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**REPORT ON COMPLETED PROJECTS AND PRE-PROJECTS  
IN THE FIELD OF REFORESTATION AND FOREST MANAGEMENT**



**REPORT ON COMPLETED PROJECTS\* AND PRE-PROJECTS IN THE FIELD OF  
REFORESTATION AND FOREST MANAGEMENT**

• **COMPLETED PROJECTS**

**(1) PD 62/99 Rev.3 (F) Reforestation Pilot Project for the Recovery of Degraded Areas in the Medium Rio Doce Region, State of Minas Gerais, Brazil**

Budget and Funding Sources:

Total Budget:		US\$	1,851,064
ITTO Budget:		US\$	543,892
Government of Japan:	US\$	503,892	
Government of the U.S.A.:	US\$	40,000	
IEF/MG:		US\$	1,307,172

Implementing Agency: State Forest Institute of Minas Gerais (IEF/MG)

Session of Approval: ITTC Session XXIX, November 2000, Yokohama, Japan

Starting Date and Duration: September 2004 / 48 months

Approved Revised Date of Project Completion: First extension until September 2009 (CRFXLII)  
Second extension until March 2011 (CRFXLIII)  
Third extension until March 2012 (NOL F.11-0152)

**I. Introduction**

The Council approved this project at its Twenty-seventh Session in November 1999 in Yokohama, Japan. The Agreement regulating the implementation of the project was signed in February 2003. Upon submission of the first Yearly Plan of Operations and a notification from the Executing Agency that the project was ready to start, the Secretariat disbursed the first installment of funds in September 2004.

The project was scheduled to be executed in 48 months, but due to the difficulties faced over time, the actual execution lasted for 102 months. During this period, three extensions of time were approved by ITTO, the first until September 2009, the second until March 2011 and the third until March 2012. From 2011 on, the resources used for the execution of activities were undertaken by the State Forestry Institute, with the intent to fully comply with the work plan, valuing the partnership assumed by ITTO.

At its 47th session the committee noted that the latest progress report received for this project only covered the implementation of its activities until March 2013. It further stated that all activities but one have been completed, but the description of these were lacking, and so were the technical reports, workshop aide memoirs and other means of verification, such as manuals, publications, maps, pamphlets, videos, etc. Moreover, it further observed that the project was slated to have been completed in March 2012 but had continued intermittently until March 2013, when it came to a halt, with no further progress reports or a request for an extension in time having been submitted to the Secretariat since then.

At that same session, the Committee further observed that the 2010-2011 audited report had been the latest one submitted to the Secretariat, and that this report stated that the expenditures were only executed up to December 31, 2010, not having incurred in any expenses during the year 2011. Also, the unspent amount of ITTO funds with the EA as at 31 December 2011 was reported as approximately US\$55,000. In addition, ITTO was also still withholding the originally programmed 8th and last disbursement for an additional US\$ 50,000. The Committee also took note that the Executing Agency, The State Forest Institute of Minas Gerais (IEF/MG), had requested the Secretariat to consider this project as completed, but had not submitted the required completion report, technical reports and other means of verification to the ITTO Secretariat.

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\*Including financial audit

Additionally, it also noted at that time that the final financial audit report was also pending, and taking into account the financial audit report for 2010-2011, there also was still approximately US\$ 50,000 unaccounted for that needed to be reimbursed to ITTO if the project was deemed as completed. In addition, the Executing Agency also needed to submit an official notification relinquishing the project's last disbursement from ITTO in the amount of US\$ 50,000, in order for the Secretariat to be able to reimburse all the remaining funds to the original donors, as per ITTO procedures.

Based on the aforementioned facts, the Committee may recall that at its 47th session in Libreville, Gabon in 2013, it had recommended an independent mid-term evaluation be carried out to assess what had been achieved, and further provide unanimous recommendations on the actions needed in order to either continue or close the project, in accordance with ITTO's rules of procedure.

The independent mid-term evaluation took place in May 2014 in the project's area of influence and both the executive summary [CRF(XLVIII)/6] and the full report (48RFM-4) are available upon request from the Secretariat. Overall, the mid-evaluation's main recommendation was that the Executing Agency expedite the preparation and submission to the ITTO Secretariat of a proper Completion Report, a Final Financial Audit Report, an Official Notification relinquishing the ITTO last disbursement of US\$ 50,000, and finally, reimburse to ITTO the unspent amount of ITTO funds (US\$ 45,668.96 as of May 30, 2014), as per ITTO rules of procedure. Additionally, it also recommended ITTO to disseminate and make the best use of the lessons learned and experiences gained by the project and share the knowledge to promote South-South and Triangular cooperation in rehabilitation of degraded forest areas.

The Executing Agency, as per the recommendations of the mid-term evaluation, recently submitted to ITTO a proper Completion Report, a Final Financial Audit Report, an Official Notification relinquishing the ITTO last disbursement of US\$ 50,000, and reimbursed to ITTO the unspent amount of ITTO funds it had in the project account.

## **II. Project Objective**

The objective of this Project was to contribute in a cooperative manner and through the utilization of educational processes to the sustainable production of timber, promoting the recovery of degraded areas, as well as the protection and recovery of resources through the implementation of demonstrative units of technology for desirable environmental reforestation.

### **General Objective**

To contribute to the adoption of reforestation technologies with native species in degraded areas of the Rio Doce basin by disseminating to the level of rural properties, appropriate forest management practices as well as the concept of integrated and sustainable management of natural resources.

### **Specific Objective**

The implementation of reforestation pilot units in the middle region of the Rio Doce, using the technology of native forests recovery.

## **III. Project Achievements and Outputs**

Output 1: Project and its benefits scattered throughout the region through diffusion seminars and dissemination through the local means of communication.

Output 2: Rural producers motivated to implement technologies for recovering degraded forest areas, through talks and meetings, creation and strengthening of the consultative councils and field days to promote the exchange of experiences.

Output 3: Technical managers, engineers, technicians, secretaries, nursery growers and producers trained in seedling production processes, in the implementation of recommended technologies in natural forest management and other issues related to the rehabilitation of degraded areas:

- Conducting courses to train and expand the knowledge and techniques
- Implement the exchange of experiences of project technicians
- Provide easy access to information and organize the training of all interested parties

Output 4: Demonstration units implemented:

- Acquisition of office materials and field supplies
- Selection of areas and the establishment of forestry extension working program schedule

- Implementation of nurseries and seedling production
- Carrying out of plantations
- Maintenance and protection of plantations

Output 5: Monitoring and evaluation of project activities:

- Execution of a socioeconomic and environmental evaluation
- Carrying out the monitoring of areas under recovering
- Hosting workshops in the middle and end of the project

#### **IV. Outcomes and Impacts**

The project objective was achieved: 189 rural producers were engaged in the project totaling 196 pilot units established in 870 hectares in forest under recovery.

Mobilization activities were conducted in each of the project micro basins to achieve the objective. Later on, the technical team visited interested rural producers in order to identify and measure the area in need of recovery. A technical project was then prepared for recovering the area, defining the supplies and materials needed to start the activities. In the rainy season, the materials and seedlings were delivered and all the technical assistance was given to rural producers. After the implementation of recovery actions, the technician responsible for the area returned to evaluate the effectiveness of the actions and guide the rural producer on the measures necessary for the maintenance of the area in order to ensure the ecological succession. In the last year of the project, all areas were visited to evaluate the success of environmental recovery.

Despite the difficulties encountered during the project, a major advance in environmental issues in the region can be highlighted, as the record shows initially an intense practice of degradation, which has gradually been replaced by well-managed soil, mainly associated with water springs protection. At the end, there were 17 municipalities participating in the project, more than 30 partner institutions and over 1000 participants in the training courses, field days, lectures and community meetings.

With regards to public policies, the project, in alliance with the Programa Promata, (Pro Forest Program) became a pilot for the implementation of a program at the level of Minas Gerais State, initially called "Structuring Project for the Conservation of Cerrados and Atlantic Rainforest Recovery", in the period 2007-2011. Currently, period 2012-2015, it is called "Strategic Project for the Conservation and Recovery of the Atlantic Rainforest, Cerrado and Caatinga".

The projects beneficiaries participated actively throughout its execution. The rural producers, who wanted to register in the project, signed a commitment to implement all recovery actions, included protection of surrounding areas, soil preparation, planting and plantations maintenance. It is expected that direct and indirect beneficiaries of the project will use the results primarily for better managing of the land.

The rural producers who implanted pilot units on their rural properties should ensure the maintenance of the area, which was secured by the term of commitment between each owner and the State Forestry Institute.

#### **V. Lessons Learnt and sustainability**

In spite of the extensive experience of the IEF in forest fostering, always based on production forests with exotic species, the reforestation with native species, aiming natural resources conservation was a relatively new theme to the institution.

With regards to the sustainability of the project after its completion, there was a positive surprise: the State Forestry Institute, based on the project experiences has adopted the actions of recovering degraded areas and payment for environmental services as part of the public policy of the State of Minas Gerais, creating specific budgets and legislation towards that end.

The experience acquired as a result of the projects execution refers principally to the fact that other dimensions, besides environmental ones, should be considered in the process. Aspects such as social and economic factors need to be internalized from the initial stages of the project's design. It was not the case of the present project and as a consequence it was necessary to invest long time in the project's dissemination and mobilization of beneficiaries and partners, in addition to holding several adjustments in the work plan during its execution.

Another lesson learned is that the main actors involved in the project should participate in the identification and design of the project, increasing the chances of success of planned activities and minimizing the need for major changes in scope, schedule and budget of the project.

The operational issues should be studied and considered as early as the project design stage, especially when there are financial transfers to beneficiaries, in order to prevent interruption of resources flow, which generates intense demotivation.

The activity 'management of the species aroeira' was also influenced by the lack of planning. As a result, it was necessary to replace this activity, which was discussed and approved at a Steering Committee Meeting and later on in a CRF Session. The lesson learned here is that a project proposal has to take into account possible legal impediments that can prevent its execution.

The pioneering and successful project actions were incorporated into public policies and expanded to other regions, providing basis for the law and decree of payment for environmental services, and the forest incentive program of Minas Gerais State.

The projects sustainability is derived from the commitment signed by the rural producers as well as from the awareness produced in all direct and indirect beneficiaries of the project, and also through the fostering of public forest policy and payment for environmental services promoted by the State of Minas Gerais.

## **VI. Concluding Remarks**

Overall, the project has contributed towards the rehabilitation of the degraded forest lands in Minas Gerais, Brazil. As the ITTO Secretariat has received the a proper Completion Report, a Final Financial Audit Report, an Official Notification relinquishing the ITTO last disbursement of US\$ 50,000, and reimbursed ITTO the unspent amount of ITTO funds it had in the project account, this project can be reported as completed. Copies of the Completion Report and other technical documents are available either upon written request from the Secretariat or can be downloaded in digital format via the online project search engine on ITTO's website at: <http://www.itto.int>

### **(2) PD 350/05 Rev.3 (F) Production Systems and Integrated Management of Shoot-borers for the Successful Establishment of Meliaceae Plantations in the Yucatan Peninsula and Veracruz, Mexico**

#### Budget and Funding Sources:

Total Budget:		US\$	575,871
ITTO Budget:		US\$	366,271
Government of Japan:	US\$	346,271	
Government of Finland:	US\$	20,000	
Government of Mexico:		US\$	209,600

Implementing Agency: National Institute for Forestry, Agricultural and Animal Research (INIFAP)

Session of Approval: ITTC Session XL, May-June 2006, Mérida, Mexico

Starting Date and Duration: January 2007 / 36 months  
Approved Revised Date of Project Completion: First extension until July 2011 (CRFXLIII)  
Second extension until July 2012 (CRFXLV)  
Third extension until July 2013 (NOL F.12-0185)  
Fourth extension until December 2014 (NOL F.14-0127)

## **I. Introduction**

The Council approved the project during its Fortieth Session in June 2006 and full financing for its implementation was pledged at that same session. The final agreement regulating the implementation of the project was duly signed in September 2006. Upon the submission of the first Yearly Plan of Operations, the

first installment of funds was transferred in January 2007. The sixth and last disbursement was further executed in February 2013.

## **II. Project Objective**

This project aimed to achieve the sustainable production of tropical timber in Mexico through the development, implementation and transfer of technology to foresters by an integrated system for the management of pests that are currently limiting the establishment of cedar and mahogany plantations in the Mexican tropics. More specifically, it envisaged developing an integrated borer management system for young Meliaceae plantations, including silvicultural management, to enable forest producers in the Yucatan Peninsula and Veracruz to successfully establish plantations for the sustainable production of tropical timber; and further designing an operational model for the development and adoption of technologies for the management of community Meliaceae plantations with the direct participation of producers and technicians in the establishment of 12 demonstration plantations in the Yucatan Peninsula and Veracruz.

## **III. Project Achievements and Outputs**

The Project's field activities were completed in December 2014 and the overall project was reported as completed in February 2015. In accordance with the project document, all the planned activities were carried out during the project's lifespan and its achievements can be summarized by major outputs and products envisaged by the project, as follows:

### **1. Validation of direct control methods for *H. grandella* and *C. yucatanensis*, assessing their cost-effectiveness**

- Two scientific experiments were designed to study different control methods for the shoot borers *H. grandella* and *C. yucatanensis*;
- Several silvicultural trials to test the resilience of *Cedrela odorata* seedlings to pests under various conditions were established. Treatments validated during the study were based on: i) the genetic component of *Cedrela odorata* (progenies), ii) biological control (*Beauveria bassiana* and *Metarhizium fungii*), and iii) controlled treatments with organic (killNeem) and chemical (Novaluron, Cipervel, Piretroide) insecticides. Applications were carried out on a monthly basis for three years; and
- The selected trials were periodically monitored and evaluated over a period of 3 years.

### **2. Monitoring of damage and pests to collect information on the biology of Meliaceae shoot-borers in the study area**

- 12 one-hectare pest-affected plantation sites were identified in order to monitor pest damage over a wide variety geographic, climatic and soil conditions in four Mexican States: Campeche, Quintana Roo, Yucatan and Veracruz;
- Methodologies were developed to carry out some basic studies on shoot-borer biology, such as the degree of damage inflicted on plants, and its reactions to different trapping methods and environmental factors;
- The selected sites and trials were periodically monitored and evaluated over a period of 3 years.

### **3. Identification and propagation of Meliaceae borer-resistant genotypes**

- Inspection tours for the identification of resistant genotypes and selection of individuals were periodically carried out. An initial 200 trees were pre-selected in these tours and the further evaluated to finally select 46 trees considered as resistant to *H. grandella*;
- Initially cuttings from the aforementioned resistant trees were considered as the reproductive materials of choice, but as problems occurred, grafts were performed instead. Two clone banks were established: one at the El Palmar Experimental Station in Veracruz with 30 genotypes, and another at the Mococho Bacalar Experimental Station in Yucatan, with 12 genotypes;
- 46 genotypes with good growth and *H. grandella* tolerance potential have been selected: 30 at the El Palmar Experimental Station and 16 at the San Felipe Bacalar Experimental Station, and are currently subject to 3 genetic trials;
- 4,000 certified seedlings were planted at three INIFAP experimental sites in order to validate shoot-borer resistant genotypes of *Cedrela odorata*; and
- The selected sites were periodically monitored and evaluated over a period of 3 years.

#### IV. Outcomes and Impacts

The results of the project have provided producers, technicians, service providers, educational institutions, CONAFOR and federal and state authorities with a system for the integrated control of shoot borer *Hypsipyla grandella* Zeller (Lepidoptera: Pyralidae) in young plantations of *Cedrela odorata* L. (Cedar) and *Swietenia macrophylla* King. (Mahogany) that will minimize the damage caused by this pest and thus contribute to the development of cedar and mahogany plantations with the consequent contribution to the economy in Mexico.

Moreover, the Project has produced a total of 32 documents, among scientific papers, technical reports, studies, training materials and other, the 3 main ones being the following:

1. Integrated management of shoot borers in the terminal buds of *Meliaceae*,
2. Manual for the clonal propagation of cedar and mahogany through grafts, and
3. The climate as an element of prediction in the presence of *Meliaceae* shoot borers in forest plantations.

Most of the aforementioned documents have been or will be uploaded onto the ITTO website for further dissemination to all our member countries and other interested parties.

#### V. Lessons Learnt and sustainability

The main lessons learned from the implementation of the project include:

- Preliminary meetings with the various project beneficiaries to define the demands and needs of research and socialization of partial results, will improve project outcomes.
- Having trained and experienced personnel facilitated the project design, the definition of the operational strategy, and the success in achieving the project's development and specific objectives.
- Regular meetings between the actors/beneficiaries of the project to analyze and discuss the project's partial results achieved allowed avoiding deviations between the scheduled and the executed activities of the project or to further correct deviations promptly if they occurred.

In order to achieve sustainability of the project after its completion, it is important to continue with the dissemination of the acquired knowledge among all actors and beneficiaries,

#### VI. Concluding Remarks

Overall, the project has significantly contributed towards the establishment of healthy cedar and mahogany plantations via the development of proper pest control techniques, and thus creating more jobs and increasing the standard of living of the forest communities in Mexico.

As the ITTO Secretariat has received the Project Completion Report, several technical reports and the Final Financial Audit, this project can be reported as completed. Copies of the Completion Report and other technical documents are available either upon written request from the Secretariat or can be downloaded in digital format via the online project search engine on ITTO's website at: <http://www.itto.int>.

#### (3) PD 377/05 Rev.3 (F) **Development of Cloning for Samba (Obéché), West African Mahogany and Tiokoué Tree Species** (Côte d'Ivoire)

Budget and Funding Sources:

Total Budget:		US\$	648,194
ITTO Budget:		US\$	421,060
Government of Japan:	US\$	421,060	
Government of Côte d'Ivoire:		US\$	227,134

Implementing Agency: Société de Développement des Forêts (SODEFOR)

Session of Approval: ITTC Session XLI, November 2006, Yokohama, Japan



Starting Date and Duration: December 2008 / 36 months

Approved Revised Date of Project Completion: First extension: December 2012 (NOL F.12-0005)  
Second extension: June 2013 (NOL F.12-0237)

## I. Introduction

The project was approved by the Council at its Forty-first Session in Yokohama, Japan, in November 2006, and fully financed at the Forty-third Session in Yokohama, Japan, in November 2007, thanks to the generous contribution of the Government of Japan. The Agreement regulating the implementation of the project was signed on 23 June 2008 during an official visit of the Executive Director to Cote d'Ivoire. The first disbursement of ITTO funds was made in December 2008. Two project extensions were granted until July 2013, without additional ITTO funds, by the ITTO Secretariat, based on official requests including proper justification with appropriate detailed work plan and budget. However, as an acceptable version of the project completion report was received in October 2014, the project operation period had lasted 70 months instead of 36 initially designed by the implementing agency (SODEFOR). However, the project final financial audit report was submitted in March 2015 by the Executing Agency, allowing this project to be documented for the completion and closure procedures.

## II. Project Objective

The objective of the Project was « the diversification of tree plantation species in Côte d'Ivoire ». This project contributed to the establishment of a programme of cloning and seedling production technique improvement aimed at accelerating the development of *Obeche/Samba*, *West African Mahogany* and *Tiokoue* industrial plantations. Specifically, it intended to develop strategies in order to ensure a regular supply in selected and improved planting stock (*Obeche/Samba*, *West African Mahogany* and *Tiokoue*) to reforestation programmes.

## III. Project Achievements and Outputs

While reminding that the implementation of most project activities had been disturbed and delayed due to the post-election socio-political turmoil in Cote d'Ivoire from November 2010 to June 2011, the project implementation strategy had been based on the following approaches: taking into account the results of previous studies and research work on the three species used by this project (*Obeche/Samba*, *West African Mahogany* and *Tiokoue*); and establishing pilot forest plantations with the seedlings of these three species produced in the cuttings propagation centre established and operated in Téné village by SODEFOR with the involvement of selected local communities.

The main project achievements and outputs, in relation to the project implementation strategy, can be summarized in the following table:

<u>Specific Objective:</u> Developing strategies to ensure a regular supply in selected and improved planting stock (OBÉCHÉ/SAMBA, WEST AFRICAN MAHOGANY) and propagation cuttings (TIOKOUÉ) to reforestation programmes in Cote d'Ivoire.		
Expected Outputs	Indicators	Achievements
<u>Output 1:</u> Clone breeding of OBÉCHÉ/SAMBA continued	As of the second quarter of Year 1: <ul style="list-style-type: none"> <li>• “Plus trees” have been identified and mobilized</li> <li>• Clonal tests have been established</li> <li>• A parent stock arboretum has been established</li> </ul>	<ul style="list-style-type: none"> <li>• 52 superior trees (“Plus Trees”) of OBÉCHÉ/SAMBA identified for seed collection during the fruiting period</li> <li>• 4 ha established for clonal trial of OBÉCHÉ/SAMBA seedlings from “plus trees”</li> <li>• 268,239 high quality seedlings of OBÉCHÉ/SAMBA produced for reforestation purposes</li> <li>• 100 ha of OBÉCHÉ/SAMBA mixed with Teak established for forest rehabilitation purposes in two Gazetted Forests (Téné and Sangoué)</li> </ul>

<p><u>Output 2:</u> Borer-resistant genotypes of WEST AFRICAN MAHOGANY selected and cuttings produced</p>	<p>By the end of Year 2, Experimental parcels have been planted using selected clones</p>	<ul style="list-style-type: none"> <li>• 2.4 ha established for clonal trial of borer-resistant AFRICAN MAHOGANY seedlings</li> <li>• 43,270 borer-resistant seedlings of AFRICAN MAHOGANY produced for reforestation purposes <ul style="list-style-type: none"> <li>• 100 ha of AFRICAN MAHOGANY mixed with Teak established for forest rehabilitation purposes in two Gazetted Forests (Téné and Sangoué)</li> </ul> </li> </ul>
<p><u>Output 3:</u> TIOKOUE propagation by cuttings is effective</p>	<p>By the end of Year 2, experimental parcels have been planted with propagated cuttings</p>	<ul style="list-style-type: none"> <li>• 0.3-ha established for clonal trial of TIOKOUE seedlings produced in the cuttings centre of Téné village.</li> <li>• 45,988 TIOKOUE cuttings produced for reforestation purposes and also for distribution to local communities as incentives for their involvement in forest rehabilitation activities. <ul style="list-style-type: none"> <li>• 10.3 ha of TIOKOUE plantations established in collaboration with local communities</li> </ul> </li> </ul>

Seedlings production techniques, using vegetative propagation for OBÉCHÉ/SAMBA, AFRICAN MAHOGANY and TIOKOUE species, had been fully operationalized in the cuttings centre of Téné village.

#### **IV. Outcomes and Impacts**

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

- The project had contributed to make available the seedlings of high quality of OBÉCHÉ/SAMBA, AFRICAN MAHOGANY and TIOKOUE species in order to ensure a regular supply of improved planting materials produced through propagation cuttings, for the purpose of reforestation programmes in Cote d'Ivoire. The techniques promoted during the project implementation could produce significant integrated benefits including ecological, economic and social aspects;
- SODEFOR, as the national institution in charge of the implementation of national reforestation policy in Cote d'Ivoire, had become self-sufficient for the timber species seedlings production, as the project had contributed to put in place the techniques for the mass production at the cuttings centre of Téné village;
- Local communities had been involved in the operational activities of the cuttings centre of Téné village through the association called "*Cooperative Forestière de Kimoukro*" which signed a memorandum of understanding with SODEFOR, for the establishment and maintenance of nurseries by selected community members who had acquired the skill and knowledge for those purposes; and
- SODEFOR had been in contact with forestry institutions in African countries (Cameroon, Ghana, Togo, Mali, etc.) for the exchange of experience and knowledge on the techniques of propagation cuttings of OBÉCHÉ/SAMBA, AFRICAN MAHOGANY and/or TIOKOUE species.

#### **V. Lessons Learnt and sustainability**

The achievements of this project could be considered as a good opportunity for the mass production of high quality seedlings of OBÉCHÉ/SAMBA, AFRICAN MAHOGANY and/or TIOKOUE species through the techniques of vegetative propagation cuttings. Special arrangements made with local communities, through the signing of a memorandum of understanding, contributed to the smooth implementation of the project, as the responsibilities and rights of each party were clearly defined in relation to the project's objective and expected outputs.

The sustainability of main project outcomes could be ensured through the institutional arrangement between SODEFOR and the association called "*Cooperative Forestière de Kimoukro*". SODEFOR, as the national institution in charge of the implementation of the reforestation and forest management policies in Cote d'Ivoire, will continue the collaboration with this association while providing appropriate means required to regularly sustaining key project's achievements and outcomes, in Cote d'Ivoire. The members of this

association had acquired experience and skills in forest management and forest rehabilitation techniques and would, to a certain extent, be in a position to continue implementing them after the project completion.

The project's staff members, which were also SODEFOR's worker, had acquired experience and knowledge that could contribute to the sustainability of main project achievements and outputs, after the project completion. SODEFOR would continue to mobilize appropriate means for the maintenance of facilities and seeds orchards established for the mass production of high quality seedlings of OBÉCHÉ/SAMBA, AFRICAN MAHOGANY and/or TIOKOUÉ species through the techniques of vegetative propagation cuttings.

## **VI. Concluding Remarks**

As the ITTO Secretariat received the Project Completion Report, as well a satisfactory Final Financial Audit Report, the Committee may wish to declare the Project PD 377/05 Rev.3 (F) as completed. Soft copies of abovementioned reports can be made available, upon request, by the Secretariat.

### **(4) PD 419/06 Rev.3 (F) Forest Seeds Management and Conservation (Côte d'Ivoire)**

Budget and Funding Sources:

Total Budget:		US\$	1,459,510
ITTO Budget:		US\$	912,764
Government of Japan:	US\$	912,764	
Agency/GOC:		US\$	546,746

Implementing Agency: Société de Développement des Forêts (SODEFOR)

Session of Approval: ITTC Session XLIII, November 2007, Yokohama, Japan

Starting Date and Duration: December 2008 / 36 months

Approved Revised Date of Project Completion: First extension: December 2012 (NOL F.12-0006)  
Second extension: June 2013 (NOL F.12-0235)  
Third extension: December 2013 (NOL F.13-0180)

## **I. Introduction**

The project was approved by the Council at its Forty-third Session in Yokohama, Japan, in November 2007, and fully financed at the ITTO High Level Meeting in Accra, Ghana, in June 2008, thanks to the generous contribution of the Government of Japan. The Agreement regulating the implementation of the project was signed on 23 June 2008 during an official visit of the Executive Director to Cote d'Ivoire. The first disbursement of ITTO funds was made in December 2008. Three project extensions were granted until December 2013, without additional ITTO funds, by the ITTO Secretariat, based on an official request including proper justification with appropriate detailed work plan and budget. As an acceptable version of the project completion report was received in September 2014, the project operation period had lasted 69 months instead of 36 initially designed by the implementing agency (SODEFOR). However, the project final financial audit report was submitted in March 2015 by the Executing Agency, allowing this project to be documented for the completion and closure procedures.

## **II. Project Objective**

The project contributed to implement the sustainable rehabilitation of Côte d'Ivoire's forests through the development of a seed supply system having the capacity to provide high-quality products to meet the needs of the national forest rehabilitation stakeholders. Specifically, it intended to produce and supply forest seeds from planting stock of high genetic quality.

## **III. Project Achievements and Outputs**

It is important to recall that the implementation of most project activities had been disturbed and delayed due to the post-election socio-political turmoil in Cote d'Ivoire, from November 2010 to June 2011. The project implementation strategy had been based on the three following complementary thrusts: building

human and organizational capacities (skill upgrading for SODEFOR personnel by LANASEM which is the national laboratory for seedlings research-development in Cote d'Ivoire), building technical and material capacities (facilities for seed conservation and storage enhanced) and building partnership (LANASEM, farmers' cooperatives, timber industrialists, NGOs, University of Cocody, etc.). The aim of this project was to contribute to the mass production of improved quality of forest seedlings complying with international standards.

The main project achievements and outputs, in relation to the project implementation strategy, can be summarized in the following table:

<u>Specific Objective:</u> To produce and supply forest seeds from planting stock of high genetic quality		
Expected Outputs	Activities	Project Achievements
<u>Output 1:</u> 133 hectares of new seed-producing plots are installed, 174 hectares of existing seed sources are developed and 5 hectares of seed-tree orchards are created.	Activity 1.1: To establish 5 ha of seed tree orchard	2 orchards of seed trees of 2.5 ha each established in two Gazetted Forests (Téné and Sangoué)
	Activity 1.2. Selecting 242 ha of new seed-producing plots	280 ha of new seed-producing plots selected
	Activity 1.3: Developing 416 ha of seed production plots	317 ha of seed production plots established and under management.
	Activity 1.4: Establishing a database on forest seed production and management	Database on forest seed production and management operational in SODEFOR.
<u>Output 2:</u> Material capacities for seed collection, conditioning, conservation, storage, distribution and control are developed	Activity 2.1: Acquiring tools and equipment appropriate for forest seed management, collection, packaging and transport	Appropriate tools and equipment for forest seed management, collection, packaging and transportation acquired and operational, while a pick-up vehicle was purchased for the transportation of seeds collected from selected tree-plus in natural forests
	Activity 2.2: Building five 440-m <sup>2</sup> storehouses and one 50-m <sup>2</sup> seed laboratory	3 storehouses of 177-m <sup>2</sup> each (in Abidjan, Adzopé and Sangoué) and one 40-m <sup>2</sup> seed laboratory built and operational in Adzopé
	Activity 2.3: To acquire one cold chamber for forest seed conservation	One cold chamber of 8-m <sup>2</sup> for forest seed conservation operational.
<u>Output 3:</u> The persons involved in forest seed production and management activities have received adequate training in seed technologies (seed collection, conditioning, quality control and data management procedures)	Activity 3.1: To plan training programmes	Technical trainings planned and conducted for capacity building
	Activity 3.2: To organize training sessions	Executing Agency's technical personnel trained on the management of forest seedlings. Representatives of 8 villages trained on seeds collection in the natural forests
	Activity 3.3: To raise partners' awareness to the importance of using good-quality seeds	Private sector, cooperatives of farmers, local communities and forestry administration in Cote d'Ivoire sensitized on the importance of using good-quality forest seedlings

In addition to six forest species originally planned for this project (*Tectona grandis*, *Khaya ivorensis*, *Heriteria utilis*, *Cedrela odorata*, *Terminalia superba*, *Terminalia ivorensis*), three other forest species were also taken into account for the production of good-quality seedlings (*Pericopsis elata*, *Mansonia altissima* and *Gmelina arborea*).

#### **IV. Outcomes and Impacts**

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

- Availability of seedlings, for nine main forest species which were subject to conservation techniques in seed orchards established as a source seeds for the production of good-quality of forest seedlings needed for reforestation activities in Cote d'Ivoire. These nine species were selected in line with the future programmes of the National Reforestation Plan of Cote d'Ivoire;
- The operational capacity for the production of good-quality forest seedlings, required for the reforestation activities in Cote d'Ivoire, ensured by qualified personnel capable to efficiently manage the forest seedlings production;
- Interests expressed by key stakeholders, including local communities, to use good-quality forest seedlings for reforestation activities in Cote d'Ivoire;
- Capacity to control the quality of forest seeds and seedlings ensured because of the availability of the personnel of the Executing Agency appropriately trained for that purpose and through the collaboration with relevant technical institutions (LANASEM, National Centre for Research in Agronomy, University of Cocody, etc.) in Cote d'Ivoire. Key project implementing team visited the national institutions in charge of seedlings production, in Burkina Faso and Mali, for the exchange of experience; and
- SODEFOR had acquired the facilities, materials, tools and equipment appropriate for seed collection, seed processing and seed long-term conservation aiming to produce good-quality forest seedlings.

With the implementation of this project, SODEFOR had been able to supply good-quality forest seedlings required for the implementation of the project PD 419/06 Rev.3 (F)-EXT-TICAD5 Rev.1. The latter project, which is currently implemented in the Western Region of Cote d'Ivoire, intends to contribute to the rehabilitation of two Gazetted Forests (Scio and Duekoué) which had been degraded by refugees from Liberia and internal displaced people due to armed conflict in Cote d'Ivoire.

#### **V. Lessons Learnt and sustainability**

##### **5.1 Lessons learnt**

The involvement of key stakeholders (Ministry of Forestry of Cote d'Ivoire, private sector, cooperative of farmers, LANASEM, National Centre for Research in Agronomy, University of Cocody, etc.) right from the beginning of the project implementation which contributed to define their roles and responsibilities in relation to the project's objective and expected outputs. This was very crucial for the success of the project, although it was a time consuming process to involve these stakeholders when required during the project implementation. That's why the duration of the project implementation lasted 69 months instead of 36 months initially planned by the implementing agency. The training of key staff members of the project implementing team had contributed to the smooth implementation of this project, as the qualified personnel had been capable to efficiently manage the forest seedlings production process (from seeds collection to seedlings production, conservation and distribution).

##### **5.2 Project sustainability**

###### a) Institutional sustainability

Institutional sustainability was pursued through the partnership established with key stakeholders (Ministry of forestry of Cote d'Ivoire, private sector, cooperative of farmers, LANASEM, National Centre for Research in Agronomy, University of Cocody, etc.) in relation to the National reforestation Plan of Cote d'Ivoire. SODEFOR decided to create a forest seedlings production centre to be integrated in SODEFOR's organizational chart for its operationalization. The trained and qualified personnel, as well as the equipment, materials, tools and facilities acquired for the implementation of this project, had been considered as the basis for the creation of that forest seedlings production centre, as a reliable source good-quality forest seedlings for reforestation activities in Cote d'Ivoire. A feasibility study for the creation and operationalization of a forest seedlings production centre within SODEFOR was undertaken at the project completion.

b) Technical sustainability

The abovementioned partnership established with key stakeholders (Ministry of forestry of Cote d'Ivoire, private sector, cooperative of farmers, LANASEM, National Centre for Research in Agronomy, University of Cocody, etc.) was also used to train key staff members of the project implementing team in the process of producing forest seedlings. Memoranda of understanding had been signed with LANASEM, National Centre for Research in Agronomy and University of Cocody, for regular training sessions of project team members and for the technical support to the forest seedlings production centre to be established and operationalized by SODEFOR in the near future.

The institutional partnership and technical collaboration described here above could contribute the sustainability of the production of forest seedlings for the needs of stakeholders involved in the reforestation activities in Cote d'Ivoire.

## **VI. Concluding Remarks**

As the ITTO Secretariat received the Project Completion Report, as well a satisfactory Final Financial Audit Report, the Committee may wish to declare the Project PD 419/06 Rev.3 (F) as completed. Soft copies of abovementioned reports can be made available, upon request, by the Secretariat.

### **(5) PD 438/06 Rev.2 (F) Sustainable Forest Management for the Forest Production Area of the Northern and North-eastern Regions of the Department of Antioquia, Colombia**

Budget and Funding Sources:

Total Budget:		US\$	1,172,473
ITTO Budget:		US\$	547,917
Government of Japan:	US\$	412,917	
Government of USA:	US\$	135,000	
CORANTIOQUIA:		US\$	624,556

Implementing Agency: Autonomous Corporation of Central Antioquia (CORANTIOQUIA)

Session of Approval: ITTC Session XLII, May 2007, Port Moresby, PNG

Starting Date and Duration: September 2008 / 36 months

Approved Revised Date of Project Completion: First extension until May 2012 (NOL F.11-0150)  
Second extension until October 2012 (NOL F.12-0101)

## **I Introduction**

The Council approved the project during its Forty-second Session in May 2007. The final agreement regulating the implementation of the project was duly signed in July 2008. The first installment of funds was transferred in September 2008, after the submission, by the Executing Agency, of the first Yearly Plan of Operations, a request for the no-objection of the project's key personnel and a notification that implementation is about to begin, and the approval of the aforementioned by the Secretariat.

Overall, it aims to contribute towards the integrated socioeconomic development and environmental protection of the North and Northeast Regions of the Department of Antioquia. More specifically, it intends to launch a participatory forest management process to foster the rational use of production forests and environmental protection with a view to reaching a consensus-based vision among key stakeholders regarding the use and sustainable management of the Magdalena Medio Forest Reserve, MMFR. To this end, the project will develop and implement a Management Plan for the Reserve, train forest workers, forest owners, loggers, assistants and carriers, and support the strengthening of local forest organisations, as well as providing awareness-raising services regarding the advantages of forest management certification.

Since the beginning of project implementation, the existence of armed groups, displacing people from their farms and generating disorder in the region, have made it difficult to progress with the project in the Magdalena Medio Forest Reserve. This caused considerable delays in the project execution, and was the main reason for the budget neutral extension of the time, requested by the EA and agreed up on by the ITTO Secretariat.

Although the project execution was delayed, it has completed in full all its planned activities. The last one was a seminar for dissemination of project results, which was held on the 28<sup>th</sup> and 29<sup>th</sup> of October 2013, in conjunction with the last PSC meeting.

The Republic of Colombia is actively involved in initiatives that implement tools to assess progress towards sustainability, when referring to sustainable forest management. In year 2000, it promulgated the National Forestry Development Plan (PNDF) that gives elements for, among other things, the management of forest areas for wood production and the integration of the forest production chain. This plan constitutes a ruling document of the National Forest Policy until 2020. The Ministry of Environment also has a program of Biodiversity for the conservation and restoration of priority areas of forest and non-forest ecosystems in strategic eco-regions and for the protection of threatened species and of scattered occurrence.

In the Department of Antioquia, geographically located in the northwest of Colombia, there are under way interesting activities in the field of restoration of degraded forests. Therefore, the Executing Agency (EA) of this project, CORANTIOQUIA, The Autonomous Regional Corporation of Central Antioquia, (Corporación Autónoma Regional del Centro de Antioquia), with head office in Medellín, develops and promotes activities to restore degraded forest landscapes establishing plantations.

The execution zone of the project was initially thought of in the municipalities of Nechí, El Bagre, Zaragoza, Segovia and Remedios. These five municipalities belong to the subregions of Lower Rio Cauca and the Northeast Antioquia, which are identified as the CORANTIOQUIA territorial offices of Panzenú (Nechí, El Bagre and Zaragoza) and Zenufana (Remedios and Segovia). Given the magnitude of the whole territory, it became necessary to establish territorial priority of the actions, being selected the municipality of El Bagre, according to the Minutes of the first project Steering Committee, as point 6 of the Recommendations and Decisions.

El Bagre is part of the Forest Reserve Magdalena Medio (RFMM) which covers an area of 352.484 ha (Gutiérrez Moreno, 2005) of that municipality. The central problem, as diagnosed in the initial phase of the project, is that the Reserve forest management is not sustainable, mainly due to: insufficient mobilization of stakeholders, lack of a forest management plan for the integrated use of forest resources and disorderly exploitation of resources in the RFMM.

As a general observation, there exists a need to meet the regulatory standard as the Decree 1791 of 1996, which led to a limitation in principle as that decree is tied only to timber harvesting and other products. One of the advances of the project was to demonstrate the limitations of this side and the need to approach action fronts other than the timber harvesting, because most of the actions were aimed at organizing only that front.

## **II. Project Objective**

The project is based on the preparation of a participatory process of forest management for rational use of production forests in the North and Northeast areas of the Department of Antioquia, Colombia.

### **General Objective**

To contribute to the integrated socioeconomic development and environmental protection of the North and Northeast areas of the Department of Antioquia.

### **Specific Objective**

Starting a participatory forest management process for the rational use of production forests and protection of the environment in the priority area: the Magdalena Medio Forest Reserve in El Bagre, Antioquia.

### III. Project Achievements and Outputs

#### **Output 1: Stakeholders in the Magdalena Medio Forest Reserve (MMFR) are contributing to the elaboration of a consensus vision of integrated management of natural resources.**

Activities:

- Support the inter-institutional coordination: the agreement with the University of Antioquia was strengthened in order to go further in the communication process for the stakeholder's participation that propelled the Collective of Communications. Another point to deserve special mention was the formulation and diffusion of the agenda for forests and people of San Lucas. Through the holding of two virtual meetings it was advanced the Latin American Dialogue on the "conditions and opportunities for the peasantry and ethnic groups in the establishment and conservation of forests", which were attended by representatives of Mexico, Brazil (ITTO Regional Office), Guatemala, and Colombia. It is fair to say that this activity was broadly met according to the schedule.
- Organize stakeholder workshops: workshops were held in addition to community activities in order to strengthen social organizations and qualify the leading social communication competencies, management agency, participatory multipurpose cadaster, forest harvesting, general management and support to farms, family gardens etc. as fundamental components for the foundation of the local development. Efforts were articulated with local entities in conjunction with municipal administrations for monitoring the forest management process, the right to land, and the productive issues. As a whole, this activity has been essential in all actions to advance the essential results of the Project.
- To support the creation and functioning of municipal and inter-municipal advisory spaces: the maintenance of this type of space was taken as a working basic principle. It is worth of emphasize the creation of El Bagre Collective of Communications, whose blog is recommended to visit: [www.derechoalatierraelbagre.blogspot.com](http://www.derechoalatierraelbagre.blogspot.com)

#### **Output 2: The forest management plan developed and implemented.**

Activities:

- Supporting the municipal operations of subtraction of non-forest areas classified as forests, according to the Law 2<sup>nd</sup> of 1959: contact was maintained with the Colombian Institute of Rural Development, INCODER, which has renewed its interest in this process success. The Ministry of Environment and Sustainable Development has provided comments to the Plan produced under this project. To date is still pending the previous consultation of the Ministry of Interior with ethnic communities in order to execute the subtraction task. The project has provided constant support for this process, but the final decision and the speed of it do not depend on the project EA but rather on the competent authorities. The rural community of Puerto López is interested and expectant.
- Supporting the municipal operations for the legalization of private properties: the most significant is the progress of the agreement with the Program Colombia Responde (Colombia Answers Program) that executes resources of USAID cooperation. This is in partnership with the Ministry of Agriculture, the Municipality of Antioquia and INCODER in order to legalize 200 peasant farms outside the Forest Reserve and 17 rural schools, among other goals of this agreement. For the purposes of the project commitments, this target was largely fulfilled.
- Zoning RFMM and developing the Management Plan: this activity has also been completed. The work has continued with the socialization and awareness generation towards the plan, for the success of its current implementation process. In the Plan, it is made clear that the formalization is not appropriate in the context of the area of San Lucas as a part of the Magdalena Medio Forest Reserve, because the forest law establish conditions that are not attainable in that territory.
- Design a system for monitoring and evaluating the implementation of the management plan: it was executed the validation of the data with field visits to identify deforestation spots based on the analysis of the dynamics factors and the permanent ones. This activity was completed.



- Establishing project coordination and increasing the operational capacity of CORANTIOQUIA regional offices: part of the strengthening consisted in a process of communication in skills training of the communities in the Municipality of El Bagre, which was achieved through audiovisual media construction, hosted on the blog [derechoalatierraelbagre.blogspot.com](http://derechoalatierraelbagre.blogspot.com). This activity was fully achieved.

### **Output 3: Efficient forest harvesting systems adopted by most operators**

#### Activities:

- Organizing the training of the harvesting operators: This activity was executed through an agreement with the National Apprenticeship Service – SENA, for labor competency certification. To complete the expected number of skilled operators, it was started an exploratory process in rural and indigenous communities which inhabit the MMFR. A total of 181 operators were trained. A forest engineer, as a project representative, made farm visits, promoting the distribution of inputs and tools available from the project resources. This activity was fully completed.
- Designing ways to support operator's access to credit: through CORANTIOQUIA official memo number 97-8437, of July 13, 2009, it was presented the document final report on the '*Ways for credit access by harvesting operators*'. Unfortunately, they could not make use of the access to credit mainly due to the lack of communities organization and the lack of property titles.
- Support and advice in the management of 25 model farms: for the execution of this activity, property micro-plans were prepared to organize the relevant information for the families. The plans were articulated with the new production projects. The activity was completed.
- Forest Certification: it was not performed, following a recommendation made by the ITTO Expert Panel.
- Conducting a study of the potential use of NTFP: During the second half of 2012, there was a focus in strengthening and expanding this activity, especially with beekeeping. It involved 86 families in the municipalities of El Bagre, Zaragoza and Nechí. It was a success because the beekeeping generates income and is a way to encourage pollination and multiplication of plants, fruit quality and creates awareness in the communities towards pesticides and deforestation. The activity was completed.

#### **Activities in addition to the original schedule:**

1. Development of social mapping in order to identify the farms, forests and key elements for planning and development of activities.
2. Characterization, quantification and specialization of the peasant economy.
3. Study of the women contribution to the peasant economy.
4. Boost in women's participation in the forest management process.
5. Determination of the Family Farm Unit, UAF (from the Spanish name), with forestry potential for the municipality of El Bagre.
6. Inter-institutional process for updating rural cadastral data in the Municipality of El Bagre by a participatory and multipurpose cadaster.
7. Increasing visibility of the inhabitants of the territory communities in forest management.
8. Training in communicative capacities for social participation.
9. Movement Collective of Communications for Land Rights.
10. Publication of Blog: [derechoalatierraelbagre.blogspot.com](http://derechoalatierraelbagre.blogspot.com)

11. Publication of poster calendar for the Land Rights.
12. Proposed Land Rights in forest soils.
13. Proposed adjustment to Resolution 293 of 1998 on the Forest Reserve Subtraction.
14. Formulation for knowledge, assessment, preservation and sustainable use of biodiversity with the peasantry and ethnical groups.
15. Supporting the construction of the Pact for the Forests of Antioquia.
16. Supporting Enrichment Project of second growth forests with ethnic communities.
17. Beekeeping Project for peasant families and ethnic communities.
18. Agroforestry project, establishment of rubber, cocoa and *Acacia mangium* for peasant families and ethnic communities.
19. Contributing to the attainment of inter-institutional consensus for the collective reparation of the people of Puerto López as a determinant for forest management.

#### **IV. Outcomes and Impacts**

The activities described in the project were fully met. With regards to the activity 3.5 - Forest Certification, it was not developed following the ITTO Expert Panel's recommendation, reorienting resources to conducting forest inventories.

As for the Output 1, the consultation process of stakeholders interested in the MMFR (Magdalena Medio Forest Reserve) resulted in achieving a general consensus view towards the forest resources management. Thus, it was created a Collective of Communications that operates as a network of leaders in the priority area of the project. That has been one of the primary spaces of consensus and social dialogue of the project. In addition, it was set up an inter-institutional alliance with Antioquia Government, Medellin Botanical Garden, USAID Cooperation (Chemonics), National Victims Unit, Municipalities of El Bagre, Remedios and Segovia, Land Restitution Unit, Territorial Consolidation Unit, Company Colmenares del Tropico Ltd. and INCODER.

This process also includes an articulation approach between forest management and reparation for the victims of conflict, and titling processes of land to families. It also held an agreement for the formulation of the UAF (Family Agriculture Unit) with forest dimension for the Department of Antioquia. It was strengthened the agreement with the University of Antioquia to advance the communication process for the participation that boosted the Collective of Communications. Further on, it was negotiated with all interested parties, formulated and promoted The Agenda for Forests and People of San Lucas, which is a call for an inter-institutional alliance in the area of influence of the Project. Progress was made in Latin American dialogue conditions and opportunities for the peasantry and ethnicity in the establishment and conservation of forests, using two virtual encounters, which were attended by Mexico, Brazil (ITTO Regional Office), Guatemala, and Colombia. This was in partnership with the Latin American Forestry Law Network and German Cooperation represented by GIZ.

For the realization of a forest management plan, scheduled in the Output 2, it was first necessary to collect basic information for the formulation of a socioeconomic and environmental study with the communities and institutions involved. In the process of designing a monitoring and evaluation system, it was prepared a multi-temporal analysis of land cover present in the study zone, producing preliminary figures. The forest management plan was prepared and delivered to the Ministry of Environment and Sustainable Development and is part of the technical products prepared under this project.

As for establishing the project coordination and increasing the operational capacity of the territories of CORANTIOQUIA, part of strengthening consisted in a process of communication skills training in the communities of the Municipality of El Bagre and the forests of the Serrania de San Lucas (Antioquia). The formulation and management of the project is an implementation strategy of the forest management plan and to maintain the continuity of action, as it was formulated on the basis of the learning that threw the process.

The Output 3 which aimed to implement efficient forest harvesting systems adopted by most of the operators, it was reached through the working agreement with the National Learning Service – SENA, involving the training of the operators who were given job skills certification at the end of the course.

As a result of the farms management, it could work on the diversification of the agricultural production through agroforestry arrangements, tree production in nurseries that were used for various purposes such as enrichment of natural forest, agroforestry, recovery of degraded areas and small areas planted with fast growing species.

With respect to the credit access for the operators, it was organized the orienting guidelines. However, they could not access the credit lines mainly by the weakness in the communities' organization and the lack of property titles.

On the other hand, NTFP harvesting activities, especially beekeeping, were successful. They involved 86 families in the municipalities of El Bagre, Zaragoza and Nechí. This is a success case for the income generation by the activity. Moreover, it is also a way to encourage pollination and the multiplication of plants and the fruits quality improvement. The activity is also sensitive to pesticides and deforestation, providing an alert system to the communities.

## **V. Lessons learnt and sustainability**

The project had originally a focus towards the timber harvesting and the conception that the preparation of a management plan would solve the problem of the occupation and sustainable use of the MMFR as a whole. One of the main lessons learned was that this is not necessarily true. The field conditions are most complex and the possession of the land itself is a major task and there are causes of deforestation as the creation of pastures for cattle which compete with the forest harvesting. Today, due to the intense project fieldwork, it is possible to understand that the fundamental forest problem is the extractive culture of the regional economy, which is harmful for not establishing plantations, there is no sustainable use of the resources and the conservation of the forests is not properly addressed. This vision reveals that little importance is paid to forest inventories, to forest management plans and to training. In Colombia, in light of Decree 1791 of 1996, the impact a plan has is legal: it serves as a facilitator for forestry permits for timber extraction, but not always is useful for forestland rationalization.

It was noted that a plan for logging might be a misleading concept especially for the status quo of the Colombian legislation on forestry permits and wastelands, which assumes that these forests are owned by the state, and farmers do not exist or have no rights, or their right is weak. In that way, it is thought that the forest fate can be decided without consulting the peasantry although they bear dozens of years there. Efforts were made to seek a concept of integral intervention, where one of its axes would be to provide real rights to the population. Hence, the Plan as a formal act could be thought as irrelevant, since repeat formulas that have led to failure in true forest management. This is a situation to be reviewed as many people set their primary concerns in logging, when the forest crisis is really due to other factors such as the change of land use to cattle farming, the low culture of forest plantation establishment and other agroforestry practices, etc.

Therefore, project actions should focus on both sides: first, thinking how will be the establishment of forests given the precarious institutionalism and forest culture in the present situation; and second, how to act to tackle deforestation, being the action more informative and sensitive, leaving the focus of command and control repressor.

Such issues change the priority of the action: it is understood that more than acting in existing forests (initial project conception), the project should act primarily on its degraded peripheries, where forest are being cut to give space for pastures. Emphasis should be directed to strategies for silvopastures, management of natural regeneration in grasslands, agricultural areas, enrichment of degraded forests or in the process of revival, etc.

The rights issue is inevitable: without winning the hearts and consciences of the peasantry is not possible to implement forest management. This means social inclusion, strong solidarity to search the realization of the rights, among other actions that involve resources and time to work on the ground in face of the public policy.

In terms of process sustainability, the difficulty refers to the low volume of resources, although it has achieved great inter institutional and social convergence without a wide visibility of the whole process, there is strong risk to stay as an isolated experience.

With respect to operational matters, the greatest observation is that there is need of a more specialized institutionalism in the establishment and conservation of forests. In Colombia, there is a culture that divorces both aspects: there are different institutions to conserve and protect resources differing from cultivation. It can be considered a mistake not trying to bring both concepts together.

## **VI. Concluding Remarks**

It can be said that the project has achieved its objectives. The forests and forest soils of the reserves of Law 2 of 1959 derive their importance from several aspects, including its overall size in Colombia, which is around 51 million hectares, i.e., nearly half of the continental Colombia. In the reserves, several million people inhabiting, including hundreds of thousands of peasant and ethnic families. In the rural areas, there are numerous municipal and township areas. The task is twofold: to subtract from reserves the urban areas is a facet on which there is broad consensus today, so is the promotion of multiple arrangements and rights of municipal life, which are dammed nowadays. As for the rural areas of forest reserves, the task is to renovate its meaning and content. The following lines indicate those elements of redefinition and new content that forest reserves deserve.

It is generally recognized as a major problem the increasingly intense deforestation that is facing the native forests. However, the problem has two sides: the poor cultivation or the non-establishment of forests should be taken as a serious problem correlative to deforestation. The native forest protection involves establishing tree plantations in the contiguous areas where the forest was lost. Stop deforestation involves a firm policy that articulates forest protection and production. Therefore, public effort to establish forests for commercialization and industrialization should be planned largely on the areas where the native forests lost their forest cover. These would lead to productive projects there occupying the population and approaching them to the State, providing opportunities to the residents to make commitments to conservation and producing wood and other forest products, which are now only available in native forests. The joint strategy of forest conservation and its establishment in degraded forest soils is both a way to accomplish purposes related to climate change: carbon stored (CDM and other instruments) and reduced output (REDD +).

Peasant families inhabiting forest reserves and their contiguous territories have been marginalized in every right. In order to get their property titles, they have to expect that the institutions execute processes of subtraction of the reserves, which puts the peasantry in a marginal situation in face of the rights recognized to the ethnic communities. Although there is the alternative of subtraction for the land rights of peasants, it should be promoted a legal reform to recognize the compatibility between the land rights of rural families and the existence of the forest reserve, without the subtraction. Who has recognized their rights, it can be asked duties. That's why in order to get out of the marginality which are in the forests nowadays, there should also be the work on the removal of the marginalization of those who inhabit the reserves for decades. Reducing forest reserves for subtraction the areas for the peasantry, can be taken as a bad sign in terms of conservation.

Favoring a partnership approach and solidarity with the rural and ethnic population of the national forest reserves is a successful condition for the increase of forests and overcoming of deforestation. This population, which has suffered many waves of armed conflict, constitutes a considerable part of the victim's population in Colombia today that have a right to full compensation. In this context, forest reserves are one of the biggest stages of the integral reparation that must be carried out in Colombia. Thus, collective reparation with reconstructive dimension of the social environment, natural, institutional and productive, has become a great opportunity to inter-institutional and social convergence for forests and those who inhabit them.

The current time is ripe to rethink the criteria with which are being worked the relationship between forests and people. The current context of peace building in Colombia requires clarity of initiatives of what to do with the forest reserves. For many years, they are territory under dissolution, elusive to peace, institutionalism, rights and conservation. To change this situation, which is an evident demand for peace building, the above proposals are inputs that only a broad social alliance and inter-institutional can perform. Such is the commitment of the Agenda for the Forests and the People of San Lucas.

As the ITTO Secretariat has received the Project Completion Report, several Technical Reports and other products, as well as the Final Financial Audit Report, the project can be reported as completed. Technical documents and other products are available from the Executing Agency and Secretariat upon written request, and most can also be downloaded from the ITTO website.

**(6) PD 519/08 Rev.1 (F) Tropical Forest Conservation for Reducing Emissions from Deforestation and Enhancing Carbon Stocks in Meru Betiri National Park, Indonesia**

Budget and Funding Sources:

Total Budget:		US\$	973,388
ITTO Budget:		US\$	814,590
7&i Holdings Co. Ltd (Japan):	US\$	814,590	
Government of Indonesia:		US\$	158,798
Implementing Agency:	Forestry Research and Development Agency (FORDA), Ministry of Forestry, Indonesia		
Session of Approval:	Spring 2009		
Starting Date and Duration:	January 2010 / 48 months		
Approved Revised Date of Project Completion	First Extension until December 2014 (NOL Ref No. F.13-0194) Second Extension until April 2015 (NOL Ref No. F-14-0200)		

**I. Introduction**

The project was approved under the Spring 2009 Project Cycle and full financing was made by 7&i Holdings Co. Ltd (Japan). The agreement regulating the implementation of the project was duly signed on 8 October 2009. The duration of the project implementation had been extended twice, the first until the end of December 2014 and the second until the end of April 2015 in order to fully achieve the project objectives without additional funds.

**II. Project Objective**

The Meru Betiri National Park (MBNP) is located in the southern part of East Java and has a total area of approximately 58,000 ha, rich in biological diversity across the landscape consisting of several vegetation types, such as highland vegetation, lowland and coastal vegetation, swamp and mangrove. However, the MBNP had faced weak institutional and human resource capacity for effective management of biodiversity and ecosystem services and limited community participation.

The development objective of the project was to contribute to reducing emissions from deforestation and forest degradation and to enhancing forest carbon stocks through enhanced community participation in conservation and management of the Meru Betiri National Park (MBNP) as an integral part of the larger landscape in which they live. Specifically, the project intended to (i) improve the livelihoods of local communities living inside and in the surrounding area of MBNP through participation in avoiding deforestation, degradation and biodiversity loss and (ii) develop a credible measurable, reportable and verifiable system for monitoring emission reductions from deforestation and forest degradation and enhancement of forest carbon stocks in MBNP.

**III. Project Achievements and Outputs**

In accordance with the outputs specified in the project document, the main achievements and outputs produced by the project are summarized as follows:

**Output 1.1 Community participation in conservation improved**

- A social-economic survey was carried out for 12 villages including 8 villages located in Jember district, and 4 villages in Banyuwangi district surrounding MBNP.
- An assessment of the potential of financing for REDD+ and benefit sharing mechanisms in MBNP was conducted. A series of stakeholders' consultations to identify the most viable REDD+ scheme in MBNP were conducted.
- Workshop on implementation of REDD+ in Meru Betiri National Park was held at IPB International Convention Center, Bogor in 2013 with participation of key stakeholders.

**Output 1.2 Alternatives source of income to improve the livelihood of local communities living inside and in the surrounding area of Meru Betiri National Park (MBNP) developed**

- Mapping of agroforestry types in the rehabilitation zone of MBNP for Curahnongko village was carried out. A MOU between community groups in Curahnongko village and MBNP had been prepared in a lengthy consultation and signed to support the assurance of legal aspects for the community to utilize the rehabilitation zone (around 4,000 ha).
- Forest rehabilitation had been taken place in the rehabilitation zone. Seedlings had been provided not only from the project but also from a separate CSR programme of 7&i Holdings Co. Ltd and MBNP office.
- Skills for the cultivation of oyster mushroom had been trained for 20 farmers in Curahnongk village with the support of the Faculty of Agriculture, University of Jember. Autoclave equipment and gas stove were provided by the project.

**Output 1.3 Illegal logging and forest encroachment reduced and reported**

- A series of awareness raising activities had been undertaken for stakeholders involving community leaders including women groups, police, forestry officials, local NGO, Perhutani (State Forestry Company), and parliament members.
- Protection training had been undertaken twice by providing improved skills for investigation technique; forestry extension technique; information on fauna protection; management and policy of MBNP; and climate change issues.
- Data of forest disturbances such as illegal logging, forest encroachment and illegal wildlife hunting were collected.

**Output 2.1 Capacity in resource base inventory and carbon accounting improved in measurable, reportable and verifiable form**

- After a review of the existing methodologies of resource base inventory for carbon accounting, standard operation procedures for field measurement had been produced. These include resource base inventory, carbon accounting and biodiversity assessment to support REDD+.
- Two training workshops on resource base inventory for related stakeholders were conducted with the support of a team of the Faculty of Agriculture, Brawijaya University led by Prof. Kurniatun Hairiah in order to measure forest carbon stocks based on the IPCC guidelines for carbon assessment.

**Output 2.2 Report on comprehensive baseline data and estimation of emission reduction and carbon enhancement of the national park prepared**

- A remote sensing analysis on landcover mapping of MBNP was conducted by Jember University and FORDA based on 6 land categories of IPCC GL 2006 - AFOLU.
- 40 Permanent Sample Plots (PSPs) were designed and established. Measurement of five carbon pools within the PSP was carried out. The survey shows that primary forest contains an average of 135 ton/ha while secondary forest storing an average of 167 ton/ha. Estimation of annual rate of forest conversion to other land uses for the period of 1997-2010 that was 2,802 ha.
- Net emissions reductions and enhancement of carbon stocks in MBNP were estimated to prepare Project Document of VCS by applying its methodology of VM-0015 (Avoid unplanned deforestation). The Project Document was then pre-validated by an official validator. However, carbon benefits from deforestation of MBNP were very small.

**OUTPUT 2.3: System for monitoring emission reduction and enhancement of carbon stocks established and validated**

- An assessment to establish institutional arrangements for carbon monitoring in MBNP was conducted. For monitoring forest carbon stock, hierarchical levels and specialized units and positions within the organization of MBNP were identified with ways to enhance the local community participation in monitoring carbon stocks.
- Measures to enhance the sustainable emissions reductions and enhancement of carbon stocks in MBNP were identified. In order to address the illegal harvest of timber and non-timber forest products from MBNP, local forest law enforcement strategies were highlighted.

#### **IV. Outcomes and Impacts**

The main outcomes and impacts of the project attaining its specific and development objectives are summarized in the following points:

- The project had enabled MBNP to improve its management plans for conservation of biodiversity and ecosystems, including MRV systems to reduce emissions from forest degradation and to increase the conservation and enhancement of carbon stocks;
- Effective involvement of the local community in MBNP had been explored in relation with the design and implementation of REDD+ and MRV for carbon accounting. Through the MoU between the local community and MBNP, the community has been given right to access the rehabilitation zone of MBNP. Forest rehabilitation of the rehabilitation zone is a way to enhance the carbon stocks in the context of REDD+ with active engagement of women groups;
- Monitoring and estimating CO<sub>2</sub> emissions from forest degradation and carbon enhancement become an important element for the future management of MBNP in line with possible incentives of REDD+. The establishment of 40 permanent sample plots (PSP) in MBNP has contributed to improved monitoring and reporting of forest carbon stocks and biodiversity; and
- REDD+ in MBNP that represents conservation area in Indonesia has been disseminated through availability of some published materials including technical reports, technical guidance, brief info, video, and web <http://www.puspijak.org>.

In the context of promoting REDD+ demonstration activities in Indonesia, efforts by the Executing Agency have produced the following impacts:

- Support from the national government (Ministry of Forestry) was encouraging as the project in Meru Betiri National Park has been officially registered as one of the REDD+ demonstration activities in the country;
- The project's community development work became a significant part of the social forestry programme of MBNP. Local NGO (LATIN/KAIL) has developed a program called PINTAR to provide incentives to the community who has made conservation efforts with plantations. The program has get support from local Indonesia private companies. In addition, the local NGO (LATIN/KAIL) of the Indonesian PES Community Consortium has prepared a Plan Vivo Project Idea Note (PIN) titled "Local Community Participation for Enhancement of Carbon Stock in Meru Betiri National Park";
- The project's achievements were frequently reported or quoted in local and overseas meetings, conferences and seminars, and were used to report on the progress of the REDD+ demonstration activities. Scientific studies on REDD+ in MBNP have been proceeded by many institutions including Indonesia University (UI), Bogor Agricultural University (IPB), Birmingham University, Korea University, and United Nations University (Tokyo); and
- The project had become well known among many stakeholders in the country as a model of Public-Private Partnership with the support of 7&i Holdings Co. Ltd (Japan).

#### **V. Lessons Learnt and sustainability**

The project was widely recognized among the key stakeholders in the country and has achieved considerable outputs. A number of lessons emerged from the project's implementation include:

- The project correctly identified the problems facing MBNP management, namely, potential risk/damage due to illegal logging and illegal hunting, lack of baseline data required for effective management, and lack of collaboration presence;
- Understanding of the socio-economic background of the local communities in and around MBNP has been improved substantially. More inclusive social approach either through the public directly or community leaders was recognized as important and fundamental to the sustainability of the project;
- Institutional support and recognition of the project's contributions as a REDD+ demonstration project in conservation forests was a definite advantage in boosting the image of the project and that of EA in enhancing its REDD+ development efforts;
- Documenting the results of research, studies and community activities was an essential component of the Project. A series of technical reports covered various technical issues of the design and implementation of REDD+ activities in MBNP in conservation forests;
- In project monitoring and evaluation, the PSC played a critical role in assessing the project's progress and making recommendations for improvement; and

- One external factor that affected implementation but could not be foreseen was the complexity of developing REDD+ activities focusing on conservation of carbon stocks and enhancement of carbon stocks in conservation forests due to limited methodologies.

The sustainability depends on active involvement of project beneficiaries. After project completion, the Ministry of Environment and Forestry will continue to provide various forms of assistance to MBNP as a conservation institution for the conservation and management of biodiversity and ecosystem services including conservation of carbon stocks. The EA and local NGOs have been committed to generate carbon benefits to the concerned community under Plan Vivo scheme. In the development and implementation of REDD+ strategies and policies in the country, it is expected that the EA will play an important role in promoting conservation of carbon stocks, taking into account the outcomes of the project.

## **VI. Concluding Remarks**

To achieve the objectives and outputs, the project had initiated a thorough overview of the existing conditions of the forests, biodiversity and other natural resources in MBNP and associated local communities, estimating and monitoring carbon stocks changes, and forest law enforcement. Many project activities had been implemented in cooperation with key stakeholders including the local governments, NGOs, community leaders, academic and research agencies. With the generous financial support of 7&i Holdings Co. Ltd (Japan), dedicated work of the project leader and EA was a significant factor in ensuring success of the project.

Since the ITTO Secretariat has received the Project Completion Report, several Technical Reports, and Financial Audit Report, the Committee may wish to consider this project.

### **(7) PD 534/08 Rev.1 (F) Small-Scale Private Mixed Plantations Development PLUS Nutrition Promotion: The Case of Six Rural Community Women's Groups in the Eastern and Ashanti Regions of Ghana: Phase II (Ghana)**

Budget and Funding Sources:

Total Budget:		US\$	639,349
ITTO Budget:		US\$	424,837
Government of Japan:	US\$	369,837	
Government of USA:	US\$	55,000	
Pitris Consult / Government of Ghana:		US\$	214,512

Implementing Agency: PITRIS Consult

Period of Approval: Spring 2009

Starting Date and Duration: April 2011 / 36 months

## **I. Introduction**

This project was approved under Spring 2009 Project Cycle through the electronic approval system, but it was fully funded during the 46<sup>th</sup> ITTC Session in December 2010, thanks to the generous contributions of the Governments of Japan and the USA. The Project Agreement has been signed by the parties in March 2011. The project implementation started in April 2011, after the disbursement of the first installment of ITTO funds following the delivery of relevant documentation and submission of a memorandum of understanding with the collaborating agencies (Ghana Forestry Commission and the Forestry Research Institute of Ghana - FORIG). As an acceptable version of the project completion report was received in September 2014, the project operation period had lasted 41 months instead of 36 initially designed by the implementing agency. The project final financial audit report was submitted in March 2015 by the Executing Agency, allowing this project to be documented for the completion and closure procedures.



## II. Project Objective

This three-year project intended to empower six rural women groups to continue to create wealth by cultivating small-scale individually-owned mixed plantations of commercial indigenous timber species of Wawa (*Triplochiton scleroxylon*), and Ofram (*Terminalia superba*), in combination with *Moringa oleifera* and *Tectona grandis*. The women beneficiaries had used the degraded land legally, allotted to them by their respective traditional clan heads, for forest rehabilitation activities in the Ashanti Region (Adansi and Asankare Communities) and Eastern Region (Enyiresi and New Jejeti Communities).

## III. Project Achievements and Outputs

The project implementation strategy which contributed to the smooth implementation of this project can be summarized through the following approaches and methods: easy access to degraded lands provided by traditional chiefs for forest rehabilitation activities implemented by local communities involved in the project implementation and utilization of *Moringa oleifera* as incentives for communities involved in forest rehabilitation of degraded lands (production and distribution of seedlings of *Moringa oleifera*, processing and trade of products from *Moringa oleifera*). The role of the Forestry Commission of Ghana and Forestry Research Institute of Ghana (FORIG), as technical advisory institutions, had been useful with regular technical support provided to the local communities involved in the implementation of activities regarding the forest rehabilitation of degraded lands through the utilization of community taungya agroforestry system.

The main project achievements and outputs, in relation to the project implementation strategy, can be summarized in the following table:

Planned outputs	Output-related achievements	Remarks
<u>Output 1:</u> “Established and thriving individual women plantations of commercial Wawa and Ofram trees professionally nurtured, and totaling 150 acres in the aggregate in the six target rural communities (together), owned, and managed by the respective village women members within the context of a thriving local network that ensures sustainability of functions.”	Established and thriving individual women plantations of commercial Wawa and Ofram trees professionally nurtured, and totaling 156 acres in the aggregate in the six target rural communities (together), owned, and managed by the respective village women members within the context of a thriving local network that ensures sustainability of functions.	Output 1 achieved with more acres, than originally planned, of mixed indigenous species forest plantations ( <i>Triplochiton scleroxylon</i> and <i>Terminalia superba</i> ) established by selected women groups involved in the project implementation.
<u>Output 2:</u> “Established and thriving individual women plantations of commercial Teak (in single stands), professionally nurtured, and totaling 150 acres in the aggregate in the six target rural communities”	Established and thriving individual women plantations of commercial Teak (in single stands), professionally nurtured, and totaling 165 acres in the aggregate in the six target rural communities.	Output 2 achieved with the establishment of more acres of Teak plantations, than originally planned, in combination with <i>Moringa olifeira</i> species provided to women groups as incentives by the project implementing team.
<u>Output 3:</u> “Established and thriving small-scale multiple Moringa products processing income earning business (e.g. Moringa soft drinks making, Moringa condiments/recipes making, Moringa hair foods, and Moringa body soap making and sale) that significantly augments the average yearly per head income”	180 beneficiaries, or targeted project women from the six rural communities provided with high-level baking skills, selected edible Moringa foods preparation skills, as well as Moringa soap making skills.	Output 3 achieved with the capacity building of women groups on the processing and trade of products from <i>Moringa olifeira</i> .

#### **IV. Outcomes and Impacts**

This project had served as an eye-opener for forest policy-makers in Ghana regarding rural reforestation activities, with the involvement women groups in rural areas, for the rehabilitation of degraded forest lands using indigenous tropical tree species (in small-scale mixed plantations *Triplochiton scleroxylon* and *Terminalia superba*), in Ashanti and Eastern Regions of Ghana.

The processing and trading of Moringa products had been a source of income by local communities involved in the project implementation as a contribution to poverty alleviation in these communities, in addition to food crops associated with trees planted in rehabilitated agroforestry plantations. These agroforestry plantations had been subject to the registration process, for long term benefits of women groups, which would lead to the endorsement of the tree ownership and benefit sharing scheme by the Forestry Commission of Ghana, in conformity with the related law and regulations. The effective and efficient project implementation, through a participatory approach, also implied effective listening, communication, public relations, promotion, public education, and exchange of ideas and findings. The project therefore applied the following dissemination systems: local FM radios broadcastings in the target project areas, verbal communications in local churches and mosques, billboards of selected schools in the Ashanti and Eastern Regions, etc.

#### **V. Lessons Learnt and sustainability**

This project had served as an eye-opener for forest policy-makers in Ghana regarding rural reforestation activities, with the involvement women groups in rural areas, for the rehabilitation of degraded forest lands using indigenous tropical tree species (in small-scale mixed plantations *Triplochiton scleroxylon* and *Terminalia superba*), in Ashanti and Eastern Regions of Ghana.

The planning and implementing of this kind of social participatory forestry project had been an interactive process among all relevant stakeholders, including selected rural women groups interested in the implementation of forest rehabilitation activities. The project contributed to empowering rural women collectively as a group and individually as active and focused stakeholders, in view of their involvement in the forest rehabilitation of degraded lands provided by traditional chiefs in the project target areas. Rural women's empowerment therefore was the process which led to their participation with motivation as they were part the decision making system during the project implementation. By giving project members more responsibility, and letting them to play a more meaningful and active role, the ownership of main project's results and achievements was facilitated for them.

The Executing Agency (PITRIS CONSULT) had been working hand in hand with the elected Women Executives in each community and has laid down a practical project sustainability plan in line with the project's specific objective and expected outputs. This project sustainability plan was multidimensional, including, among others:

- sustainability of equipment and materials for the processing of Moringa products through the management and maintenance undertaken by the association-like structure established in each women group;
- capacity building of women groups on the processing and trade of Moringa products, as a source of income; and
- Registration of rehabilitated agroforestry plantations, established by women groups involved in the project implementation, for the endorsement of the tree ownership and benefit sharing scheme by the Forestry Commission of Ghana.

#### **VI. Concluding Remarks**

As the ITTO Secretariat received the Project Completion Report, as well a satisfactory Final Financial Audit Report, the Committee may wish to declare the Project PD 534/08 Rev.1 (F) as completed. Soft copies of abovementioned reports can be made available, upon request, by the Secretariat.

**(8) PD 584/10 Rev.2 (F) Implementing the Cooperative Framework between ODEF and the Stakeholders for the Effective Participatory and Sustainable Management of the Eto-Lilicope Forest Complex (Togo)**

Budget and Funding Sources:

Total Budget:		US\$	218,298
ITTO Budget:		US\$	162,788
Government of Japan:	US\$	162,788	
Government of Togo:		US\$	55,510
Implementing Agency:	Office de développement et d'exploitation des forêts (ODEF)		
Period of Approval:	Spring 2011		
Starting Date and Duration:	May 2012 / 15 months		

**I. Introduction**

The 15-month project was approved under Spring 2011 Project Cycle through the electronic approval system, but it was fully funded during the 47<sup>th</sup> ITTC Session in November 2011, thanks to the generous contribution of the Government of Japan. The Project Agreement has been signed by the parties in March 2012. The project initiated implementation in May 2012 following the disbursement of the first installment of ITTO funds. As an acceptable version of the project completion report was received in January 2015, the project operation period had lasted 32 months instead of 15 initially designed by the implementing agency. The project final financial audit report was submitted in March 2015 by the Executing Agency, allowing this project to be documented for the completion and closure procedures.

This project proposal was a follow-up to PD 217/03 Rev.2 (F): *"Establishing a Cooperative Framework between ODEF and the Communities Living in the Eto-Lilicope Forest Complex for the Sustainable Participatory Management of this Complex"*. As the groundwork for the participatory management process had been laid through an agreement, dealing mainly with following aspects: a clear demarcation of the external boundaries of the Eto-Lili Forest Complex as well as the internal demarcation based on land-use parcels, including farm land to be allocated to the communities, while ensuring that the Forest Management Committee for this forest complex was made operational.

**II. Project Objective**

The overall aim of this project was to implement the sustainable and participatory management of the Eto-Lilicope forest complex for timber production. The project specifically intended to implement the collaboration framework established between the main stakeholders for the consensual and sustainable management of the Eto-Lilicope Forest Complex.

**III. Project Achievements and Outputs**

In conformity with the Principle 8 of ITTO guidelines on forest land restoration/rehabilitation through the Recommended Actions 24 and 25, the adopted project implementation strategy included the following main steps:

- consulting process with representatives of the communities and NGOs involved in the project implementation;
- recruitment of an NGO specializing in mapping for the demarcation of boundaries of both gazetted forests (Eto and Lili) in the presence of representatives of ODEF and key relevant stakeholders;
- recruitment of another NGO with an expertise in land-use planning and management for appropriate guidance allowing to avoid/address land conflicts around both gazetted forests and prevent encroachment within both gazetted forests; and
- reactivation of forest brigades and patrols to be supervised by the CVD (Comité Villageois de Développement / Village Development Committee) in charge of forest fire surveillance and illegal logging control.

For these two areas, Eto Gazetted Forest and Lili Gazetted Forest, which are distant of approximately 7 km, the project implementation actions had been undertaken as if both were a single project target zone. The main project achievements can be summarized in the following table:

Output 1: All stakeholders aware of the collaborative forest management approach and this approach is implemented		
Activities	Indicators	Project Achievements
Activity 1.1: To remind stakeholders of the participatory management visions for Eto-Lili	At least 90% of the communities are informed of the continuation of the participatory process;	25 main villages in six counties (Gblainvié, Gapé, Tsévié, Agbélové, Gamé and Bolou) had been sensitized on the project objective in view of their involvement in its implementation.
Activity 1.2: To materialize the consensual boundaries of forests and farming blocks in the presence of local communities	The boundaries of the 2 gazetted forests and farming blocks are materialized by landmarks and signposts	39 big size concrete landmark posts had been installed to demarcate the external boundaries of the Eto-Lili Gazetted Forests while 248 small size landmark posts had been put in place within both gazetted forests to demarcate different land use parts.
Activity 1.3: To sub-divide and apportion to the households parcels of the farming blocks identified during phase I of the project	At the end of the project, 30% of forest land allocated to households	30% of degraded forest lands had been demarcated and secured for attribution to selected households, from surrounding local communities, for the agroforestry rehabilitation activities in the Eto-Lili Gazetted Forests
Output 2: Increased capacities of institutions and/or organizations to implement the partnership framework		
Activities	Indicators	Achievements
Activity 2.1: To develop and implement the Articles of Association and Rules of Procedure of the Forest Complex Management Committee	The Management Committee of the forest complex has its Articles of Association, Rules of Procedure and executive officers	The Management Committee of the Eto-Lili Forest Complex had been put in place and its Articles of Association finalized and approved by stakeholders.
Activity 2.2: To retrain fire and illegal logging control brigades	100% of the fire and illegal logging control brigades have new knowledge and equipment to protect plantations	125 members of the brigades in charge of fire surveillance and illegal logging control had been trained using French and local languages, for a better understanding for all of them.

#### IV. Outcomes and Impacts

The main project outcomes and impacts, derived from the participatory implementation of this project and in relation to the expected outputs and associated activities, can be summarized as follows:

- Establishment of the Management Committee of the Eto-Lili Forest Complex composed of 13 members, from which 9 members representing local communities. as an adequate institutional framework for the monitoring of the implementation of management plan of this forest complex;
- The operational capacity of the members of local brigades had been enhanced through training programmes dealing with forest fire surveillance and illegal logging control in the Eto-Lili Forest Complex, in order to contribute to its ecosystem conservation;
- Awareness of key stakeholders, including local communities, on the importance of the sustainable management of the Eto-Lili Forest Complex which could contribute providing some livelihood to stakeholders through the taungya agroforestry rehabilitation system which was promoted by this project; and

- Controlling the use of degraded forest areas through secured land tenure, allowing the implementation of taungya agroforestry rehabilitation activities by selected local communities.

## V. Lessons Learnt and sustainability

### 5.1 Lessons learnt

The involvement of stakeholders, already identified during the implementation of the previous project PD 217/03 Rev.2 (F), contributed to define their roles and responsibilities in forest management and rehabilitation process. This was very crucial for the success of the project, although it was a time consuming process. That's why the duration of the project implementation lasted 32 months instead of 15 months initially planned by the implementing agency. The use of local/native languages, during the sensitization campaigns, had facilitated the communication with and among key stakeholders, in particular with local communities, for a common understanding of the objective and aim of the project. This contributed to facilitating the involvement of local communities in the implementation of some project activities, although their adherence was slow to get due to the critical issue of land tenure. The land tenure issue was already identified as a critical issue during the implementation of the previous project PD 217/03 Rev.2 (F) and it is was subject to special attention during the implementation of this project.

### 5.2 Project sustainability

Institutional sustainability was pursued through the establishment of the Management Committee of the Eto-Lili Forest Complex which had mainly included representatives of key stakeholders: local government institutions and local communities (associations of women, NGO, schools, churches, etc.), and also through the operationalization of local brigades dealing with forest fire surveillance and illegal logging control in the Eto-Lili Forest Complex under the supervision of Village Development Committees.

The forest management and forest rehabilitation interventions by the project beneficiaries included the planting of annual crops (maize, plantain, cassava, bean, etc.) by local communities within the framework of the taungya agroforestry system in the Eto-Lili Forest Complex. The products of these crops had been sold in an existing local market by those local communities as well as in the large market of the cities of Atakpamé, Kpalimé and Lomé. The financial benefits from taungya agroforestry system, as a source of livelihood for local communities, would be an incentive leading to the continuation of interventions regarding the forest management and forest rehabilitation activities.

## VI. Concluding Remarks

As the ITTO Secretariat received the Project Completion Report, as well a satisfactory Final Financial Audit Report, the Committee may wish to declare the Project PD 584/10 Rev.2 (F) as completed. Soft copies of abovementioned reports can be made available, upon request, by the Secretariat.

### (9) **PD 586/10 Rev.1 (F) Operational Strategies for the Conservation of Tengkwang Genetic Diversity and for Sustainable Livelihood of Indigenous People in Kalimantan (Indonesia)**

Budget and Funding Sources:

Total Budget:		US\$	\$513,356
ITTO Budget:		US\$	414,104
Government of Japan:	US\$	344,104	
Government of USA	US\$	50,000	
Government of Korea	US\$	20,000	
Government of Indonesia		US\$	99,252
Implementing Agency:	Dipterocarps Research Centre, FORDA, MOF		
Session of Approval:	ITTC Session XLVI, Nov.2010, Yokohama, Japan		
Starting Date and Duration:	July 2011 / 36 months		

## I. Introduction

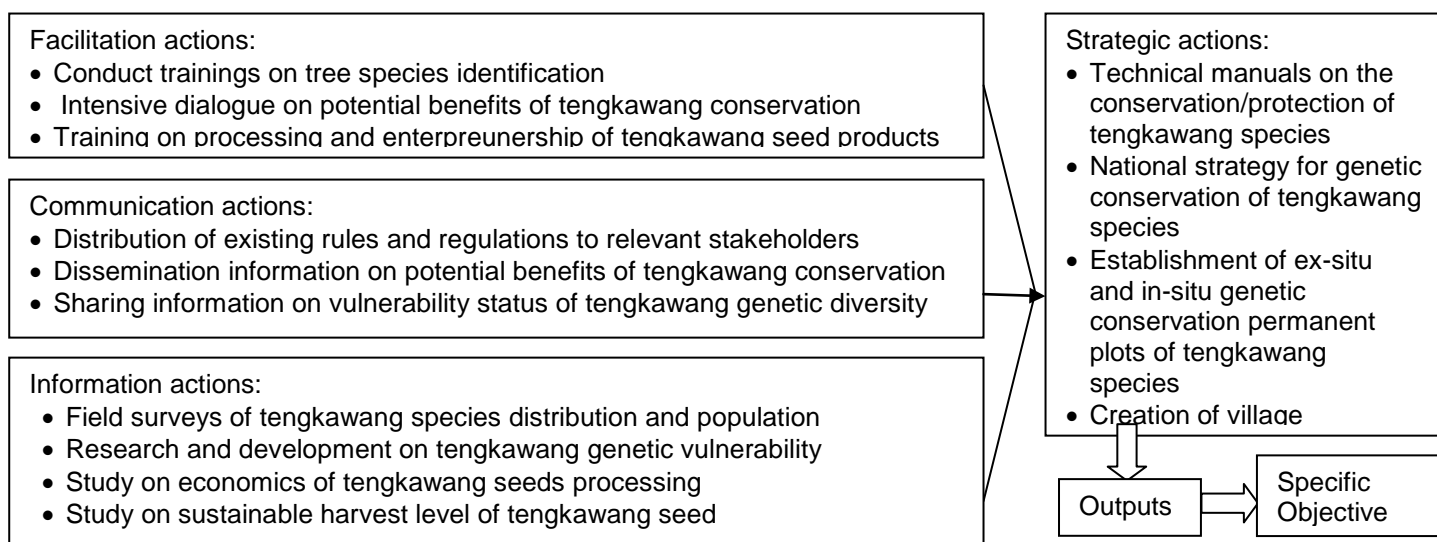
The 36-month project was approved by the Council at its Forty-sixth Session in November 2010 in Yokohama, Japan, and fully funded at the same Session, by the Governments of Japan, Korea and USA. The Agreement governing the implementation of the project was signed on 7 March 2011. The first disbursement of ITTO funds was made in 14 July 2011. As an acceptable version of the project completion report was received in November 2014, the project operation period had lasted 40 months instead of 36 initially designed by the implementing agency. An acceptable project final financial audit report was submitted in January 2015 by the Executing Agency, allowing this project to be documented for the completion and closure procedure of this project.

## II. Project Objective

The project development objective contributed to the improvement of the biodiversity conservation of Dipterocarps especially tengkawang species and related livelihood of indigenous people. Specifically, it intended to stop the depletion process of tengkawang species genetic diversity in Indonesia.

## III. Project Achievements and Outputs

The project implementation strategy was based on the following approaches and methods:



The main project achievements and outputs, in relation to the project implementation strategy, can be summarized in the following table:

<u>Specific objective:</u> To stop the depletion process of tengkawang species genetic diversity			
Expected outputs	Original indicators	Adjusted indicators	Remarks
<u>Output 1:</u> Measures for protection of tengkawang species improved	<ul style="list-style-type: none"> <li>By end of the project, 30 forest managers and supervisors trained in tree species identification, 30 government staff/officers trained in law enforcement, technical manuals for protection of tengkawang developed and disseminated.</li> </ul>		Output 1 fully implemented with the training of forest managers and supervisors, as well as government staff/officers, as originally planned.

<p><u>Output 2:</u> Genetic conservation program of tengkawang species improved</p>	<ul style="list-style-type: none"> <li>• By end of the project, 200 Ha of tengkawang, for ex-situ genetic conservation, established in Samboja, as permanent plots in conformity with technical requirements.</li> <li>• By end of the project, at least 6 in-situ conservation permanent plots established in 3 provinces</li> <li>• By end of the project, national strategy for tengkawang genetic conservation developed</li> </ul>	<ul style="list-style-type: none"> <li>• By end of the project, around 20 Ha of tengkawang ex situ genetic conservation plots established in Samboja, as permanent plots in conformity with technical requirements.</li> <li>• By end of the project, at least one in-situ permanent plots established in each of three provinces</li> </ul>	<ul style="list-style-type: none"> <li>• 3 most widely distributed tengkawang species were found and used for the project implementation and collected in each province as target species for ex-situ conservation.</li> <li>• Considering the budget constraint, it was not possible to establish 200 Ha of ex-situ permanent plot.</li> <li>• Considering the amount of available budget, it was not possible to establish 6 different in-situ permanent plots in three provinces. However, one in-situ permanent plot was scientifically considered as reasonable for purpose of conservation, research and development.</li> </ul>
<p><u>Output 3:</u> Support of indigenous people for tengkawang genetic diversity conservation obtained</p>	<ul style="list-style-type: none"> <li>• By end of first year, study on economics of tengkawang seeds processing completed</li> <li>• By end of the project, at least 100 households trained in appropriate technologies for the processing of tengkawang seeds</li> <li>• By end of project, at least 6 model village cooperatives established</li> </ul>	<ul style="list-style-type: none"> <li>• By end of the project, at least 50 households in 3 provinces trained on appropriate technologies for the processing of tengkawang seeds</li> <li>• By end of project, at least 3 village cooperatives established and involved in the tengkawang seeds business</li> </ul>	<ul style="list-style-type: none"> <li>• Unstable tengkawang seed market led the lack of interest of households on tengkawang seeds business as their primary livelihood. Therefore, it was impossible to mobilize more households.</li> <li>• 6 village cooperatives were difficult to establish because tengkawang market trends to become weak. Therefore, it was realistic to focus on 3 villages which still have potential to supply the market with tengkawang seeds products.</li> </ul>

#### **IV. Outcomes and Impacts**

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

- This project has provided to the Ministry of Forestry of Indonesia useful updated data and information on the ecological and conservation status, as well as the level of genetic diversity of selected threatened tengkawang tree species, contributing to the development of draft conservation guidelines for the sustainable management and conservation of tengkawang species in Indonesia, being circulated for review by relevant stakeholders;
- Establishment of two permanent plots for ex-situ genetic diversity conservation of tengkawang species in East Kalimantan (one) and West Kalimantan (one) with the technical collaboration of the Faculty of Forestry of Mulawarman University of Samarinda;
- Establishment of three permanent plots for in-situ genetic diversity conservation of tengkawang species in West Kalimantan (two) and South Kalimantan (one); and
- Promotion of products deriving from the tengkawang seeds through technical trainings on the adapted and efficient techniques of processing and trading these products, as a source of income for local communities selected for the high potential of their forests to supply the market with products from tengkawang seeds.

The main project results had been shared and disseminated through the organization of nine (9) workshops for capacity building and the publication of technical manuals (ex-situ conservation, in-situ conservation, processing techniques of tengkawang seeds, etc.) and eight (8) research papers in collaboration with the experts of Mulawarman University of Samarinda. The project implementing team had participated in the National Exhibition of Appropriate Technology for Local Communities, in the City of Samarinda, in June 2014, and took that opportunity to display the products of tengkawang seeds processed by selected communities involved in the project implementation.

## V. Lessons Learnt and sustainability

The involvement of selected communities, right from the beginning of the project implementation, was crucial for the smooth implementation of this project, although some indicators were adjusted in order to take into account some technical constraints encountered during the project implementation. These constraints were based on technical studies and surveys conducted by consultants and experts during the project implementation (geographical distribution, genetic diversity and socio-economics of tengkawang species).

It was noted a keen interest of local communities and other stakeholders in various technical trainings carried out through the implementation of this project (identification and selection of mother trees for the collection of tengkawang seeds, establishment and management of nurseries for the production of seedlings of tengkawang, tree planting of tengkawang species, techniques of processing tengkawang seeds, establishment of cooperatives for the processing and trading of tengkawang seeds, etc.).

Selected local communities and other relevant stakeholders had acquired experience and skills in processing and trading products from tengkawang seeds and would, to a certain extent, be in a position to continue implementing them after the project completion. The Ministry of Forestry of Indonesia, at the level of East Kalimantan, South Kalimantan and West Kalimantan Provinces, will continue to provide the appropriate technical support to these selected local communities, while continuing to monitor the ex-situ and in-situ permanent plots established for the conservation/protection of tengkawang species.

## VI. Concluding Remarks

As the ITTO Secretariat received the Project Completion Report, Consultant Technical Reports, Workshop Reports, as well a satisfactory Final Financial Audit Report, the Committee may wish to declare the Project PD 586/10 Rev.1 (F) as completed. Soft copies of abovementioned reports and documents can be made available, upon request, by the Secretariat.

### (10) PD 590/10 Rev.1 (F) **Integrated Fire Management in Rural Communities of Guatemala: Establishment of Pilot Sites for the Implementation of Sustainable Integrated Fire Management Practices**

Budget and Funding Sources:

Total Budget:		US\$	799,332
ITTO Budget:		US\$	517,563
Government of Japan:	US\$	497,563	
Government of Korea:	US\$	20,000	
AVM:		US\$	174,169
INAB:		US\$	107,600

Implementing Agency: ASOCIACION VIVAMOS MEJOR – AVM

Collaborating Agency: NATIONAL FOREST INSTITUTE – INAB

Period of Approval: ITTC Session XLVI, November 2010, Yokohama, Japan

Starting Date and Duration: October 2011 / 36 months

Approved Revised Date of Project Completion: Extension until December 2014 (NOL F. 14-0176)

## I. Introduction

The Council approved the project at its Forty-sixth Session in December 2010 and full financing for its implementation was further pledged at that same session. The Project Agreement regulating the implementation of the project was duly signed on April 8<sup>th</sup> 2011. The Project Inception Report and the First Yearly Plan of Operations were further received from the Executing Agency Vivamos Mejor and approved by the ITTO Secretariat. The project's first Steering Committee met on June 22<sup>nd</sup> 2012, and assessed the project's start-up activities and its compliance with ITTO's rules of procedures. The second disbursement of



funds was transferred to INAB in September 2012 and the third one in December 2012, both after verifying the executing agency's compliance with the conditions established for each of these payments. The fourth disbursement of funds was transferred to AVM in July 2013 and the fifth one in February 2014, both also after verifying the executing agency's compliance with the conditions established for each of these payments. A very productive 3<sup>rd</sup> Project Steering Committee took place in Guatemala City in April 2014. At that time, the committee noted that the project continued to be implemented in a timely fashion following the original schedule developed for the project, suffering no delays so far. The sixth and last disbursement was released in July 2014 shortly after submission of their 5<sup>th</sup> progress report, several technical reports and an appropriate explanation as regards the sustainability of the implemented actions after project completion and its expected impacts. The project's completion report and the final financial audited report were received by the Secretariat in February 2015, together with several technical documents and other related project outputs.

## **II. Project Objective**

Wild and man-made forest fires destroy vast areas of Guatemala each year. Overall, this project aims to contribute to sustainable management of Guatemala's tropical forests via the development and application of community-based integrated fire management practices. More specifically, it seeks to implement sustainable integrated forest fire management practices in four pilot sites in rural community areas of Guatemala. It is expected that through community courses and workshops, this project will seek to define appropriate strategies for the protection of broadleaved and pine forests against catastrophic fires caused by agricultural and other activities, such as the use of fire for tropical pine forest restoration, regeneration and improvement. *Integrated Fire Management (IFM)* programs will be planned and implemented with the extensive participation of rural communities in four pilot sites, based on the principles *IFM* (Myers, 2006), integrating ecological, socio-economic, policy and technical factors to address the issues of forest fires and the use of fire in Guatemala. The results obtained will be applied to similar communities and ecosystems in tropical areas. The project will be focused on IFM for tropical broadleaved and pine forests to ensure forest protection and appropriate use of fire in forest management and improvement processes. The project will serve as a link between government agencies responsible for forest fire issues and the communities living within and around selected pilot sites.

## **III. Project Achievements and Outputs**

The Project's field activities were completed in December 2014 and the overall project was reported as completed in February 2015. In accordance with the project document, all the planned activities were carried out during the project's lifespan and its achievements can be summarized by major outputs and products envisaged by the project, as follows:

### **Output 1: Institutional capacity for community-based Integrated Fire Management (IFM) strengthened.**

This output has been 100% successfully achieved.

- The methodological aspects of the training courses have finalized and all training courses were carried out, both at the technical level (100 participants) as well as the community-based integrated fire management (IFM) level (400 participants). A National Course on Integrated Fire Management was held in June 2013 with the participation of 30 technicians from seven departments of the country. Specialized personnel from INAB, CONAP and Vivamos Mejor also participated at the Fourth International Symposium on Fire Economics, Planning, and Policy: Climate Change and Wildfires held in Mexico City in November 2012; and
- The development, revision and validation of IFM planning and evaluation tools were been finalized and widely disseminated.

### **Output 2: Community-based Integrated Fire Management (IFM) Plans developed and implemented.**

100% of the activities required to achieve this output have been implemented, as follows:

- An inter-institutional coordination group for project implementation was established;
- A community-based IFM planning and approval process was completed for each of the 4 pilot sites;
- Four Integrated Fire Management (IFM) Plans were developed, one for each pilot site;
- The actions defined in community-based IFM plan for each pilot site are under implementation;

- The exchange of experiences in the implementation of community-based IFM practices between pilot sites was carried out; and
- The acquisition of appropriate basic equipment for community-based IFM practices was completed.

**Output 3: Fire-related socio-economic impacts and forest dynamics documented and disseminated.**

All activities required to achieve this output have been completed, as follows:

- A baseline and evaluation protocol on community-based IFM practices was completed;
- A study of the current forest status for each of the pilot sites were finalized;
- The implementation of the Monitoring and Evaluation Protocol was accomplished;
- The conduct of a study on economic costs and benefits of fire use practices and their impact on the forest was completed; and
- Many printed and audio-visual materials on community-based IFM experiences were published and disseminated.

**IV. Outcomes and Impacts**

An assessment of project impacts was carried out with the participation of local community stakeholders and institutional technical staff in order to determine the ecological, social and institutional benefits obtained through the implementation of the project, and the following aspects were identified:

- Social aspects: There was a highly significant increase in the effective participation of community members with adequate capacities for Integrated Fire Management planning. This was reflected in the results of the appeal for community participation in the implementation of project activities
- Ecological aspects: The project achieved a change in fire regimes, which translated into an 80% reduction in the intensity and frequency of forest fires and the identification of fire management areas for the implementation of controlled and prescribed burns. Ecological succession increased in the demonstration fire management plots, with a strong increase in the natural regeneration of both forest and non-forest species.

In addition, the Project has produced several products, among them studies, maps, technical documents and training materials, of which the following can be highlighted:

1. Methodology for the Implementation of the National Training Course on Integrated Fire Management at the Local Foresters level.
2. General Characterization of the Forest Cover and Fuel Situation at Four Pilot Sites in Guatemala for the Preparation of the Plan of Integrated Fire Management - Pinalón Forest Site Report.
3. General Characterization of the Forest Cover and Fuel Situation at Four Pilot Sites in Guatemala for the Preparation of the Plan of Integrated Fire Management - Parque Regional la Enea Site Report.
4. General Characterization of the Forest Cover and Fuel Situation at Four Pilot Sites in Guatemala for the Preparation of the Plan of Integrated Fire Management - Noreast Quiscab watershed Site Report.
5. General Characterization of the Forest Cover and Fuel Situation at Four Pilot Sites in Guatemala for the Preparation of the Plan of Integrated Fire Management - San Jeronimo watershed Site Report.
6. Four Integrated Fire Management Plans, one for each pilot area.
7. 27 Powerpoint presentations as part of the material developed for training in community-based integrated fire management (IFM).

Most of the aforementioned documents have been or will be uploaded onto the ITTO website for further dissemination to all our member countries and other interested parties.

**V. Lessons Learnt and sustainability**

Among the many lessons learnt, the following can be highlighted:

- In order to strengthen the capacities of community leaders, community experience-sharing sessions were held among the different regions of the country where the project was being implemented. During these sessions, the participants were able to exchange information on problems encountered, limiting factors, potentialities and local strategies developed, and were also able to observe the outcomes of Integrated Fire Management (IFM) actions in different environments and

under different conditions, the types of local organization and regulation procedures that had been implemented in each region of Guatemala, the importance and the success of the participation of women in some regions of the country, and the impacts generated by the project.

- These experiences were considered to be successful because of the level of social participation in planned project activities and the changes made to existing fire regimes in the pilot project sites. These were previously characterized mainly by an unmanageable frequency of forest fires that caused the degradation of forest stands, limited tree stem growth, stem deformations, increased bark thickness, pests and diseases, and severe damage to associated forest vegetation (undergrowth) and natural regeneration of forest species, among others.
- Project activities included the development of a Monitoring Protocol for IFM practices and impacts in pilot sites so as to allow community members to see the results of their actions implemented with the support of the project.

As regards sustainability, the following aspects should be highlighted:

- Project sustainability over time is guaranteed because throughout this whole process, the project sought to generate successful community experiences in the implementation of Integrated Fire Management practices in forest ecosystems so as to develop a forest fire management model that could be replicated in other regions of the country. The approach was based on inclusive and participatory planning (communities, local governments and organizations, and State institutions) in the use of fire as a forest ecosystem management principle and not just as a threat control strategy.

## VI. Concluding Remarks

As the ITTO Secretariat has received the Project Completion Report, several Technical Reports and other products, as well as the Final Financial Audit Report, the project can be reported as completed. Technical documents and other products are available from the Executing Agency and Secretariat upon written request, and most can also be downloaded from the ITTO website.

### (11) PD 622/11 Rev.1 (F) **Marketing of Native Plant Seeds, Seedlings And Timber Products to Improve Living Standards and Strengthen Regional Forest Policies in the Amazon Region of Peru: A Pilot Case on the Taulia Molinopampa Rural Community (Peru)**

Budget and Funding Sources:

Total Budget:		US\$	188,743
ITTO Budget:		US\$	149,958
Government of Japan:	US\$	124,958	
Government of USA:	US\$	25,000	
IIAP/NCI		US\$	38,785
Implementing Agency:	PERUVIAN AMAZON RESEARCH INSTITUTE (IIAP) – AMAZONAS OFFICE		
Period of Approval:	ITTC Session XLVII, November 2011, Guatemala City, Guatemala		
Starting Date and Duration:	Oct 2012 / 24 months		

## I Introduction

The Council approved the project at its Forty-seventh Session in November 2011 at Guatemala City and full financing for its implementation was pledged at that same session. The final agreement regulating the implementation of the project was duly signed on 22 August 2012. The first installment of funds was transferred at the end of October 2012, after the submission, by the Executing Agency, of an inception report, a detailed work plan, a request for the no-objection of the project's key personnel and a notification that implementation was about to begin, and the approval of the aforementioned by the Secretariat. The second tranche of funds was transferred in April 2013, immediately after the members of the project's

technical committee verified in the field the adequate implementation of the activities to date, and the Secretariat verified that the other conditions for the second disbursement had also been complied with. The third tranche was disbursed in October 2013 after receipt of the second progress report and the fourth and last tranche was transferred to the EA in May 2014 after a successful Project Technical Committee meeting at which the third progress report and several draft technical reports were reviewed, as well as the impacts and sustainability of the project's activities in the long term. The project's completion report and the final financial audited report were received by the Secretariat in March 2015, together with several technical documents and other related project outputs.

## **II. Project Objective**

Members of the Taulía Molinopampa Rural Community, the Molinopampa Association of Conservationist Producers (APROCOM), the Peruvian Amazon Research Institute (IIAP) and Nature and Culture International (NCI) in the Amazon Region of Peru, through joint actions aimed at improving production capacity, establishing innovative mechanisms and practices, and creating an enterprise for the marketing of certified seeds, seedlings and timber products from native species, are to contribute towards the strengthening of regional forest policies based on the use of native timber species, community experience and scientific research, in order to generate additional income and thus improve community living standards.

In general, the project sought to improve the living standards of the Molinopampa Rural community through the production, diversification and marketing of native tropical timber species, using innovative mechanisms and practices to enhance regional forest skills and policies. More explicitly, the project intended to establish a community enterprise to market certified seeds, seedlings and by-products of native timber species.

## **III. Project Achievements and Outputs**

The Project's field activities were completed in December 2014 and the overall project was reported as completed in March 2015. In accordance with the project document, all the planned activities were carried out during the project's lifespan and its achievements can be summarized by major outputs and products envisaged by the project, as follows:

### **Output 1: One regional policy and its regulations have been developed, proposed and adopted by the Amazonas Regional Government**

- A draft regional policy paper was developed, then discussed and enhanced at several workshops in the villages of Molinopampa, Puma Hermana, Ocol and San Jose, all of these being part of the Taulia-Molinopampa Rural Community, and further submitted to the Regional Government of Amazonas for its adoption.

### **Output 2: Three community nurseries are in production and 15 hectares have been reforested with native species in the target area.**

- 3 community tree nurseries were established and are operational, one in each of the villages of Puma-Hermana, San José and Ocol;
- A total of 150 seed trees of 5 species, namely *Alnus acuminata*, *Cedrela odorata*, *Ocotea sp.*, *Gordonia fruticosa* and *Solanum pseudosycophanta* have been identified, selected and marked in the field and are periodically monitored for seed production and collection;
- 40,000 seeds have been collected from natural stands;
- 38,000 seedlings were produced by the 3 nurseries; and
- 40 ha of degraded forest lands have been rehabilitated, surpassing by far the original target of 15 ha.

### **Output 3: Three permanent plots have been established to produce certified seeds and seedlings.**

- 12 permanent plots have been established, planted and tended for the production of seeds, surpassing by far the original target of 3 plots.

**Output 4: Establishment and operation of a seed marketing enterprise and 20 trained beneficiaries applying their acquired skills.**

- The community-based enterprise “Asociacion para la Conservacion del Bosque de Palmeras – ACOBOSQUE” has been legally established and is currently collecting, selecting and marketing tree seed and seedlings; and
- Local farmers were trained to enhance tree germplasm identification, selection and collection skills.

**Output 5: Four manuals and 4 scientific studies have been published on production, phenology, germination, growth and traditional uses.**

- 4 manuals and 4 scientific studies were produced, published and widely disseminated in the project’s area of influence and beyond.

**IV. Outcomes and Impacts**

All project objectives were achieved. Among the many tangible outcomes of the project, the following deserve to be mentioned due to the impact they have had in improving the livelihoods of the local farmers in the four villages of the Taulia-Molinopampa Rural Community in northern Peru, via the production, diversification and marketing of native tropical timber species using innovative mechanisms and practices:

1. A draft Strategic Plan for Forestry and Wildlife for the Region of Amazonas presented to the Regional Government of Amazonas
2. 03 nurseries with a production of approximately 60,000 seedlings for a period of four years, installed and operational.
3. 150 individual plus tres identified, located and geo-referenced as seed sources distributed over a n área of 5,500 hectares, of 48 correspond to *Alnus acuminata* "aliso", 35 to *Cedrela odorata* "cedro de altura", 24 to *Ocotea sp.* "Ishpingo", 21 to *Gordonia fruticosa* "chilca brava" and 22 to *Solanum pseudosycophanta* "san pablo".
4. 40 hectares of forests rehabilitated and tended.
5. 12 permanent plots for seed production distributed over 7.03 hectares - two plots in Puma Hermana, five in Ocol and five in San José; planted species are aliso (1908 individuals), cedro (231) and san pablo (557).
6. The community-based enterprise “Asociacion para la Conservacion del Bosque de Palmeras – ACOBOSQUE” is legally established and registered in the SUNARP and SUNAT to operate as a trading company of seeds, seedlings and timber products.
7. Four technical manuals were published and widely disseminated:
  - a. Harvesting seeds from native tree species: The Molinopampa experience
  - b. Forest nurseries for the production of native tree seedlings: The Molinopampa experience
  - c. Description of four timber species from the forests of the Molinopampa district for reproduction in nurseries
  - d. Permanent plots for the production of native tree seeds: The Molinopampa experience
8. Another four studies were published and widely disseminated:
  - e. Prioritization of native tree species for seed sourcing
  - f. Selection of native tree species as sources of seeds for reforestation
  - g. Vegetative propagation of chilca brava (*Gordonia fruticosa*) by stem cuttings in sub irrigation cameras, Molinopampa, Amazonas - Peru.
  - h. Preliminary phenology of five timber species in sub Andean community forests of Molinopampa
9. Information is now available on the biology and reproduction of 4 native timber species found in the project’s area of influence;

10. Simple intermediate technologies have been adapted for the regeneration of native timber species and the rehabilitation of degraded forests in the district of Molinopampa;
11. Natural forests have been rehabilitated in the project area and are being sustainably managed.
12. The income levels of local communities, particularly those who are living in poverty conditions and depend on forests resources for their livelihood, have substantially increased as a result of the sustainable management, utilization and marketing of forest products.

#### V. **Lessons Learn and sustainability**

The ever changing climate and the unusual persistent rains in the last few years has altered the phenology of the tree species, and it is currently difficult to predict the periods of seed production, hampering the collection of seeds.

As regards sustainability, it is necessary to continue strengthening the capacity of communities in forestry techniques and further motivate the public about the importance and true value of the forest resources of the region.

#### VI. **Concluding Remarks**

Overall, the project has significantly contributed in improving the living standards of the Molinopampa Rural community in the northern region of Peru through the production, diversification and marketing of native tropical timber species, using innovative mechanisms and practices.

As the ITTO Secretariat has received the Project Completion Report, several technical reports and the Final Financial Audit, this project can be reported as completed. Copies of the Completion Report and other technical documents are available either upon written request from the Secretariat or can be downloaded in digital format via the online project search engine on ITTO's website at: <http://www.itto.int> or at IIAP's website: <http://www.iiap.org.pe>

#### • **COMPLETED PRE-PROJECT**

- (1) **PPD 153/11 Rev.1 (F) Forest Fire Prevention through the Implementation of Regional Actions with the Participation of Local Communities and Other Relevant Stakeholders so as to Ensure the Protection of Forests and Ecosystem Services (Colombia)**

Budget and Funding Sources:

Total Budget:		US\$	123,326
ITTO Budget:		US\$	99.576
Government of Japan:	US\$	99,576	
ASOCARS		US\$	23.750
Implementing Agency:	Association of Regional Autonomous and Sustainable Development Corporations – ASOCARS		
Collaborating Agency:	Autonomous Corporations, Ministry for the Environment, Housing and Land Development, Division of Risk Management, Regional Governments and Municipalities		
Period of Approval:	ITTC Session XLVII, November 2011, Guatemala City, Guatemala		
Starting Date and Duration:	November 8, 2012 / 12 months		

## **I Introduction**

The Council approved the pre-project at its Forty-seventh Session in November 2011 in Guatemala City, Guatemala, and full financing was made available at that same session. The agreement regulating the implementation of the pre-project was duly signed on 30 August 2012. The executing agency submitted the Inception Report, which was approved on September 28. Thus, the pre-project had his first disbursement in October 25, 2012, beginning its execution. The second disbursement was in July, 2013.

During implementation of the pre-project, the scheduled activities were developed, producing important results for the country's decision-making process related to forest fires, contributing relevant information to the resulting project formulation. In that way, the pre-project has been able to get its objectives, within the time schedule and budget approved. The pre-project was completed on time, in October 2013, with the preparation of the project proposal to be submitted to ITTO, which is the main output of the pre-project.

The Pre-Project was performed in six departments that include the Caribbean, Andean and Orinoquia region of Colombia, where traditionally forest fires occur in Colombia and natural forests have been affected by the culture of burning. The Pre-Project consolidated relevant information at regional and local level with the participation of different actors on the issue, which contributed with knowledge from the departments of Magdalena, Cesar, Tolima, Boyacá, Meta and Casanare.

In the regions object of the Pre-Project, the economy is based on agricultural activities that have transformed the soil use of forestland, generating activities that profoundly affected forest ecosystems and the natural cycles contributing to climate variability of those regions.

The environmental actions are generally made through the National Environmental System – SINA; and the management actions related to disaster risk are taken through the National System for Disaster Risk Management - SNGRD, involving all entities from the environmental sector and risk management.

Forest fires in Colombia have been a constant in recent decades, affecting biodiversity and forest ecosystems of the country. The Andean region has the highest incidence of forest fires, but the most affected region is Orinoquia. In years when El Niño is present, forest fires increase, occurring the biggest wildfires in the country.

The reporting of forest fires at national level produces general information and shows a panorama of what may be happening in the departments. However, there is no verification, monitoring and consolidation of that information at the regional and local level. Most importantly, the main causes of forest fires and ecosystems affected are not identified and the information does not include social or economic information or, even, people involved in the generation and proliferation of fires. Therefore, the Pre-Project was oriented to determining the main causes of forest fires in the regions under study.

Although, there exist political and legal frameworks established at national ambient level addressing forest fires, it is necessary to strengthen municipalities and departments to conduct proper management according to economic, social and environmental situation in the regions. This strategy would protect forest ecosystems through prevention actions that cost less than controlling forest fires and recovering areas affected by such events.

## **II. Project Objective**

### **Development objective**

Formulation of a project for forest fire prevention, bringing together community and other local actors to identify problems and solutions, leading to the protection of forests and ecosystem services.

### **Specific objectives**

1. To determine the main causes of forest fires in each of the three Colombian regions, Andean, Caribbean and Orinoquia.
2. To formulate a prevention project that enables the participation of the community and the different actors to work the causes of forest fires.

### **III. Project Achievements and Outputs**

Output 1: a technical document on the causes of forest fires in the Caribbean, Andean and Orinoquia regions of Colombia as a result of the collection and analysis of information from the central level (Institute of Hydrology, Meteorology and Environmental Studies – IDEAM; National Unit for Disaster Risk Management – UNGRD; Ministry of Environment and Sustainable Development of the Republic of Colombia – MINAMBIENTE and Regional Autonomous Corporations – CARS). International documentary review, as well as through the development of six regional workshops, which were the main axis of the Pre-Project activities. This document was obtained at the end of Activity 3.

Output 2: formulation of a project of forest fires prevent to be submitted to ITTO, what was obtained at the end of Activity 4.

Activity 1: Review information at the national level from IDEAM, UNGRD, MINAMBIENTE to identify the historical existing at that level, doing the respective analysis and prioritize critical departments and municipalities on fire occurrence and also on the affected area, for each year in each of the three Colombian regions.

Activity 2: Organizing six workshops with the participation of local rural communities and the different actors in critical municipalities (one municipality by each of six departments, resulting six municipalities), to collect information from the community and various local actors, identifying leaderships.

Activity 3: To analyze, process and systematize the documentation and information from the workshops (Product 1 of the Pre-Project).

Activity 4: To prepare the Project of forest fire prevention based on the search and analysis of secondary information and field data collection, as well as prior socialization and validation of those results with the community (Product 2 of the Pre-Project).

### **IV. Outcomes and Impacts**

Output 1 of the Pre-Project was obtained through the survey and analysis of the data obtained from and secondary information, which provides support for the management of forest fire risk. This information serves the national entities, formulators and political institutions on the management of risk disaster in the environment and agricultural sectors and national controlling agencies (Comptrollership, Attorney and Prosecutor) for decision-making in the matter. This Output 1 was based also on primary information got from the community through the six workshops.

Output 2 of the Pre-Project, the project proposal to present to ITTO, aims to give continuity in the approach of the present work, based on the active involvement of the community and the different actors. This approach provided a strong component of training and strengthening of risk management in forest fires mainly at local and regional level, joining forces to prevent loss of forests, ecosystem services and biodiversity.

### **V. Lessons learnt and sustainability**

Lessons learned:

- Knowledge of procedures for the ITTO project formulation, reporting and management ITTO applicative, resulting in useful knowledge for future relations with international organizations.
- Regional and local knowledge of how move the actors in the agricultural and livestock sector that affect the occurrence of forest fires, which allows strong bases to guide future work on the subject.
- Knowledge of local, regional and national realities in terms of risk management in forest fires.
- Interaction with SINA entities, the SNGRD and the community in general.

The strategy adopted since the formulation of the Pre-Project, continuing during its execution was appropriate and relevant to the scope of the proposed objectives and the scheduled time. Proof of this are the products obtained, which are instruments that contribute to the strengthening of risk management in forest fires in Colombia. At the level of central entities, it was obtained collaboration from MINAMBIENTE, IDEAM, UNGRD. Regionally, the work was done with the Autonomous Corporations for Sustainable Development - CARS, each institution providing the relevant and pertinent information on the status of forest fires.



The planning, organizing, convening and logistics of the workshops was satisfactory, despite the participation of some actors that was not easy like the media and specific communities members. Some of them do not involved themselves with the matter of forest fires, although they are linked in some way to the issue of forest fires, like especially the private agricultural associations. Another reason to add difficulty was the general lack of a culture in the management of forest fires prevention at the level of municipalities and province governments.

The performance of ASOCARS, as the Executing Agency (EA), was adequate, focusing on the administrative part of the economic resources, providing efficient flow of resources according to the schedule. In that way, the EA provided important support for the technical development and success achieved, as a responsibility of the Pre-Project coordinator.

The Pre-Project sustainability is reflected in the resulting project proposal, which brings the guidelines to follow in the future on the prevention of forest fires, based on the "Technical Document on the Causes of Forest Fires in the Caribbean, Andean and Orinoquia regions of Colombia". This document takes into account the policy and legislation existing on the issue nationally, providing legal bases and makes it as a strategy of national scope.

## **VI. Concluding Remarks**

As the ITTO Secretariat has received the Pre-Project Completion Report, a project proposal, a technical report and the Final Financial Audit, this pre-project can be reported as completed. Copies of the Completion Report and other technical documents are available either upon written request from the Secretariat or can be downloaded in digital format via the online project search engine on ITTO's website at: <http://www.itto.int>

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