Report of Ex-post Evaluation

PD 57/99 Rev.2 (F)

Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon – Phase I

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Ex-Post Evaluation Project PD 57/99 Rev.2 (F)

EX POST EVALUATION

PROJECT: PD 57/99 REV.2 (F) SUSTAINABLE MANAGEMENT OF PRODUCTION FORESTS AT THE COMMERCIAL SCALE IN THE BRAZILIAN AMAZON- PHASE,

FINAL REPORT

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Ex-Post Evaluation Project PD 57/99 Rev.2 (F)

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ACRONYMS

AIMEX	Industrial and export asociation
ALU-FR	University of Frigurg
CARPE	Usaid regional Project in the Congo Basin
CENAFLOR	Centre Forest service
CIFOR	Center For International Forestry Research
CIKEL	Name of the Private forest Enterprise
CONAMA	National Environment Council
EMBRAPA	Empresa Brasileira de Pesquisas Amazonicas
FMS	Forest Management System
FMS-P	Forest management System-Prototype
IBAMA	Institto Brasileiro de Meio Ambiente
IDEFLOR	Instituto de Desenvolvimento Florestal
IFT	Instituto Florestal Tropical
IMAZON	Amazon Institute of People and the Environme
ITTO	International Tropical Timber organization
MEOF	Economic Monitoring Operations
MMA	Ministry of Environment
MOP	Monitoring Enterprise Operational
NGO	Non Gubernamental Organization
PD	Project Document
PLANEJO	Planing and Control of Forest management Operations
PNF	National Forestry Program
RIL	Reduced Impact Logging
SEMA	Secretaria de Meio Ambiente, Estado do Pará
SFM	Sustainable Forest management
UFTA	Universidade Federal do Pará

1. INTRODUCTION

PD 57/99 Rev.2 (F) Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon- Phase, was chosen for ex-post evaluation among other projects related to geographic Information System/Demonstrations areas, as a typical and important project executed in order to promote Sustainable Forest Management on Dense Tropical Forest, in close collaboration with the private forest sector of the Amazonian Region of Brazil, towards the achievement of ITTO's Objective 2000

2. PURPOSE AND SCOPE OF EVALUATION

A) <u>Purpose</u>

The primary purpose of this evaluation is to provide a concise diagnosis of the project PD 57/99 Rev.2 (F) Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon- Phase I, related to <u>Demonstrations Areas 1</u>, to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the projects towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

B) Scope of Work

a) Analyze and assess for each project:

- 1. The overall role and contribution of the project in light of sectoral policies, development programmes, priorities and requirements to achieve the rehabilitation of degraded forest lands and the sustainable management of forest resources in the country concerned.
- 2. Specific measures taken to incorporate project results in the national forestry and environmental policies and legislation.
- 3. The current management status of the forests within the project's area of influence, the effectiveness of the project's implementation and its effectiveness in promoting sustainable forest management as defined in the ITTO Guidelines and Criteria and Indicators for Sustainable Forest Management.
- 4. The effectiveness of the project area as a demonstration area or model forest for sustainable forest management.
- 5. The contributions of the specific studies in various forestry-related disciplines prepared by the project to the development of forestry in the project's area of influence and on other similar and/or related projects being implemented in the countries concerned.

¹ Another project related to the Geographic Information System was also evaluated: PD 176/02 Rev.1 (F) "Use of Remote Sensing Technology and Information Systems to Support Forestry Legislation Monitoring in the Republic of Congo" but a separate report was produced

- 6. The results and potential impact of the applied research conducted by the project (if any) on Geographic Information System / Demonstrations Areas practices and its contribution to the overall forestry-related knowledge in the region.
- 7. The impact of project activities on the livelihoods of target populations.
- 8. The effectiveness of dissemination of project results.
- 9. The overall post-project situation in the project's area of influence.
- 10. The unexpected effects and impacts, either harmful or beneficial, and the reasons for their occurrences.
- 11. The cost efficiency in the implementation of the project, including the technical, financial and managerial aspects.
- 12. Follow-up actions in order to enhance uptake of project results.
- 13. The project's relative success or failure, including a summary of the key lessons learnt; and the identification of any issues or problems that should be taken into account in designing and implementing similar projects in the future.

Approach

A) <u>Composition of the evaluation team</u>

The team was composed of two consultants Mr. Jorge Malleux as a Team Leader in charge of the final report and the presentation of the results at the Forty-seventh Council Session in Guatemala, in November 2011, and Mr. Germain Sazy, associated consultant on a regional basis for the evaluation of PD 176/02 Rev.1 (F) for the mission to the Republic of Congo.

B) <u>Consultation during evaluation exercise</u>

The team maintained close liaison with ITTO and will carry out its work in close cooperation with the concerned Executing Agencies and Governments in the countries concerned. Although the team should discussed with the authorities concerned all matters relevant to its assignment.

C) <u>Activities and report of the team</u>

The work required for this evaluation will consisted of:

- 1. Desk review of project-related documents and materials provided by ITTO.
- 2. Missions in Brazil. The consultants will visited each project's Executing Agency headquarters for a further desk review of project materials and to carry out evaluation work in collaboration with the Executing Agencies. The missions also included a field visit to the projects' area of influence to review field implementation and to evaluate the project results and impact, including discussions with project stakeholders and target beneficiaries. Approximately five to six working days are required for each project.
- 3. Preparation of an Ex-post Evaluation Report in accordance with the Scope of Work and the checklist contained in the ITTO Manual for Project Monitoring, Review and Evaluation. The report for Brazil should be in English, and the reports for Congo should be in French;
- 4. Preparation of a synthesis report of the ex-post evaluation report, focusing on the overall assessment of the projects' relative success in contributing to ITTO's

Objectives, the Objective 2000 and the ITTO Yokohama Action Plan 2002-2006, summarizing the key lessons learnt; and identifying any issues or problems which constrained their contribution to the achievement of Objective 2000.

- 5. Presentation of the synthesis report (to be called: Overall Executive Summary) at the Forty-seventh Session of the International Tropical Timber Council (November 2011, Guatemala).
- 6. Preparation of an article for possible publication in the ITTO Tropical Forest Update (TFU), in consultation with the editor, containing an overview of the projects and summarizing the lessons learned from the evaluation work. Appropriate high-resolution photographs should be provided.

In writing the Ex-post Evaluation reports, the team had the opportunity to discuss its preliminary findings, conclusions and recommendations with the representatives of each of the Executing Agencies, Governments and ITTO before the final version of the report was made.

3. PROJECT FACTS

3.1 General information

<u>Title</u>: Sustainable Management of the Production Forest at the Commercial scale in the Brazilian Amazon

- a) Serial Number: PD 57/99 Rev.2 (F)
- b) Executing Agency: Embrapa Amazônia Oriental
- c) Host Government: Brazil
- d) Starting Date: 1 November 2002
- e) Actual Duration (months): 62
- f) Actual Project Costs (US\$):

ITTO: 768,954.00 Embrapa: 223,300.00 CIFOR: 268,048.00 Timber enterprise (Juruá & Cikel): 271,644.00 Collaborators: 35,000.00

<u>3.2</u> Origin: the need to increase the number of demonstrations projects on SFM in the Brazilian Amazon region, at commercial scale is considered as one of the most important aspects that should be cover through demonstrative areas at commercial scale, however after more than two decades of research there are still some skepticism from the private enterprises about the effectiveness to adopt SFM practices, nevertheless there is a greater interest on some enterprises to participate in the improvement of efficiency of forest production, encouraged by the increase demand and the price for tropical timber.

3.3 The key problems intended to solve

Timber exploitation, as a pioneer activity, plays an important role in the economy of the Amazon region, but also in the destructive process affecting their natural resources. The characteristics of current selective logging activities can be regarded as mining. The renewable value of the forest is simply not considered. Although highly selective, the application of inadequate operational techniques usually results in significant damage to the remaining forest. In many cases, logged-over forests are legally or illegally cleared, burnt out and converted into agricultural land. In this process, biodiversity decreases as many endemic animals and plants disappear.

In this situation, the concept of sustainable forest management based on the application of Reduced Impact Logging practices is an attractive alternative to use the economic potential of the forests while maintaining their environmental and economic value. Even though several research projects conducted in the region show positive results about the effectiveness of the proposed systems, commercial loggers seriously hesitate to adopt them. This led to the paradox situation that the research results have been incorporated in the Brazilian forest management regulations, but in practice timber companies do not follow them properly.

The entrepreneurs, in general, do not believe in the benefits of introducing good management practices in their operations, and do not apply them to confirm their disbelieve. A diagnostic survey of forest management projects in the Paragominas region, conducted in 1995 by the Brazilian Agricultural Research Corporation (Embrapa), the Brazilian Institute for Environment and Renewable Natural Resources (IBAMA) and other partners, revealed that the totality of logging operations did not follow the prescriptions established in the forest management regulations which corresponds to a great extent with the ITTO's recommendations regarding good forest management practices. It became obvious that there have been only very few demonstration projects for good forest management at the commercial scale in the region, and that the logging companies have been insufficiently engaged in the few experiments established so far.

Thus one of the most important conclusions of the above mentioned survey was the need to establish demonstration projects at commercial scale and with the active involvement of timber enterprises. This important stimulation to adopt good forest management practices deemed especially important in the Eastern Amazon, as being the most important timber producing region in the Amazon. It was expected that this would complement another ongoing ITTO Project in the Tapajós Forest, in the western part of Pará State.

Based on these premises, Embrapa and the Centre for International Forestry Research (CIFOR) signed a memorandum of understanding in order to coordinate and implement, together with other relevant institutions of the region, a demonstration project on sustainable forest management having the effective participation of two local timber enterprises as partners.

<u>3.4 Foreseen Situation after project completion: i)</u> timber enterprises and governmental agencies adopt FMS developed by the project, ii) regional economy strengthened by increasing efficiency in forest production and iii) the economical, environmental and social advantages of the RLI will be identified, documented and evaluated.

3.5 Project objectives and outputs

<u>General objective</u>: Encourage the adoption of forest management good management practices by timber enterprises in the Brazilian Amazon

<u>Project components</u>: i) management, ii) silvicultural tool, iii) managerial practices, iv) training and v) dissemination.

Specific Objectives and Outputs

The project aimed to achieve two **specific objectives**:

a). Develop, test and evaluate a Forest Management System (FMS) for the effective and sustainable use of forest resources by medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon.

b). Promote a wide dissemination of the FMS amongst medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon.

For achieving each specific objective, the following targets were established as project outputs:

a.1). Project infrastructure established and maintained

a.2). A FMS-prototype validated by partner enterprises in the eastern Brazilian Amazon considering technical, environmental and economic aspects

a.3). A system for monitoring and evaluating the social, ecological and economic impacts of the FMS defined and tested

b.1). Project results documented and disseminated through field days, publications and technical meetings

b.2). A strategy and mechanism to transfer the FMS to timber enterprises of the Brazilian Amazon defined with the participation of relevant parties

4. GENERAL ASSESSMENT

4.1 The Project Proposal rationale and its Logical Framework, external influences

4.1.1 The project rationale

As it is a common situation all around the tropical forest context, most of the entrepreneurs, , do not believe in the benefits of introducing good management practices in their operations, and do not apply them to confirm their disbelieve, their reluctance to this approach is due to two main factors: a) they are afraid of further control and audit procedures from the governments through the introduction of new technical and economical and b) their resistance to the introduction of new tools which can bring additional operational costs . A diagnostic survey of forest management projects in the Paragominas region, conducted in 1995 by the Brazilian Agricultural Research Corporation (Embrapa), the Brazilian Institute for Environment and Renewable Natural Resources (IBAMA) and other partners, revealed that the totality of logging operations did not follow the prescriptions established in the forest management regulations which corresponds to a great extent with the ITTO's recommendations regarding good forest management projects. It became obvious that there have been only very few demonstration projects for

good forest management at the commercial scale in the region, and that the logging companies have been insufficiently engaged in the few experiments established so far.

Thus one of the most important conclusions of the above mentioned survey was the need to establish demonstration projects at commercial scale and with the active involvement of timber enterprises. This important stimulation to adopt good forest management practices deemed especially important in the Eastern Amazon, as being the most important timber producing region in the Amazon. It was expected that this would complement another ongoing ITTO Project in the Tapajós Forest, in the western part of Pará State.

Saw the context in this way, the rationale of the project for the achievement of its objectives and goals was correct, moreover the implementation of the project, demonstrate that this approach was right and the strategy to overcome the problem properly implemented.

4.1.2 The logical framework matrix

In general the logical framework matrix reflects the aim of the project, particularly at the level of specific objectives and outputs, however the indicators in general are very weak and generalist, failing to give a more objective and practical reference on how to asset the different out puts, no one indicators are quantifiable, they are mostly descriptive but in a general and ambiguous way, which does not help the task of evaluation. More over there are some outputs and indicators that could drive the evaluator on different directions, for instance when referring to the evaluation, test and validation of the FMS tools produced by the project, in fact the term of validation was used as a concept of test of evaluate, and the project responsible stands on this interpretation, indeed the incorporation on the logical framework matrix, outputs and indicators for the "second phase" complicate much more the situation, considering that some tasks are simply deferred to the second phase when its achievement, was not possible or difficult, like the case of the development of the strategy for the dissemination and promotion of the FMS tools among the private enterprises, according to the project responsible, this tasks belongs or should be transferred to the second phase. Actually the implementation of a intensive campaign of dissemination and proportion could be a major task for the second phase, but not the elaboration of the strategy it self

4.1.3 External influences

Most of the important assumptions for the accomplishment of the specific objectives and achievement of outputs are based on the availability of funds and the willingness of the partners to joint the project and adopt the recommendations.

It is true that the fail on funds availability could be not only a big constraint, but a definitive paralysation of the project, however it should also take in consideration that, since the project is originated and selected among other priorities, and supported by the political will of the government and other sectors willing to develop a project which is considered priority, shortage, of failure on funds won't necessarily be the most important assumption for the project paralysation. On the other hand the formulation of a project which success depends very much on the willingness of the stakeholders participation and commitment, must be prepared after a serious consultation process to avoid the vacuum of enough partners once the project starts.

The main constraint of the project once approved and initiated could be the change on the political supports and priorities at the federal and state government level, which is always a

Damocles spade when projects are very much depending on the public institutions, strongly linked with the political context.

4.2 The key problems intended to solve

The concept of sustainable forest management based on the application of Reduced Impact Logging practices becomes an attractive alternative to use the economic potential of the forests while maintaining their environmental and economic value. However after over two decades of research on sustainable forest management, there is a generalized skepticism about the effectiveness of the recommended techniques. Even though several research projects conducted in the region show positive results about the effectiveness of the proposed systems, commercial loggers seriously hesitate to adopt them. This led to the paradoxical situation that the research results have been incorporated in the Brazilian forest management regulations, but in practice not all the timber companies follow them.

4.3 Strategy adopted in carrying out the project

The main idea of the project was to develop, test, evaluate and transfer a Forest Management System (FMS) for use by timber enterprises working under typical production conditions found in *terra firme* forests of the Brazilian Amazon. The FMS consists of a set of tools designed to assist a forest enterprise in the planning, implementation, evaluation and monitoring of its operations to achieve sustained economic benefits under current and foreseeable environmental and social conditions.

There are two types of tools: <u>silvicultural</u>, including tools for planning timber harvesting, and <u>managerial</u>, for the economic planning and control of the enterprise's operations.

Two timber enterprises were selected as project partners, *Juruá Florestal Ltda.* and *Cikel Brasil Verde Madeiras Ltda.*, both are representatives for a large number of forest enterprises in the Amazon.

After the development of the silvicultural and managerial tools, the Forest Management System Prototype (FMS-P) was tested at an operational scale by these two partner timber enterprises. In addition, a system to monitor the ecological, social and economic impacts of the FMS was developed and tested.

Training was one of the most important strategic approaches developed by the project to disseminate and promo the implementation of the tools developed for FMS, and was provided in close co-operation with the Tropical Forest Institute (IFT – *Instituto Floresta Tropical*). The project technical and scientific staff trained the enterprises technical staff in the utilization of the forest management tools (computer software, silvicultural field procedures, etc), the supervision of forest operations, as well as the monitoring of the FMS-P in order to identify its direct and indirect impacts, with special emphasis in the identification of problems and opportunities created during the implementation process. Based on the results of the continuous assessment by the project partners, the FMS tools were revised and adapted for a better practical use.

In close cooperation with CIFOR for the development of the FMS and further developments of the set of tools, the project achieve to elaborate a number of technical and scientific documents and reports, which also played a very important role on testing and promoting of FMS.

4.4 Project Achievements: efficacy

Output 1.1.: Project infrastructure established and maintained

Actually this output shouldn't be considered as that, because the establishment of the project infrastructure is a regular procedure in all projects. Nevertheless it is important to notice that the EA had difficulties with the administration of the ITTO's funds, in view of the serious restrictions and procedures to be followed until the funds were used. The solution was the signature of a contract for the project funds administration by the Tropical Forest Institute (IFT) since November 2005. The database of the "Bom Manejo" virtual community (http://www.catir.sede.embrapa.br) was installed and regularly updated.

<u>Indicators</u>: Coordination Unit established and operational along the project's life, the steering committee functioned adequately, a total of five t meetings were organized, and 9 timely progress reports produced, the administration was properly set in place, initial constraints related to the administration of the ITTO's funds were solved quickly.

Output 1.2.: A FMS-prototype validated by partner enterprises in the eastern Brazilian Amazon considering technical, environmental and economic aspects.

Technical Guidelines for Forest Management as well as for Reduced Impact Harvesting – RIH, were produced and used by the partner enterprises. The software MOP (Monitoring Enterprise Operational Performance), MEOF (Economic Monitoring of Forest Operations) and PLANEJO (Planning and Control of Forest Management Operations) were developed, tested and have been used by timber enterprises, research institutions, universities and government agencies involved in forest management. However, the regarding the concept of "validation" the Executing Agency (Embrapa), considers that the actual validation will be done during the second phase of the project. In any case on the logical framework, the verifiable indicators are: studies on ecological impacts, economic feasibility studies and technical feasibility studies, although the indicators and means of verification have not necessarily a clear and direct correspondence with the output referring to validation, but having as means of verification: a) the Inspection reports from IBAMA, b) project progress reports, c) publications, d) presentation and workshops and, e) ITTO evaluation reports.

Indicators: Ecological studies on ecological impact, economical and technical feasibility studies

Several scientific and technical reports related to the ecological impact, were produced by the project in collaboration with CIFOR, UFPA and IFT, particularly those related to RLI studies and practices, as well as the large number of permanent control plots established on the natural forests, and the control of old permanent plots on the Tapajos and Jarí National Forests areas (FLONA), being controlled since 1980. This controls permitted to validated several assumptions related for instance to the forest growth rate, after different levels or intensities of logging, which allowed to IBAMA to strength its administrative and legal frame work on SFM.

Output 1.3.: A system for monitoring and evaluating the social, ecological and economic impacts of the FMS defined and tested.

A tool to monitor the social, ecological and economic impacts of the FMS, including impacts on local communities was developed, including, procedures to monitor logging damage. The criteria and indicators as well as relevant methodologies produced by the project have been used by universities and research institutions. ITTO Criteria and Indicators were applied in the Forest Management Units of Cikel (Rio Capim, ABC and Martins) and Juruá (Arataú and Santa Marta) and a manual for auditing forest management projects was developed in collaboration with IBAMA. The auditing procedures have been successfully implemented by IBAMA and the Environment secretariat of the State of Para (SEMA) for the analyses of forest management projects in the Amazon region located in public and private forests.

However it sorted it out that the monitoring of the social and economic impacts didn't receives the same importance or priority as the ecological one.

Indicators: Guidelines, manual, software, criteria and indicators defined and used

Large number of manuals, technical documents, guidelines for forest management monitoring, auditing, permanent control plots, use, test and validation of ITTO's Criteria and Indicators for SFM, at economical scale on medium and large forest management areas of private forest companies. A list of the documents produced by the project is in annex. 1

A tool to monitor the social, ecological and economic impacts of the FMS, including impacts on local communities was developed, including, procedures to monitor logging damage. The criteria and indicators as well as methodologies have been used by universities and research institutions. ITTO Criteria and Indicators were applied in the Forest Management Units of Cikel (Rio Capim, ABC and Martins) and Juruá (Arataú and Santa Marta) and a manual for auditing forest management projects was developed in collaboration with IBAMA. The auditing procedures have been successfully implemented by IBAMA and the State Environment of Para (SEMA) for the analyses of forest management projects in the Amazon region located in public and private forests

Output 2.1.: Project results documented and disseminated through field days, publications and technical meetings.

More than 40 documents were prepared in the course of the execution of the project, including books, papers, manuals, progress reports, folders, banners etc. In addition, two field days were organized and a home page (http://www.cpatu.embrapa.br/BomManejo) was created. A final seminar was organized which was attended by nearly 200 people, including scientists, the industrial sector, policy makers and students. Project results were also disseminated through presentation at national and international conferences, many technical meetings and through the involvement of graduate and undergraduate students.

The only remark to this output is the fact that even though that most of this, technical reports, scientific articles etc. were based or inspired on the project woks, several of this documents didn't mention the project or ITTO's contribution.

<u>Indicators</u>: national and international attention to the project, enterprises, research institutions, government, reports and proceedings, project homepage and educational video

As mentioned in several opportunities, the project succeed to produce and publish a large number of publications, training courses were well planned and documented as reports and project homepage is still operative proceedings, the and regularly updated (http://bommanejo.cpatu.embrapa.br/), (http://www.cpatu.embrapa.br/BomManejo. More than 40 documents were prepared in the course of the execution of the project, including books, papers, manuals, progress reports, folders, banners etc. In addition, two field days were organized. A final seminar was organized which was attended by nearly 200 people, including scientists, the industrial sector, policy makers and students. Project results were also disseminated through presentation at national and international conferences, many technical meetings and through the involvement of graduate and undergraduate students.

Output 2.2.: A strategy and mechanism to transfer the FMS to timber enterprises of the Brazilian Amazon defined with the participation of relevant parties.

The project did not elaborate a consistent and detailed strategy for the transfer the FMS tools to the timber enterprises, this task, according to the former project responsible, was left aside for to the project's second phase².

<u>Indicators</u>: partner institutions prepared to transfer FMS, training executed, partner enterprises chosen and trained

A strategy and mechanism to transfer the FMS to timber enterprises <u>were defined to be executed in the project's second phase</u>. The profoundly revised proposal for the second projects' phase foresees as the project's-executing agency Embrapa. The Ministry of Environment through the IBAMA and its Forest Management National Support Centre Forest Service (CENAFLOR), the Brazilian National Forestry Programme (PNF), and the Brazilian Forest Service (SFB) will be main partner institutions in this project, together with IFT. CIFOR and the University of Freiburg (ALU-FR) will collaborate with institutional support. In addition, a number of governmental and non-governmental institutions in the region will participate or benefit from the project.

² On In 2009, after finish the Project completion, a new proposal was submitted to ITTO by EMBRAPA, aiming to implement a second phase of the Project, which in fact was already mentioned on the Project document of the PD 57/99 Rev.2 (F)

4.5 General overview of the project operation : efficiency

The main idea of the project was to develop, test, evaluate and transfer a Forest Management System (FMS) for use by timber enterprises working under typical production conditions found in *terra firme* forests of the Brazilian Amazon. The FMS consists of a set of tools designed to assist a forest enterprise in the planning, implementation, evaluation and monitoring of its operations to achieve sustained economic benefits under current and foreseeable environmental and social conditions. There are two types of tools: silvicultural, including tools for planning timber harvesting, and managerial, for the economic planning and control of the enterprise's operations.

Two timber enterprises were selected as project partners, Juruá Florestal Ltda. and Cikel Brasil Verde Madeiras Ltda., both are representatives for a large number of forest enterprises in the Amazon.

After the development of the silvicultural and managerial tools, the Forest Management System Prototype (FMS-P) was tested and implemented at an operational scale by these two partner timber enterprises. In addition, a system to monitor the ecological, social and economic impacts of the FMS was developed and tested.

Training was provided in close co-operation with the Tropical Forest Institute (IFT – Instituto Floresta Tropical). The project technical and scientific staff trained the enterprises technical staff in the utilization of the forest management tools (computer software, silvicultural field procedures, etc), the supervision of forest operations, as well as the monitoring of the FMS-P in order to identify its direct and indirect impacts, with special emphasis in the identification of problems and opportunities created during the implementation process. Based on the results of the continuous assessment by the project partners, the FMS tools were revised and adapted for a better practical use.

4.6 Project design

The aim of the project was adequately delivered concerning the origin, justification and its strategy; however the development objective seems to be rather limited in relation to the real goal of the project, which goes far from just to "encourage the adoption of good forest management practices..." in fact that could have limited the focus of the project. Indeed the verifiable indicators for the development objective are also very limited in regard to the whole context.

The specific objectives are also well elaborated, although there is no a good consistency between to the outputs and the measurable indicators. For instance the specific objective is to "test and evaluate" a FMS, while the output refers to the "validation" and these two concepts are not necessarily the same (test is a critical examination, and validation is to make officially). That could be a narrow line in between of both concepts but also could make a big difference in practice.

In summary there are some problems with the actual interpretation of certain limits and details at the level of the objectives and verifiable indicators.

4.7 Stakeholder involvement

Actually the project Bom Manejo, was originated on a previous and successful development of the program "ProManejo" a initiative of EMBRAPA together with other partners like CIFOR and UFPA, working on research activities related to the management of the natural forest, secondary forest, participatory forest management plans, involvement of private enterprises on SFM activities etc. This common effort or strategic alliance contributed to develop a very favorable institutional environment of different stakeholders who continue very active at the regional and national level

The project went through several phases, always increasing the number of entities and partners and improving the participatory approach, seeking to work with unions, associations of producers, farmers, and agricultural schools for elementary and secondary education by involving them in the process of training on the use and management of natural resources, focusing on the management of secondary forests in areas of legal reserve and permanent preservation

Based on these premises, Embrapa and the Centre for International Forestry Research (CIFOR) signed a memorandum of understanding in order to coordinate and implement, together with other relevant institutions of the region, a demonstration project on sustainable forest management having the effective participation of two local timber enterprises as partners

As foreseen by the project strategy, timber enterprises were actively engaged in the development and testing and using of the various silvicultural and managerial tools. This has significantly contributed to the validity and acceptance of the tools by the forest sector. Already during the project a 2nd timber enterprise became interested in following the research approach and to collaborate with the project.

Both enterprises (Cikel and Juruá) contributed with the significant input of own human and financial resources. In particular, the collaboration with IFT facilitated the dissemination of project outcomes to a wider universe. Extremely positive was also the active involvement of IBAMA as the legal authority. This unique cooperation enabled the project to directly contribute to improve the effectiveness and role of governmental organisations in the promotion of sustainable forest management in the region

Finally, an expressive number of scholars, experts, professors and students were actively involved as partners in collaborators during the project. Most of the project's outcomes have been elaborated in cooperation with and support of these partners. This has contributed to the quality of the project outcomes, as well as to their dissemination.

4.8 Project administration

In general the project was very well organized and operated, generating good synergies with the private forest enterprises and other public and private institutions, as well as some NGOs. The project succeed to convince two emblematic forest companies to jointly and actively participate in the implementation and adoption of the FMS tools developed by the project, [in spite of the additional costs that it could impact on their economy and finances, at least during the first time].

EMBRAPA gave a strong support to the project and also incorporate it as a permanent program, implementing an special building for the called *Bom Manejo* project.

The several partners involved in the project (IFT, CIFOR, UFPA, IMAZON and the private enterprises Cikel and Jurua), demonstrated a very serious compromise with the project and honoured all their commitments.

Financial and managerial aspects of Project implementation,

No major remarks could be done regarding the managerial operation of the project, cash flow, financial statements, audit reports, progress reports and all other aspects related to the administration of the project were properly and timely managed

The project was originally planned for a five-year period beginning January 2000 and ending December 2004. The project actually began in November 2002 for a first phase of two years.

The budget approved by ITTO was US\$ 1,404,132.00 of which US\$ 753,954.00 was committed from ITTO and the balance from counterpart funding. During the execution of the project US\$ 162,814.00 were added to the budget, of which US\$ 15,000.00 represented the bank interest earned from the ITTO amount and the balance from counterpart funding.

4.9 Accomplishment of objectives and products.

Specific objective 1: A Forest Management System (FMS) for effective and sustainable use of forest resources by medium and large size timber enterprises in the terra firme forests of the Brazilian Amazon, was developed, tested, evaluated and have been adopted in principle by two forest enterprises in the Brazilian Amazonia, a large one (Cikel) and a medium size (Jurua). However it is necessary to continue working intensively in the dissemination of the FMS tools in a more large extend, in order to generate a critical mass of forest enterprises adopting this system and contributing to the sustainability of the Brazilian Amazonian forest. Indeed additional work has to be done in order to validate the full FMS developed by the project.

Specific objective 2: *The project has contributed to a wider dissemination of the FMS* (through field days, training, courses, seminar, publications and technical meetings) amongst medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon, including those interested in certification and good forest management. Although a strategy and mechanism to continue disseminating and transferring the FMS to timber enterprises of the Brazilian Amazon is crucial in order to generate a critical mass of forest enterprises dealing with FMS. Actually this is the main objective of the project's second phase, already submitted to ITTO by Embrapa in 2009.

4.10 Impact

The main contribution and impact of the project was on the legal framework for the improvement of the guidelines and normative on harvesting techniques performed in the Amazon forest (" a set of procedures regulating harvesting in order a) to minimize the environmental damage, keep the potential for the next commercial harvesting and maintain bbasic ecological services, b) Reduce Operational costs, and c) Increase efficiency of harvesting operations and Reduce waste ").

Some publications of the project showed the progress of improvement of techniques and practices of good management, for example, the books "Technical Guidelines for exploration operations in low-impact forest land in the Brazilian Amazon" and "Guidelines for management techniques mechanized timber production in upland forests in the Brazilian Amazon."

During the surveys and workshops to bring together the results of the project and the views of researchers involved in the process to generate these two publications and many other articles, also a discussion going on at the national level, organized by the Brazilian Federal Government, mostly with meetings in Brasilia, to improve the Brazilian Forest Law. At these meetings came the greatest contributions to the Project *Bom Manejo* for the improvement of legislation on management of natural forests in the Brazilian Amazon.

Researchers and technicians of Good Project Management actively participated in the preparation of draft standards for the Government, through IBAMA (Brazilian Institute of Environment and Renewable Natural Resources), CONAMA (National Environment Council) and MMA (Ministry of the Environment). For example, Instruction No. 5, December 11, 2006, published by the MMA, which addresses the technical procedure for the preparation, presentation, execution and evaluation technique for Sustainable Forest Management Plans (PMFS) in the primary forests and its forms succession in the Amazon "was widely discussed with the effective participation of researchers and technicians of Good Project Management. It should also be said that experiments on forestry post-harvest started in Projec Bom Manejo, now continue to run on other projects, with support from other donors, Forest Management System (FMS) for effective and sustainable use of forest resources by medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon was developed, tested, evaluated and have been adopted to a large extent by forest enterprises in the Brazilian Amazonia.

In summary the project has contributed to a wider dissemination of the FMS (through field days, training, courses, seminar, publications and technical meetings) amongst medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon, including those interested in certification and good forest management. A strategy and mechanism to continue disseminating and transferring the FMS to timber enterprises of the Brazilian Amazon to be applied in the project's second phase, which was developed in tight cooperation with highly relevant partners in Brazil.

The project has contributed to the achievement of the development objective, if related to its literal presentation "*encourage the adoptions of good forest management practices*", through:

- Good forest management practices are being adopted by medium and large size timber enterprises in the *terra firme* forests of the Brazilian Amazon.
- The auditing procedures developed by the project for the analyses of forest management projects in the Amazon are being adopted by IBAMA and SEMA.
- Technical guidelines for forest management as well as for reduced impact logging and a set of five software are being used by timber enterprises and Amazonian universities in their courses of forest engineering.
- Dissemination and use of scientific project findings by experts, technicians and governmental authorities.

Finally, PD 57/99 Rev.2 (F) has contributed largely with the ITTO's 2000 Objective, disseminating and promoting the FMS and several tools in the State of Para, the northern region of Brazil, which is the largest and most important zone about natural forest area and timber production from the Brazilian tropical forest.

which may affect the Project's success; assessment of risks and success probability;

- assessment of the effectiveness of the management of unexpected situations and evaluation of the adopted routes as compared to alternative ones; and

- assessment of whether the Project design is still valid (for ongoing Projects) including the

review of the Logical Framework and suggestions for its revision, if necessary.

4.11 Sustainability

The project has successfully developed important synergies within the main forest actors and generate a good institutional environment. The *Bon Manejo* project became a permanent and very well appreciate program of EMBRAPA, at the same time some of the most important tools have been officially adopted by IBAMA and other relevant institutions responsible for the sustainable environmental development, and management of forest resources.

However it will be necessary to have more time to actually obtain a real impact at the regional and national level, for which a second phase of the project is advisable.

4.12 The post-Project situation

Three main goals were foreseen on the vision of the situation after project completion:

a) Timber enterprises and governmental agencies adopt FMS developed by the project

The project succeed to develop a large set of tools to promote FMS, and SFM, and their adoption by a two important and representative private forest companies on the State of Pará, (CIKEL and JURUA), EMBRAPA incorporate the *Bom Manejo* program as an official part of its institutional structure, IBAMA also adopt some of the guidelines developed by the project for monitoring SFM³ and the establishment of permanent plots for monitoring the state of the natural forest on the Brazilian Amazon region. However the extend of this achievement is still very limited specially on the private sector, thus it will be necessary to continue promoting the FMS for long time before a critical mass of forest producers could adopt the system

b) regional economy strengthened by increasing efficiency in forest production

It is evident that this goal was overestimated or was elaborated in a very enthusiastic way, actually it should continue being a long term achievement, which could be reality after a great common effort between the State, private sector and civil society together, because it is not on the capacity of a single project of 3 or 4 years, to achieve such a goal alone. Indeed there are several other aspects that are out of the control of the institutions, like the economic

³ Some examples of the incorporation of different tools developed by the Project on the legal frame work of IBAMA: 1) NORMA DE EXECUÇÃO N° 2, 26 DE ABRIL DE 2007Instituir, no âmbito desta Autarquia, o Manual Simplificado para Análise de Plano de Manejo Florestal Madeireiro na Amazônia, com a finalidade de subsidiar as análises dos Planos de Manejo Florestal Sustentável - PMFS de que trata o art.19 da Lei 4.771, de 15 de setembro de 1965. 2)NORMA DE EXECUÇÃO N° 1, DE 24 ABRIL DE 2007 Institui, no âmbito desta Autarquia, as Diretrizes Técnicas para Elaboração dos Planos de Manejo Florestal Sustentável - PMFS de que trata o art. 19 da Lei 4.771, de 15 de setembro de 1965. 3)NORMA DE EXECUÇÃO N.º 1, DE 18 DE DEZEMBRO DE 2006 Art. 1º - Instituir, no âmbito desta Autarquia, a metodologia e o respectivo modelo de relatório de vistoria com a finalidade de subsidiar a análise dos Planos de Manejo Florestal Sustentável – PMFS de que trata o art.19 da Lei 4.771, de 15 de setembro de 1965.

global crisis hammering the economy of most of the countries, in a context in which the forest sector is not an exception.

c) <u>The economical, environmental and social advantages of the RLI will be identified,</u> <u>documented and evaluated.</u>

Being RLI mostly a technical system, its accomplishment was more feasible, and the project done a successful work on this direction, actually the large number of publications, training activities, technical meetings, demonstration days in the field and specially the commitment of all the partners, joint the operational activities of the project, contributes largely to the full achievement of this goal.

5. LESSONS LEARNT, CONCLUSIONS AND RECOMMENDATIONS

5.1 Lessons learnt

The joint work of various institutions, public, private and civil society, contributed to the achievement of many objectives and goals of a project of this size and operational complexity.

Detailed and consistent economic and social information is absolutely necessary to better understand the real impact of the project, both at the regional and enterprise level.

The infrastructure of the executing agency and of the partner timber enterprises. and the experience of Embrapa and CIFOR in conducting international projects was a key element for the accomplishment of most of the tasks and outputs of the project. The experience of Embrapa on forest research and the lessons that it has learned over the past 30 years on the management of Amazonian natural forests contributed substantially to the project's success

Forest enterprises demonstrate that they are capable to adopt and develop technological innovations, when well advising and monitoring process is established. Reduced impact harvesting (RIL) does not constitute a technical problem but a cultural challenge.

Ambiguous and too general elaboration of the indicators and means of verification on the logical matrix, does not help the assessment of the project achievements.

5.2 Conclusions

The project has proved of great importance in the regional context of Amazon, for the implementation of sustainable forest management system of the Brazilian Amazon Forest, and great expectations in some private forest companies that are interested in adopting the sustainable forest management tools.

The project has developed synergies with various actors in the public and private sector, and civil society, with which it has worked hard for the implementation of sustainable forest management system.

The specific objectives and expected project results have been properly fulfilled in an efficient and professional manner, however there are some aspects that are necessary to continue working on as the

case of the FMS validation, the development of a comprehensive strategy and detailed comprehensive plan for dissemination of good forest management tools developed by the project.

The training activities undertaken by the project, have allowed a large number of officials, technicians, professionals, students to have assimilated the knowledge developed by the project and become trainers and promoters of FMS.

The project fails in developing decisive information on the economic impact of implementing the FMS Tools.

Despite the interest shown by some forest companies to participate in the project, it was confirmed that most of them still have some suspicion and reticence to adopt FMS and its tools, in part, because they are afraid about additional controls from the government and the higher operating costs resulting from the adoption of new FMS tools, developed by the project.

5.3 Recommendations

a) For the executing agency

There are a large number of documents, information and valuable experiences which are necessary to systematize and disseminate.

There are some products and results, in the elaboration of the logical framework matrix, which require a more precise and detailed explanation due to the ambiguity or inadequacy of the indicators and means of verification.

It is necessary to develop ecologic, social and economic baselines as a starting point for assessing the impact of the adoption of the FMS developed by the project, particularly if a second phase of the project. is foreseen.

The economic feasibility of the implementation of SFM tools is essential to understand its impact on the economy of the forest enterprise and the forest sector production in the Brazilian Amazon.

b) For ITTO

In consideration of the request for funding for a second phase of the project, it is necessary to include in the proposal a specific output regarding the validation of the FMS tools produced during the first phase, as well as the dissemination strategy of the products made during the first phase.

It is also necessary a careful development of the logical framework matrix, in such a way that the expected results, indicators and means of verification should be specific, realistic and quantifiable, clearly contribute to evaluate the fulfilment of specific objectives.

In order to ensure the full accomplishment of the project objectives and goals, it is advisable to go for a second phase of the project, as per the project proposal already elaborated and submitted by the executing agency to the ITTO, indeed this new proposal was already cleared and approved by the Expert panel, for financing, since two years ago. However this proposal should be updated and improved, given special emphasis on the evaluation of the economic impacts, elaboration of a consistent base line (economical, ecological and social), and the actual validation of the full set of tools developed for the FMS.

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c) For the hosting government

The full achievement of the project objectives need a clear and strong political support of the federal and state governments, incorporation the FMS tools on the legal and administrative framework, as per was partially done by IBAMA, during the first phase of the project.

Forest law enforcement is essential for the implementation of SFM, reducing or vanishing illegal or informal practices by forest operators, that would also encourage the private enterprises to decide adopting the tools development by the project,

d) To the stakeholders

To continue participating and supporting project activities, particularly on training activities, workshops and to carefully register all economic data regarding the use of FMS

6. THE PROJECT FOLLOW UP

Project PD 57/99 Rev.2 (F), was considered as the first phase of a long term project, indeed on the text of the approved project document, a second phase has been mentioned, and the logical frame work constructed with the indication of outputs for the second phase.

Once the phase I was finalized, the Brazilian Government submitted to the ITTO's Expert panel a new proposal for the follow up, titled Sustainable management of production forests at the commercial scale in the Brazilian Amazon – **Phase II** receiving the code PD 452/07 Rev.1 (F) and technically cleared by the Expert Panel on 2009, approved on the XLV ITTO's Council, however this project is still waiting for financing.

The consultant evaluator fully agrees with the continuation of the project though a second phase, however some adjustments and improvements on the project document of PD 452/07 Rev.3, should be done (discussed with the EA, during the evaluation mission in Brazil), as follows:

A) Regarding the project objectives

The Development objective of this new proposal is the same as the established for the Phase I :

To encourage the adoption of sustainable forest management (SFM) by medium and large size timber enterprises in *terra firme* forests of the Brazilian Amazon.

Observation: As it was mentioned by the evaluator, the way how this objective is presented, does not reflect properly the real aim of the project, which is the promotion of SFM at commercial scale for the improvement of the regional economy and livelihood of the Brazilian Amazon region

1.2 Specific objectives

1) Consolidate a set of tools to support the implementation of SFM by timber enterprises, Observation:

2) Build capacity of training centres and universities of the Amazon region to transfer SFM tools to timber enterprises and government environmental agencies responsible for forest management.

3) Evaluate the direct and indirect impacts of transferring SFM tools to timber enterprises.

4) Disseminate project achievements and products.

5) Execute and administer the project.

Observation:

Practically all of this specific objectives could be merged in two:

- Elaborate a detailed strategy for the dissemination and promotion of the MFS, developed during the first phase of the project, among the private operator, public sector and civil society
- 2) Validate the MFS system, to be adopted by the forest producers on the Brazilian Amazon Region, generating a critical mass of SFM on natural tropical forest.
- B) Regarding the budget

The budget requested from ITTO, could be scaled down in order to make more feasible its financing, reducing for instance the budget lines on National experts, duty travel and computer systems development

Other initiatives

Embrapa is currently trying to implement a national program called Forest Biomass Network, which objectives are the following:

General objective

Promoting innovation in the production chain to forest logging based on the generation of knowledge, technology and value industrial processes for the sustainable use of forests native and planted in the State of Pará

Specific objectives

To develop the MFN system (groups of species and smaller diameters)

b) Develop systems for timber production (MFP)

- c) develop tools to support and organizational mechanisms and institutional management of FN / PL
- d) develop technology and process timber in order to add value chains of production of wood products

This program could also be a good vehicle for the dissemination and promotion of the FMS tools developed during the first phase of the project .

ANNEX 1

Persons contacted during the evaluation mission in Brazil

NAME	INSTITUTION
ADEMIR RUSCHEL	EMBRAPA
LARISSA STONER	IFT
OLEGARIO P. CARVALHO	UFPA
PEDRO BERNARDO	IDEFLOR
VICTOR HUGO ARANDA	ODEFLOR
JOSE FRANCISCO PEREIRA	EMBRAPA
JORGE ALBERTO GAZEL YARED	UFRA
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MARCO LENTINI	IFT
MARCIO HOFMAN	EMBRAPA
JOSUE EVANDRO RIVEIRO FERREIRA	CIKEL
NATALINO	FORMER PROJECT COORDINATOR
PAULO BITTENCOURT	CIKEL
IRAN PAZ PIRES	CIKEL
CESAR PONHEIRP	CIKEL

ANNEX 2

List of main publications produced by the project and bibliographic references

- Conformidade com as diretrizes de exploração de impacto reduzido por empresas madeireiras em florestas de terra firme da Amazônia brasileira.
- Mudanças ocorridas na composição florística em decorrência da exploração florestal em uma área de floresta de Terra firme na região de Paragominas, PA.

• <u>Efeito da exploração de madeira e tratamentos silviculturais sobre a estrutura horizontal de</u> <u>uma área de 136 HA na floresta nacional do Tapajós, Belterra-Pará.</u>

- Manejo forestal empresarial en la Amazonia brasileña. Restricciones y oportunidades para la adopción de buenas prácticas de manejo.
- <u>Anelagem de árvores e plantio em clareiras como silvicultura póscolheita em floresta natural</u> <u>na amazônia brasileira.</u>
- <u>Mudanças nas populações de louros em conseqüência da exploração florestal na fazenda Rio</u> <u>Capim, Paragominas, PA.</u>
- Efeito da Exploração de Madeira e dos tratamentos silviculturais na diversidade de espécies do povoamento florestal remanescente na região do Jarí Amapá.
- Alianza para un buen manejo forestal Una iniciativa conjunta de investigadores e industrias madereras en la Amazônia brasileña.
- Partnership for good forest management A joint initiative of researchers and timber industries in the Brazilian Amazon.
- Efeito da exploração de madeira e tratamentos silviculturais na composição florística e diversidade de espécies em uma área de 136ha na Floresta Nacional do Tapajós, Belterra, Pará.
- IUFRO international seminar-workshop Towards better management practices in tropical humid forests: developing principles and recommendations for the Amazon Basin.
- <u>Collaborative Monitoring of Production and Costs of Timber Harvest Operations in the</u> <u>Brazilian Amazon.</u>
- <u>Compliance with reduced-impact harvesting guidelines by timber enterprises in terra firme</u> forests of the Brazilian Amazon.
- <u>C&I para el monitoreo de operaciones forestales Un caso en Brasil.</u>
- IUFRO international symposium: Integrated management of neotropical rain forests by industries and communities Applying research results, involving stakeholders and defining policy.
- Metodologías para evaluar la aplicación de criterios e indicadores en el manejo forestal de bosques tropicales en América Latina.
- Introducing Criteria and Indicators for monitoring and auditing forest management in the <u>Brazilian Amazon.</u>

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ANNEX 3

<u>Terms of Reference</u> Ex-Post Evaluation of ITTO Projects on Geographic Information System / Demonstrations Areas

I. <u>Background</u>

ITTO is an intergovernmental commodity organization established in 1986 to administer the provisions and operation of the International Tropical Timber Agreement (ITTA), particularly in the promotion of international trade in tropical timber, the sustainable management of tropical forests and the development of tropical forest industries through international cooperation, policy work and project activities.

The two projects that will be the subject of the Ex-post Evaluation are as follows:

PD 57/99 Rev.2 (F)	Sustainable Management of Production Forests at the Commercial Scale in the Brazilian Amazon – Phase I
PD 176/02 Rev.1 (F)	Use of Remote Sensing Technology and Information Systems to Support Forestry Legislation Monitoring in the Republic of Congo

The background information of the projects is provided in Annex to the Terms of Reference.

II. Purpose and Scope of Evaluation

A) <u>Purpose</u>

The primary purpose of the evaluation is to provide a concise diagnosis of two projects related to Geographic Information System / Demonstrations Areas so as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the projects towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

B) Scope of Work

a) Analyze and assess for each project:

- 1. The overall role and contribution of the project in light of sectoral policies, development programmes, priorities and requirements to achieve the rehabilitation of degraded forest lands and the sustainable management of forest resources in the country concerned.
- 2. Specific measures taken to incorporate project results in the national forestry and environmental policies and legislation.
- The current management status of the forests within the project's area of influence, the effectiveness of the project's implementation and its effectiveness in promoting sustainable forest management as defined in the ITTO Guidelines and Criteria and Indicators for Sustainable Forest Management.
- 4. The effectiveness of the project area as a demonstration area or model forest for sustainable forest management.
- 5. The contributions of the specific studies in various forestry-related disciplines prepared by the project to the development of forestry in the project's area of influence and on other similar and/or related projects being implemented in the countries concerned.
- 6. The results and potential impact of the applied research conducted by the project (if any) on Geographic Information System / Demonstrations Areas practices and its contribution to the overall forestry-related knowledge in the region.
- 7. The impact of project activities on the livelihoods of target populations.
- 8. The effectiveness of dissemination of project results.
- 9. The overall post-project situation in the project's area of influence.
- 10. The unexpected effects and impacts, either harmful or beneficial, and the reasons for their occurrences.
- 11. The cost efficiency in the implementation of the project, including the technical, financial and managerial aspects.
- 12. Follow-up actions in order to enhance uptake of project results.

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- 13. The project's relative success or failure, including a summary of the key lessons learnt; and the identification of any issues or problems that should be taken into account in designing and implementing similar projects in the future.
- b) Provide a synthesis to:
- 1. assess the overall role and meaningful contribution of the two projects in achieving sustainable management of forest resources in tropical timber producing countries taking into account ITTO's objectives, the ITTO Yokohama Action Plan and Objective 2000, as follows:
 - Adopt a forest policy and apply legislation;
 - Secure the permanent forest estate;
 - Apply reduced impact logging;
 - Train the work force, including supervisors, in reduced impact logging;
 - Limit timber harvest to the sustained yield capacity;
 - Raise public awareness that timber harvesting can be consistent with the sustainability of tropical forests; and
 - Focus forest research on the analysis and use of existing data and knowledge.
- 2. assess the overall appropriateness of the design and objectives, outputs and implementation approach of the two projects in light of its efficiency and effectiveness to assist promoting sustainable forest management.
- 3. evaluate the overall contribution of the two projects to forest rehabilitation in the tropics and to the restoration, management and rehabilitation of degraded and secondary tropical forests.
- 4. evaluate the overall impact on and relevance of the two projects for the Executing Agencies, the forest industry sector and local communities being served and the countries concerned.
- 5. evaluate the overall attainment of the objectives and assess the overall effectiveness of the two projects.
- 6. evaluate the overall appropriateness of the costs and cost structure and use of resources within the two projects.

And make recommendations on:

- 1. the needs for similar projects in the future.
- 2. the objectives of such future projects.
- 3. innovative approaches/designs for projects aiming at promoting sustainable forest management in the tropics.
- 4. the effectiveness of the two projects' approach to promoting sustainable forest management.
- 5. appropriate target groups, e.g. countries, government, organizations, forestry sector, local communities.
- 6. the organizational arrangements of the project.
- 7. follow-up and evaluation practices.
- 8. supplemental, alternative activities, processes, procedures, and/or follow-up programmes in the field of Sustainable Forest Management, if appropriate.
- 9. further actions needed to sustain or increase the intended effects on sustainable forest management and Objective 2000 and to draw conclusions which may be of relevance to other ITTO projects in the field of sustainable forest management.

III. <u>Approach</u>

A) <u>Composition of the evaluation team</u>

The team will be composed of two consultants. One of the consultants will be the Team Leader in charge of the final report and the presentation of the results at the Forty-seventh Council Session in Guatemala, in November 2011. The assignment of the other consultant will be made on a regional basis: the second consultant will carry out the mission to Congo. The assignment of specific tasks within the TOR will be left to the Team Leader based on the individual expertise of the members of the team.

B) <u>Consultation during evaluation exercise</u>

The team will maintain close liaison with ITTO and will carry out its work in close cooperation with the concerned Executing Agencies and Governments in the countries concerned. Although the team should feel free to discuss with the authorities concerned all matters relevant to its assignment, it is not authorized to make any commitments on behalf of ITTO.

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C) Activities and report of the team

The work required in this evaluation will consist of:

- 1. Desk review of project-related documents and materials provided by ITTO.
- 2. Missions in Brazil and the Republic of Congo. The consultants will visit each project's Executing Agency headquarters for a further desk review of project materials and to carry out evaluation work in collaboration with the Executing Agencies. The missions shall also include a field visit to each of the projects' area of influence to review field implementation and to evaluate the project results and impact, and should include discussions with project stakeholders and target beneficiaries. Approximately five to six working days are required for each project.
- 3. Preparation of an Ex-post Evaluation Report for each project in accordance with the Scope of Work and the checklist contained in the ITTO Manual for Project Monitoring, Review and Evaluation. The report for Brazil should be in English, and the reports for Congo should be in French;
- 4. Preparation of a synthesis report [see b) Scope of Work] of the two ex-post evaluation reports in one of ITTO's languages, focusing on the overall assessment of the projects' relative success in contributing to ITTO's Objectives, the Objective 2000 and the ITTO Yokohama Action Plan 2002-2006, summarizing the key lessons learnt; and identifying any issues or problems which constrained their contribution to the achievement of Objective 2000.
- 5. Presentation of the synthesis report (to be called: Overall Executive Summary) at the Fortyseventh Session of the International Tropical Timber Council (November 2011, Guatemala).
- 6. Preparation of an article for possible publication in the ITTO Tropical Forest Update (TFU), in consultation with the editor, containing an overview of the projects and summarizing the lessons learned from the evaluation work. Appropriate high-resolution photographs should be provided.

In writing the Ex-post Evaluation reports, the team will have the opportunity to discuss its preliminary findings, conclusions and recommendations with the representatives of each of the Executing Agencies, Governments and ITTO before the final version of the report is made. Responsibility for the final content of the reports, however, remains with the evaluation team.

D) <u>Duration of the assignment</u>

The duration of the assignment will be eight weeks for the Team Leader, and three weeks for the second consultant (Republic of Congo). Travel time for each project to be visited will be approximately one week. The remaining time will be used for preparation of the evaluation and report writing.

- E) <u>Proposed Work Schedule</u>
- July 2011 Desk review
- Aug. /Sept. 2011 Field visits
- 18 Sept. 2011 Submission of draft reports to ITTO Secretariat and to each of the Project Executing Agencies for comments and suggestions.
- 08 Oct. 2011 Submission of the final ex-post evaluation reports and the overall executive summary to ITTO Secretariat.
- Nov. 2011 Submission and presentation of the Final Report at the Joint Session of the Committees during the Forty-seventh Council Session in Guatemala (team leader).

F) Proposed Consultants

- Jorge MALLEUX, Team Leader (Brazil & Republic of Congo 8 weeks)
- Germain ZASY NGISAKO, Consultant (Republic of Congo 3 weeks)