPO were received and approved by the ITTO Secretariat and the first disbursement of funds was transferred to the Executing Agency on 1 August 2013 and project activities commenced shortly after that. The second installment was disbursed in early February 2014, the third installment in October 2014 and the fourth in July 2015. All disbursements were based on the prior submission and approval of the corresponding required 6-monthly progress report, annual audits and updated OLMS reporting. The project was further granted two extensions, one until December 2015 and another until the end of August 2017, in order to allow for the successful completion of all activities, particularly as regards the adoption of the draft mangrove forest regulation developed by the project. The project was not impacted by ITTO's financial impairment since all funds were disbursed prior to that problem. However there have been several delays in completing the project due to changes in Guatemala's forest administration and governance. The project was monitored in mid-2017 with a view to expediting production of the final report and financial audit which are now expected before the 53<sup>rd</sup> ITTC session; if they are received and judged acceptable, this small project may be considered complete.

The project has completed all technical activities as follows:

Output 1: Mangrove Ecosystem Management and Conservation Program for the local communities with a focus on climate change adaptation.

- 4 pilot areas involving 13 communities were selected for the development and implementation of community forest management plans centering on mangrove forest conservation and management, these being: Blanca Cecilia, Manchon Guamuchal, Cayo Quemado and Mangales. All four sites now have operational management plans focusing on mangrove forest rehabilitation, conservation, protection and production;
- The training modules on mangrove management and all related materials have been developed;
- Training workshops to raise awareness of the local communities on the use and conservation of mangrove areas have been completed; and

- Other events continue were carried out at the community level aimed at highlighting the significance of practices focused on improving local capacities for climate change adaptation.

Output 2: Conservation and management strategy for Guatemala's mangrove ecosystem with the effective participation of key stakeholders.

- A methodology was designed with the effective participation of both local and national stakeholder groups for the establishment of a National Strategy for Mangrove Ecosystem Conservation, Management and Restoration, and the strategy itself has been developed;
- 9, rather than the original 3, local roundtables have been established with the participation of key local stakeholders to develop local actions focused on mangrove conservation, management and restoration within the framework of the national strategy and also to review the draft mangrove forest regulation; and
- The new mangrove forest regulation has been approved.

**Achievements, impacts and lessons learned:**

The following achievements can be mentioned:

- 4 pilot areas over an area of 532.27 ha with operational community forest management plans centering on mangrove conservation and management, these being: Blanca Cecilia (22.50 ha), Manchon Guamuchal (486.77 ha), Cayo Quemado (2.00 ha) and Mangales (21.00);
- Training modules and materials for the conservation and sustainable use of mangroves have been developed and disseminated among the stakeholder communities, and are readily available for further dissemination elsewhere;
- A National Strategy for Mangrove Ecosystem Conservation, Management and Restoration has been developed in a participatory manner and has been approved by the competent government authorities (INAB and CONAP); and
- 9 local roundtables established with the participation of key local stakeholders are currently active in the development of local actions focused on mangrove conservation, management and restoration within the framework of the draft national strategy.

The Project has also to date produced several outputs and products, among them several technical documents describing the achievements, impacts and lessons learnt of the project. All project reports/outputs are available in Spanish through the project search function of the ITTO website ([www.itto.int/project\\_search/](http://www.itto.int/project_search/)); the completion report will be made available once approved.

**Improving efficacy of forestry policies and activities in Liberia through REDD+ demonstration projects**

Project number:	RED-SPD 084/12 Rev.1 (F)	
Project country:	Liberia	
Budget:	Total:	US\$ 308,718
	ITTO Contribution:	US\$ 149,922
	NORAD:	US\$ 158,796
Submitted by:	Government of Liberia	
Executing Agency:	Forest Development Authority and Flora & Fauna International (FFI)	
Original Duration:	12 months	
Financed at:	REDD+ 4 <sup>th</sup> Cycle (2012)	
Status:	Ongoing	

**Summary:**

As Liberia emerges from conflict, avoidable threats to its forests remain, including shifting agriculture, illegal and quasi-legal logging, and wide-scale conversion to agro-industrial crops. Underlying these issues are key threats associated with low national capacity coupled with a lack of large scale livelihood development interventions. Faced with these challenges, the Government of Liberia has been actively exploring options for REDD+ development- however, a demonstration site is critically lacking. The project proposes to support the establishment of two on-the-ground demonstration projects for testing pro-poor REDD+ approaches that are replicable and will feed into improving the efficiency, equity and efficacy of forestry policies and activities in Liberia. Adopting a grassroots and participatory approach, the project will support the establishment of tenure arrangements and equitable benefit sharing and ensure good governance, with a key focus on community rights and gender equity. Project activities will support the development of sustainable livelihoods, with a pro-poor approach underpinning all activities.

**Progress:**

Despite of repeated reminders from the ITTO Secretariat, the completion report was not submitted, by end of October 2017, by the project Executing Agency (Flora & Fauna International / FFI) and Collaborating Agency (Forestry Development Authority of Liberia / FDA).

**Achievements, impacts and lessons learned:**

The ITTO Secretariat is continuing to request the submission of the completion report by the Executing Agency Executing Agency (Fauna International / FFI) and Collaborating Agency (Forestry Development Authority of Liberia / FDA). If the completion report is not submitted by August 2018, this project could be subject to termination procedure at the next Council (ITTC-54).

**Environmental assessment and economic valuation of ecosystem services provided by coastal forests (mangrove forests, flood forests, rain forests and scrub forests on dunes) and their agricultural replacement systems on the central coastal plain of Veracruz, Mexico**

Project number:	RED-PD 045/11 Rev.2 (M)	
Project country:	Mexico	
Budget:	Total:	US\$ 871,825
	ITTO Contribution:	US\$ 470,682
	Institute of Ecology (INECOL), Mexico	US\$ 401,143
Submitted by:	Government of Mexico	
Executing Agency:	Institute of Ecology (INECOL)	
Original Duration:	36 months (+15 months no-cost extension)	
Financed at:	REDDDES 3 <sup>rd</sup> Cycle (2011)	
Status:	Completed	

**Summary:**

The project aims at a quantitative assessment of the goods and services provided by the various types of tropical forests and coastal forests (mangrove forests, tropical flood forests, rain forests and scrub forests on dunes), on the coastal plains of Veracruz in the Gulf of Mexico. Services to be evaluated will include flood containment, carbon sequestration, improved water quality, and accelerated regeneration). These services will also be assessed from the economic point of view, and criteria will be developed jointly with local communities for monitoring and valuing these benefits, thus encouraging sustainable use of these ecosystems. A comparison will be drawn between technical data and local community perceptions of potential benefits and products from these tropical forests, and the evaluation of services gained for paddocks and agricultural fields created by cutting down these ecosystems. Material will be developed to publicize valuation and assessment of environmental services outcomes among the population, and workshops will be organised with government sectors to transfer information and seek their inclusion in payment for environmental services schemes. The project will contribute to sustainable forest management and to the valuation of coastal forests with similar conditions throughout the Gulf of Mexico and the Mexican Pacific Region.

**Progress:**

The first installment was sent in May 2012 and the last installment was sent in August 2015. The project has been extremely productive. The completion report was received on 1 March 2017 and reports on a large number of achievements and products under each of the seven Outputs. A detailed account can be downloaded from the ITTO website through the project search.

**Achievements, impacts and lessons learned:**

At project completion, the following products and outreach material have been produced in Spanish (English versions are available only if indicated). These products meet the means of verification stated in the project document, and the project can be considered as successfully completed. All materials give proper recognition to ITTO. All products are available at ITTO's project search at [http://www.ito.int/project\\_search](http://www.ito.int/project_search) and through ITTO's You Tube channel (in the case of videos) at <https://www.youtube.com/user/ittosfm>:

- 4 videos that summarizes the outputs of the project:
  - Environmental services of Veracruz's coastal forest (Spanish only)
  - Environmental services of Veracruz's coastal forest (Spanish with English subtitles)
  - What's connectivity?
  - Economic valuation of environmental services
- 8 publications:
  - Environmental services of Veracruz's coastal forest
  - Description of Veracruz's wetlands and flooded forest
  - Manual on good rural practices
  - Techniques, tricks and practices to restore and maintain trees and woodland in the dunes of Veracruz (already published)
  - Practical guide to the reforestation and enrichment planting of dunes
  - Manual on medicinal plants
  - Comic on environmental services "the spirit of the tropic"
  - Comic "times of change"

- 28 maps of the environmental services in four regions of Veracruz
- Outreach materials (all already published):
  - 02 posters on environmental services for flood forest and dunes
  - 03 leaflets on environmental services for flood forest, dunes and use of trees
  - 01 calendar of coastal forest and wetlands
  - 01 scientific poster on the carbon sequestration by flood forest and dunes
- 20 papers published on scientific journals (the ones listed below are available from the project search, others are listed in Annex one of completion report):
  - Palm use and social values in rural communities on the coastal plains of Veracruz, Mexico (published on 'Springer science+business media' in March 2012) – available in English
  - Traditional wetland palm uses in construction and cooking in Veracruz, Gulf of Mexico (published on 'Indian journal of traditional knowledge' in July 2012) – available in English
  - Regaining the traditional use of wildlife in wetlands on the coastal plain of Veracruz, Mexico (published on 'Regional Environmental Change' in March 2016) – available in English
  - Green Rural Enterprises: guidelines for empowering local groups towards sustainable ventures (published on Journal of Environmental Planning and Management in December 2013) – available in English
  - Use of trees in Jamapa, traditions in a deforested area (published on 'Madera y Bosques' journal in Spring 2016)
  - From tropical wetlands to pastures on the coast of the gulf of Mexico (published on 'Pastos' journal in 2012) – available in English
  - Scenarios of vulnerability in coastal municipalities of tropical Mexico: an analysis of wetland land use (published on 'Ocean & Coastal Management' journal in December 2013) – available in English
  - Trade-offs in fishery yield between wetland conservation and land conversion on the Gulf of Mexico (published on 'Ocean & Coastal Management' journal in July 2015) – available in English
- 13 theses for advance university degree (indicative titles):
  - Diagnosis and perspectives for wetland management in Alvarado, Veracruz
  - Alternatives for conservation of wetlands in the coastal plain of Veracruz
  - Assessment of the environmental service of provision of natural resources in a paddock in Jamapa, Veracruz
  - Assessment of the environmental service of mitigation from storm and hurricane effects provided by wetlands in Tecoluta, Veracruz
  - Forest of Pachira aquatica in the 'Encrucijada' biosphere reserve in Chiapas, Mexico
  - Rural participation in nature conservation
  - Use of artificial wetlands for microbial fuel
  - Use of artificial wetlands and Sagitaria lacinfolia L. for energy generation
  - Soil characterization of wetlands converted into paddocks in Jamapa, Veracruz
  - Development of water quality standards for Jamapa's basin
  - Secondary succession in abandoned paddocks (seed content in the soil)
  - Characterization of underground water contained in wetlands close to the city of Veracruz
  - Relational assessment of water quality and microorganisms
- 03 articles published in ITTO's Tropical Forest Update (TFU):
  - "Saving freshwater flooded forests in Mexico" (issue No. 25/3)
  - "The forgotten wetlands" (issue No. 26/2)
  - "The trees left behind" (issue No. 26/2)

The EA is also disseminating the project results through the sites <http://www1.inecol.edu.mx/costasustentable/esp/presentacion.htm> and [www.costasustentable.org](http://www.costasustentable.org).

The research results indicate that is extremely important in Mexico to put in place policies and programmes for the conservation and restoration of wetlands (currently some PES are available for mangroves). Project activities have heavily involved the participation of local communities, who are the owners of the forests that provide several environmental services on the coastal plains of Veracruz, Mexico and who have benefitted from training provided and have improved their forest management and rural practices. Such involvement has already created awareness among the locals about the benefits derived from the forest, the importance of its preservation and its sustainable management. In fact, the authors of the publication on *medicinal plants* are the women from the community of Jamapa. While forest owners in the municipalities of Jamapa and La Guadalupe have organized their own reforestation campaigns and have increased the number of trees in their fields. Other members of the communities have organized themselves into ecotourism enterprises and now disseminate information about environmental services and restoration to their visitors.

The government both at regional and national level have now information on the value of the environmental services provided by the coastal forest. As stated under output 7, the National Institute of Ecology and Climate Change (INECC) has now incorporated wetlands as a priority ecosystem of its policy making on climate change mitigation, and has adopted the concept of connectivity as a climate change adaptation strategy.

In terms of continuation of project activities after completion, the EA will remain involved in conducting further research in the subject as it is part of its mandate and is in fact collaborating and sharing information produced by the project to the federal government to assist climate-change policy making.

## TMT

**Support for ANAFOR for optimum operation of the database management of *Pericopsis elata* (Assamela) in Cameroon**

Project number:	TMT-SPD 020/15 (M)	
Project country:	Cameroon	
Budget:	Total:	US\$ 113,400
	ITTO Contribution:	US\$ 113,400
Submitted by:	Government of Cameroon	
Executing Agency:	ANAFOR	
Original Duration:	10 months	
Financed at:	TMT 5 <sup>th</sup> Cycle (2015)	
Status:	Completed	

**Summary:**

The database (Dbase) on Assamela established as part of the ITTO/CITES Joint Regional Programme on monitoring of plant species listed in Appendix II has operated under sub-optimal conditions. Remote locations of production and/or processing sites, or energy deficit problems, use of one data formats by logging companies, among many others, are obvious constraints associated with any physical collection of production data to feed the Dbase, which prevent the efficient operation of this Dbase. This project has been developed in response to the identified challenges with the aim to ensure the proper operation of the Assamela Dbase by involving all stakeholders in the management of the species in Cameroon. The activities will allow ANAFOR to ensure harmonization of the data collection format for Assamela; to train managers of forest management units in logging companies, as well as the staff of the Forest and Customs Departments due to take over from ANAFOR the responsibility to conduct the regular collection of data at forest sites and shipping ports. The database management unit shall also be provided with equipment and technical resources to ensure the continuous monitoring of the collection system and updating of the species processing/recovery rate for the next two years. This project was funded as part of the ITTO-CITES Programme.

**Progress:**

The project was approved under the 5<sup>th</sup> TMT Cycle (2015). The project agreement was signed on 6 July 2015 and the project is now complete. The Assamela Dbase system has been developed and several training workshops occurred in the second half of 2015. However the loss of ITTO project funds prevented the disbursement of the final instalment of project funds. However ANAFOR was able to successfully complete the project with available funds, with the final report and financial audit submitted in late 2016.

ANAFOR organized the first meeting of the National Technical Committee (NTC) on 25 August 2015 where the Activity document including the objectives, the work plan and the budget were examined. The NTC recommended that (i) an additional data sheet be included in the current field logging book with specific elements related to *P. elata*; (ii) the data collection be automatic (obliged) for any forest company that wishes to exploit *P. elata* in Cameroon; and (iii) the coordination team should work closely with the timber industry association in planning field missions for data collection. All of these changes were taken into account in project implementation. Terms of reference for the three studies called for in the proposal had been developed and validated by the Scientific Committee in September 2015, namely, (i) updating of field sheets for data collection in different forest concessions; (ii) updating the volume base tariff; and (iii) updating and integration of the processing coefficient (log/sawn wood) in the database. All of these studies were completed in 2016. The studies related to the revision of the volume base tariff and processing coefficient were carried out in coordination with related studies under another project (C2D) funded by the French government as to avoid any duplication and to assure synergies. ANAFOR organized the second meeting of the Scientific Committee in 2016 to validate the reports produced by the experts. Following this validation process the revised reports were submitted to ITTO where they are available with the completion report through ITTO's project search function ([www.itto.int/project-search](http://www.itto.int/project-search)).

**Achievements, impacts and lessons learned:**

Expected results were achieved with significant results recorded. The results achieved are as follows:

- The standard format for data collection on Assamela;
- The conceptual model of the database;
- The user manual of database providing techniques for importing, consulting and querying data;
- The database on PHP with consolidation of data of all titles containing Assamela;
- The document on formulas developed within the framework of the Activity,
- Support equipment for database;
- Operational Assamela database;
- The report of the national workshop on restitution and dissemination of results;
- The report of the national training workshop for forestry administrations and enterprises on the data collection format and on the functioning of the database.

In order to maintain these achievements, it is desirable that this Activity should be supplemented by a follow-up activity to ensure annual stocking of database at the end of each financial year and consequently actual annual updating of data recorded in the NDF. The training for data managers in forestry sites should ultimately ensure harmonization of information to be collected and an interconnection between data production sites and database installed at ANAFOR. It would be possible for Cameroon to have necessary means to ensure that this database can be adapted for other species to manage species similar to Assamela such as Bubinga. As a part of update of non-detriment findings for Assamela, the project's contribution in setting of quotas by plant and by title has been effective to great satisfaction of all stakeholders in Assamela's management in Cameroon.

The project may be considered successfully completed.

**Supporting SMEs and importers of tropical timber for better understanding of CITES and the need to comply with CITES rules in China**

Project number:	TMT-SPD 023/15 Rev.1 (M)		
Project country:	China		
Budget:	Total:	US\$	246,800
	ITTO Contribution:	US\$	150,000
	Chinese Academy of Forestry	US\$	96,800
Submitted by:	Government of China		
Executing Agency:	Research Institute of Forestry Policy and Information, Chinese Academy of Forestry (RIFPI/CAF)		
Original Duration:	18 months		
Financed at:	TMT 5 <sup>th</sup> Cycle (2015)		
Status:	Completed		

**Summary:**

Legality requirements and timber procurement policies are being introduced in many countries. These requirements and policies are principally aimed at addressing public concerns about the legal and environmental credentials of products. Many purchasers are demanding that products should come from sustainable, or at least legal, sources and that this be verifiable in order to maintain credibility with buyers in the market place.

These requirements and policies have significant implications for tropical timber importers and manufacturers. As developments are occurring at a rapid rate, there is an urgent need for tropical wood product importers and manufacturers to monitor these developments, assess the costs in meeting these requirements and explore the market implications and opportunities presented by these developments.

The project aims to raise the capacity of SMEs and importers of tropical timber in Yangtze River Delta to understand and prepare procurement strategies and business plans to take into account the development of CITES Appendices, with a view to improving market transparency and promoting the trade in tropical timber from sustainably managed and legally harvested forests.

This project was funded as part of the ITTO-CITES Programme.

**Progress:**

The following activities were carried out by the project:

- Collected and analyzed the trade data about the species on the CITES list. The data mainly comes from CITES trade dataset.
- Analyzed the impact of CITES implementation on the import of timber in China.
- Translated the teaching materials on the website of CITES college, and releasing these materials to the enterprises through our WeChat platform.
- Procured trade data about the species on the CITES list. Active communications were kept with the Customs to obtain relevant data.
- Conducted the on-the-spot investigations in some enterprises, including the Customs service providers, the rosewood importers, the manufacturer and seller of Mahogany furniture, the Shanghai Timber Association.
- Finalized the summary of these investigations to sum up the impact of CITES on Chinese enterprises and knowledge on the industry chain of CITES-listed species.
- Collected latest information and requirement about CITES and released CITES news and knowledge on FPI WeChat regularly, including the information on the 17th Conference of the Parties of CITES (CoP17).
- Finalized the report of "Analysis of trends and impact on China's timber trade of commercial timbers included in CITES".
- Provided advice and guidance to SMEs and importers based on Q and A from format, such as how to apply the import certification of CITES-listed species and which species need to apply the import certification.
- Prepared materials for the training workshop, such as the regulatory requirements of CITES and China, trade process, certificate application, etc.

**Achievements, impacts and lessons learned:**

This small project analyzed the impact of CITES implementation on the import and export of rosewood, which provided to the policy makers as well as the importers the latest progress of CITES listing and advise how to adapt to the developments. The report “Analysis of trends and impact on China’s timber trade of commercial timbers included in CITES”, which is the main output of the project, has been disseminated to a wide range of stakeholders in Chinese timber sector.

This project has also attracted considerable attention, as two research papers have been published in authoritative journals. “Trade dynamics of the CITES-listed Timber Species” is published in the World Forestry Research (2017, Vol 30, No.2). “The impact of new-added CITES-listed timber on Chinese timber enterprises” is published in the Forestry Economics (2017, Vol 3). These studies of trade in CITES-listed timber species filled the gap in CITES research in China.

Wechat is now the most popular mobile based communication tool in China. This project has established a CITES Wechat mobile webpage, providing updated information on CITES knowledge every two weeks and enabling dialogue between SMEs and importers and exporters on CITES related issues. As the other ITTO project established FPI Wechat mobile webpage, the CITES webpage has set up links to it as well as the CITES website, so as to maximize the impact and dissemination and provide more information to relevant stakeholders. The communication platform provides the opportunity and means for timber SMEs and importers communicating with related management departments on policy and market developments. Currently there are over 4930 users who can access the site to obtain a wide range of market, trade and policy information.

The State Forestry Administration now pays attention to trade situation of CITES-listed timber (especially the endangered tropical timber) and have initiated further works through some new projects focusing on tropical timber trade and SMEs and some of the works have been allocated to the EA. In addition many industry and trade associations in China are willing to cooperate with the EA to request the information services brought by this project.

Lessons learned from the implementation of this project are as follows:

- Public information services on domestic and international CITES-listed timber market and trade rules should be provided to SMEs via new media ‘platforms’, such as the Wechat and website.
- A ‘platform’ for regular exchange of policy information should be permanently established to facilitate a two-way exchange of information between the decision making departments of government, CITES management authority, and CITES scientific authority and CITES-listed SMEs.
- The combination of production, research and application and cooperation between associations and research institutions should be supported and promoted. The output of work by institutions on CITES investigation should not be limited just providing reports, instead, they should find means to effectively deliver and operationalize such information for the SMEs.
- The difficulties and policy requests of SMEs and importers related to CITES should be assessed regularly and CITES policy information should be passed to SMEs as promptly as possible.

The Executing Agency has submitted the completion report, the technical reports and the final audit report. The project may be declared duly completed.

## Establishment of a monitoring center for the industrial use of *P. Elata* in the Republic of Congo

Project number:	TMT-SPD 021/15 Rev.1 (I)		
Project country:	Republic of Congo		
Budget:	Total:	US\$	143,000
	ITTO Contribution:	US\$	130,000
	Government of the Republic of Congo	US\$	13,000
Submitted by:	Government of the Republic of Congo		
Executing Agency:	National Centre for Forest and Wildlife Resources Inventory and Management (CNIAF)		
Original Duration:	12 months		
Financed at:	TMT 5 <sup>th</sup> Cycle (2015)		
Status:	Completed		

### Summary:

This project aimed to establish a monitoring center for *P. elata* industrial use in the Republic of Congo. The expected results were: (1) The flow of information on logging activities is designed, (2) The information data to be secured are identified, (3) the architecture of the information system is developed, (4) the data are collected and stored, and (5) Users of the information system are trained. The monitoring center will focus on the harvesting and processing of Afrormosia timber. It primarily aims to inform management and planning decisions as well as to meet the information needs of the scientific community. The system will be capable of securing and facilitating the monitoring of information related to the industrial use of the Afrormosia species.

This project was funded as part of the ITTO-CITES Programme.

### Progress:

The project was approved under the 5<sup>th</sup> TMT Cycle (2015). The project agreement was signed on 29 June 2015 and the project is now completed. The National Technical Committee (NTC) met for the first time in September 2015 and examined the Activity document including the objectives, the work plan and the budget. The NTC appreciated the link made between this Activity and the recommendations formulated in the non-detriment findings report developed during the first phase of the ITTO-CITES Program. A total of three experts were recruited with the assistance of the ITTO-CITES Programme Regional Coordinator for Africa namely, (i) an expert on the state-of-the-art of the current control system; (ii) an expert on geographic information systems; and (iii) a database specialist. A Scientific Committee met from 2-3 December 2015 in Brazzaville and examined and validated the reports submitted by the experts. The database developed is quite simple, easy to use, and based on Excel. The training workshop on the use of the database was organized at Ouesso, North Congo in February 2016. The final report and financial audit were submitted in late 2016; all project reports/outputs are available in French on [www.itto.int/project-search](http://www.itto.int/project-search). The project may be considered successfully completed.

### Achievements, impacts and lessons learned:

The project contributed to the enhancement of the transparency of management of species of Congo's wild fauna and flora listed in Appendix II of CITES. However, there is still much to be done, especially on the part of public authorities, to make every effort to implement this tool effectively. To this end the following recommendations are made:

#### To ITTO and CITES:

- continue the program, with particular emphasis on awareness raising and capacity building on specific themes related to the sustainable management of wild fauna and flora species listed in Annex II to CITES;
- in view of additional costs due to unforeseeable constraints during the implementation of the activities, it is desirable to consider larger investments.

#### To the Government of the Congo:

- make every effort to make counterpart funds available since the lack of these funds strongly influenced the activities and put more stress on ITTO's limited contribution; and
- elaborate and adopt regulations to make operational this observatory which from now on is part of the tools of management of the forest and wildlife resources.

**Preparation of the publication “Atlas of tropical timber species – 1st Edition: Technological characteristics and uses of 273 tropical timber species (and 17 temperate species)”**

Project number:	TMT-SPD 010/12 Rev.1 (M)	
Project country:	France	
Budget:	Total:	US\$ 273,789
	ITTO Contribution:	US\$ 138,033
	CIRAD	US\$ 135,756
Submitted by:	France	
Executing Agency:	CIRAD	
Original Duration:	24 months	
Financed at:	TMT 3 <sup>rd</sup> Cycle (2012)	
Status:	Completed	

**Summary:**

The project aims to produce, publish and disseminate an *Atlas of tropical timber species* covering the information contained in the latest TROPIX software (version 7 - 2011) distributed by CIRAD; the very first version of this software was developed in the late 1980s by CTFT (CIRAD Forestry Department) with financial support from ITTO. This new Atlas is meant to be a continuation of the three former timber Atlas covering Africa, South America, and Asia respectively, the last of these three books (on timber from South America) have been produced and published in 1988 by CTFT and ATIBT with financial support from ITTO. The three books are still in high demand among operators of the timber sector but they are partly out of print; in addition, most of the information contained is partly obsolete and should be updated and supplemented.

The Atlas will be published in French and English (TROPIX is available in these two languages). The new edition will be associated with the release of a new version of TROPIX (version 8) describing species in greater number than the current version 7 (290 total instead of the current 245) and having new technological features requested by operators in the timber sector.

This project was funded as part of the ITTO-CITES Programme.

**Progress:**

The project agreement was signed in September 2013. The project implementation started in October 2013 and despite some delays, the project is now complete. The following activities have been carried out:

- Documentary research and complementary literature reviewed. The number of 290 species to be described in the Atlas was increased to 328 species;
- Additional testing technology and digitization of wood samples developed;
- Collection photo books or wood products carried out. 150 more pictures have been collected and the continuation of the collection is running;
- Writing Technical descriptions for species to be added in Tropix and Atlas finalized;
- The manuscript of the Atlas for the printer-model maker finalized and completed. The new version of the Tropix software (V 7.5) as the basis for the script receives the latest validation and is available on the website <http://tropix.cirad.fr/>;
- Proofreading of technical descriptions of the Atlas species;
- The Tropical Timber Atlas which is the key product and outcome of the project was produced and published. The 1000-page book described the characteristics and technological behavior, and the uses of 300 species (283 tropical);
- Several promotional activities have been done to promote the Atlas and others will be carried out as a long-term operation that will continue after project completion.

**Achievements, impacts and lessons learned:**

The Atlas of tropical wood is an essential reference and a key tool and a major interest for actors of tropical timber industries internationally.

The project received a favorable reaction from all private or public operators informed of its existence and some of which are involved in the project work. The Atlas of tropical timber was highly anticipated and a number of these operators spontaneously volunteered to participate by providing highly relevant data and information on

timbers as well as pictures to illustrate the technical descriptions in the Atlas. All operators surveyed agreed that the quality of the work in the Atlas was of international standard that will be universally recognized.

The number of species described in the Atlas has been increased. Initially 290 species to be described in book to produce, this number was increased to 330 species because it was considered of major interest to cover a wider range tropical species involved in regular trade.

The Atlas of Tropical Timber is available to the operators of the timber industry in hard copy and e-version. It is widely distributed and many operators use it as a reference tool for their work of buying and selling of tropical timber. In particular, the Atlas contains descriptions of species that arrive in the market and the operators use the Atlas as a tool for promotion and dissemination of information and knowledge on these new timber.

In addition, the EA has already received feedbacks from some operators who asked about the possibility to integrate new species in a future edition of the Atlas for tropical timber. All reports produced by the project and a link to the Atlas are available through [www.itto.int/project-search](http://www.itto.int/project-search).

The Executing Agency has submitted the completion report, the technical reports and the final audit report. The project may be declared duly completed.

### Improving intra-African trade and market transparency in timber and timber products

Project number:	TMT-SPD 012/12 Rev.1 (M)		
Project country:	Ghana		
Budget:	Total:	US\$	149,996
	ITTO Contribution:	US\$	111,931
	Ghana Timber Millers Organization:	US\$	38,065
Submitted by:	Ghana		
Executing Agency:	Ghana Timber Millers Organization (GTMO)		
Original Duration:	24 months		
Financed at:	TMT 3 <sup>rd</sup> Cycle (2012)		
Status:	Completed		

#### Summary:

African timber suppliers accounted for less 10% per year of the total African imports of timber and timber products (ITTO 2010). One major constraint identified was the lack of knowledge among traders in the region. This proposal seeks to increase knowledge of the regional market and promote trade (and thus leading to an increased intra-African market share) within the region through active engagement of traders and information provision. The outputs of the study will be an online timber marketplace, capacity building of enterprises to leverage ICT to enhance their competitiveness, and a geospatial database of market access and logistic information. The online timber marketplace will catalogue timber companies, trade leads and provide a social media tool to facilitate liaison among African traders. At the marketplace, regular surveys will be conducted with trader and market intelligence will be gleaned, prepared and reported on the website for the various users.

The project is funded under a grant from the EU to the ITTO-CITES program which provides for part of the funds pledged to be used for TMT activities with objectives relevant to both programs.

#### Progress:

All technical activities under this project have been completed and the Executing Agency has submitted the completion report and the final financial audit report in late 2016.

#### Achievements, impacts and lessons learned:

The website for an online timber marketplace has been designed and developed. The online marketplace will promote trade and increase awareness of market information among traders in the region. The newsletter will convey relevant and timely information to actors in the marketplace. The marketing training undertaken will enhance the ability of companies to craft effective marketing strategies. The translation of the website into French has been completed and is operational.

All project outputs are available through [http://www.itto.int/project\\_search/](http://www.itto.int/project_search/)

**Improving sustainable *Pericopsis elata* conservation and trade regulation in Ghana**

Project number:	TMT-SPD 017/15 Rev.2 (M)		
Project country:	Ghana		
Budget:	Total:	US\$	186,611
	ITTO Contribution:	US\$	149,997
	Government of Ghana:	US\$	36,614
Submitted by:	Government Ghana		
Executing Agency:	Nature and Development Foundation		
Original Duration:	18 months		
Financed at:	TMT 5 <sup>th</sup> Cycle (2015)		
Status:	Completed		

**Summary:**

This project is aimed at establishing the current conservation and trade status of *Pericopsis elata* in Ghana. This will be done through a habitat survey to assess the distribution and quantities of *Pericopsis elata* in Ghana and also ascertain the current market dynamics in its trade. The main objective of the project is to improve the availability of current data on the distribution, quantities and trade of *Pericopsis elata* in Ghana. The project will enable the Forest Commission (FC) to adopt the designed and tested tools and mechanisms to improve market regulation and put in effective interventions for its sustainable conservation. To guarantee sustainability of objectives and outcomes, the continuous support and guidance of non-detriment findings (NDF) will be readily available to the FC and industry players. This project was funded as part of the ITTO-CITES Programme.

**Progress:**

The Project has completed all activities under its three Outputs, namely: i) Conservation status of *P. elata* including its distribution, habitat condition and population assessed and established, ii) Market and trade status of *P. elata* including value chain, volumes and level of knowledge of its endangered status evaluated, and iii) Dedicated country level interventions for the protection of *P. elata* initiated.

The assessment and establishment of the conservation status of *P. elata* including its distribution, habitat condition and populations was done in the form of a study conducted by the coordinator of the scientific authority for CITES in Ghana. The assessment revealed that, stock density of the species is too low (even lower than estimated in the management plans) and that almost all the forest reserves within the range of the species are in poor conditions and the species stocks have declined with regeneration generally lacking.

The study to assess the market to ascertain extent of trading of the species in the Ghanaian market confirmed that the government has put in place some mechanisms, in addition to CITES requirements, aiming at sustainable conservation of the species. Some of these measures are; a higher diameter felling limit of 110 cm DBH, categorization of the species as a restricted timber species thus requiring a prior special permit to harvest the species whenever it is included in a yield allocation. It is noteworthy to state that the Forestry Commission has not issued permits for the harvesting of *P. elata* since 2002. Considering that the Forestry Commission has not issued any permit for the harvesting of *P. elata* and has not issued CITES certificate for the export of products from the species, the study concluded that, all *P. elata* timber products in or from Ghana are illegal. The study faced challenges in estimating annual volumes traded since those involved were aware of the illegality in trading in the species. Therefore, some interviewees refused to acknowledge their involvement in the trade or under declare the volumes traded. A conservative estimated annual trade volume of the species is 48.74 cubic meters for the last two years. Another important revelation of the study was that, stakeholders' awareness of the protection status of *P. elata* and the required procedures for its trade is very poor.

The action to initiate dedicated country level interventions for the protection of *P. elata* delivered through increased visibility and awareness on the species by producing diverse communication toolkits. These included t-shirts, stickers, video documentary and publication of study reports. These communication materials carried information on the conservation and trade status of the species and were disseminated to relevant stakeholders and by airing the documentary on TV, uploading to You Tube ([https://www.youtube.com/watch?v=zwFbN8\\_uRBA](https://www.youtube.com/watch?v=zwFbN8_uRBA)) and through Facebook.

An innovative part of the project was the organization of a one-day policy-dialogue involving all District Chief Executives within the range of the species, the Forestry Commission and civil society organizations to discuss

effective implementation of policies for the conservation of the species, new policies and proposed modification of existing ones. The report of this workshop is attached as annex 4 on page 27.

Implementation of the project spanned twenty-one (21) months instead of the eighteen months originally scheduled. This was due to the suspension of project activities for three months due to the financial difficulties experienced by ITTO within that period. However, the expansion of project duration did not bring additional cost to the ITTO.

The publication of the findings of the studies provides essential information to the government and other stakeholders. Indeed, within the project period and due principally to the engagement and awareness created, the government of Ghana has initiated allocated funding under its Forest Investment Program to finance the establishment of plantations or enrichment planting of the species within its range. It can therefore be said that, overall, the project objective has been achieved. It is therefore submitted that an opportunity for Phase II which will concentrate on supporting enrichment planting, engagement with private plantation developers to plant the species as part of the requirement to maintain 10 percent of the land under indigenous tree cover. The other areas will be research and communications.

#### **Achievements, impacts and lessons learned:**

The project had a development objective “to improve the conservation and market regulation of *P. elata* in and from Ghana” and a specific objective “to make available current data on the distribution, quantities, habitat and trade of *P. elata* in Ghana”. This action was aligned with the government of Ghana’s policy of sustainable forest management and resource utilization. It also conformed with NDF’s mission of contributing to the complementarities of development and nature conservation.

In pursuance of the above stated specific objective, the project commissioned two important studies. These studies sought to ascertain the conservation status of *P. elata* within its range in Ghana and whether current measures aim at protecting the species are working on the one hand and on the other hand to determine whether there are on-going trading, both domestic market and export, in or from Ghana. These studies made important revelations. First, there are a number of measures put in place by the government of Ghana in addition to the CITES requirements to protect the species from local extinction. Some of these measures include raising of felling limit to 110cm DBH, classification of the species as a restricted timber species, creation of provenance protection of the species and pilot plantation by the Forestry Research Institute of Ghana (FORIG) at Aframoso forest reserve. The second revelation of the studies worth mentioning is the point that there is on-going trading of the species in the local market. Although this is illegal, it further highlights the precarious and vulnerable state of the species.

The findings of these studies have been published and distributed to stakeholders as an important reference material on the subject matter. In this respect, it can be said that the project, has made available current information on the habitat conditions of *P. elata* including information on the availability, distribution and quantities in Ghana. This information and data are invaluable to ensure adequate policy responses by forest authorities and also would give civil society organizations and other non-state actors the required evidence to develop advocacy programs with the aim of supporting government in the protection of the species. It thus contributed to the achievement of the development objective of improving the conservation and market regulation of *P. elata* in and from Ghana.

There is inadequate capacity in the identification and recording of *P. elata* by field staff of the Forestry Commission. The project took this into account. Training was organized for about twenty-five (25) field staff, including Forest Guards, Range Supervisors and Technical Officers, of the Forestry Commission within the range districts of *P. elata*. This was to update them on identification, conservation measures and the recording procedure that are required of inventory and monitoring teams and particular with regard to the conservation status of the species. The training was also important to build capacity to ensure that relevant data on the species are included in management plans for forest reserves where the species occurs. Therefore, current efforts to develop management plans for all the forest reserves by the Government of Ghana in compliance with FLEGT VPA requirement have benefited from the data collected as part of this project. This was essential to sustain effort in the conservation of the species and to ensure management directives on *P. elata* are reflected on the ground.

Effective advocacy depends on the quality of information available to Civil Society Organization (CSOs). The ability of civil society and other non-state actors to advocate for effective conservation and protection of *P. elata* depends on the availability of quality information on the species within its range. Therefore, the project has provided data on the conservation status of the species and has renewed the interest for CSOs not just on flagship species of fauna, but to pay critical attention to the impacts of irresponsible harvesting and wood removal on the survival of commercial species such as *P. elata*. CSOs have been involved and benefited from

dissemination of information produced as part of the project. The project has provided industry and industry associations with a better perspective on the status of *P. elata* and a motivation for the protection and conservation of the species in their concessions. It has also given timber traders in the local markets a good reason to eliminate *P. elata* from their supply chain.

The project has also achieved the output of creating general public awareness. It is understood that to maintain any conservation gains with respect to the protection of *P. elata*, the project must involve the public by advocating for behavioral change in consumption. The project did exactly that. A component of this action produced a ten (10) minute video documentary that is aiding advocacy and public education on the impact of unsustainable logging and trade in the species and the likely consequence of causing its local extinction in Ghana. It was broadcasted on national Television station and uploaded on NDF pages on YouTube and Facebook. This has in turn exerted pressure on authorities to embark on enrichment planting of the species within its catchment area. Although the impact is difficult to quantify or measure, it our estimate that estimate that more than 2 million Ghanaians have been reached and influenced by the documentary considering the listenership of the TV station and the times it was broadcasted, that is, 9pm on Fridays for three weeks. The project also produced 3000 stickers and 500 "Save *P. elata*"-branded t-shirts and is estimated to influence an additional 50,000 Ghanaians.

The EA submitted the final report and financial audit in late 2016. All project reports are available through [www.itto.int/project-search](http://www.itto.int/project-search). The project may be considered successfully completed.

**Establishment of a fully documented reference sample collection and identification system for all CITES-listed *Dalbergia* species and a feasibility study for *Diospyros* and look-alike species**

Project number:	TMT-SPD 022/15 Rev.2 (M)
Project country:	Global
Budget:	Total: US\$ 220,000 ITTO Contribution: US\$ 200,000 ETH Zurich US\$ 20,000
Submitted by:	Collaborative Guatemala, Madagascar, Switzerland
Executing Agency:	Plant Ecological Genetics (PEG), Institute of Integrative Biology (IBZ), ETH Zurich, Switzerland
Original Duration:	13 months
Financed at:	TMT 5 <sup>th</sup> Cycle (2015)
Status:	Completed

**Summary:**

With increasing international demand for precious tropical timber and the difficulties to prevent illegal logging, pressure on source countries is rising to ensure legal and sustainable timber trade. In order to help source countries with trade control, the parties of the Convention of International Trade in Endangered Species (CITES) agreed on listing all *Dalbergia* and *Diospyros spp.* populations from Madagascar on Appendix II. The listing of these species is helping CITES authorities and other involved institutions to better control the trade of wood products derived from these precious timbers on the international market and is an important step towards a sustainable use of these species. Nonetheless, to enforce CITES regulations, reliable and fast identification techniques for logs and wood products are needed. The main objectives of the here proposed project are to 1) establish a fully documented reference sample collection for all *Dalbergia* species currently listed in CITES Appendix I-III and 2) to finalize identification systems that are being developed based on DNA analysis and wood anatomy for all *Dalbergia* species currently listed in CITES. Experience gained from *Dalbergia* will then be used to 3) assess the feasibility of developing an identification system for the species-rich ebony genus *Diospyros* and 4) to assess the feasibility of including look-alike species of both taxa. Reaching these goals will help Madagascar with the implementation of the Action plan for *Dalbergia* and *Diospyros* agreed at the CoP16.

This project was funded as part of the ITTO-CITES Programme.

**Progress:**

The project was approved under the 5<sup>th</sup> TMT Cycle (2015). It aims to assist Madagascar to implement the Appendix II listings of nearly 200 *Dalbergia* and *Diospyros* species and Central American countries to implement the Appendix II listings of several *Dalbergia* species approved at CITES COP 16. The reference sample collection was to be facilitated by collaborative agreements between the implementing agencies and CITES authorities in Madagascar and Guatemala.

In Madagascar, field sampling was conducted in two different areas in the Western part of the country (region of Morondava and Tulear) where fruits and flowers of *Dalbergia*, *Diospyros* and look-alikes were collected using the developed sampling protocol and are now being analyzed. In addition, a sampling strategy and a work plan have been prepared for Guatemala. This was to have been followed by a field visit to Guatemala that aimed to exchange knowledge about techniques and species, as well as to discuss the sampling procedure and initiate sampling. However activities in Guatemala were cancelled due to the inability of the country to authorize export permits for the research samples required. Project funds originally earmarked for work in Guatemala were instead devoted to the work in Madagascar.

For Madagascar, laboratory work at the ETH Zurich (*Eidgenössische Technische Hochschule Zürich*) tested different protocols for DNA extraction and amplification of *Dalbergia* wood, and increased the reference dataset. These tests were completed in March 2016. The establishment of the wood anatomy laboratory was also completed and wood anatomy work undertaken. The project submitted its final report and financial audit on schedule at the end of 2016.

**Achievements, impacts and lessons learned:**

The original project objective was to cover all CITES-listed *Dalbergia* and a feasibility study for *Diospyros* and look-alike species of both genera by teaming up with colleagues in Guatemala who established their own

laboratory for wood analysis through a previous ITTO-CITES activity. Unfortunately the implementation of the Nagoya protocol in Guatemala entered into force just after the project started, which led to unforeseen administrative hurdles in obtaining research and sampling permits, which finally led to the withdrawal of the partner in Guatemala. This had severe consequences for the implementation of the project. In order to fulfil the proposed project objective botanical gardens around the globe were contacted for available DNA banks to obtain material of the missing species. While unfortunately not all missing CITES-listed species could be obtained, the team was nevertheless able to execute all original objectives for species from Madagascar thanks to well-established partnerships between ETH Zurich, DBEV and MBG. All the project outputs and activities, except for those involving the partner in Guatemala, were carried out successfully.

Tangible outputs from the project include the availability of the first ever fully vouchered reference collection that is suitable for analyses using different genetic techniques. By comparing results from different techniques the team finally has the possibility to propose an identification system for precious timber species. The newly developed and field-approved sampling protocol will be useful for future efforts to establish reference collections for timber species other than those studied during this project. The valuable involvement of partners in Madagascar increased capacity in taxonomy and wood anatomy within the country. During this project, two students received training in wood anatomical analysis as part of their master theses work. The collection trips allowed MBG field botanists to refine their identification skills for species of *Dalbergia*, *Diospyros* and look-alike species in other genera, which is important for future projects and training of young botanists. A key lesson learned concerning the overall implementation of this project is that for such a time-restricted project it would be wise to include only partners that have worked together before.

The team concluded that a future project needs to examine more closely the problem of look-alike species. The scope of this project was too broad, which led to a substantial slowing down of the sampling work done at each site. The list of target species should be narrowed down as much as possible to the species level and should not include entire groups at the genus level. With the established reference sample collection, additional samples and species can now be easily included in the future to expand the available database further. As the studied genera are very species-rich, both in Madagascar and globally, the team recommends continuing efforts to support scientific research in order to collect and analyze all species for the reference database. It is equally important to continue capacity building in countries of origin to perform basic genetic analyses. Although some of necessary equipment is very expensive and requires a high level of experience for handling and maintenance and it may therefore not be possible in the near future to do all genetic analyses in the countries of origin. The team therefore strongly recommends that efforts continue to build up relationships with partners that have the capacity to do all the genetic analyses.

All project reports are available through [www.itto.int/project-search](http://www.itto.int/project-search). The project may be considered successfully completed.

**Strengthening of the forest information system of Guatemala to improve market and trade transparency and decision-making in the forest sector**

Project number:	TMT-PD 004/11 Rev.2 (M)	
Project country:	Guatemala	
Budget:	Total:	US\$ 656,562
	ITTO Contribution:	US\$ 359,716
	Government of Guatemala	US\$ 270,278
	IUCN	US\$ 26,568
Submitted by:	Government of Guatemala	
Executing Agency:	Instituto Nacional de Bosques (INAB)	
Original Duration:	36 months (plus 10 months no-cost extension)	
Financed at:	TMT 2 <sup>nd</sup> Cycle (2011)	
Status:	Completed	

**Summary:**

In 2011 Guatemala completed the project PD 340/05 Rev.1 (M), which created the Forest Statistical Information System of Guatemala (Sistema de Información Forestal de Guatemala—SIFGUA). In 2012, ITTO approved this second project with the aim of enhancing SIFGUA. The enhanced SIFGUA seeks to automate forest-related processes, minimize response times, standardize forms, clarify procedures, avoid data duplication, minimize human error, limit officers’ discretionary powers and bureaucracy, and meet the deadlines established by law to process requests and applications. This project is being implemented jointly by the National Council for Protected Areas (Consejo Nacional de Áreas Protegidas, CONAP, the authority in charge of managing forests in natural protected areas) and the National Forest Institute (Instituto Nacional de Bosques, INAB, the authority in charge of managing forests outside natural protected areas).

It consists of a new portal for SIFGUA, plus of three information systems: 1) the Electronic Forest Enterprises Information System (Sistema Electrónico de Información de Empresas Forestales—SEINEF); 2) the Electronic Forest Administration System in Protected Areas (Sistema Electrónico de Administración Forestal en Áreas Protegidas—SEAF-CONAP); and 3) the Electronic Forest Management System (Sistema Electrónico para la Gestión Forestal—SEGEFOR—for forests outside protected areas).

**Progress:**

The first instalment of the project was sent in January 2013, the last instalment was sent in November 2015. The project final audit was satisfactorily approved by ITTO Secretariat on 1 July 2016. Completion report was submitted in January 2017, reporting the achievement of the following outputs:

Output 1, “There is a system to analyse and process SIFGUA's forest sector statistical data”

- The output has been completed, the new portal of SIFGUA is available at [www.sifgua.org.gt](http://www.sifgua.org.gt) and it provides statistics on:
  - Forest cover,
  - Forest management
  - Forest incentives
  - Forest health
  - Forest plantations
  - Forest fires
  - Foreign trade of forest products –import and export– of timber and NTFPs
  - Domestic trade of forest products
  - Forest enterprises
  - Forest professionals (regents, technicians, etc.)
  - Procedures, formalities and arrangements of the forest sector
- The new portal also handles personalized queries, creates reports and graphs in an intuitive manner and in various output formats. Further information can also be requested through a dedicated e-mail at [sifgua@inab.gob.gt](mailto:sifgua@inab.gob.gt). SIFGUA’s portal gives proper recognition to ITTO and bears ITTO logo.

Output 2, “Online forest product control system linked through SIFGUA to the various institutions associated with legality monitoring”

- The output has been completed, the ‘electronic system of forest enterprises’ known as SEINEF is now operational at available at [www.seinef.inab.gob.gt](http://www.seinef.inab.gob.gt). SEINEF registers, monitors and controls the flow of forest

products through companies that are legally established and registered with INAB. In addition the raison d'être of SEINEF, was the standardization of a single timber transport document for the industry —the “company bill of transport” SEINEF generates this document electronically if the applicant meets three requirements: 1) it should be an active, registered operator in INAB’s National Forest Registry; 2) it should be up to date in the submission of quarterly reports; and 3) it should have a timber stock balance on the basis of which the document may be issued. These three requirements ensure that INAB is able to monitor the company bills of transport it issues, and they make it possible to follow a traceability procedure to check irregularities at any stage of the process. Company bills of transport are numbered and have unique QR barcodes (machine-readable optical labels), and they are printed on special paper that minimizes the potential for falsification. A direct benefit for businesses is a reduction in the time and cost of obtaining authorizations. At project completion more than 1,300 timber companies were actively using SEINEF. SEINEF’s portal gives proper recognition to ITTO and bears ITTO logo.

Output 3, “At least five forest management processes have been automated through SIFGUA”

- The various components of forest management processes are covered under two new systems, namely SEGEFOR (<http://segefor.inab.gob.gt/>) and SEAF-CONAP (<http://seaf.conap.gob.gt/>)
- The aim of SEAF-CONAP and SEGEFOR is to automate various forest services provided by CONAP and INAB in accordance with their legal mandates.
  - SEAF-CONAP, which is managed by CONAP, is designed to automate forest harvesting permit operations in protected areas, the registration of professionals developing management plans in protected areas, and the issuance of CITES [Convention on International Trade in Endangered Species of Wild Fauna and Flora] certificates, among others. SEAF-CONAP is now operational at national level and at the time of preparation of this report, the regulation that will officialise it was under approval.
  - SEGEFOR, which is managed by INAB, has automated services associated with forest harvesting, forest incentives, and the National Forest Registry. SEGEFOR is now operational and at the time of preparation of this report, the regulation that will officialise it was under the approval process.
  - Both SEAF-CONAP and SEGEFOR’s portals give proper recognition to ITTO and bear ITTO logo.
- Like SIENEF, both systems issue electronic transport documentation, and this process facilitates the automatic, real-time verification of stocks, progress in harvesting operations and on-the-road monitoring of timber shipments.
- INAB and CONAP’s databases are now connected to share information on their respective approvals of forest procedures, such as information of ‘company bill of transport’. Other databases that share information include the ‘One-stop export website’ and the ‘National tax administration system’ to verify authenticity of company bills of transport, CITES certificates and company tax registration.

Output 4: “Outreach plan”

- Output completed, posters and banners have been printed. A video on SEINEF was produced in Spanish and English versions and is available through ITTO’s YouTube channel at [https://www.youtube.com/watch?v=OI2s7UGoB\\_k](https://www.youtube.com/watch?v=OI2s7UGoB_k) (for Spanish version) and <https://www.youtube.com/watch?v=MyhZNKVYMqU> (for English version).
- Benefits of the systems covered under the project were broadcasted in national television in the program “Los secretos mejor guardados” on 9 August 2014. Videos are available in YouTube at:
  - <https://www.youtube.com/watch?v=pJbL7L7d0jQ>
  - <https://www.youtube.com/watch?v=7MFj54mWLJI>
  - <https://www.youtube.com/watch?v=H96Z0y0ioBU>
  - [https://www.youtube.com/watch?v=aA2TkRmPJ\\_8](https://www.youtube.com/watch?v=aA2TkRmPJ_8)
  - <https://www.youtube.com/watch?v=FbsPzThpACA>
- In addition the project has made presentations at several international fora, including ITTC-50 in 2014, the World Forestry Congress in Durban South Africa in 2015, and the international workshop on “Innovative Technologies for Wood-based Products-Traceability and Supply Chain Transparency” and APEC’s Workshop on strengthening forest control systems and market chains in APEC economies in 2016, among others. Such presentations have led to exchange of experiences with Chile, Costa Rica, Ecuador, Honduras, Mexico and Panama –countries which have sent official delegations to Guatemala–, as well as expressions of interest from other countries in Latin America for similar exchanges.

#### **Achievements, impacts and lessons learned:**

Other donors have looked favorably at the outputs delivered under this project and have extended financial support to INAB for further expansion of its electronic timber traceability systems. In particular, the European Union (EU), through IUCN, is financing a new module under SEINEF for auditing of forest enterprises. Other donors which have approached INAB are FAO-FLEGT and the World Bank.

Other countries in the region, including Colombia, Costa Rica, Chile, Ecuador, Honduras, Mexico and Panama have expressed interest in getting to know the system. An exchange of experiences has happened with Chile, Costa Rica, Ecuador, Honduras, Mexico and Panama.

SIFGUA is an important tool for all forest-sector stakeholders in Guatemala because it provides them with free access to accurate, up-to-date information for decision-making. SIFGUA also makes available information on domestic trade of forest products, which before the year 2014 was not available. In the longer term it should help increase forest investment by improving data on the contributions of the forest sector to gross domestic product; market trends; forest production; the socioeconomic impacts of forest activities; and the dynamics and legal origin of forest products.

CONAP has seen the benefits and the value of the SEAF-CONAP system, and has expressed that it will expand the system to automate other processes under its mandate.

A comprehensive article on the implementation of this project was published in ITTO's *Tropical Forest Update* issue 24/1 in early 2015. The article is available at <http://www.itto.int/tfu/id=4367>.

This project worked closely with the project TFL-PD 024/10 Rev.2 (M) 'Improvement of forest law enforcement at the national level to promote forest governance in Guatemala' –completed in 2016– and has been able to achieve substantial results. The implementation of Electronic Information System for Forest Enterprises, SEINEF has allowed the National Forest Institute to have positive impacts on the regulation and control of trade in forest products.

The project may be considered successfully completed.

**Enhancing the Sustainable Management and Commercial Utilisation of the CITES-listed Species *Cedrela odorata* (red cedar) in Guyana**

Project number:	TMT-SPD 014/13 Rev.1 (M)	
Project country:	Guyana	
Budget:	Total:	US\$ 239,765
	ITTO Contribution:	US\$ 136,640
	Government of Guyana	US\$ 103,125
Submitted by:	Government of Guyana	
Executing Agency:	Guyana Forestry Commission, GFC	
Original Duration:	18 months	
Financed at:	TMT 4 <sup>th</sup> Cycle (2013)	
Status:	Completed	

**Summary:**

This project builds on Guyana's efforts to develop and promote its lesser used species, as part of a multi-pronged strategy for managing the country's commercial forest estate sustainably. Specifically, the project will focus on the assessment, development, marketing and promotion of *Cedrela odorata* (locally known as red cedar). Historically, Red Cedar has been a valuable timber, with a natural range covering Latin America, the Caribbean and South America. Over-harvesting in some range countries in the region has meant that the species is now considered to be vulnerable according to the International Union for the Conservation of Nature (IUCN). It is also listed on the Convention on International Trade in Endangered Species (CITES) Appendix III for the countries of Brazil, Bolivia, Columbia, Guatemala, and Peru. In Guyana, the species has not been used commercially to the same extent as in other range countries. This project will enable Guyana to undertake an assessment of its commercial forests to determine the status of the species. The outputs from the resource assessment will be used to develop a management plan for the sustainable harvesting of red cedar, as well as develop the capacity of the industry to harvest, develop and market the species domestically and internationally; consistent with the objectives of CITES Appendix III listing. Among the main expected outcomes of the project are completion of a resource assessment of red cedar in Guyana's commercial estate to establish the status of the species; informing a decision on the status of conservation and/or utilization of red cedar; development of capacity in Guyana for managing red cedar; development of a strategy for developing and commercializing CITES-listed species in Guyana including statistical database; and developing markets for red cedar both locally and internationally in areas of added value products. This project was funded as part of the ITTO-CITES Programme.

**Progress:**

A consultant was hired and conducted an assessment of *Cedrela odorata* (Red Cedar) in Guyana gathering information from GFC database and historical information available. Information/data was gathered in relation to the project deliverables. The review of the technical literature available on Red Cedar was completed. General information on distribution, cover, density, size structure, regeneration dynamics and timber characteristics and uses of Red Cedar were gathered from literature. Discussions with a number of stakeholders from both within the GFC and the timber industry revealed that Red Cedar is considered to occur at low density; being estimated at less than 1 tree per 50 ha. The species is also considered not to occur in aggregate stands (clumps) such as for instance greenheart, wallaba, mora and morabukea. In terms of site preference, it is suggested by some operators that the species seems to prefer marsh or mora forest. Due to the low density (numbers per ha) of its occurrence and uncertainty about site preferences, it was decided to first explore existing resource assessment data. The Resource Assessment and Forest Management Plan for the CITES-Listed Species *Cedrela odorata* (Red Cedar) in Guyana was completed. The Management Plan for the Red Cedar was also elaborated. In order to develop a protocol framework for international trade of Red Cedar, CITES Appendix III listing requirements were examined. Additionally, a review of CITES and protocols was completed. Protocols for International Trade relating to CITES and Red Cedar have been developed and disseminated. Furthermore the process of collating market information was advanced and the data analyzed. Production and export statistics for Red Cedar were provided for the period 2006-2015. Field visits were undertaken to the following sawmills/exporters: Barama Co. Ltd., Cummings Wood Products, L.S. Harridat Sawmill, Bhola's Sawmill and S & M Bission Sawmiller. The latter two sawmillers have their own concessions. Cummings Wood Products and L.S. Harridat Sawmill procure Red Cedar from various sources, many of those Amerindian communities.

**Achievements, impacts and lessons learned:**

The work under this project resulted in the completion of the first Resource Assessment and Forest Management Plan for the CITES-Listed Species *Cedrela odorata* (Red Cedar) in Guyana. The report provides an overview of the population size, distribution, stand density, size structure, regeneration dynamics and possible strategy for the sustainable management of the timber species *Cedrela odorata* L. in Guyana. In Guyana the species is known under the common name Red Cedar. Additionally, the Report also gives an overview of the application of CITES rules regarding export of Red Cedar that explains the permitting process among other areas. The Report also covers the characteristics of Red Cedar, summarizes the geographic distribution based on the findings of the Resource Assessment, and the uses, population trends of the species. Further, the Report also includes an outline of other aspects of the Resource Assessment that relates to the density and size classes, the volume and the regeneration dynamics for sustainable production levels of Red Cedar. This aspect relates directly to the Management Plan for the species. In addition, the pre-project has provided all of the necessary information should Guyana decide to list Red Cedar in CITES Appendix III.

The project submitted its final report (which has been posted on the ITTO-CITES Programme website [www.itto.int](http://www.itto.int)) and financial audit in late 2016. This project may be considered successfully completed.

**Annex II**

**LIST OF PROJECTS REPORTED COMPLETED TO EARLIER SESSIONS OF THE ITTC AND PROJECTS LAPSED UNDER ITTO'S 'SUNSET' CLAUSE DUE TO NOT COMMENCING IMPLEMENTATION WITHIN 26 MONTHS OF APPROVAL/FUNDING**

TFLET				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
BWP 2008/2009	PP-A/43-193	Enhance capacity of small and medium size enterprises to produce and trade timber from legally and sustainable source	\$ 300,000	Completed (48 <sup>th</sup> ITTC)
BWP 2008/2009	PP-A/43-194	Promote trade in tropical timber and tropical timber products from sustainably managed and legally harvested sources	\$ 600,000	Completed (50 <sup>th</sup> ITTC)
BWP 2008/2009	PP-A/43-200	Provide technical assistance for selected poor local/indigenous communities to formulate project proposals for submission to ITTO for management of forests and sustainable timber production	\$ 100,000	Completed (48 <sup>th</sup> ITTC)
BWP 2008/2009	PP-A/43-202	Global assessment of the status of tropical forest tenure with identification of trends and implications for investment and management, and for convening an expert workshop on Tropical Forest Tenure and Business Models, including formulation of a project to assist Civil Society Organization(s) to set up and operate on a pilot basis a remote sensing system to detect illegal logging activities in areas known to be critically affected by such activities	\$ 200,000	Completed (48 <sup>th</sup> ITTC)
Africa	PD 124/01 Rev. 2 (M) Phase II – Stage 2	Promotion of Sustainable Management of African Forests (ITTO/ATO)	\$ 544,070	Completed (46 <sup>th</sup> ITTC)
Cambodia	PD 493/07 Rev.1 (F)	Strengthening Capacity of Forest Law Enforcement and Governance (Cambodia)	\$561,195	Completed (48 <sup>th</sup> ITTC)
Cameroon	TFL-PD 003/09 Rev.2 (M)	Improving governance and transparency of timber harvests and trade in Cameroon	\$365,526	Completed (52 <sup>nd</sup> ITTC)
China	TFL-PD 017/09 Rev.2 (M)	Equipping small and medium sized forestry enterprises in China for procurement of tropical timber from legal and sustainably managed forests	\$322,056	Completed (51 <sup>st</sup> ITTC)
Colombia	TFL-PPD 001/09 Rev.2 (M)	Implementing and promoting sustainable forest management through formulation of an action plan for improved forest law enforcement and governance in Colombia	\$91,498	Completed (48 <sup>th</sup> ITTC)
Germany	TFL-PPD 023/10 Rev.1 (F)	Development and implementation of a species identification and timber tracking system in Africa with DNA fingerprints and stable isotopes	\$155,522	Completed (47 <sup>th</sup> ITTC)
Ghana	TFL-SPD 007/09 Rev.1 (M)	Strengthening the capacity of small-medium enterprises in Ghana to produce and trade in timber products from legal and sustainable sources	\$163,039	Completed (49 <sup>th</sup> ITTC)
Ghana	TFL-SPD 028/12 Rev.1 (M)	Empowering civil society organizations and other non-state actors to effectively contribute to forest law compliance in Ghana	\$147,701	Completed (51 <sup>st</sup> ITTC)
Guatemala	TFL-PD 024/10 Rev.2 (M)	Improvement of forest law enforcement at the national level to promote forest governance in Guatemala	\$563,339	Completed (52 <sup>nd</sup> ITTC)
Indonesia	TFL-PD 010/09 Rev.1 (M)	Strengthening the capacity of related stakeholders in Java on implementing new Indonesian TLAS	\$474,163	Completed (50 <sup>th</sup> ITTC)
Indonesia	TFL-PD 019/10 Rev.2 (M)	Developing collaborative management in the Cibodas Biosphere Reserve, West Java Indonesia	\$496,670	Completed (50 <sup>th</sup> ITTC)
Mali	TFL-SPD 038/13 Rev.3 (M)	Capacity-building programme to foster law enforcement and local governance over timber use and marketing activities in the Segou region, Mali	\$149,707	Completed (51 <sup>st</sup> ITTC)
Peru	PPD 138/07 Rev.1 (M)	Verifying the Legality of Timber Forest Products in Peru	\$79,844	Completed (48 <sup>th</sup> ITTC)
Peru	TFL-SPD 029/12 Rev.1 (M)	Marketing of timber from legal and sustainable sources by indigenous communities in Ucayali, Peru for the fair trade market	\$137,941	Completed (51 <sup>st</sup> ITTC)
Peru	TFL-SPD 030/12 Rev.1 (M)	Improved governance and implementation of transparent negotiation mechanisms for indigenous community forestry in Atalaya (Ucayali), Peru	\$131,236	Completed (51 <sup>st</sup> ITTC)
PNG	PD 449/07 Rev.2 (M,I)	Enhancing Forest Law Enforcement in Papua New Guinea	\$ 473,040	Completed (51 <sup>st</sup> ITTC)
Thailand	TFL-PPD 005/09 Rev.1 (F)	Strengthening the capacity of local communities of Chaiyapum Province (Thailand) to manage community forest	\$56,970	Sunset (2013)

REDDES				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
Cameroon	RED-PPD 050/11 Rev.1 (F)	Participatory development, conservation and rehabilitation of degraded forest areas in the Bamboutos Mountain chain, West Cameroon	\$73,613	Completed (51 <sup>st</sup> ITTC)
Cameroon	RED-PPD 051/11 Rev.1 (F)	Contribution to the implementation of REDD mechanisms by enhancing the participation of stakeholders in sustainable forest management in Cameroon	\$81,864	Completed (49 <sup>th</sup> ITTC)
Cameroon	RED-PPD 074/12 Rev.1 (F)	Identification of a project on gender mainstreaming in the development of actions to control deforestation and forest degradation, to improve the well-being of communities dependent on forests and other ecosystems in Central and West Africa	\$101,117	Completed (50 <sup>th</sup> ITTC)
China	RED-SPD 020/09 Rev.1 (F)	Development and demonstration on scheme of payment for environmental services (PES) derived from degraded and secondary tropical production forests in China.	\$149,040	Completed (48 <sup>th</sup> ITTC)
China	RED-SPD 075/12 Rev.1 (F)	Demonstration on investigation and assessment of typical forest ecotourism resources in Hainan province, China	\$145,800	Completed (51 <sup>st</sup> ITTC)
DRC	RED-A 023/09 Rev.1 (F)	Technical Support for the Development of a National Forest Inventory in the Democratic Republic of Congo to assess carbon stocks and changes in carbon stocks of forest land	\$476,820	Completed (48 <sup>th</sup> ITTC)
Ecuador	RED-SPD 055/11 Rev.1 (F)	Integrating sustainable livelihoods, environmental mortgages, and science-based reforestation for tangible forest conservation change in the Ecuadorian Chocó	\$149,922	Completed (51 <sup>st</sup> ITTC)
Ghana	RED-PD 026/09 Rev.1 (F)	Reducing emissions from deforestation and forest degradation through collaborative management with local communities	\$658,716	Completed (52 <sup>nd</sup> ITTC)
Guatemala	RED-PPD 006/09 Rev.2 (F)	Local REDDES programme for development and addressing climate change in Guatemala: Building social processes for sustainability	\$82,080	Completed (49 <sup>th</sup> ITTC)
Guyana	RED-PD 005/09 Rev.2 (F)	Strengthening Guyana's capacity to manage forest resources and environmental services through resources assessment and monitoring changes in deforestation and degradation	\$400,680	Completed (48 <sup>th</sup> ITTC)
Honduras/ Guatemala	RED-PPD 041/11 Rev.2 (F)	Designing a Programme for Capacity Building and Meaningful Stakeholder Participation in Forest Governance and REDD+ in Honduras and Guatemala	\$144,650	Completed (50 <sup>th</sup> ITTC)
Indonesia	RED-PD 007/09 Rev.2 (F)	Enhancing forest carbon stock to reduce emission from deforestation and degradation through sustainable forest management (SFM) initiatives in Indonesia	\$447,071	Completed (48 <sup>th</sup> ITTC)
Indonesia	RED-SPD 009/09 Rev.2 (F)	Promoting the partnership efforts to reduce emission from deforestation and forest degradation of tropical peatland in south Sumatra through the enhancement of conservation and restoration activities	\$149,493	Completed (50 <sup>th</sup> ITTC)
Indonesia	RED-PD 064/11 Rev.2 (F)	Promoting Local Community Initiative on the Rehabilitation of Mangrove Ecosystem with Demonstration Activities in Bintan Island to Reduce further Deforestation and Forest Degradation	\$504,317	Completed (51 <sup>st</sup> ITTC)
ITTO	RED-A 004/09 Rev.1 (F)	Building a voluntary carbon marketing scheme to promote sustainable forest management	\$97,180	Completed (46 <sup>th</sup> ITTC)
ITTO	RED-PA 056/11 Rev.1 (F)	Strengthening the capacity of ITTO producer countries in Africa in generating and disseminating scientific information on Reducing Deforestation and Forest Degradation and Enhancing Environmental Services from Forests	\$253,120	Completed (50 <sup>th</sup> ITTC)
ITTO	RED-PA 069/11 Rev.1 (F)	Quantifying the REDD+ effect of ITTO projects	\$143,510	Completed (50 <sup>th</sup> ITTC)
Malaysia	RED-PD 037/11 Rev.2 (F)	Reducing forest degradation and emissions through sustainable forest management (SFM) in peninsular Malaysia	\$590,922	Completed (52 <sup>nd</sup> ITTC)
Myanmar	RED-PD 038/11 Rev.3 (F)	Capacity building for developing REDD+ activities in the context of sustainable forest management	\$571,890	Completed (52 <sup>nd</sup> ITTC)
Peru	RED-PD 018/09 Rev.1 (F)	Sustainable forest management and utilization of ecosystem services in forests managed by the Ese'Eja naïve community in Infierno, Peru	\$356,519	Completed (51 <sup>st</sup> ITTC)
Peru	RED-PD 033/11 Rev.2 (F)	Value adding to environmental services from managed forests belonging to seven communities in the Ucayali region	\$415,384	Completed (51 <sup>st</sup> ITTC)
Thailand	RED-SPD 039/11 Rev.1 (F)	Improving the quality and coverage of the estimates of carbon stocks in Thailand's forests and trees outside forest: Phase I	\$113,373	Sunset (2014)

REDDES				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
Togo	RED-PD 031/11 Rev.1 (F)	Rehabilitation and restoration of residual forests and arid savannah lands in the Akpé and Akama valleys	\$478,894	Completed (52 <sup>nd</sup> ITTC)
Togo	RED-SPD 092/12 Rev.1 (F)	Reducing deforestation and forest degradation in the Natchambonga and Djiyega community forests by promoting participatory forest management actions	\$149,904	Completed (52 <sup>nd</sup> ITTC)

CFME				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
Ghana	CFM-SPD 007/10 Rev.1 (F)	Enrichment of young forest plantations with selected NTFPs for livelihood improvement and support of forest fringe communities in Atwima Mponua District of Ghana, in order to secure and protect the resources on a sustainable forest management basis	\$149,229	Completed (49 <sup>th</sup> ITTC)
Indonesia	CFM-PD 001/10 Rev.1 (F)	Strengthening capacity of stakeholders for the development of community-based plantation forest at 3 selected areas in Indonesia	\$465,151	Completed (50 <sup>th</sup> ITTC)
ITTO	CFM-PA 009/10 Rev.2 (F)	International Conference on Forest Tenure, Governance and Small and Medium Forest Enterprises with Focus in the Asia Pacific	\$200,000	Completed (47 <sup>th</sup> ITTC)
PNG	CFM-PPD 006/10 Rev.1 (F)	Enabling customary landowners to participate effectively in CFM and REDD schemes within four pilot areas of PNG	\$122,040	Completed (51 <sup>st</sup> ITTC)
Thailand	CFM-PPD 005/10 Rev.1 (M)	Increasing access to markets and capital for teak plantation smallholders in Thailand	\$31,104	Sunset (2013)

TMT				
	Project ID	Title	ITTO Funding	Status (reported at)
Gabon	TMT-SPD 011/12 Rev.2 (M)	Adaptation and application at the national scale of the Trace Bois-Gabon (Gabon timber tracking) for the collection and processing of forest and timber statistics in Gabon	\$138,996	Sunset (2015)
Guyana	TMT-PD 006/11 Rev.3 (M)	Strengthening market information systems to enhance trade and market intelligence in the forest sector of Guyana	\$320,920	Completed (51 <sup>st</sup> ITTC)
ITTO	TMT-SPD 002/10 Rev.1 (M)	Improving resilience of the tropical timber sector to the impacts of global and regional economic and financial crises	\$150,000	Completed (48 <sup>th</sup> ITTC)
ITTO	TMT-PA 007/11 Rev.1 (I)	Methodological Development for Life Cycle Analysis of Tropical Wood Products to Improve their Competitiveness in International Markets	\$60,116	Completed (48 <sup>th</sup> ITTC)
ITTO	TMT-SPD 013/12 Rev.1 (M)	Analysis of the Economic Impact of Governmental Procurement Policies on Tropical Timber Markets	\$150,000	Completed (50 <sup>th</sup> ITTC)

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