



**INTERNATIONAL TROPICAL
TIMBER COUNCIL**

Distr.
GENERAL

ITTC(LII)/8
18 October 2016

Original: ENGLISH

FIFTY-SECOND SESSION
7-12 November 2016
Yokohama, Japan

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

(Item 14 of the Provisional Agenda)

List of Acronyms

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
CTFT	Technical Centre for Tropical Forestry
FFPRI	Forestry and Forest Products Research Institute
FLEGT	Forest Law Enforcement, Governance and Trade of the European Union
IDE	Industrial Development and Efficiency
INAB	National Institute of Forests, Guatemala
ITTC	International Tropical Timber Council
ITTO	International Tropical Timber Organization
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 51st Session of the Council held in Kuala Lumpur, Malaysia, on 16–21 November 2015; therefore, the reporting period of this document is nominally from 22 November 2015 to 31 August 2016, 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. The tables in Annex I provide an overview on the number of projects by country/region and TP (Table a), and a list of all projects approved by TP (Table b).

As of August 2016, 51 projects had been completed (including 7 in 2016), 22 projects were ongoing, one project was pending agreement, one project was in the inception phase, and four projects had lapsed into "sunset". Chapter 4 of this document highlights selected achievements and impacts during the reporting period, and Annex II provides an overview of the status of individual projects (not including projects reported completed at previous sessions of the Council or sunset projects).

2. Thematic programme financing

No new pledges were received for the TPs during the reporting period. Table 1 shows pledges received, commitments and funds available for allocation by TP. Table 2 provides an overview of the pledges made to TPs, by programme and 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 48th ITTC.

Table 1. TP Funding Status by Programme

TP	a) Pledges	b) Committed	c) Available for Allocation (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

To date, the IDE TP has received no pledges from donors, and the CFME TP has not received new pledges since the 46th ITTC in December 2010 and only one call for proposals was launched under that TP in 2010. Of the five projects approved under CFME, one has lapsed into sunset and the other four have been completed.

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 for the implementation of all TPs.

Table 2: Pledges to the Thematic Programmes

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

Note : JLIA = Japan Lumber Importers' Association.

3. Calls for proposals under the Thematic Programmes

No new calls for proposals were launched during the reporting period, due to a lack of funding. The last call for proposals under the TPs was the 5th TMT Cycle, which was launched in November 2014.

4. Achievements, impacts and lessons learned

The main achievements of projects completed during the reporting period and projects about to be completed are summarized below; please refer to Annex II for additional information. Projects reported to earlier sessions of the Council and sunset projects are not included in Annex II. Detailed information on all projects, including project documents, completion reports, technical reports, ex-post evaluation reports and other materials (e.g. flyers, poster and brochures), is available via the ITTO online project search tool at www.itto.int/project_search/. Documents (in the original language of submission) are posted as they become available.

TFLET

Two projects were completed under TFLET during the reporting period:

- 1) TFL-PD 003/09 Rev.2 (M): “Improving governance and transparency of timber harvests and trade in Cameroon”; and
- 2) TFL-PD 024/10 Rev.3 (M): “Improvement of forest law enforcement at the national level to promote forest governance in Guatemala”.

TFL-PD 003/09 Rev.2 (M) conducted capacity-building exercises and a series of studies designed to help improve forest law enforcement. A major achievement was that the project created an opportunity for collaboration between the forestry administration (MINFOF), the finance administration (MINFI; Customs and Tax), the justice administration (MINJUSTICE; Magistrates) and the arms forces administration (MINDEF; Police and Gendarmerie) in the fight against illegal logging and associated trade in Cameroon. The project also produced two maps of the main timber trade roads and prepared a code of conduct and professional ethics. Stakeholders were trained, informed and sensitized on the forestry law and the fight against illegal logging and associated trade. Five studies were conducted, resulting in reports on: 1) updating timber trade routes in Cameroon; 2) evaluating the status of forest law enforcement monitoring in Cameroon; 3) reviewing the timber traceability system in Cameroon; 4) developing a work plan for forest law enforcement; and 5) developing an information management system for access by the public on illegal timber trade activities to foster transparency.

TFL-PD 024/10 Rev.3 (M) facilitated forest law enforcement from the point of view of the authorities by providing a monitoring mechanism (called SEINEF) to promote legal practices, and also from the point of view of forest owners and enterprises involved in timber harvesting, transportation and processing, who are benefiting from systems that 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 deadlines established by law to process their requests and applications. As of January 2015, 1814 enterprises were registered with INAB (Guatemala’s forestry agency), of which 1440 (nearly 80%) were already using SEINEF. Collectively, these enterprises reported an initial stock volume of timber of 341 240 m³ to SEINEF. By the end of 2015, timber from natural forests outside protected areas and within protected areas had been included in SEINEF, and 86.7% of total local company-to-company transactions were being handled through SEINEF’s electronic company bill of transport system.

Both these projects contributed to the following TFLET specific objectives: a) strengthening 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; and b) improving transparency and the effective management of supply chains and increased domestic and international trade in legally produced tropical timber.

Among other outputs produced in the TFLET TP in the reporting period were the following:

- A video (in Spanish) titled “Sustainable forest management in Guatemala” (TFL-PD024/10 Rev.2 (M))—see www.youtube.com/watch?v=940Pv9mthK0&feature=youtu.be.
- A video titled, “Empowering civil society organization and other non-state actors to effectively contribute to forest law compliance in Ghana” (TFL-SPD 028/12 Rev.1 (M))—see www.youtube.com/watch?v=tpNzBfSkhXE&spfreload=10.

REDDDES

The following five projects were completed in the REDDES TP during the reporting period:

- 1) RED-PD 026/09 Rev.1 (F): “Reducing emissions from deforestation and forest degradation through collaborative management with local communities” (Ghana).
- 2) RED-PD 031/11 Rev.1 (F): “Rehabilitation and restoration of residual forests and arid savannah lands in the Akpe and Akama valleys” (Togo).
- 3) RED-PD 092/12 Rev.1 (F): “Reducing deforestation and forest degradation in the Natchambonga and Djiyega community forests by promoting participatory forest management actions” (Togo).
- 4) RED-PD 037/11 Rev.2 (F): “Reducing forest degradation and emissions through sustainable management (SFM) in peninsular Malaysia” (Malaysia).
- 5) RED-PD 038/11 Rev.3 (F): “Capacity building for REDD+ activities in the context of sustainable forest management” (Myanmar).

The three projects in Africa (Ghana, Togo x 2) helped in sensitizing local communities in selected (conservation) areas on issues such as deforestation, forest degradation and the rehabilitation of degraded lands and helped increase technical and managerial capacities and capacity for ecosystem rehabilitation, forest resource management planning and bushfire control. The projects contributed to the following specific objectives of the REDDES TP: a) reduce unplanned deforestation; b) reduce forest degradation; and d) contribute to the social and economic sustainability and well-being of forest-dependent communities by increasing forest values through forest restoration and rehabilitation, as well as payments for forest-based environmental services.

The two projects in Malaysia and Myanmar contributed to the reduction of deforestation and forest degradation through SFM and have fed directly into those countries' respective national REDD+ mechanisms. The project in Malaysia is one of several REDD+ pilot projects to enhance readiness for the full implementation of REDD+. The project in Myanmar pioneered several activities towards REDD+ readiness in Myanmar; for example, as a result of a series of stakeholder consultation meetings in collaboration with UN-REDD, the Myanmar national REDD+ Readiness Roadmap was adopted in June 2013. Both projects produced numerous papers, project briefs, awareness materials and technical reports, which can be accessed via the ITTO project search function (www.itto.int/project_search). The main contributions of the two projects to the REDDES specific objectives a) to reduce unplanned deforestation; b) to reduce forest degradation; and c) to maintain and enhance climate change mitigation and other environmental services of tropical forests. The project in Malaysia is one of only a few projects under REDDES to also consider adaptation measures to climate change, thereby contributing to REDDES specific objective e) to enhance the adaptation and resilience of tropical forests to negative effects of climate change and human-induced impacts.

Among other outputs produced under REDDES in the reporting period were the following:

- 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" produced three videos (www.youtube.com/user/ittosfm):
 - 1) "Environmental services of coastal forests in Veracruz" (in Spanish)
 - 2) "What's connectivity?" (in Spanish)
 - 3) "Economic valuation" (in Spanish).

The project also produced a substantial number of outreach materials, maps, technical reports and scientific papers available via the ITTO project search function (www.itto.int/project_search).

TMT

No projects were completed in the TMT TP during the reporting period, but the following achievements towards the TMT programmatic objectives can be highlighted:

- TMT-SPD 020/15 (M): "Support for ANAFOR for optimum operation of the database management of *Pericopsis elata* (assamela) in Cameroon" developed a database on assamela, and users have been trained.
- 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" (China) 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.
- TMT-SPD 012/12 Rev.1 (M): "Improving intra-African trade and market transparency in timber and timber products" (Ghana) has developed a website for an online timber marketplace, and the design of the African Timber Newsletter and social pages has been finalized.
- TMT-SPD 022/15 Rev.2 (M): "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) has completed its laboratory work (at ETH Zurich) to test protocols for DNA extraction and amplification for *Dalbergia* wood and to increase the reference dataset for Madagascar. The establishment of the wood anatomy laboratory has been completed and wood anatomy work has commenced.
- TMT-SPD 014/13 Rev.1 (M): "Enhancing the sustainable management and commercial utilization of the CITES-listed species *Cedrela odorata* (red cedar) in Guyana" (Guyana) 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.

The highlighted achievements mainly contribute to TMT specific objectives a) to strengthen information systems on markets and the forest sector, and b) to fill gaps in the market transparency of tropical timber and timber products.

5. Impact of the impairment of ITTO funds on TP projects

The impairment of ITTO funds and the subsequent suspension of payments to projects has affected 13 ongoing projects under the TPs: six under TFLET, two under REDDES and five under TMT. The total funding affected is approximately US\$1.74 million. It is expected that the five projects under TMT will be fully funded and completed once the final payment under the contract with the EC for Phase 2 of the ITTO-CITES program has been received (expected by the end of 2016).

Annex I

a) Projects by country/region and TP

Country/Region	TFLET	REDDDES	CFME	TMT	Funded projects	Funding US\$
Cameroon	2	3		1	6	1,038,082
Congo				1	1	130,000
DRC		1			1	476,820
<i>Gabon</i>				(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
Africa Total	5	10	1	4(1)	20(1)	4,372,809
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
<i>Thailand</i>	(1)*	(1)*	(1)*		(3)*	(201,447)*
Asia Pacific Total	7(1)	7(1)	2(1)	1	17(3)	6,207,286
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
Latin America Total	7	10		3	20	5,728,936
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
Others Total	9	3	1	5	18	4,340,479
	28(1)	30(1)	4(1)	13(1)	75(4)	20,649,510

* projects gone into sunset (not counted in the totals)

b) List of approved projects (by Thematic Programme)

TFLET approved projects				
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 th 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 th 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 th 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 th 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 th ITTC)
Australia	TFL-PD 037/13 Rev. 2 (M)	Implementing a DNA timber tracking system in Indonesia	\$518,833	Ongoing
Cambodia	PD 493/07 Rev.1 (F)	Strengthening Capacity of Forest Law Enforcement and Governance (Cambodia)	\$561,195	Completed (48 th ITTC)
Cameroon	TFL-PD 003/09 Rev.2 (M)	Improving governance and transparency of timber harvests and trade in Cameroon	\$365,526	Completed
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	Ongoing
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 st 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 th 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 th 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 th 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 st 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
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	Ongoing
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	Ongoing
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 th ITTC)
Indonesia	TFL-PD 019/10 Rev.2 (M)	Developing collaborative management in the Cibodas Biosphere Reserve, West Java Indonesia	\$496,670	Completed (50 th 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	Ongoing

TFLET approved projects				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
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 st 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
Peru	PPD 138/07 Rev.1 (M)	Verifying the Legality of Timber Forest Products in Peru	\$79,844	Completed (48 th 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 st 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 st ITTC)
PNG	PD 449/07 Rev.2 (M,I)	Enhancing Forest Law Enforcement in Papua New Guinea	\$ 473,040	Completed (51 st ITTC)
PNG	TFL-SPD 043/13 Rev. 1 (M)	Chain of Custody Verification for Timber Processors in Papua New Guinea	\$147,280	Inception Phase
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

REDDES approved projects				
Submitted by	Project ID	Title	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	Pending Agreement
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 st 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 th 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 th 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 th 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 st 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 th 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 st 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
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	Ongoing
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-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 th ITTC)

REDDES approved projects				
Submitted by	Project ID	Title	ITTO Funding	Status (reported at)
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
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 th 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 th 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 th 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 th 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 st ITTC)
ITTO	RED-A 004/09 Rev.1 (F)	Building a voluntary carbon marketing scheme to promote sustainable forest management	\$97,180	Completed (46 th 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 th ITTC)
ITTO	RED-PA 069/11 Rev.1 (F)	Quantifying the REDD+ effect of ITTO projects	\$143,510	Completed (50 th ITTC)
Liberia	RED-SPD 084/12 Rev.1 (F)	Improving efficacy of forestry policies and activities in Liberia through REDD+ demonstration projects	\$149,922	Ongoing
Malaysia	RED-PD 037/11 Rev.2 (F)	Reducing forest degradation and emissions through sustainable forest management (SFM) in peninsular Malaysia	\$590,922	Completed
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	Ongoing
Myanmar	RED-PD 038/11 Rev.3 (F)	Capacity building for developing REDD+ activities in the context of sustainable forest management	\$571,890	Completed
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 st 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 st 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
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
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

CFME approved projects

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 th 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 th 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 th 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 st ITTC)
Thailand	CFM-PPD 005/10 Rev.1 (M)	Increasing access to markets and capital for teak plantation smallholders in Thailand	\$31,104	Sunset

TMT approved projects

	Project ID	Title	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	Ongoing
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	Ongoing
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	Ongoing
France	TMT-SPD 010/12 Rev.1 (M)	Preparation of the publication "Atlas of tropical timber species – 1 st Edition: Technological characteristics and uses of 273 tropical timber species (and 17 temperate species)"	\$138,033	Ongoing
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
Ghana	TMT-SPD 012/12 Rev.1 (M)	Improving intra-African trade and market transparency in timber and timber products	\$111,931	Ongoing
Ghana	TMT-SPD 017/15 Rev. 2 (M)	Improving Sustainable <i>Pericopsis elata</i> Conservation and Trade Regulation in Ghana	\$149,997	Ongoing
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	Ongoing
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	Ongoing
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 st 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	Ongoing
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 th 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 th 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 th ITTC)

ANNEX II

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)

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	
Implementing agency:	University of Adelaide, UoA, Australia	
Duration:	24 months	
Financed at:	6 th 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 been able to make substantial progress.

Collection of samples:

Sixteen sites were selected for collection of dipterocarp species across Kalimantan. The sites were selected to reflect species diversity and distribution as well as diverse environmental conditions.

The total number of trees tagged and cambium samples collected is 1839 comprised of 136 species of which 115 are of known/identified species, 21 are unidentified (herbarium vouchers of unidentified species have been sent to LIPI Herbarium for identification). The genera sampled are Anisoptera (4 sp), Cotylelobium (2 sp), Dipterocarpus (26 sp), Dryobalanops (4 sp), Hopea (11 sp), Parashorea (4 sp), Shorea (73 sp), Upuna (1 sp), and Vatica (11 sp). Collection of samples at the last site 15 in central Kalimantan (PT. Austral Bina) has been deferred to a later date due to limited budget.

DNA extraction of samples:

A total of 476 samples have been processed for DNA extraction and the DNA had been shipped to Adelaide for further analysis. Details of the DNA samples are 103 DNA samples from leaf and 403 DNA samples from cambium. Those 476 samples are from 85 species. In addition, high quality and quantity DNA has been extracted from 20 leaves of a single *Shorea laevis* individual to facilitate genome sequencing.

DNA barcoding marker design:

Markers used in existing DNA barcoding work on the group have been selected for screening. The other standard DNA barcode for plants has been used, matK. Nuclear regions ITS and SODH have also been selected, along with loci for seven genome regions designed by R. Dixon and E. Biffin (staff at UoA) to be universal for land plants. Novel markers are also being developed using a double digest Restriction-site Associated DNA (ddRAD) approach. This approach utilizes a pair of restriction enzymes to fragment the genomic DNA of each sample at the enzyme specific restriction sites. The wet lab protocols and sequencing for this process have been completed and the resulting data are now being analyzed.

Genome Sequencing:

In order to provide a reference genome to aid bioinformatic processing of the Dipterocarpaceae data, the species *Shorea laevis* has been selected for genome sequencing. This work is underway in conjunction with our partners at the Australian Genome Research Facility in Adelaide and will provide the first genome sequence for a Dipterocarpaceae species.

Development of intra-specific DNA markers for *Shorea laevis*:

DNA from 73 individual *Shorea laevis* trees has been extracted and 24 samples from across the range selected for a ddRAD sequencing run to identify intra-specific DNA markers to facilitate chain of custody spot checking and to evaluate the within species genetic structure and its potential for determining provenance. The ddRAD wet lab work has been completed and the final sequencing and bioinformatic analyses are underway.

Stakeholder Workshop:

The first stakeholder workshop was held in Yogyakarta, Indonesia from 10-11 March 2016. The workshop involved representatives from scientific, governmental, industrial, certification and NGO sectors. During the workshop, after introducing the project and understanding the requirements of the certification and industrial sectors, the partners were able to focus on stakeholder requirements and how they can be incorporated into the project, increasing the likelihood that outputs will be implemented. Some key recommendations which have been adopted are:

- Focus on bangkerai products (*Shorea laevis*) as species substitution is an important issue threatening the reputation of legally sourced Indonesian timber.
- Develop tests that are cheap for the end-user.
- Develop tests that are easily implementable with government legislation, for example the SVLK certification process in Indonesia.

Achievements, impacts and lessons learned:

While excellent progress has been made with the sampling efforts exceeding expectations and delivering many more species and samples than was originally planned. However, management and analyses of these collections introduce further costs. Prudent choices have been made about which samples and species to focus on initially to facilitate marker development which has also progressed extremely well. The project is on schedule with respect to technology transfer and ahead thanks to the delivery of the stakeholder workshop in March 2016. The resources to continue laboratory work in Adelaide are in place, so that the design of the final markers for screening can be completed. Actual screening of all samples will need to wait for additional funding. After the initial PSC, the Executive Agency was encouraged to apply for additional funds for the project (US\$247,934). An application was submitted in March 2016 through the electronic no objection procedure. Since June 2016 the project has been impacted by the suspension of payment due to the impairment of ITTO funds.

Improving governance and transparency of timber harvests and trade in Cameroon

Project number:	TFL-PD 003/09 Rev.2 (M)	
Project country:	Cameroon	
Budget:	Total:	US\$ 418,626
	ITTO Contribution:	US\$ 365,526
	Traffic International:	US\$ 53,100
Submitted by:	Government of Cameroon	
Implementing agency:	Traffic International	
Duration:	24 months	
Financed at:	TFLET 2 nd Cycle (2009)	
Status:	Completed	

Summary:

The project is designed to contribute to the improvement of governance and transparency of timber harvest and traded in Cameroon and internationally by strengthening the national process for controlling illegal logging and associated trade in Cameroon in order to contribute to transparency of timber trade in Cameroon with a view to address the problems of unsustainable timber harvesting, weak forest law enforcement and illegal trade of the country's timber.

Progress:

The project has initially experienced a substantial delay. Although the project agreement has been signed in March 2010, the project implementation only commenced on October 2011. The delay was due to the need for revisions to the work plan and the inception report, and arrangements between the Executing Agency and the collaborating counterparts at MINFOF, Cameroon.

Activities carried out over the implementation period include:

- A total of 22 MINFOF officials benefited from two training of trainer's workshops organized by the project. Part of the workshop involved the review of the training modules on law enforcement developed by a consultant recruited by the project. Inputs from workshop have been incorporated in the final version of the manual.
- Forty three (43) officials from Finance (Customs and Tax), Justice, Police and Gendarmerie were trained in three training of trainer's workshops.
- Train forest logging companies in relevant FLE aspects of their work completed with the participation of six logging companies including representative of logging companies and Douala sea port timber's parks in the first training of trainer's workshop.
- A study to gather information on timber routes was carried out; a report is available with maps identifying new timber routes.
- A draft report on the interagency national coordination committee work plan was prepared.
- Establishment of an interagency coordination committee for FLE was not completed. However, the terms of reference were prepared with strong recommendation that it should be managed by the prime minister office since it involves several ministries.
- A draft code of conduct and professional ethics for forest controllers in Cameroon has also been produced.
- A draft report on status of the traceability systems in Cameroon produced and available.
- An information system for the monitoring of forest products trade was developed and report prepared.
- Actual field work focused on the update of the IT data management system at MINFOF for communication to public and transparency promotion.

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 total of four training of trainer's workshops on forest law enforcement, forest regulation and control were conducted that befitted more than one hundred participants of whom sixty-five were direct beneficiaries and the rest indirect stakeholders.

The project developed a manual on forest legislation and control with five modules based on the various capacity building workshops organized by the project. Five studies were conducted and are annexed to this report on the following i) to update timber trade routes in the country; ii) to evaluate the status FLE monitoring in Cameroon; iii) to review the timber traceability system in Cameroon; iv) to develop a work plan for FLE and v) to develop an information management and communication to the public on illegal timber trade activities to foster transparency.

The project has also produced 2 maps of the main timber trade roads as part of the study and a code of conduct and professional ethics has also been prepared as an annex to the study to the monitoring of FLE in Cameroon. In order to foster relations between relevant stakeholders, an agreement has been reached to put in place a National Coordination Unit on forest law enforcement under the auspices of the Prime Minister Offices.

Those significant achievements have resulted in the improvements in improved capacity and forest law enforcement as compared to the period before the project. Stakeholders were trained, informed and sensitized on forestry law and the fight against illegal logging and associated trade. The various government stakeholders in the agencies now know their roles and responsibilities of better, and how and where and when they should collaborate based on their mandate and legal frameworks.

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	
Implementing agency:	Forestry Department, Ministry of Forestry and Wildlife (MINFOF)	
Duration:	24 months	
Financed at:	TFLET 2 nd Cycle (2009)	
Status:	Ongoing	

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 has 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. Since September 2014, there has no updated reporting including the required progress reports and audit reports as well as the financial statements and cash flow statements, and remaining activities are unlikely to be completed in a timely manner.

The ITTO Secretariat has 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. At the time of preparing this report, no response has been received from the EA.

Achievements, impacts and lessons learned:

The Government of Cameroon will get information for the formulation 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 will benefit from the chain-of-custody system established for timber products trade to address similar problems.

Local communities will have fair access and rights to forest resources, for poverty reduction 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.

Improvement of forest law enforcement at the national level to promote forest governance in Guatemala

Project number:	TFL-PD 024/10 Rev.2 (M)	
Project country:	Guatemala	
Budget:	Total:	US\$ 804.419
	ITTO Contribution:	US\$ 563.339
	Government of Guatemala:	US\$ 200.880
	IUCN:	US\$ 40.200
Submitted by:	Government of Guatemala	
Implementing agency:	National Institute of Forests (INAB)	
Duration:	36 months (plus 11 month no-cost extension)	
Financed at:	TFLET 3 rd Cycle (2010)	
Status:	Completed	

Summary:

The project aimed at improving effective implementation of forest management plans in Guatemala by strengthening the capacity of forest institutions to conduct forest-law enforcement, and provision of better services and instruments for the promotion of sustainable forest management. The project involved civil society, institutions and local governments in activities designed for reducing illegal logging, promoting compliance with forest laws, and good governance.

Progress:

Project activities have commenced in February 2012, and 4 main outputs have been completed as follows:

Output 1: “The National Forest Service has been strengthened in the promotion and monitoring of sustainable forest management system for law compliance and up-dating the legal framework”

- Four forestry laws and regulations were updated: the national forest law, the forest enterprise monitoring regulation, the regulation for forest products transport and legal sourcing, and regulation for family consumption of timber. The national forest law was translated into 3 Mayan languages.
- With the entry into force of the regulations on ‘forest enterprise monitoring’ and on ‘forest products transport and legal sourcing’ in February 2014, an online registry for forest enterprises became mandatory through the ‘Electronic Forest Enterprises Information System’ (*Sistema Electrónico de Información de Empresas forestales –SEINEF–* <http://seinef.inab.gob.gt/>). SEINEF is an output of another project under the TMT thematic programme, for further information, please refer to summary of project TMT-PD 004/11 Rev.2 (M).
- INAB capacity was strengthened with 41 trainers in forest extension, more than 60 training workshops on geographical information systems (GIS), forest inventories, criteria and indicators (C&I), forest management and forest incentives. According to INAB’s Human resources manager such training represents the biggest investment ever done in personnel for the institution.

Output 2: “Community and institutional participation mechanisms generated to promote forest governance”

- Interinstitutional round tables to combat illegal logging have been established throughout the country.
- As part of inter-institutional coordination activities, and largely thanks to SEINEF monitoring activities – road inspection of timber consignments and monitoring visits to forest enterprises– are constantly carried out and have smoother operations and improved transparency.

Output 3: “Information and experiences on sustainable forest management are available to society”

- The documents “Guidelines for the management of communal forest” and “Guidelines for conflict resolution” were published. The first document was also translated into 3 Mayan languages.
- The project has produced a good set of outreach materials, including banners, posters, radio spots and videos. Topics include combat against illegal logging, SFM, positive impacts of SFM, negative impacts of

illegal logging, hardcopies of the forest law and approved regulations, and other documents generated through the project. Two videos were produced (positive impacts of SFM and negative impacts of illegal logging). In addition a national award was established to recognize every two years forest stakeholders who implement good practices of forest management. Most outreach materials and printed documents are available from ITTO's project search at http://www.itto.int/project_search/.

Output 4: "Improved availability of information on forest practices and their impact"

- Through SEINEF data is collected in a reliable and standardized manner at critical points in the production chain, such as records of entries into companies' stock inventories; yield levels; diversity of products and species; and records of inventory exits, thus facilitating the oversight of the forest sector and increasing its efficiency and transparency.
- Information on forest cover, forest incentives, national forest registry and monitoring of management plans has been made publicly available through an online Geographical Information System (GIS) portal called 'SEGEFOR' at <http://geoportal.inab.gob.gt/>. SEGEFOR is an output of another project under the TMT thematic programme, for further information, please refer to summary of project TMT-PD 004/11 Rev.2 (M).

The systems and tools foreseen in the project will be incorporated into SIFGUA (National Forest Information System of Guatemala available at www.sifgua.org.gt). SIFGUA is the direct output of a former ITTO financed project PD340/05 Rev.2 (M). Current expansion of SIFGUA is on-going under another ITTO project, TMT-PD 004/11 Rev.2 (M), thus linking the two projects.

Achievements, impacts and lessons learned:

As for project sustainability, the outputs achieved by the project as of today and the existing inter-institutional coordination are ensuring project sustainability, as these facilitate forest law enforcement not only from the point of view of the authorities who now has monitoring mechanisms in place to promote legal practices; but also from the point of view of forest owners and enterprises involved in harvesting, transportation and processing of timber, who now are benefiting from systems that 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 their requests and applications.

SEINEF outcomes: as of January 2015, 1814 enterprises were registered with INAB, of which 1440 (nearly 80%) were already using SEINEF. Collectively, these enterprises reported an initial stock volume of timber of 341 240 m³ to SEINEF. By the end of 2014, this figure had increased with the inclusion of timber from natural forests outside protected areas (169 026 m³) and within protected areas (59 365 m³), while plantation timber amounted to 351 820 m³ and imports were 59 365 m³. Local company-to-company transactions amounted to 395 815 m³, of which 343 139 m³ was handled through SEINEF's electronic company bill of transport system, accounting for 86.7% of total transactions.

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	
Implementing agency:	National Institute of Forests - INAB	
Duration:	11 months	
Financed at:	5 th TFLET Cycle (2013)	
Status:	Ongoing	

Summary:

It is estimated that more than 95% of forest product flows in Guatemala, or approximately 28.6 million m³ out of the 30.7 million m³ 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 is expected 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 is not impacted by the loss of ITTO funds that was brought to Council's attention at its 51st 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, route 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 have been submitted to CONESFORGUA and the pre-project completion report is in preparation. It should be submitted to the ITTO Secretariat together with the new project proposal before the 52nd Session of the ITTC. The most recent progress report is available on request

from the Secretariat (Spanish only). If the final report and audited financial statements are received prior to the 52nd Session of the ITTC and deemed acceptable by the ITTO Secretariat, this pre-project will be considered complete.

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 “vulnerable communities”. 15 of these municipalities were identified with forests primarily supplying wood to the industrial centers of Guatemala, Chimaltenango and San Agustín Acasaguastlán. However, in the municipalities of Chimaltenango, Guatemala and Antigua Guatemala 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. Within access costs to legality, fixed costs represent up to 85 percent at a production level of 16 m³ or less (consistent with many small-scale production levels) but only 45 percent at a production level of 150m³ 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	
Implementing agency:	National Institute of Forests - INAB	
Duration:	8 months	
Financed at:	6 th TFLET Cycle (2013)	
Status:	Ongoing	

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 has been approved under the 6th TFLET Cycle (2013). The project agreement has been signed and the inception report has been received by the Secretariat in September 2014. The consultant firm to conduct the study and develop the technical manual has been identified.

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.

The first and final installments of funds of US\$53,770 were made in October 2014 and November 2015 respectively. There is no balance of funds for this project. The Executing Agency is preparing the completion

report, technical reports and final audit report. In the event that the EA will timely submit those reports and are deemed satisfactory before the 52th ITTC, this project may be declared completed.

Achievements, impacts and lessons learned:

A database with information obtained has been created and is currently analyzed and the information from the tracking systems used by INAB has been utilized to determine relevant legal and technical parameter.

Both the methodology and the results of the performance study of primary processing in the forest industry have been validated and socialized with various stakeholders in priority poles, 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 socialized and validated in the areas prioritized by the study, however, the involvement has been both, representatives from other regions have applied for joining the socialization and validation of the manual.

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	
Implementing agency:	Center for Climate Change and Policy Research, Forestry Research and Development Agency (FORDA)	
Duration:	24 months	
Financed at:	6 th TFLET Cycle (2013)	
Status:	Ongoing	

Summary:

Institutional strengthening of Community Forestry is a program dedicated to empower communities who are living in the surroundings of forest areas. The scheme is aimed at strengthening community institutions. In the Sanggau district, West Kalimantan, three units of Community Forestry attained permits (IUPHKm) from the District Leader allowing communities to utilize state forest areas under the production forest function and covering 3,790 hectares, under the condition of applying sustainable forest management principles. The program progress is however slow and only 5% of the total target area have been met, which delays the HKm development program in Indonesia. The project is expected to facilitate the empowerment of local communities in the context of sustainable community forestry management. Main project beneficiaries will be forest communities and other forest dependent people through improved capacity of community organizations to manage community forests in Sanggau, which is expected to accelerate the development of HKm program implementation in Indonesia. The project will contribute to reduced rural poverty, better access to forest resources, increased employment and income for forest communities, less social conflict and improved social capital among forest communities.

Progress:

The First PSC Meeting was held on 19 January 2015. Under Activity 3.1. the regulations guiding the implementation of the program of community forestry, which are often poorly understood by local governments, were disseminated at the Head Office of District Government Sanggau (Kantor Bupati). A meeting on the important role of community forestry for the development of the district was organized on the 23 February 2015 chaired by the Head of the District to brief 55 participants including government staff, local NGOs, village leaders and the community forestry group of IUPHKm. Under activity 3.2.2 the first workshop to strengthen the capacity of local governments in facilitating the implementation of HKm at Sanggau was conducted on 30 March 2015. The workshop was attended by 25 participants including representatives from the neighbouring Sekadau district. All participants had responsibility for community development, including representatives from the Department of Industry and Trade, village governance, agriculture, forestry and fisheries sector as well as the handicraft promotion office. Representatives from forest farmer groups were invited to facilitate discussions with the local government. Under activity 3.3.1 information was collected on existing regulation schemes for Community Forestry in Indonesia. Each has its own regulations issued by the Ministry of Forestry. Other schemes related to community development are promoted by other ministries, such as the Ministry of Home Affairs, the Ministry of Social Affairs or the Ministry of Women Affairs. Field information was collected through discussions with HKm right holders and other key informants. Under 1.3.2 four training activities were conducted for community groups.

The 2nd PSC meeting was organized on January 2016 which approved the Project extension up to four months period to finalize Project activities without any additional funding from ITTO. Prior the PSC meeting, a monitoring visit was made by the Project Manager of ITTO who traveled to the project site and observed it progress through consultation with various parties. During the visit, it was acknowledged that strong demand being posed to extend Project assistantship into the neighboring district of Sekadau. Community forestry of HKm Merabun in that district has lots of potency to offer but lack of information and access to trade their products. Among the products being

presented include bamboo and rattans handicrafts, also the potency of mushrooms produced in that area which serves as valuable menu for European dining.

On Activity 1.1: The development of local community institutions in designing forest village based eco-tourism. The need to develop forest village based ecotourism has already been acknowledged during the first year of project implementation. A group from community forestry of HKm members at village Mobui being formed and being strengthen its capacity to design and to develop the potency of waterfall named Riam Jhito as main destination for forest village based tourism. On April 2016, the Project facilitates meetings and discussions for a team of forest village based tourism, pengelola desa wisata among others to clarify on regulation, landuses, and benefit sharing also potential risks incur from the developing eco-tourism in the region. The Project also facilitated selected members of the team to participate in a tourism course organized by office of tourism at Sanggau district. The discussions include government authorities at the village and sub-district, also villagers at the neighboring area of desa Terusan, and local Paroki or Church entity. The discussions is meant to agree on keeping transparency and better communication on planning to develop Riam Jito waterfall as eco-tourism destination and the planning to use virgin forests at the neighborhood as sacred or holly place for the local Paroki.

On Activity 1.2: The development of local community institutions in improving capacity of entrepreneurships through various trainings and business gatherings. The important of entrepreneurship has been acknowledges in trade of products from community forestry. Various trainings and business gatherings being organized by the Project involving not only community members of HKm but also they involves staffs of government agency and its affiliation including semi-government organization of Dekranasda, a women group at the district and village levels. Among the trainings include introduction about silk worm and cultivation of mulberry plants that had been conducted during the months January up to March taking the advantage of rainy season. Plantation of mulberry being established at several places of Sanggau and Tukun, Langka and Mobui villages to provide opportunities for expanding income sources particularly for women group member of HKm. Assistantships from forestry R&D at Bogor were provided from cultivation up to provision of information about potential trade of mulberry leaves for drinking, food and vegetables up to the potency of silk clothing. Visit to the silk house at Bogor was arranged by the Project to get clear understanding on silk work production activities.

To improve capacity in entrepreneurship, collaboration with the Ministry of Industry was established in March 2016 through the signing of MOU between the DG Small-scale Industry with the DG FORDA of Forestry to establish a self-sufficient industrial village of Desa Industri Mandiri/DIM by using community forestry at Sanggau as the basis. The collaboration was manifested at the selection of Sanggau as among 12 members of DIM network across the country, which also represent for Kalimantan. Sets of equipment to produce organic fertilizer worth about USD 20,000 to be granted by the Ministry of Industry to the group of community forestry at Sanggau and it is expected to operate at the village Mobui by end of August 2016. The Projects will facilitate trainings to operate the equipment and the production of organic fertilizer called pupuk organik cair (POC/liquid organic fertilizer). The new technology will improve land productivity which at this moment being polluted with chemical fertilizer. It will save the community with cost for attaining fertilizer, it will stimulates organic farming with cattle and fish growing to provide income sources needed other than from harvesting timber from the forests.

On Activity 1.3: The development of local community institutions in formulation of operational plan of forest management under the IUPHKm. An operational plan for the right holders of IUPHKm shall be developed every year as among the requirements demanded by the Ministry of Environment and Forestry. The Project facilitates the five groups of community forestry at Sanggau to formulate their planning in accordance to the procedures sets by the government. The planning includes among others activities to conduct forest protection, to rehabilitate degraded forests and land, to utilize forest products.

On Activity 2.3: The improvement on information and access of local community to attain micro credits or financing. After series of trainings and business gatherings during the first year of activities, groups of women who involve in handicraft-making received the support from the Provincial Bank of Bank Daerah Kalimantan Barat. The Bank granted its Corporate Social Responsibility (CSR) to help the six groups of women handicrafts improve their capital.

Achievements, impacts and lessons learned:

- The project has succeeded in developing a mutual trust between the local government of Sanggau District and its local communities in developing their community forests and also succeeded to bring in a bank and the Ministry of Industry to grant the women group and local communities with funding and equipment for producing fertilizer; and
- The project team has shown excellent communication skills that enable the stakeholders to actively participate in the project implementation.

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	
Implementing agency:	Directorate of Forest Revenues and Forest Product Distribution, Ministry of Forestry	
Duration:	24 months	
Financed at:	6 th TFLET Cycle (2013)	
Status:	Ongoing	

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 will 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:

Under Activity 1.2 the Ministerial Regulation no. P 30/Menhut-II/2012 was reviewed in form of FGD (Focus Group Discussion), involving 134 participants from 19 districts. Activities 1.1., 1.2 and activities 1.3 were implemented behind the schedule. Activities 1.3 has been carried out partially and activity 2.3 will be carried out in year two due to revisions and changes in Ministry Regulation number P. 30/Menhut-II/2012, which will impact the activities to be undertaken. The regulation concerning the use of certificates of origin (SKAU) for transportation of timber forest products originating from forest right/private owned were amended to regulation P. 21/Menhut-2015. The amendments and changes require additional dissemination at the village level and adjustments to the materials produced. Target audiences for the capacity building may have to be adjusted.

During the reporting period, project have conducted the second Project Steering Committee meeting on 18 January 2016 in Jakarta, followed a visit to West Sumatra province from to see the progress and impact of the training that was carried out in Padang, West Sumatra province on November 2015. The training received positive response from the Head of the Province's Head of Forestry Service which help officers in charge of timber trade administration in performing their duties.

On Output 2: Improved support by beneficiaries of timber administration, the activities that have been carried out were:

- Activity 2.1. To identify and Apply incentives for main beneficiaries to support timber administration and to identify and apply penalties for administrative incompliance
- Activity 2.2. To conduct evaluation of the implementation of regulation as a feedback to make the

- regulation effectively operational
- Activity 2.3. To conduct training workshop for beneficiaries in implementing Permenhut 30/Menhut-II/2012 (and its revision).

Activities of 2.1 and 2.2 included conducting Focused Discussion Group (FGD) to review and analyze the obstacle in implementing the regulation number P.30/2012 and P. 21/2015 (the revised version); and to Review the content and substance of the changes of Regulation 30/2012 to be Ministerial Regulation No. P21/2015. Three FGD has been carried out inter alia: in Jambi province on March 2016, in Medan, North Sumatra Province on April 2016 and Semarang, Central Java on May 2016 to discuss result of activity 2.2. Each FGD was attended by at least 30 participants. The participants consist of Government at provincial level, district, and from Forest community owner.

On Activity 2.3, as requested by the Ministry of Environment and Forestry, there were additional three training activities organized on mastering online system for wood/timber administration namely SIPUHH online. The system was developed by the Directorate General of Sustainable Production Forest Management and specifically designed to help small scale industries increase their productivity.

Achievements, impacts and lessons learned:

Under Activity 1.1 the project has produced practical manuals of Ministerial Regulation No. P. 30/Menhut-II/2012 concerning wood administration of timber harvested from community forestry land in form of posters, a video, a film and a practical guideline for the dissemination. Dissemination was carried out three times in two provinces (West and Central Java) involving 113 participants from 35 districts. Under Activity 1.3 a first training on skills to implement Ministerial Regulation No. P. 30/Menhut-II/2012 was provided to 30 village heads from 6 districts. The training objective was to improve local capacity in the implementation of timber administration system from private land, including inter alia policy and regulations on timber measurement, identification of timber species timber grading and timber administration. Under Activity 2.1 and 2.2 the project has produced a draft revised version of Ministry Regulation No. 21/2015 awaiting for the Minister's approval. Under Activity 2.3 three additional training activities were organized.

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	
Implementing agency:	WWF Panama	
Duration:	24 months	
Financed at:	6 th 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 49th ITTC and will commence in 2014.

Progress:

The project has been approved under the 6th TFLET Cycle (2013). Following the approval and financing, the project has 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 forest (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 of US\$220,000 according to the project agreement are pending.

The suspension of ITTO funding had caused delays 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 workplan, in coordination with the Ministry of Environment (MiAmbiente), the EA managed to get support from other offices of WWF and the FAO FLEGT Programme to continue the implementation of the planned activities. However, it is expected that after the 52th ITTC, the ITTO funding could be normalized and reactivated so as not to jeopardize the achievement of results and objectives of the project.

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.

However, the suspension of ITTO funding had serious impact on project implementation, though the EA is seeking support from other sources. Since it's at the early stage, the future implementation of this project will be based on the resume of ITTO funding.

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	
Implementing agency:	Papua New Guinea Forest Industries Association (PNGFIA)	
Duration:	12 months	
Financed at:	6 th TFLET Cycle (2013)	
Status:	Inception Phase	

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 has been approved under the 6th TFLET Cycle (2013). The project agreement has been signed in October 2014 and the project is still in the inception phase no funds have been disbursed to the EA yet.

Achievements, impacts and lessons learned:

Nothing yet to report

REDDDES

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	
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	
Implementing agency:	Amazon Cooperation Treaty Agency (ACTO)	
Duration:	48 months	
Financed at:	REDDDES 2 nd 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 Observation Rooms 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 pending financial audits for 2014 and 2015 have been received and approved. The continuation of the project is affected by the impairment of ITTO funds.

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 importance of RED-PD 029/09 Rev 1 (F) and its impact on the forest conservation on the Amazon Region has been highlighted by the Governments of Germany and the Netherlands to the extent that the results of its technical cooperation with ACTO in the implementation of the Regional Project to Monitoring Deforestation encouraged the German Technical Cooperation GIZ to conduct, with technical input from INPE, a regional meeting about monitoring deforestation where similar experiences, to ACTO's in the Amazon region, like others in Latin America, Africa, Asia and Eastern Europe were shared and discussed (INPE-PRA/GIZ International Workshop, Sao Jose dos Campos, Brazil, 31 Oct – 1 Nov 2013). The importance and relevance of the project and its continuation under BNDES/ACTO has also been highlighted by the meeting of the ACTO Foreign Relations Ministers (e.g. in Ecuador, May 2013).

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
	Fibria, Brazil	US\$ 18,750
Submitted by:	Government of Brazil	
Implementing agency:	Instituto Terra	
Duration:	12 months	
Financed at:	REDD+ 3 rd Cycle (2011)	
Status:	Pending agreement	

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+ 3rd Cycle (2011). The project has been facing difficulties as the key collaborating agency had unexpectedly declined to participate in the project. Instituto Terra has now been identified and agreed as Executing Agency for the project and the project agreement has been prepared and signed by the Executing Agency and the Brazilian Government in April 2016, however, due to the impairment of ITTO funds, the project agreement could not be countersigned by ITTO.

Achievements, impacts and lessons learned:

Nothing yet to report

Reducing Emissions from Deforestation and forest Degradation through Collaborative Management with Local Communities

Project number:	RED-PD 026/09 Rev.1 (F)	
Project country:	Ghana	
Budget:	Total:	US\$ 760,408
	ITTO Contribution:	US\$ 658,716
	Government of Ghana	US\$ 101,692
Submitted by:	Government of Ghana	
Implementing agency:	Forestry Research Institute of Ghana (FORIG)	
Duration:	48 months	
Financed at:	REDD 2 nd Cycle (2009)	
Status:	Completed	

Summary:

The project aims to contribute to sustainable management and conservation of Ankasa Conservation area to improve the provision of environmental services and reduce greenhouse gas (GHG) emissions. The Ankasa Conservation area incorporates the Nini-Suhien National Park and the Ankasa Resource Reserve and is considered as the most biologically diverse forest ecosystem in Ghana. The project specifically intends to develop and implement participatory, good governance and management system for the Ankasa conservation area, determine the financial value of the environmental services as well as methods for measurement, assessment reporting and verification (MARV) for forest carbon. The project will be participatory and thus will build on a high level community involvement and capacity building.

Progress:

a) Administrative aspects:

The Project Agreement regulating the implementation of the project was duly signed on 05 April 2010. An acceptable Inception Report and related first Yearly Plan of Operation were submitted on 15 April 2010. The Project implementation began with the disbursement of the first installment of TP funds in April 2010. The first project extension was granted until April 2015 and a second one until September 2015 in order to allow the completion of all activities. However, for this 48-month project, as an acceptable version of the project completion report was received in August 2016, the project operation period had lasted 76 months instead of 48 initially designed by the implementing 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, could be summarized as follows:

- Awareness and knowledge on REDD at local level had been developed through appropriate approaches involving the organization of workshops and dissemination of information through community radio broadcast, in English and vernacular language.
- Participatory management involving Community Resource Management Areas (CREMAs) had been reinforced in ACA. It was noted that the committees responsible for these CREMAs lacked the capacities for management dealing with conservation, including the restoration and rehabilitation of the degraded areas. Thus, the project contributed to build the capacities of CREMA committees established in the following nine (9) local communities: Amokwaw, Fia, Nungua-Cocoatown, Tweakor Navrongo, Aiyinasi-Ayawora, Ohiamadwen-Fiasoro, Asomasi, Naptoma and New Adiembra.
- Enhancement of biodiversity conservation had been achieved through regular field monitoring, in close collaboration with local communities involved in the project implementation. Thus, the local communities were trained in the collection of all relevant data on biodiversity resources. To facilitate the field

monitoring, a community-based forest monitoring unit had been established under each CREMA structure.

- Community participation in forest conservation, monitoring of illegal logging and forest encroachment had been improved through the stakeholder consultation process leading to pro-active interactions with local communities. The CREMAs were strengthened through appropriate training workshops, and provision of logistics and incentives.
- Governance and benefit sharing arrangements for REDD were developed, and REDD concept mainstreamed within SFM activities. Equitable benefit sharing scheme/arrangements, as well as the responsibilities of each relevant stakeholder, were identified for development through a stakeholder consultation process. The capacity of the local communities on activities that contribute to SFM was enhanced and measures taken to mainstream these activities in their land use practices, in ACA.
- Verifiable methods for carbon accounting and monitoring were developed for the project target area (ACA). In order to establish a verifiable methodology for carbon monitoring and accounting, the approach involved the most up to date, but cost effective, GIS and remote sensing based REDD monitoring methodologies. Field measurements were made using standard, but rigorously applied, forest sampling methods to assess forest biomass/carbon stocks. Recommended allometric equations, suitable for different parts of the project target area, were adjusted and used to estimate biomass stocks. Without compromising on scientifically approved standards, the project adopted measures that made local communities to play active role in carbon measurement and monitoring.
- Baseline emissions and potential carbon credit under REDD project scenario were determined and the project explored baseline approaches that reflect the local circumstances. The project used approaches based on GIS modelling and remote sensing multi-resolution methods for mapping and qualitative analysis of baseline scenarios, as well as the estimation of emissions and enhancement of carbon stocks. GIS models that incorporate biophysical factors as well as socio-economic spatial information were also explored by this project. Monitoring of forest cover change was done using satellite remote sensing for determining baseline deforestation rates against which future rates of change can be based. Adequate validation and accuracy assessments were carried out to determine the levels of uncertainties contained in the estimates. All these approaches were meant to provide improved spatially explicit information on the location of carbon stocks in ACA.

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:

- Nine abovementioned local communities have been selected and sensitized on the issues regarding the deforestation and forest degradation in Ankasa Conservation Area (ACA), and most of them had been implementing the best practices for the rehabilitation of degraded lands in ACA, and therefore contributing to the biodiversity conservation;
- These nine local communities had been involved in the registration of forest plantations and related trees established by them for the rehabilitation of degraded lands in ACA. The registration process had been undertaken in close collaboration with the Forest Services Division (FSD) of Ghana Forestry Commission represented by the District Forest Manager that oversees the Ankasa Conservation Area (ACA). The registration is the first and important step of the process which could lead to the tree ownership and benefit sharing scheme/arrangements, for these nine local communities involved in the rehabilitation of degraded lands in ACA;
- In addition to technical reports (available in http://www.itto.int/project_search/), the results and findings of this project had been used to produce scientific papers presented in international meetings organized by FAO in 2015, as well as posters shown in other international meetings.

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	
Implementing agency:	FORIG	
Duration:	24 months	
Financed at:	REDDDES 4 th Cycle (2012)	
Status:	Ongoing	

Summary:

The project aims 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. This will be achieved through sensitizing and building the capacity of commercial charcoal and firewood producers in the transition zone to plant and/or manage wood fuel plantations sustainably. Participatory approaches will be 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 will also be produced to guide communities for efficient utilization of wood fuel resources. The government of Ghana will benefit through improved resource base and sectoral information for policy decisions. Other benefits to be derived 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:

No progress report was submitted in August 2016 by the project Executing Agency (Forestry Research Institute of Ghana (FORIG) which informed the Secretariat that the preparation of the completion report was under way because all project activities have been completed in the field, as a contribution for reducing deforestation and degradation and contributing to carbon sequestration in the forest savanna transition zone of Ghana.

Achievements, impacts and lessons learned:

Achievements, impacts and lessons learned should be documented with the completion report under preparation by the Executing Agency (Forestry Research Institute of Ghana (FORIG) at the next Council (ITTC-53).

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	
Implementing agency:	Ghanaian National REDD+ Secretariat	
Duration:	12 months	
Financed at:	REDD+ 4 th 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:

No progress report was submitted in August 2016 by the project Executing Agency (Ghanaian National REDD+ Secretariat) and Collaborating Agency (Forestry Research Institute of Ghana /FORIG) which informed the Secretariat that the preparation of the completion report was under way because all project activities have been completed in the field, as a contribution for reducing deforestation and degradation and contributing to carbon sequestration in the forest savanna transition zone of Ghana.

Achievements, impacts and lessons learned:

Achievements, impacts and lessons learned should be documented with the completion report under preparation by the Executing Agency (Ghanaian National REDD+ Secretariat) and Collaborating Agency (Forestry Research Institute of Ghana /FORIG) at the next Council (ITTC-53).

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	
Implementing agency:	INAB	
Duration:	24 months	
Financed at:	REDDDES 4 th 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 on mangrove forest protection, restoration and conservation as a climate change adaptation measure 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:

Administrative Progress:

The Project Agreement regulating the implementation of the project was duly signed on 10 March 2013. The Project Inception Report and the YPO have been 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 executed in early February 2014, the third installment in October 2014 and the fourth in July 2015, and all were based on the prior submission and approval of the corresponding required 6-monthly progress report and updated OLMS reporting. The project was further granted two extensions, one until December 2015 and another until the end of August 2016, 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.

Technical Progress:

In accordance with the project's most recent progress report and the monthly highlights submitted through the project on-line monitoring system, progress in project implementation can be summarized by major outputs as follows:

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

Almost all activities required to achieve this output have been implemented, as follows:

- 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 currently count with 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; and
- Training workshops to raise awareness of the local communities on the use and conservation of mangrove areas have been completed; and
- Other events continue to be 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.

5 activities out of 7 required to achieve this output have been completed, as follows:

- 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 activity related to the strengthening, consolidation, approval and implementation of the new mangrove forest regulation is still pending.

Achievements, impacts and lessons learned:

To date, 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 submitted to the competent government authorities (INAB and CONAP) for their review and approval; 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, of which the following are worthwhile mentioning:

- 1) Módulos de capacitación: características, uso y conservación de áreas manglar
- 2) Reglamento para el manejo sostenible del recurso forestal del ecosistema manglar
- 3) Estrategia para el manejo y conservación del bosque manglar en Guatemala
- 4) Planes de manejo comunitario

These publications, describing the achievements, impacts and lessons learnt of the project, will also be uploaded onto the ITTO website for a greater dissemination to all our member countries and other interested parties, and are available from the ITTO project search tool at http://www.itto.int/project_search/.

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	
Implementing agency:	Forest Development Authority and Flora & Fauna International (FFI)	
Duration:	12 months	
Financed at:	REDD+ 4 th 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:

No progress report was submitted in August 2016 by the project Executing Agency (Forest Development Authority and Flora & Fauna International / FFI) and Collaborating Agency (Forestry Development Authority of Liberia / FDA) which informed the Secretariat that the preparation of the completion report was under way because all project activities have been completed in the field, as a contribution to support the establishment of two demonstration sites 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.

Achievements, impacts and lessons learned:

Achievements, impacts and lessons learned should be documented with the completion report under preparation by the Executing Agency Executing Agency (Forest Development Authority and Flora & Fauna International / FFI) and Collaborating Agency (Forestry Development Authority of Liberia / FDA) at the next Council (ITTC-53).

Reducing forest degradation and emissions through sustainable forest management (SFM) in peninsular Malaysia

Project number:	RED-PD 037/11 Rev.2 (F)	
Project country:	Malaysia	
Budget:	Total:	US\$ 864,622
	ITTO Contribution:	US\$ 590,922,
	Government of Malaysia	US\$ 273,700
Submitted by:	Government of Malaysia	
Implementing agency:	Forest Research Institute Malaysia (FRIM)	
Duration:	36 months	
Financed at:	REDDDES 3 rd Cycle (2011)	
Status:	Completed	

Summary:

Forest management in Malaysia is based on the Selective Management System (SMS) which involves the selection of a management regime to optimize not only the objectives of efficient and economic harvesting and sustained yield but, more importantly, to ensure that forest development is ecologically and environmentally sustainable. However, forest degradation in terms of carbon stocks is occurring in production forests as a result of logging operations. Logging operations in Malaysia in the past have also been reported to be damaging, but significant improvements have been made. The extent of current forest degradation in terms of carbon stocks needs to be further studied as it is still not well understood in Malaysia. Reports have indicated that improved forest management could reduce degradation and reduce carbon emission. However, all these studies are confined to specific areas and with limited information for scaling up activities. Consequently, this project is implemented to assess enhancement of climate change mitigation through reduced emissions from forest degradation in Malaysia. Specifically, the project will determine emissions from forest degradation in logged forests and assess the value of enhancing forest management practices to reduce emissions from forest degradation. Financial evaluations of the improved management practices will be undertaken to provide avenues for assessing payment for ecosystem services.

Progress:

The Agreement regulating the implementation of the project was duly signed on 18 January 2012. The implementation of the project started in February 2013 after finishing administrative arrangements. The project implementation was extended until 30 June 2016 without additional funds. The delay in completing the project was mainly due to the preparation of quality technical reports resulting from the project. In accordance with the project agreement, the ITTO Secretariat received the project completion report, technical reports and financial audit report for closure of the project.

All activities based on the four outputs were conducted accordingly as planned in the project document. The main activities carried out in relation to the four outputs include the following:

Output 1: National forest degradation estimated

- Reviewed deforestation and forest degradation drivers in the country and conducted an assessment of forest degradation drivers in Pahang state. The project site is located in Ulu Jelai Forest Reserve, Lipis, Pahang where an improved logging method of RIL (Rimbaka) has been introduced.
- Baseline information on the level of forest carbon stocks as well other values such species composition and forest structure was assessed before and after logging under current forest management prescriptions and logging techniques
- With assistance of the Lowering Emissions in Asia's Forests (LEAF) based in Bangkok, Thailand, produced guidelines to account, monitor and report deforestation and forest degradation. Results of the project research were presented at many forums including a training course on trainers on climate

change and REDD+ on 25-30 May 2015 at Center for Forestry Education and Training (CFET), Bogor, Indonesia

Output 2: Forest degradation reduced at the forest management unit

- Conducted an assessment of forest degradation through a survey on soil, litter, sapling and deadwood carbon in low impact logging area of Ulu Jelai Forest Reserve, Lipis, Pahang
- Improved protocols introduced and tested to enhance carbon retention and reduce degradation in one forest management unit in Pahang. In particular, reduced impact logging systems which reduce the construction of skid trails and maintaining forest structure were tested to assess their potential in enhancing current management practices towards achieving sustainable forest management and enhancing carbon stocks.
- Changes in carbon stocks under the improved forest management prescriptions and logging techniques compared with current practice. Other aspects such as forest structure and species composition were also assessed to better understand the value of forest in additions to carbon stocks

Output 3: Incentives for carbon and ecosystem services established

- Reviewed the methodologies in assessing opportunity costs and the costs involved in implementing REDD+ projects as well as valuation of ecosystem services identified by MEA (2005)
- A framework and design for PES (carbon and watershed) in Pahang state produced. It was presented to key stakeholders such as the Pahang State Economic Planning Unit, Pahang State and Federal Forestry Departments as well as relevant Federal Ministries for policy development at the Pahang State Government level
- Coaching session on economic valuation of ecosystem services was held on 9-11 March 2015 at Bangi-Putrajaya Hotel, Malaysia

Output 4: Capacity of major stakeholders and communities where relevant is strengthened

- Through various researches on the planning and management of forest in relation to climate change, FRIM personnel but also relevant people from other agencies and organizations have enhanced their knowledge on SFM to address climate change.
- Provided training in awareness of REDDES and carbon accounting to more than 120 participants; more than 150 participants/personnel locally and internationally had undergone related activities conducted under this project
- The project team shared project results at many national and international meetings. These include attending the International Seminar REDD+ Finance Mechanism and Its Optimum Use-How to Incentive Forest Conservation held on 3-4 February 2015 at Tokyo University which was organized by the FFPRI of Japan; XIV World Forestry Congress (WFC), Durban, South Africa, 7-11 September 2015; and the 51st session of the International Tropical Timber Council (ITTC) on 16-21 November in Kuala Lumpur.

Achievements, impacts and lessons learned:

The Executing Agency has produced a number of papers, posters, articles, awareness materials and project briefs. These include the following:

- Reducing Forest Degradation and Emissions through Sustainable Forest Management (SFM) in Peninsular Malaysia
- Identifying drivers of deforestation in Peninsular Malaysia by using satellite imagery
- Assessing Carbon Pools in Dipterocarp Forests of Peninsular Malaysia
- Assessing rate of deforestation and changes of carbon stock on mangroves in Pahang, Malaysia
- Identifying Drivers of Deforestation and Developing Reference Emission Level for REDD+ In Peninsular Malaysia
- Mitigating the Climate Change by Sustainable Forest Management (SFM) Practices in Peninsular Malaysia Under REDD+ Mechanism
- Carbon Emission from Conversion of Forests to Different Types of Agricultural Crops in Malaysia.
- Identifying Payments for Environmental Services on Malaysian Forests (poster)
- What is REDD plus? (poster)
- Comparative Study of Carbon Emissions Changes from Harvesting Techniques in Production Forest in Pahang (poster)
- Achieving REDD+ through SFM in Peninsular Malaysia (project brief)

- Carbon Emission from Deforestation in Pahang, Malaysia (project brief)
- Biomass and carbon changes from different harvesting techniques in Pahang, Malaysia (project brief)
- An Annotated Bibliography on REDD+ in Southeast Asia (book published by FRIM)

Many of technical papers and project briefs can be found on FRIM website at <http://www.frim.gov.my/frim-itto-reddes> as well as the project's Facebook at <https://www.facebook.com/pages/FRIM-ITTO-REDDDES/277076555767504>.

The project resulted in improved management practices based on SFM in terms of its total carbon storage. In addition, improved silvicultural and management prescriptions were purposed based on project's outputs to further enhance the carbon stock in the forest. The amount of total carbon stock based on the SFM practices in this country and Pahang in particular is the critical baseline information for incentive calculation under the REDD+ mechanism. The project has also evaluated the economy aspect for PES such as carbon stock, watershed and ecotourism in State of Pahang. The project is among pilot REDD+ projects in Malaysia in order to enhance its readiness for full implementation of the REDD+, once the mechanism takes place in the country. The outputs of the project are expected to enable to better integrate climate change mitigation and adaptation measures into the improvement of the current forest management practices.

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	
Implementing agency:	Institute of Ecology (INECOL)	
Duration:	36 months (+15 months no-cost extension)	
Financed at:	REDDDES 3 rd Cycle (2011)	
Status:	Ongoing	

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 of the project was done in May 2012 and the last installment was sent on August 2015. By now the project has achieved the following outputs:

Output 1: "Environmental and socio-economic diagnosis of resources derived from forests and coastal forests on the central coastal plains of Veracruz, Mexico"

Results on 'perceptions on local communities':

- The survey has been conducted and results are now available. In summary local communities understand the relation of the preservation of coastal ecosystems with their well-being and livelihoods, including use of timber, fire wood, palms, medicinal plants, flora and fauna.
- Two publications have been released from the research conducted and are available from ITTO's project search at http://www.itto.int/project_search/:
 - Catalogue on local medicinal plants. This particular publication was written by a group of local women, with the assistance of the Executing Agency, and includes 44 local species, and their uses in traditional medicine.
 - Perceptions of local communities on coastal forest and their environmental services.

Results on 'restoration techniques':

- The project conducted filed study on economical restoration techniques that can be used by local communities, such as through the poles for birds for distribution of seeds, and tramps to catch seeds. Two publications have been release on this subject and are available from ITTO's project search:

- A manual on techniques, tricks and practices to restore and maintain trees and mountains in the dunes of Veracruz
- Practical guide to the reforestation and enrichment planting of dunes

Output 2: "Aerial technical evaluation of plant productivity, in coastal forests and their replacement agricultural systems and organic carbon content in these ecosystems and evaluation of the role of the soil in the containment of floods and in hydrological flows and water quality in mangroves and flood forests"

- Field work has been concluded.
- The research shows that the most productive ecosystems for carbon sequestration are rain forests, secondary vegetation and dunes. These ecosystems also retain sand and avoid the erosion of beaches.
- Ecosystems such as rain forest and fresh water marsh are of higher importance for flood containment and to regulate the water cycle. Some regions of rain forests contain as much as 4 gr of water per gram of soil. These ecosystems are quite sensible to land-use change.
- Restoration of paddocks also improves the soil capacity of flood containment.
- The loss of containment capacity is highly correlated to the organic carbon sequestered in the soil.
- These ecosystems are threatened by land-use change for livestock, and human settlements.
- Research activities have been concluded, a video which summarizes the results is available from ITTO's YouTube channel at <https://www.youtube.com/watch?v=Fxxvb7YiyIq>.

Output 3: "Evaluation of the role of native trees in these ecosystems in various agricultural-silvicultural-livestock benefits"

- The research work will conclude with a manual of best practices in the use of endemic trees in paddocks (draft available).

Output 4: "Economic valuation of environmental services, included in an economic value that can be incorporated into government policies and instruments"

- The project studied the economic valuation of the following environmental services:
 - carbon sequestration,
 - conservation of water quality for fisheries,
 - water catchment and purification,
 - flood containment,
 - connectivity and restoration of ecosystems, and
 - biodiversity conservation
- The economic valuation took into account the opportunity costs (direct and indirect), the implementation costs and the transaction costs for each service.
- Results have been summarized on a video available from ITTO's YouTube channel at <https://www.youtube.com/watch?v=Fxxvb7YiyIq>. A book will be also published and as of the end of June 2016 a draft is already available.

Output 5: "To encourage rural community involvement in the project and to develop and distribute information to decision-makers, CONAFOR technical experts and rural communities, so that they can incorporate the outcomes of the project in their practices and activities"

- The involvement of local communities has been constant throughout project execution, including surveys, research activities, field monitoring activities, drafting and review of publications and promotional material.
- Plant cover and land use maps, with distinct general categories (tree cover, native herbaceous cover and agricultural/ livestock paddock systems) for the project area, with the purpose of environmental service spatial mapping, are now available from ITTO's project search.

Output 6: "Implementation, monitoring and evaluation of the results obtained in the pilot restoration sites, and reproduction of plants for forest restoration"

- Field activities in selected sites to monitor forest restoration through the use of artificial perches and isolated trees have been recently concluded
- Two manuals for forest restoration are now available from ITTO's project search
- Courses and workshops have been conducted; a final workshop with local communities is schedule before project completion (end of August 2016).

- Two dissemination videos are now available.

Output 7: “An agreed proposal and operational strategies for its implementation by local users, relevant government authorities and NGOs with experience in the payment of the environmental services evaluated”

- The EA has been working with local stakeholders during the research activities, who have provided feedback to refine outputs.
- Training for governmental authorities at federal and state levels were carried out in June 2015 and May 2016 with the attendance of high level officials from sectors involved in the protection, management and use of natural resources (water, biodiversity, forest management and natural protected areas), as well as NGOs. The quality of the research was praised by the officials, in particular INECC (National Institute of Ecology and Climate Change) which expressed interest in getting all the data generated by the project for a national decree on water reservoirs, stating the value of the project in generating a useful baseline. CONAFOR (National Forestry Agency) stated that the project is valuable as it reinforces the need to associate PES to productive projects. Furthermore, all governmental organizations agreed on the value of sharing the information of the project, in particular in RAMSAR sites, where Mexico has international obligations.

Achievements, impacts and lessons learned:

As of 30 June 2016, the following products and outreach material have been produced in Spanish, (English versions are available only if indicated). These products match against the means of verification stated in the project document, and the project can be considered as technically completed. All materials give proper recognition to ITTO. Completed products are available at ITTO's project search at http://www.itto.int/project_search and through ITTO's You Tube channel (in the case of videos) at <https://www.youtube.com/user/ittosfm>:

- 02 Videos that summarize the outputs of the project:
 - Environmental services of Veracruz's coastal forest
 - What's connectivity?
- 06 Publications:
 - Environmental services of Veracruz's coastal forest (in printing process)
 - Description of Veracruz's wetlands and flooded forest (in printing process)
 - 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 (already published)
 - Manual on medicinal plants (already published)
 - Comic on environmental services “the spirit of the tropic” (already published)
- 28 Maps of the environmental services in four regions of Veracruz (already published)
- 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
- 08 Papers published on scientific journals:
 - 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 *Sagittaria laciniifolia* 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

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).

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

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. 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".

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. It is desirable that presentation of results may take place at higher levels within the government as that can have a higher impact for future action.

Capacity building for developing REDD+ activities in the context of sustainable forest management

Project number:	RED-PD 038/11 Rev.3 (F)	
Project country:	Myanmar	
Budget:	Total:	US\$ 645,692
	ITTO Contribution:	US\$ 571,890
	Government of Myanmar	US\$ 73,802
Submitted by:	Government of Myanmar	
Implementing agency:	Forest Department/Forest Research Institute. Ministry of Environmental Conservation and Forestry (MOECA), Myanmar.	
Duration:	36 months	
Financed at:	REDD+ 3 rd Cycle (2011)	
Status:	Completed	

Summary:

Forests in Myanmar have contributed to the provision of abundant benefits to local, regional and global communities especially in reducing Green House Gas (GHG) emissions and enhancing forest carbon stocks and environmental services. The Toungoo District in the Bago Yoma region of Myanmar is approximately 1,064,939 ha and it will be used as project site. Implementation on Reducing Emissions from Deforestation and forest Degradation and Enhancing Forest Carbon Stocks (REDD-plus) through sustainable forest management requires understanding and participation by all stakeholders. As the concept and methodologies of REDD-plus are new to Myanmar, capacity building and awareness raising for all levels of stakeholders are of crucial importance, and urgently needed. Accordingly, the development objective of this project is to contribute to sustainable forest management in the Bago Yoma region to improve the provision of environmental services and reduce GHG emissions from deforestation and degradation and enhancement of carbon stocks. The specific objective of the project is to strengthen the capacity of the Ministry of Forestry in REDD-plus initiatives. The expected outputs are: (i) REDD-plus national strategies prepared, (ii) Institutional setting for capacity building on REDD-plus strengthened and (iii) Capacity built to conduct MRV of the carbon stock.

Progress:

The project was approved and financed under the REDD+ 1st Cycle 2011. After the conclusion of the necessary administrative arrangements including the project agreement, the Executing Agency commenced the project in October 2012. The project implementation was extended to increase the achievement of the project until June 2016 without additional funds. In accordance with the project document, the Executing Agency has completed all project activities and submitted the project completion report, technical report and financial audit report in August 2016.

The main activities carried out in relation to the three outputs include the following:

Output 1 REDD-plus national strategy prepared

- Major drivers of deforestation and forest degradation were identified and draft national strategies for reforestation and forest degradation formulated and published.
- C&I for REDD+ Social and Environmental Safeguards (in English and in Myanmar) developed and published.
- REDD+ Readiness Roadmap was developed with support of UN-REDD Programme.

Output 2 Institutional setting for capacity building on REDD-plus strengthened

- Build institutional capacity for national REDD+ strategy development through the organization of 8 technical trainings, 4 national workshops and 2 seminars as well as study tours to Vietnam and Malaysia.
- Established 3 National REDD+ Working Groups and 3 REDD+ Core Units. For the formulation of national REDD+ strategy, 25 consultation meetings (technical meetings) were held with the participation of REDD+ Core Units and National REDD+ Working Groups.

- REDD+ training modules were developed and disseminated to Forestry Training Schools under Forest Department and Myanmar Timber Enterprise
- 419 persons (including government staff and local communities) were trained on the opportunities and challenges of REDD+ various activities
- Free, prior and informed consent (FPIC) guideline was developed, published and disseminated. A training course on FPIC was held on 30 March - 3 April 2015 at Forest Research Institute, Yezin as well as on 20-29 May 2015 at the Pawlangyi Forest Camp, Paukhaung Township, Pyay District, Bago Region.

Output 3 Capacity to conduct MRV of carbon stock built

- Standard operational guidelines for National Forest Monitoring System (MRV) (in Myanmar) developed
- Guideline for forest inventory and biomass survey was prepared and published.
- REDD+ demonstration site was established in Compartments 12, 14, 18, 19, 20 of Kyaukmasin Reserved Forest, Yedashe Township
- Model Community Forest (20 household village) was re-vitalized in Yedashe Township. Demonstration on Agroforestry and Bamboo Plantation were established in Yoma public Protected Area, Yedashe Township
- Report on Forest Inventory in Yedashe and Oktwin Townships of Taungoo District (in English)
- Conducted a survey of the estimation of the above ground forest biomass, above ground forest carbon, timber volume, basal area and number of trees on the National Forest Inventory data (2013) of Taungoo Forest Division
- Reviewed the construction of Forest Emission Reference Level Levels in the project site in accordance with the Warsaw Framework on REDD+
- An extension and educational public talk about forest, climate change and efficient stove was conducted at Let Pan Kone Village, Kyo Pin Thar Village and Thine Wa Village on 10th January 2015. On 5th April 2015, another extension and public educational talk relating to forest, climate change and combatting illegal logging was conducted at Than Dadar Village, Okpho Village and Thit Poke Pin Village of Yedahse Township, Taungoo District. During the two public talks, a total of 240 efficient stoves was distributed to villagers.

Achievements, impacts and lessons learned:

As part of capacity building of key stakeholders for promotion of REDD+ in Myanmar, the Executing Agency has produced a series of REDD+ related knowledge materials, technical reports and proceedings of project's international events. These include the following:

- Newsletters (8) sets
 - 1) SFM and Multiple Function of Forest
 - 2) SFM and Climate Change Adaptation
 - 3) SFM and Biological Diversity Management
 - 4) SFM and REDD+
 - 5) SFM and Indigenous People
 - 6) SFM and Gender
 - 7) SFM and Food security and Livelihood
 - 8) SFM and Primary Forests
- REDD+ Glossary (in English and in Myanmar)
- Guidelines for Free, Prior and Informed Consent (FPIC)
- Guidelines on Destructive Measurement for Forest Biomass Estimation for Technical Staff Use (in Myanmar)
- REDD+ Manual (in Myanmar)
- Social and Environmental Safeguards (in English and in Myanmar)
- REDD+ Academy Modules (translation into Myanmar language)
- National Forest Monitoring System (in Myanmar)
- Voluntary Guidelines for SFM (ITTO Guidelines translated in Myanmar)
- Major drivers of deforestation and forest degradation (in English)
- Proceedings on International Workshop on Capacity Development of Stakeholders (December, 2013)
- Proceedings on International Workshop on REDD+ and Sustainable Land Use Management in Myanmar (December, 2014)
- Proceedings on International Workshop on REDD+, CF and Women (December 2015)

Key technical reports and materials can be found on the following:

- Facebook: REDD+ Programme in Myanmar (<https://www.facebook.com/redd.psd.fd.moecaf/>)
- Website: Forest Department (<http://www.fdmocaf.gov.mm/eng/>)
- Blog: reddteammyanmar (<http://reddmyanmar.blogspot.com/>)

This ITTO REDD+ Capacity Building project is a pioneer in Myanmar and initiated several activities for the readiness of REDD+ in Myanmar. Awareness about REDD+ has been improved among line Ministries, NGOs, local communities in the project site and relevant stakeholders. In collaboration with UN-REDD Programme, the project staff members facilitated the series of stakeholder consultation meetings, and consultation meetings in States and Regions including National Validation Workshop on REDD+ Readiness Roadmap. As a result, the national REDD+ Readiness Roadmap was adopted in June 2013. Key outcomes of the project were presented at a side event on REDD+ within INDCs: Governance lessons learnt from community forest management in tropics which was held at 1 December 2015 at UNFCCC COP 21 in Paris, France.

With the various initiatives and supports of the project, the REDD+ Readiness will be going on after the completion of the project. Particularly, continued efforts will be made for the implementation of national strategies, improvement of the national forest monitoring system, setting up forest emission reference level/forest reference level and implementation of the safeguard information system. Multi-stakeholder coordination mechanism will also be working for the REDD+ readiness since national level working groups were formally established with the facilitation of the project. Local communities will continue to participate in forest conservation activities since their livelihood activities are linked to community forestry and SFM activities. It would be important for the Executing Agency, Forest Department of Myanmar to mobilize resources necessary for the successful implementation of the REDD+ Readiness through strengthening REDD+ technical working group and further institutionalization of REDD+ for long run.

Rehabilitation and restoration of residual forests and arid savannah lands in the Akpé and Akama valleys

Project number:	RED-PD 031/11 Rev.1 (F)	
Project country:	Togo	
Budget:	Total:	US\$ 773,349
	ITTO Contribution:	US\$ 478,894
	Government of Togo	US\$ 294,455
Submitted by:	Government of Togo	
Implementing agency:	Office de Développement et d'Exploitation des Forêts	
Duration:	36 months	
Financed at:	REDDDES 3 rd Cycle (2011)	
Status:	Completed	

Summary:

The project is the result of pre-project PPD 7/98 Rev. 2 (F) and simultaneously aims to implement the rehabilitation and restoration of residual forests and the conversion of arid savannah lands in the Akposso-Akébou landscape for timber production with the involvement of local communities in order to improve the socio-economic conditions of local communities.

It provides for the enrichment planting of natural forests (200 ha), agro-forestry lots (50 ha), gallery forests (50 ha) and the establishment of 300-ha new forest plantations. To secure the sustainability of this rehabilitation: i) a co-ordination mechanism will be established between stakeholders; ii) local communities will be effectively trained in participatory management; iii) and most of all, a management plan will be established and implemented by a management unit to be created.

Progress:

a) Administrative aspects:

The Project Agreement regulating the implementation of the project was duly signed on 12 January 2012. An Inception Report and related first Yearly Plan of Operation were submitted on 21 January 2012 and approved. The project implementation began with the disbursement of the first installment of ITTO TP funds on 01 February 2012. The ITTO budget modification was approved in June 2014 in order to increase social-related actions for the benefit of local communities involved in the project implementation.

However, for this 36-month project, as an acceptable version of the project completion report was received in July 2016, the project operation period had lasted 53 months instead of 36 initially designed by the implementing agency (ODEF). 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, could be summarized as follows:

Output 1: Stakeholders' coordination mechanism established

- Advocacy work towards project stakeholders to promote the objectives of the project was achieved through the sensitization campaigns in Bato and Alaoussou villages located in Akebou and Amou Prefectures, for the rehabilitation and restoration of degraded forest lands and savannas.
- Collaboration agreements between stakeholders were signed by representatives of key stakeholders, including local communities involved in the project implementation, in order to insure a smooth participation of stakeholders in Alaoussou and Bato villages.
- A stakeholders' advisory committee was established, after a consultation process that had involved

representatives of key stakeholders, in order to be used as a special structure providing appropriate guidance dealing with forest restoration/rehabilitation activities in Bato and Alaouso villages, in Togo.

Output 2: The communities have the capacities required for rehabilitating ecosystems

- 200 hectares of degraded forest lands had been reforested with four species (*Khaya grandifolia*, *Khaya senegalensis*, *Terminalia superba* and *Cedrela odorata*) using the enrichment silviculture techniques;
- 128 hectares of agroforestry plantations had been established with one species (*Tectona grandis*) at the request of local communities involved in the project implementation;
- 10 hectares of degraded natural forest plots had been enriched with four species (*Khaya grandifolia*, *Khaya senegalensis*, *Terminalia superba* and *Cedrela odorata*);
- 303 hectares of savannas lands had been reforested with three species (*Khaya senegalensis*, *Tectona grandis* and *Gmelina arborea*) using the taungya agroforestry system, at the request of local communities involved in the project implementation;
- Two water pools, with a capacity of storage of 25,000m³, were built in Bato and Alaouso villages for the production of seedlings and also for agriculture activities (production of crops), as permanent sources of water even during the dry season; and
- Two nurseries were established and operational in Alaouso and Bato villages, where 106,660 seedlings and 370,680 seedlings had been produced respectively, for the abovementioned rehabilitation tasks, with the participation of local communities.

Output 3: Forest resources management plan developed and implemented

- Local communities were trained on the participatory and sustainable forest resources management practices through the holding of a series of workshops and meetings dealing with the participatory approach for the sustainable management of forest resources in areas around both villages (Alaouso and Bato); and
- Key stakeholders, including local communities, were involved in the preparation of a management plan of forest resources for Alaouso and Bato villages. Both management plans were approved by the Government of Togo with the aim to ensure a participatory and sustainable management of forest resources in the project target area around the Alaouso and Bato villages.

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:

- Bush fire control and rehabilitation of degraded lands (forests and savannas) had been considered as part of priorities for local communities in Bato and Alaouso villages, because of good sensitization campaigns undertaken by the project team in consultation with selected local leaders gathered in the Stakeholders' Advisory Committee (SAC);
- Local communities have got the technical capacity for the production of forest seedlings through the establishment and management of two nurseries in Alaouso and Bato villages;
- Agriculture activities, in particular food crops production, have been stimulated in both villages due to the permanent availability of water provided by two water pools built by the project;
- The access to Bato and Alaouso villages was facilitated by the work of profiling/repairing 19 km of a dirt road leading to both villages. The project executing agency was able to mobilize the governmental counterpart funds for the abovementioned road-related works;
- The establishment of SAC contributed to the participation of stakeholders for a smooth implementation of this project.

Reducing deforestation and forest degradation in the Natchambonga and Djijega community forests by promoting participatory forest management actions

Project number:	RED-SPD 092/12 Rev.1 (F)	
Project country:	Togo	
Budget:	Total:	US\$ 290,377
	ITTO Contribution:	US\$ 149,904
	Government of Togo:	US\$ 140,473
Submitted by:	Government of Togo	
Implementing agency:	Water and Forest Authority	
Duration:	24 months	
Financed at:	REDDDES 4 th Cycle (2012)	
Status:	Completed	

Summary:

The project aims to contribute to the restoration and rehabilitation of the Natchambonga and Djijega forests to ensure the value-added development of environmental services and to improve the livelihoods of people in the savannah region of Togo. It will reduce unplanned deforestation and forest degradation for the benefit of local communities. Project activities aim to establish 50 ha of grazing pastures, 100 ha of fuel wood plantations; to redefine transhumance corridors (for seasonal movement) through stakeholders' consensus; to establish 10 reservoirs; to support forest protection; to improve charcoal production technology; to improve agricultural practices; to conduct extension work and raise awareness of regulations; to train stakeholders in SFM/SLM techniques; to train 50 stakeholders in GHG evaluation; and to train and equip local forest management committees.

Progress:

a) Administrative aspects:

The Project Agreement regulating the implementation of this small project was duly signed on 31 January 2013. An Inception Report and related Detailed Work Plan were submitted and approved by the ITTO Secretariat. The project implementation began with the disbursement of the first installment of TP funds in April 2013. However, for this 24-month project, as an acceptable version of the project completion report was received in June 2016, the project operation period had lasted 38 months instead of 24 initially designed by the implementing agency (Water and Forest Directorate). 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, could be summarized as follows:

Output 1: The land-use allocation process is improved through the rehabilitation of 150 ha of degraded forests

- 70 ha had been planted along the identified and demarcated transhumance corridors with the following species: *Leucaena leucocephala*, *Peltophorum ferrugineum* and *Albizia lebbeck*. The aim was to provide grazing pastures for livestock farmers and transhumant herders in order to contribute to mitigating conflicts generated by the destruction/degradation of forest lands and food crops by cattle during the transhumance period;
- 103 ha of forest plantations (for fuelwood) had been established by local communities with the following tree species: *Azadirachta indica*, *Senna siamea*, *Eucalyptus camaldulensis*, *Tamarindus indica*, *Vitellaria paradoxa*, *Parkia biglobosa* and *Khaya senegalensis*;
- 8.6 km of transhumance corridors had been identified, demarcated and established through a consensus and participatory process involving relevant stakeholders;

- 2 main water wells were established near the sites selected for the establishment of nurseries for the production of forest seedlings in Natchambonga and Djiyega villages, while 8 water reservoirs were established along the transhumance corridors near five villages (Boumbouaka, Dapaong, Kountouare, Gniampoule and Bouldjoare). These water wells and reservoirs had been supervised by local water management committee established in each village.

Output 2: Natural resources are sustainably used by organizing farmers and charcoal producers, and putting in place local committees

- Fire prevention activities had been carried out by local communities with the surveillance groups established in villages involved in the project implementation;
- Training workshops had been organized for the dissemination and extension of improved techniques for charcoal production in the target project area, as well as for the promotion of the utilization of improved wood stoves, at the request some local communities.

Output 3: Technical and managerial capacities are enhanced through capacity training on charcoal production techniques

- Training workshops and meetings were conducted by the NGO called RAFIA for the extension and dissemination works aiming to raise awareness on the forest-related regulations at national and local levels.
- Training activities were carried out by the same NGO, RAFIA, on key aspects regarding the sustainable forest management (SFM) and sustainable landscape management (SLM) techniques, for local communities involved in the project implementation.

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:

- Sensitization campaigns of local communities had led to their participation in the project implementation for selected activities dealing with the rehabilitation of forests and landscape degraded because human activities (bush fire for slash and burn agriculture, charcoal and fuelwood, etc.), in Natchambonga and Djiyega villages.
- Frequent conflicts (due to the destruction/degradation of forest lands and food crops by cattle during the transhumance period) between settled populations and nomadic communities had been mitigated by the appropriate redefinition and improvement of transhumance corridors (used for seasonal movement of domestic animals searching for grazing areas).
- Both the Natchambonga and Djigeya forests had been selected for the process leading to the creation of the two first community forests in Togo, thanks to the results and findings of the implementation of this project.
- Various local committees (for forest management, water and fire control) had been established in villages involved in the project implementation.
- The permanent availability of water near villages had been considered par local communities as an opportunity to undertake some income generating activities (production of gardening products and food crops), even during the dry season. That had been also a good opportunity for the improvement of the livelihood of local communities.

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	
Implementing agency:	ANAFOR	
Duration:	10 months	
Financed at:	TMT 5 th Cycle (2015)	
Status:	Ongoing	

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 has been approved under the 5th TMT Cycle (2015). The project agreement has been signed on 6 July 2015 and the project is ongoing. 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 has prevented the disbursement of the final instalment of project funds which has prevented completion of the project as scheduled.

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. Terms of reference for the three studies 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. The studies related to the revision of the volume base tariff and processing coefficient will be 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 February 2016 with the aim to validate the reports produced by the experts.

Achievements, impacts and lessons learned:

The Assamela Dbase has been developed and several users trained, however full development of the database

to monitor production and trade of assamela and completion of the studies mentioned above will depend on the provision of the final installment of project funds.

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
Submitted by:	Government of China	
Implementing agency:	Research Institute of Forestry Policy and Information, Chinese Academy of Forestry (RIFPI/CAF)	
Duration:	18 months	
Financed at:	TMT 5 th Cycle (2015)	
Status:	Ongoing	

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 have been carried out:

- Collecting and procuring trade data about the species on the CITES list. The data mainly comes from China Customs and CITES dataset. The HS involved include: 44039930, 44039950, 44079910, 44079500, 44072990 and ect.;
- Identifying commercial timbers included in CITES Appendices which are imported and utilized by SMEs;
- Interviewing the director of Multilateral division of the International Cooperation Department in SFA to get overall information and deeply understand the relation between Chinese forestry and CITES;
- Arranging to interview the related experts and entrepreneurs. These experts include the director of Endangered Species Management Office, the scholar of research institute of wood industry, Chinese Academy of Forestry;
- Analyzing the impact of CITES implementation on the import and export of rosewood, and some important conclusions are realized;
- Drafting the report "Analysis of trends and impact on China's timber trade of commercial timbers included in CITES";
- Establishing a CITES Wechat mobile webpage linked to FPI Wechat mobile web. The FPI webpage, which releases the latest news about CITES to SMEs in China, has set up links to CITES website, such as <https://cites.org> and <http://www.cites.gov.cn>;
- Setting up the training group, developing a work plan in detail, and assigning tasks to members.

The first instalment of funds of US\$ 80,000 was made in September 2015. The final instalment with a balance of

US\$ 42,570 is awaiting disbursement.

Achievements, impacts and lessons learned:

This small project will analyze the impact of CITES implementation on the import and export of rosewood, which will provide 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 being drafted as main output of the project, will be disseminated to a wide range of stakeholders in Chinese timber sector.

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.

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
Submitted by:	Government of the Republic of Congo	
Implementing agency:	National Centre for Forest and Wildlife Resources Inventory and Management (CNIAF)	
Duration:	12 months	
Financed at:	TMT 5 th Cycle (2015)	
Status:	Ongoing	

Summary:

This project aims to establish a monitoring center for *P. elata* industrial use in the Republic of Congo. The expected results are: (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, (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 has been approved under the 5th TMT Cycle (2015). The project agreement has been signed on 29 June 2015 and the project is ongoing. 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 for the first time 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 Ouessou, North Congo in February 2016.

All funds have been disbursed to this project and it was due to be completed in mid-2016, however no completion or progress report had been received from Congo at the time of preparing this report.

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	
Implementing agency:	CIRAD	
Duration:	24 months	
Financed at:	TMT 3 rd Cycle (2012)	
Status:	Ongoing	

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 has started in October 2013 and despite some delays, the project is well advanced. The project is now approaching to the final stage of implementation. 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 share of added species in Tropix and written software rose to 80%;
- 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 will soon be available on the website <http://tropix.cirad.fr/>.
- Proofreading of technical descriptions of the Atlas essences: Before the construction of the model that will prove to be the final stage before production of the Atlas, it was decided to start proofreading of technical documents. This will have only one reading of this model before printing.

The first installment of funds of US\$ 70,000 was made in October 2013. The final installment with a balance of US\$ 57,808 is pending funding.

In accordance with the suspension of ITTO funding, CIRAD, the Executing Agency of the project submitted a proposal for the minor modifications of the project outcomes and budget with a view to completing the project within the received funds and minimize the impact on the achievements of project objectives. However, as the cost for the delivery of the electronic version of English version of the Atlas has been committed to collaborating agency, the EA is expecting a disbursement of funds of US\$ 20,700 from ITTO for the finalization of the project. As the project is in the very final stages, the request should receive due consideration.

Achievements, impacts and lessons learned:

The project is being built to its full extent and suggests a final product, the Atlas of tropical wood, which will be a 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 is highly anticipated and a number of these operators have already 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 has to be high for the Atlas to be useful and the project team will continue to work for a product of international standard that will be universally recognized. The number of species described in the Atlas has been increased from initially 290 species to 330 species because it was considered of major interest to cover a wider range tropical species involved in regular trade.

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		
Implementing agency:	Ghana Timber Millers Organization (GTMO)		
Duration:	24 months		
Financed at:	TMT 3 rd Cycle (2012)		
Status:	Ongoing		

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.

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

Progress:

- The technical activities under this project have been completed and the Executing Agency has submitted the completion report in August 2016. The project Executing Agency still needs to submit the final financial audit report for the project closure.

Achievements, impacts and lessons learned:

The website for an online timber marketplace has been designed and developed. The design of 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. The marketing training will enhance the ability of companies to craft effective marketing strategies. The translation of the website into French has been completed as far as possible. The completion report is in preparation.

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
Submitted by:	Government Ghana	
Implementing agency:	Nature and Development Foundation	
Duration:	18 months	
Financed at:	TMT 5 th Cycle (2015)	
Status:	Ongoing	

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 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 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 been approved under the 5th TMT Cycle (2015). The project agreement was signed on 27 July 2015. Within the period under reporting, activities executed included conducting a market study on *Pericopsis elata*, conducting of a habitat condition and distribution patterns of *Pericopsis elata* in the country and the development of a video documentary to aid advocacy on the species.

1) Market study

The purpose of the market survey is to establish the value chain, trade volumes and level of knowledge of the protection status of *Pericopsis elata* in Ghana. Although *Pericopsis elata* is an endangered and CITES Listed species, prior information gathered before the project development suggested that there were some trading in the domestic market and export of the species in utter disregard of the precarious conservation status of the species. To verify the authenticity of the above statement, the study was conducted in major and minor timber markets where there were high potentials of trade in the species. The study has established current statistics on trade volumes and trade chain of *Pericopsis elata*, the trade volumes versus quantities in the context of sustainability, trade regulations mechanisms instituted and their effectiveness in maintaining sustainable trade. The study also involved an assessment of the level of knowledge of market players on the protection status of the species and the required procedures in its trade.

2) Study on the habitat conditions and distribution patterns of *Pericopsis elata* in Ghana

The study sought to provide information on the distribution, population and conservation status of *Pericopsis elata* in Ghana for its sustainable management for improved trade in the species. The objectives of the study are to provide current data on the distribution, estimate plant density and wood volumes, determine the habitat conditions and describe the conservation status of the *Pericopsis elata* in Ghana. As part of the study, physical visits were made to sites (forest reserves) to have first-hand information on the habitat condition and the distribution patterns.

Another activity was to engage a media consultant to addressing the information gap on and the threat to the sustainable management of *Pericopsis elata* in Ghana by raising public awareness and interest on the species. A 10 minutes documentary on the state of *pericopsis* in Ghana has been developed. The documentary which is expected to reach 50,000 Ghanaians through national TV and other online platforms such as YouTube. The documentary is expected to encourage individuals and businesses to take action to save the species from local

extinction. It is also to inform and encourage wood consumers not to patronize *Pericopsis elata* timber sold in the domestic market.

Achievements, impacts and lessons learned:

The Project succeeded to collect more information on *Pericopsis elata* in Ghana which will contribute to raise awareness on the importance of sustaining the endangered species. The results of study on the habitat conditions and distribution patterns will help the Government to develop an action plan to manage the species.

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
Submitted by:	Collaborative Guatemala, Madagascar, Switzerland
Implementing agency:	Plant Ecological Genetics (PEG), Institute of Integrative Biology (IBZ), ETH Zurich, Switzerland
Duration:	13 months
Financed at:	TMT 5 th Cycle (2015)
Status:	Ongoing

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 has been approved under the 5th 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 will 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 have been 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 will instead be devoted to the work in Madagascar.

For Madagascar, laboratory work at the ETH Zurich (*Eidgenössische Technische Hochschule Zürich*) continued to test different protocols for DNA extraction and amplification of *Dalbergia* wood, and to increase the reference dataset. These tests were completed in March 2016. The establishment of the wood anatomy laboratory is also completed and wood anatomy work has commenced. The project will be completed on schedule by the end of 2016.

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	
Implementing agency:	Instituto Nacional de Bosques (INAB)	
Duration:	36 months (plus 10 months no-cost extension)	
Financed at:	TMT 2 nd Cycle (2011)	
Status:	Ongoing	

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 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 done in January 2013 and the last instalment was sent on November 2015. By now the project has achieved 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.sifqua.org.gt and it provides statistics on:
 - Forest cover
 - Forest management
 - Forest incentives
 - Forest health
 - Forest plantations
 - Forest fires
 - Foreign trade of forest products (timber and NTFPs)
 - Domestic trade of forest products
 - Forest enterprises
 - Forest professionals (regents, technicians, etc.)

The new portal also handles personalized queries, creates reports and graphs in an intuitive manner. SIFGUA gives proper recognition to ITTO.

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 and available at 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.

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

- The various components of forest management processes are under development, through the new systems, namely SEGEFOR (<http://segefor.inab.gob.gt/>) and SEAF-CONAP (<http://186.151.231.171/SEAF-CONAP/>).
- 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] permits, among others.
- SEGEFOR, which is managed by INAB, will automate services associated with forest harvesting, forest incentives, the National Forest Registry, applications for company bills of transport, and export permit applications for forests outside protected areas.
- Like SEINEF, both systems will issue electronic transport documentation, and this process will facilitate the automatic, real-time verification of stocks, progress in harvesting operations and on-the-road monitoring of timber shipments.
- For the completion of this output an extension without additional funds was approved until the end of November 2016.

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 (for Spanish version) and <https://www.youtube.com/watch?v=MyhZNKVYMqU> (for English version). 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” in 2016, among others. Such presentations have led to exchange of experiences with Honduras and Chile, 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 the 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 and Honduras.

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 forest-sector decision-making. 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.

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 recently completed project TFL-PD 024/10 Rev.2 (M) 'Improvement of forest law enforcement at the national level to promote forest governance in Guatemala' 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.

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	
Implementing agency:	Guyana Forestry Commission, GFC	
Duration:	18 months	
Financed at:	TMT 4 th Cycle (2013)	
Status:	Ongoing	

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 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, Bholas 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.

The project has submitted its final report which has been posted on the ITTO-CITES Programme website (www.itto.int). If the financial audit is submitted prior to the 52nd Council Session and deemed acceptable by the Secretariat, this project may be considered complete.

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.

* * *