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## **EX-POST EVALUATION REPORTS EXECUTIVE SUMMARIES**

**ITTO Project PD 194/03 Rev.2 (M)**  
**Expanding and Improving Global Mangrove Database and  
Information System (GLOMIS) and its Networking**  
(Japan/Global)

**ITTO Project PD 34/99 Rev.2 (I)**  
**Development and Implementation of Stress Grading Rules for  
Tropical Timber in the Philippines**  
(The Philippines)

**ITTO Project PD 35/99 Rev.4 (I)**  
**Performance Evaluation of Export Wood Furniture in relation to  
Strength and End-use Applications Using Established Test Standard**  
(The Philippines)

**ITTO Project PD 94/90 Rev.3 (I)**  
**The Integration of Forest-based Development in the Western Amazon - Phase II -  
Technology for Sustainable Utilization of Raw Forest Materials**  
(Brazil)

**ITTO Project PD 46/97 Rev.3 (I)**  
**Community Forest Product Processing in the Puerto Dias Extractive Reserve**  
(Brazil)

**ITTO Project PD 68/01 Rev.2 (I)**  
**Training in Reduced Impact Logging in Guyana**  
(Guyana)

**ITTO Project PD 146/02 Rev.1 (I)**  
**Promoting Sustainable Utilization of Bamboo through  
Community Participation in Sustainable Forest Management**  
(Myanmar)

*[Complete reports are available from the Secretariat.]*

## TABLE OF CONTENTS

		Page
PD 194/03 Rev.2 (M)	Expanding and Improving Global Mangrove Database and Information System (GLOMIS) and its Networking (Japan/Global)	1
PD 34/99 Rev.2 (I)	Development and Implementation of Stress Grading Rules for Tropical Timber in the Philippines	8
PD 35/99 Rev.4 (I)	Performance Evaluation of Export Wood Furniture in relation to Strength and End-use Applications Using Established Test Standard (Philippines)	14
PD 94/90 Rev.3 (I)	The Integration of Forest-based Development in the Western Amazon - Phase II - Technology for Sustainable Utilization of Raw Forest Materials (Brazil)	20
PD 46/97 Rev.3 (I)	Community Forest Product Processing in the Puerto Dias Extractive Reserve (Brazil)	24
PD 68/01 Rev.2 (I)	Training in Reduced Impact Logging in Guyana	28
PD 146/02 Rev.1 (I)	Promoting Sustainable Utilization of Bamboo through Community Participation in Sustainable Forest Management (Myanmar)	32

**ITTO Project PD 194/03 Rev.2 (M)**

**Expanding and Improving Global Mangrove Database and  
Information System (GLOMIS) and its Networking  
(Japan/Global)**

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Mr. Erik Lammerts van Bueren

## Executive Summary

### 1) Introduction

The purpose of ex-post evaluations is to learn lessons and to draw conclusions for future Projects. Ex-post evaluation of PD 194/03 Rev.2 (M) "*Expanding and Improving Global Mangrove Database and Information System (GLOMIS) and its Networking*" is particularly relevant, as the project has been the third and last phase of three succeeding ITTO projects with a total duration of six years.

The ex-post evaluation of PD 194/03 Rev 2 should reveal the relevance, impact and sustainability of the project. More in particular the evaluation should determine to what extent the project has contributed to strengthening the information exchange for networking on mangrove ecosystems between and among GLOMIS Headquarters and its Regional Centres and promoting the sustainable management of mangrove ecosystems globally for forest products, fisheries production and coastal water quality and stability.

In August 2008, ITTO has invited Mr. Erik Lammerts van Bueren, Netherlands to undertake the Ex-post evaluation. He directs a small bureau, ISAFOR, which advises policy makers and institutions on forest policy and management issues. The evaluation comprised a desk study of relevant documents pertaining to the project, and a visit, 13-17 October 2008, to the office of the Execution Agency and ITTO.

#### **Main problems to be addressed**

During Phases I & II of GLOMIS, the Regional Centres were not adequately resourced to carry out their respective mandates i.e. collect and screen data and information related to mangroves; enter the information, using a standardized format, in to the GLOMIS database; organize training programmes; encourage stakeholders to communicate and identify and liaise with mangrove management experts. Information exchange between the RC's had also not been well achieved. The database was mere a reference database without abstracts or full publications. Also, the lack of digital visual data such and maps, color photos and figures made the online database and the CD Rom less attractive.

#### **Project PD 194/03 Rev 2**

##### **Development objective**

To ensure that the mangrove ecosystems globally are managed and utilised judiciously for forest products like timber and fuel wood as well as the sustainable production of fisheries and the maintenance of coastal water quality and stability.

##### **Specific objective**

To strengthen information exchange for networking on mangrove ecosystems within and among Regional Centres and GLOMIS Headquarters (HQ). The specific objective was to be realized through five outputs.

##### **Starting date and duration**

The project started 1 June 2004. The anticipated duration of two years was budget neutrally extended with half a year until the end of December 2006, allowing for the completion of GLOMIS CD ROM III.

##### **ITTO contribution**

\$ 484 865

##### **EA contribution**

\$ 163 952

##### **Executing Agency**

The International Society for Mangrove Ecosystems (ISME) is an international non-profit and non-governmental scientific society, established in August 1990. ISME is a membership organization with over 900 members all over the world. ISME Head Quarter is located at the University of the Ryukyus in Okinawa, Japan. The Headquarters were supported by four Regional Centres in Brazil, Fiji, Ghana, and Malaysia.

## 2) Findings

### **Project outcome and impact**

Overall, PD 194/03 Rev 2 (M) has been implemented with a high rate of efficiency and has resulted in an improved comprehensive and up to date Mangrove data base and information system. GLOMIS was still operating at the time of the ex-post evaluation, two years after the completion of the project.

The quality of the data base has been stepped up considerably by the third phase of the project, notably with respect to:

- the number and variety of data;
- the search possibilities;
- possibility to retrieve abstracts;
- attractiveness;

However the Project did not accomplish an additional feature to aggregate data on productivity and management or a specific window to store this type of information.

At the time of the ex-post evaluation the database provided impressive lists of people, institutes, projects and references. Evidence of the usefulness of the data base is, among others, provided by the ever increasing number (39,246 as of 10 November 2008) of hits on the website. However an analysis of users is not yet possible.

ISME is conducting training courses on a regular basis for scientists, policy makers and mangrove managers. To a modest extent, ITTO has financially contributed to these activities, through the implementation of GLOMIS phase III.

The Project Document describes the intended situation after project completion by five aspects. But little can be said about the impact of the improved database and the training and extension activities. Hard evidence and sound indicators are lacking, particularly with respect to the uptake of information by end users such as planning agencies and mangrove ecosystem managers and users.

What can be stated is that the quality of the data base has been stepped up considerably and that the Regional Centres and the communications between them and with the Head Quarter have been strengthened.

Since the inception of GLOMIS the information technology has evolved tremendously. Innovated and empowered search engines, such as Google, have made a wealth of information available to its users. Search on key words, including *mangrove*, results in thousands of results. Future development of GLOMIS should be considered in the light of this evolution in particular with respect to the reference data base.

### **Project design**

The positive results of GLOMIS phase III have been achieved in spite of a flawed project design and a shaky logical framework. The development objective seems too general and too far away from the performance level of the project to serve as a basis for measuring the impact of the project. The specific objective is somewhat ambiguous. It is not clear whether *Networking* is merely confined to HQ and the RC's, or also includes stakeholders.

It is crucial that activities are sufficient and necessary to produce the outputs and the outputs are sufficient and necessary to achieve the specific objective. In this sense the vertical logic is sloppy. Some outputs have been formulated ambiguously and open ended other outputs comprise project management activities rather than deliverables of the project. Activities do not always support the outputs. Most of the means of verification, presented in the logical framework, resembled rather indicators than sources of information. Being short of the sources of information, where the value of indicators can be verified, little can be concluded as to the impact and outcome of the project.

Apparently the EA knew exactly what it wanted to achieve but failed to harness it in a sound project design and logical framework. This may have resulted in false expectations with the donors of the project, notably concerning the involvement of and uptake by end users. For projects like this it is difficult to measure the real uptake by endusers. It takes a well designed user survey to gain insight in the real impact.

### **Sustainability**

Although GLOMIS is still operating its sustainability is at stake. Major problems are relative high costs, single funding source, lack of funds and consequently manpower. Also the limited content and the lack of a library function, as well as competing database are being considered as constraints. Necessary measures to secure continuation of GLOMIS at a adequate level include reduction of costs and integrating budgets in other ISME projects.

### **Organizational matters**

Project organization was sound. The EA has signed a Memorandum of Understanding with each of the Regional Centres specifying the task and the budget of the RC. The responsibilities were clear and no redundancy in management and procedures has become manifest with the ex-post evaluation.

### **Financial matters**

The Project document presents consolidated costs and breakdown of costs over the activities. The unit costs seem fair. The ITTO funds have been fully spent with only minor deviations from the budget components in the Project document. Progress reports were adequate, presenting budget expenditures per component, progress in realized outputs and executed activities, but no specification of expenses per activity, nor does the final Audit report. So it is hard to draw conclusions on the actual implementation of activities in relation to budgeted amounts, other than observing the outputs.

## **(3) Lessons learned**

### **Project design**

A justified Project strategy, based on a thorough problem analysis, and a solid Project design, comprising a sound vertical and horizontal logic, are crucial for effective project implementation, monitoring and validation.

*The flawed project design and shaky logical framework have caused inability to properly assess accomplishments and impacts. Frictions between objectives, outputs and activities easily give raise to false expectations with donors, in the case of this project particularly concerning the involvement of and uptake by end users.*

A necessary part of the problem analysis is to anticipate developments which may influence the problem as such and or the project strategy.

*IT technology has developed fast. Powerful search engines such as Google should have had a bearing on the project strategy of GLOMIS. This is particularly the case with respect to the reference part of the database.*

### **Project development**

Systematic user analysis and analysis of user needs is a prerequisite to identify Outputs which satisfy (projected) end users and to create a sense of ownership over the project, which in turn stimulates the use of the project products and services.

*Due to lack of a deliberate and systematic consultation with actual and potential end-users during the project formulation process, the project has not benefitted from a potential input of end users such as mangrove policy makers, managers and mangrove users. It was recognized that the content must be more useful for the end user.*

### **Project Appraisal by ITTO**

Shortcomings in the Project formulation process and the Project design should be recognized during the appraisal process of the Project proposal and should not be accepted by the Expert Panel.

*A cautious conclusion might be that, at the time of the appraisal (2003), the appraisal process was not robust enough to ensure that proposals with a weak Project formulation process, Project design and logical framework, were either enhanced to a satisfactory level or rejected.*

### **Impact**

Impact is the ultimate measurement of success. Impact is measured at the level of the development objective. Albeit broader and at a higher level, the development objective should be closely linked to the specific objective and formulated in away that enables the measurement of impact of the project through

appropriate indicators. The description of the intended situation after project completion should reflect these indicators.

*Little can be said about the impact of the improved database and the training and extension activities which were sponsored by phase III. Hard evidence and sound indicators are lacking, particularly with respect to the uptake of information by end users such as planning agencies and mangrove ecosystem managers and users. The impression is that the development objective was too broad and not closely enough linked to the specific objective.*

An indicator for the usefulness of a web based database is the number and origin of the hits. The origin is necessary to get insight in the type of users and, in that respect, the extent to which the objectives of the database are realized.

*Unfortunately GLOMIS can not identify the source of the hits. Thus a user analysis is lacking.*

### **Project organization**

A robust organizational structure, clear and documented division of responsibilities and sound procedures are prerequisites for effective and efficient Project management.

*The organization of PD 194/03 Rev.2 and its smooth implementation confirms this statement.*

Project staff must be skilled and available for the implementation of the project in conformity with the Project Document.

*Staff at the Regional Offices had to be trained during the implementation of the project. It would have been more efficient if the staff could have been trained before the start of the project.*

### **Financial matters, requirements by ITTO**

Monitoring on both outputs and inputs is necessary to assess the effectiveness and efficiency of project implementation.

*Progress reports provide no specification of expenses per activity, nor does the final Audit report. So it is hard to draw conclusions on the actual implementation of activities, other than observing the outputs.*

## **(4) Conclusions and recommendations**

### **Conclusions**

#### **Overall conclusion**

PD 194/03 Rev 2 (M) has been implemented with a high rate of efficiency. It has resulted in an improved comprehensive and up to date Mangrove data base and information system, which enjoys an ever increasing number of hits on the website. GLOMIS is particularly unique in identifying and bringing together so called grey literature and providing a facility, through its Electronic Journal, which stimulates students and young scientists to publish.

The content of the data base is continuously expanding. A full library function will not be achieved due to constraints connected to copyright. However the linkage with publishers of journals has given access to abstracts.

#### **Project design**

The positive results of GLOMIS phase III have been achieved in spite of a flawed project design and a shaky logical framework.

Apparently the EA knew exactly what it wanted to achieve but failed to harness it in a sound project design and logical framework. This may have resulted in false expectations with the donors of the project, notably concerning the involvement of and uptake by end users.

The development objective seems too general and too far away from the performance level of the project to serve as a basis for measuring the impact of the project.

The specific objective and some outputs have been formulated so ambiguously and open ended that in fact they do not provide a solid basis for assessing their accomplishment.

It is not clear whether the term *Networking* in the specific objective is merely confined to HQ and the RC's, or also includes stakeholders. The networking has certainly been strengthened within GLOMIS. Not much evidence supports a strengthened network with stakeholders.

It is crucial that activities are sufficient and necessary to produce the outputs and the outputs are sufficient and necessary to achieve the specific objective. In this sense the vertical logic is sloppy. Some outputs have been formulated ambiguously and open ended other outputs comprise project management activities rather than deliverables of the project. Activities do not always support the outputs. Most of the means of verification, presented in the logical framework, resembled rather indicators than sources of information. Being short of the sources of information, where the value of indicators can be verified, little can be concluded as to the impact and outcome of the project.

#### **Impact**

Little can be said about the impact of the improved database and the training and extension activities which were sponsored by phase III. Hard evidence and sound indicators are lacking, particularly with respect to the uptake of information by end users such as planning agencies and mangrove ecosystem managers and users.

#### **Sustainability**

The expected role, after project completion, of each GLOMIS Regional Centre as a reference point or a library facility stocked with available published and unpublished data on the distribution and productivity of mangrove species and major mangrove forest types worldwide has proven to be too ambitious.

Although GLOMIS is still operating its sustainability is at stake. Major problems are relative high costs, single funding source, lack of funds and consequently lack of manpower.

### **(5) Recommendations (based on the lessons learned and the conclusions)**

#### **Recommendations for the EA**

##### **Project formulation and design**

The Guidance provided in the ITTO Manual for Project Formulation on stakeholder analysis, problem analysis, logical framework and project design should be closely followed.

Anticipate developments which may influence the problem as such and or the project strategy. Consider in what way powerful search engines such as Google may be used as a basis for references on mangrove.

#### **Impact**

Adapt the registration of hits on the web based database in order to register numbers, origin, and duplications. Make analysis of the users and improve the database content and presentation to comply with the demand of the target groups.

In turn, the user analysis will provide a sound basis for a well designed user survey which might produce information on the real impact and uptake by endusers. I

#### **Sustainability**

Consider GLOMIS and an indispensable asset for ISME to accomplish its mission. GLOMIS may be seen as a necessary provision comparable to an office. In order to continue the operations of GLOMIS at a relevant level it is necessary to reduce costs and to provide a continuous funding source.

Cost reduction may be achieved by reducing the number of Regional Centres. Analysis, based on the experience, of the usefulness of the centres for GLOMIS should provide answers as to the minimal number of RC's and their location. Expenses at the HQ should be limited to: maintenance of a server; salary of one fulltime staff and system maintenance and repair. This way HQ costs will probably not exceed \$32,000.

Cost should preferably covered by incorporating the costs as part of the overhead of all ISME activities and projects including but not exclusively ITTO projects such as the Mangrove Atlas project (PD 276/04 Rev.2 (F))



## **Recommendations for ITTO**

### **Project appraisal**

Shortcomings in the Project formulation process and the Project design should be recognized during the appraisal process of the Project proposal and should not be accepted by the Expert Panel.

### **Financial statements**

Consider the requirement of reporting of expenses per activity in addition to expenses per budget component.

### **Sustainability**

Data bases such as GLOMIS may be operated on the expenses of the host and, where and when possible, of the users. Now and then these data basis need a boost to upgrade them. ITTO could express its willingness to financially support a project with the objective to enhance the quality level.

\* \* \*

**ITTO Project PD 34/99 Rev.2 (I)**

**Development and Implementation of  
Stress Grading Rules for Tropical Timber in the Philippines**  
(The Philippines)

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Dr. Hiras Sidabutar

## Acronyms

ASEP	:	Association of Structural Engineers of the Philippines
BPS	:	Bureau of Product Standards
CIAP	:	Construction Industry Authority of the Philippines
CREBA	:	Chamber of Real Estate and Builders' Associations, Inc.
FBIAC	:	Forest Based Industry Advisory Committee
FFTC	:	FPRDI Furniture Testing Center
FPRDI	:	Forest Products Research and Development Institute, Department of Science and Technology
ITTC	:	International Tropical Timber Council
ITTO	:	International Tropical Timber Organization
LFM	:	Logical Framework Matrix
MGL	:	Machine Graded Lumber
NSCP	:	National Structural Code of the Philippines
PDCB	:	Philippine Domestic Construction Board
PICE	:	Philippine Institute of Civil Engineers
PSC	:	Project Steering Committee
PWPA	:	Philippine Wood Producers Association
UPLB	:	University of the Philippines at Los Banos

## Executive Summary

1. This report presents the results of the ex-post evaluation of Project PD 34/99 Rev.2 (I) "Development and Implementation of Stress Grading Rules for Tropical Timber in the Philippines". Dr. Hiras P. Sidabutar was tasked by ITTO to conduct the evaluation.

### 2. Rationale of the Ex-post Evaluation

- The Committees on Economic Information and Market Intelligence and Forest Industry decided at their Thirty-seventh Sessions in November 2005 that an ex-post evaluation for Project PD 34/99 Rev.2 (I) should be carried out to establish how well the project served its purposes and to draw up recommendations for future action.
- The primary purpose of the ex-post evaluation is to provide an in-depth diagnosis of the project as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contributions of the project towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

### 3. Project Identification and Context

- Project budget :

Government of the Philippines	: US\$ 521,195
ITTO (Donors: Japan, Switzerland and USA)	: US\$ 616,257
Total	: US\$ 1,137,452
- Duration : 30 months plus 34 months of extension
- The project was consistent with five particular objectives of ITTA 1994 and was related and strongly linked with Goals 1, 2 and 3 of the Forest Industry under the ITTO Libreville Action Plan.

### 4. Evaluation, Scope, Focus and Approach

- The main purpose of the ex-post evaluation is to learn lessons and draw conclusions for future projects; to establish the extent to which the results in terms of outputs, achieved objectives, impact and sustainability of the project intervention have been achieved; and draw conclusions and recommendations for similar interventions in the future.
- The evaluation involved the review of project document, YPOs, minutes of PSC meetings, bi-annual progress reports, technical and financial reports, completion report and other relevant technical documents as well as meeting and discussion with the former project key personnel, national expert and Officials of FPRDI, the Executing Agency.
- A visit was paid to Central Lumber Corporation in Cebu City to obtain first hand information on the MGL technologies and market potential for MGL.
- The key stages of the evaluation include clarification and analysis of the project design, assessment of performance by analyzing achievements against the LFM, assessing actual intended situation, studying the work plans and associated budgets against actual implementation and spending and assessing impact and sustainability of the project.

### 5. Origin of the Project

The project was built on completed pre-project which revealed that: i) lumber continues to be an acceptable building material for structural components in the Philippines; ii) the mixed species composition, mostly imported, in the current market coupled with the positive trend in the lumber supply and demand in the long-run show favorable prospects for lumber stress grading; iii) when a mechanized stress grading method with visual override is integrated as an added activity in the sawmill, preliminary estimates show that the net profit of producers will remain positive; and iv) the

development and implementation of stress grading rules in the Philippines will be a long process, hence initiatives should be placed in motion immediately.

## **6. Development Objective**

As defined in the project document, the development objective was “to develop and implement stress grading rules for timber used for construction in the Philippines”.

## **7. Specific Objectives and Outputs**

Originally, four specific objectives were defined; the 33<sup>rd</sup> ITTC Council meeting in November 2002 approved an additional specific objective to conduct an international workshop on, the Development and Implementation of Stress Grading Rules for Tropical Timber: The Philippine Experience.

## **8. Findings**

- Planned outputs had all been delivered; consequently, the specific objectives had also been achieved. The development objective should also have been achieved as it was defined similarly to Specific Objective 1.
- The project design was weak as the proposal was formulated without full adherence to the ITTO Manual for project formulation. The problem analysis was inadequate and resulted in a weak vertical logic and thus LFM.
- Effects of the project intervention include raised awareness of beneficiaries of MGL production technologies, and trained graders and inspectors of MGL. Impact of project intervention has not materialized yet as expected as evident by the absence of investment in MGL production primarily caused by the undeveloped market for MGL.
- Market for MGL is not developing due to the strong penetration of substitutes and the absence of legal basis for effecting policy measures requiring use of MGL in structural applications.
- The once raised awareness of MGL technologies may fade away with the interruption of marketing campaign activities.
- Technologies of MGL had been effectively transferred to target groups through various means including dissemination of information materials, press and radio releases, technological presentations to Trade Fairs, government officials, private companies, academes, and professional organizations.
- The project required a 34-month extension in time without additional funding due mainly to the much longer time than expected to complete the market studies and stress grade testing.
- Sustainability of the project is under question as no institutional and financial arrangements were made prior to completing the project causing interruption of critical such activities as MGL market campaign and process of endorsement of MGL standards and their adoption as national structural code.
- Despite the extension in time, the project was implemented well due to the timely procured inputs, effective management of operations, prudent financial management and full support by beneficiaries.
- One of the key success factors of project implementation was the involvement of stakeholders in implementing the project in various such forms as respondents, resource persons, cooperators in piloting MGL production, trainees and producers of specimens for testing.

## **9. Lessons Learned**

- i. The project was built on completed pre-project. During implementation of the pre-project, the Executing Agency conducted sufficient stakeholder consultation. Consequently, aspiration of the beneficiaries was well captured in the formulated project of MGL. This had created ownership thus the full support of the beneficiaries to the implementation of the project.

- ii. Formulation of the project did not fully adhere to the ITTO Manual for project formulation and resulted in the weak vertical logic of the project which further manifested in the weak LFM that could not be fully used in assessing achievement accurately especially at the level of objective. In this case, the intended situation after project completion as presented in the project document could be a useful tool for assessment, qualitatively. Quality of the assessment would be highly dependent on the nature of presentation of the intended situation.
- iii. While the project was weak in its design, it was satisfactorily implemented and completed by delivering all its planned outputs and achieving its overall specific objectives. The key success factors include timely supply of inputs in terms of quantity and quality, effective operational management, prudent financial management, and full support by beneficiaries.
- iv. The project had generated impact on the beneficiaries by creating awareness of the presence of MGL technologies. This impact, however, is less sustainable. The absence of clear exit strategy may jeopardize sustainability of a project's impact. Clearly defining an exit strategy establishing institutional arrangements and financial sources for implementation of critical activities at least one year prior to completing the project is highly advisable. In this manner funding could be secured through appropriation of national budget under established procedures on national budget planning.
- v. The impact is also less sustainable due to the lack of interest to invest in MGL production brought about by the undeveloped market for MGL resulting from penetration of market by substitutes for construction materials and from the absence of legal framework for use of MGL in the construction sector.
- vi. The project was planned for 30 months and extended for 34 months. The time needed to conduct market studies involving numerous respondents and to complete stress grade testing in cooperation with saw millers was much longer than expected. Careful planning by project proponent needs to be exercised when dealing with implementation of activities requiring participation and support by outsiders.

## **10. Conclusions**

- i. Planned outputs and objectives as defined in the project document had all been achieved. This was evident by comparing the outputs and objectives listed in both the project document and completion report. However, some outputs and specific objectives were, in fact, the same to each other.
- ii. The project proposal was formulated without full adherence to the ITTO Manual; problem identification and analysis were performed unsatisfactorily and resulted in a weak vertical logic that was manifested in the LFM.
- iii. The LFM presented in the project document could not be used fully and effectively in measuring achievements of the project due to the unquantifiable/unverifiable nature of some of the indicators at both the output and objective levels.
- iv. The project was relevant to the need of construction sector of the Philippines as it was intended to improve efficiency of lumber use in the construction sector. Impact of the project has not fully materialized after the project completed more than four years as evident by the fact that no investment had taken place in commercial production of MGL.
- v. Implementation of the activities on marketing program for MGL had been effective in transferring the MGL technology to target groups through dissemination of information materials, presentations, training, pilot testing, etc.
- vi. The much longer time than expected to conclude market studies and stress grade testing and conduct of additional activities on international workshop on MGL had required the project for a 34-month extension in time.
- vii. Sustainability of the project is under question mainly due to the undeveloped market and the absence of compulsory legal framework for the production and use of MGL.

- viii. The project was implemented satisfactorily due mainly to the timely supply of inputs in terms of quantity and quality, able operational management, prudent financial management and full support by beneficiaries. Beneficiaries of the project were involved in the formulation as well as implementation stages which had contributed to the successful completion of the project. Effective documentation of activities and results of the project facilitated effective monitoring exercise both internally and externally and contributed significantly to the successful completion of the project.

## 11. Recommendations

- i. To facilitate comparison between planned and realized objectives and outputs, they must be properly defined consistent with the key problem intended to address and explicitly reflect its effect as well as main causes.
- ii. Strict adherence to existing ITTO Manual for project formulation is needed to ensure a strong vertical logic of project design and to facilitate formulation of a strong LFM; the National Clearing House and ITTO Expert Panel are to ensure this adherence is observed by proponent of ITTO project proposal.
- iii. Indicators must be defined in such a way that they are specific, measurable, appropriate, realistic and time bound. In this fashion, the indicators will be useful for measuring achievements. The National Clearing House and ITTO Expert Panel are to see to it that all indicators are defined in a proper manner.
- iv. To generate and sustain impact of the project, market for MGL must be developed through provision of legal framework for production and use of MGL and through massive and continued market campaign. The Executing Agency should pay greater attention to this issue by securing the needed resources in the near future.
- v. Implementation of the activities on marketing program of MGL should be continued in order to preserve and develop the awareness of beneficiaries that had been created by the project. The Executing Agency should secure the needed resources to continue implementing the activities.
- vi. To ensure timely completion of a project, careful planning is necessary when dealing with implementation of activities involving outside parties.
- vii. Sustainability of the project could only be preserved by developing market through massive and uninterrupted campaign and by compulsory adoption of MGL standards in construction applications. In order to sustain impact of a project, an exit strategy establishing institutional and financial arrangements for implementing crucial activities after project completion must be clearly defined at least one year prior to completing a project.
- viii. To ensure successful implementation of a project, inputs and operations must be managed wisely and effectively while support by beneficiaries is indispensable. Stakeholder analysis a crucial step in project designing and stakeholder involvement in project implementation is required as appropriate. Mechanism for involving stakeholder in project implementation shall be made clear in the project design by any project proponent.

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**ITTO Project PD 35/99 Rev.4 (I)**

**Performance Evaluation of Export Wood Furniture in relation to  
Strength and End-use Applications Using Established Test Standard  
(The Philippines)**

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Dr. Hiras Sidabutar



## Acronyms

CFIFI	:	Cebu Furniture Industries Foundation Inc.
CFIP	:	Chamber of Furniture Industries of the Philippines
DENR	:	Department of Environment and Natural Resources
FFTC	:	FPRDI Furniture Testing Center
FMB	:	Forest Management Bureau
FPRDI	:	Forest Products Research and Development Institute, Department of Science and Technology of the Philippines
GOP	:	The Government of the Philippines
ICI	:	Interior Crafts of the Island
IFMA	:	Illolo Furniture Manufacturers Association
ITTA	:	International Tropical Timber Agreement
ITTO	:	International Tropical Timber Organization
LFM	:	Logical Framework Matrix
PTC	:	Project Technical Committee
YPO	:	Yearly Plan of Operation

## Executive Summary

1. This report presents the results of the ex-post evaluation of Project PD 35/99 Rev.4 (I) "Performance Evaluation of Export Wood Furniture in relation to Strength and End-use Applications using Established Test Standards" that has been conducted by Dr. Hiras Sidabutar for ITTO.

2. **Rationale of the Ex-post Evaluation**

- The Committees on Economic Information and Market Intelligence and Forest Industry decided at their Thirty-seventh Sessions in November 2005 that an ex-post evaluation for Project PD 35/99 Rev.4 (I) should be carried out to establish how well the project served its purposes and to draw up recommendations for future action.
- The primary purpose of the ex-post evaluation is to provide an in-depth diagnosis of the project as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contributions of the project towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

3. **Project Identification and Context**

- Project budget :

Government of the Philippines	: US\$ 227,900
ITTO (Donor: Japan)	: US\$ 139,999
Total	: US\$ 367,899
- Duration : 18 months plus 12 months of extension
- The project was consistent with selected objective of ITTA 1994 and was strongly linked with Goals 1, 2 and 3 of the ITTO Libreville Action Plan, with Action 3 of Goal 1; Action 3 of Goal 2; and Action 4 of Goal 3.

4. **Evaluation Scope, Focus and Approach**

- The main purpose of the ex-post evaluation is to learn lessons and draw conclusions for future projects; to establish the extent to which the results in terms of outputs, achieved objectives, impact and sustainability of the project intervention have been achieved; and draw conclusions and recommendations for similar interventions in the future.
- The evaluation involved the review of project document, YPOs, minutes of PSC meetings, bi-annual progress reports, technical and financial reports, completion report and other relevant technical documents as well as meeting and discussion with the former project key personnel, national expert and Officials of FPRDI, the Executing Agency as well as FMB, the ITTO Focal Point of the Philippines.
- A visit was paid to Cebu City to interview one of the primary beneficiaries of the project, Interior Crafts of the Island, a designer/manufacturer/exporter of furniture products.
- The Terms of Reference required that special emphasis be given to the following aspects:
  - The results of tested various types of furniture from the Philippines timber;
  - Generated data and information on the static, fatigue and impact strength and performance of the individual prototype chairs, tables, stools, cabinet doors and table drawers from tropical timber;
  - Identification, inspection and classification of wooden furniture prior to testing; and
  - Testing prototype furniture using electro-pneumatic testing machines/equipment following standard test procedures.

## 5. Origin of the Project

The project was proposed to address the observed problem facing the furniture industry of the Philippines which was the declining export revenues due mainly to inadequate mechanization, poor and inadequate performance of furniture in actual service.

## 6. Development, Specific Objectives and Outputs

As defined in the project document, the objectives and outputs of the project were:

### Development Objective:

To generate data and information on the strength and performance of furniture from tropical timber by employing established test standards. Promote the standardization of performance tests for wood furniture to enhance their competitiveness in the global market.

### Specific Objectives:

- i) To test and evaluate the static, fatigue, and impact strength of export wood furniture under high levels and rapid rates of loading that occur occasionally, and under repeated movement or applications of load occurring during daily use.
- ii) To determine the initial damage and damage propagation and ability to withstand acceptable miss-use and demonstration of sufficient residual strength. Recommend design improvement to upgrade the performance and quality of furniture products export.

### Outputs:

- i) Data and information on the static, fatigue and impact strength and performance of the individual prototype chairs, tables, stools, cabinet doors and table drawers from tropical timber generated and known.
- ii) Types of furniture damaged identified. The extent of damage propagation known and evaluated for specific kind of furniture. Designs that would improve strength and stability of furniture identified and recommended/disseminated to manufacturers.

The objectives and outputs could have been defined more explicitly to clearly picture the cause-effect relationship of the key problem to be addressed which was the lack of information on quality elements required for identifying measures to improving quality and competitiveness of wood furniture export.

## 7. Findings

- i) The project design was somewhat weak as it was formulated without full adherence to the ITTO Manual for project formulation, first edition. The weak design was evident from the lack of coherence of defined project elements and the weak LFM.
- ii) The LFM presented in the project document could not be used to fully gauge achievement of the project and necessitated the employment of the intended situation to prevail after project completion elaborated in the project document to help in the assessment of project achievement.
- iii) The overall objective was achieved through deliverance of the outputs defined. This was possible due to the fact that the project was well implemented and successfully completed.
- iv) The successful completion of the project was attributable to the timely supply of inputs in terms of quantity and quality, capable management of operations and financial resource, and support by target beneficiaries.
- v) The project results have been widely disseminated to target beneficiaries and created awareness of the need to perform quality test of furniture products before placing them in the market or exporting. Furniture producers and exporters have continuously sent samples of furniture to FFTC for testing and undergoing modifications of design and construction as needed.
- vi) FFTC has been established by FPRDI and tasked to sustain the positive impact of the project by providing test service on a day to day basis at affordable cost.

- vii) There is a growing need of producers and exporters of wood furniture for conducting tests other than the structural tests the FFTC currently capable of servicing. In this light, FFTC will have to equip itself with additional machineries and equipment.
- viii) The project has significantly contributed to the achievement of ITTO's objectives in various ways by enhancing the capacity of the furniture industry to produce quality products and improve competitiveness in the global market, promoting and transferring of improved technologies and implementing applied research and development on furniture production process.

## **8. Conclusions and Recommendations**

### **a. Project design**

- The project was formulated without strict adherence to the ITTO Manual for project formulation, first edition. The cause-effect of the key problem to be addressed was not clearly exhibited with the aid of a problem tree and resulted in the weak coherence of project elements thus weak vertical logic.
- To ensure a sound project design, there is a need for any proponent to formulate a project proposal in strict adherence to existing ITTO Manual for project formulation. There is a need for an ITTO focal point to establish and function a strong and professional national screening house to assist in assessing proposal before its submitting it to ITTO and Expert Panel.

### **b. LFM versus project achievement**

- A strong coherence of project elements facilitates development of a sound LFM. The LFM of this project was somewhat weak as the indicators of outputs and objectives were less specific, not measurable and without time bound. The LFM could not fully serve as an effective tool for measuring achievement of the project.
- To be effective as a tool for measuring achievement LFM must be sound; indicators of defined outputs and objectives must be specific, measurable, applicable, realistic and time bound; means of verification are specific and most likely available; and assumptions must be realistic.

### **c. Project achievement**

- Planned outputs and overall objective of the project has been fully achieved despite the somewhat weak project design. The LFM, combined with the intended situation expected to prevail at project completion, were used as a total to assess achievement.
- There is a need for a proponent, the national clearing house and ITTO Export Panel to ensure that expected outcomes after project completion are adequately elaborated in the project proposal as they are also a useful tool for assessing achievement.

### **d. Unexpected effects and impacts**

- The project required extension in time for one year: six months to complete the tedious testing and another six months to disseminate results of the project to target beneficiaries. The project had concentrated only in the structural testing of various furniture. Other tests like flammability testing of fabrics and foams, analysis of lead content of finishing material, formaldehyde emission of glues and textiles, corrosion test, etc. were not considered in the project.
- There is a need to: i) exercise vigilant planning of activities dealing with time consuming activities and to make realistic assumption in order to reduce risk; ii) there is a need for the FFTC to increase its testing capability in order to serve the growing demand for other tests by the furniture industry for which investment on manpower as well as machinery and equipment is urgently needed; ii) integrate dissemination of project results into the project design with allocation of sufficient budget to implement disseminating activities.

### **e. Sustainability**

- After the project completion, results/outputs of the project were widely disseminated to target beneficiaries. The management and operation of the testing facilities was continued by FFTC which caters the evaluation and performance testing of furniture.
- In order to sustain benefits of a project, there is a need to identify and define one year before project completion what critical activities to continue and how the activities will be implemented in terms of institutional and financial arrangements.

f. Stakeholder involvement

- The project had been formulated and implemented with the involvement of stakeholder especially manufacturers of exporters of furniture products which proved as one of the key success factors of project completion.
- If a project is to be successful at all, there is a need to ensure the involvement of stakeholder in the formulation and implementation stages of a project. The proponent, national clearing house and ITTO Expert Panel are to pay greater attention to stakeholder analysis section of the project proposal.

g. Efficiency and operational aspects

- The project had been implemented and completed successfully mainly due to the timely supply of inputs, capable operational and financial management and support by target beneficiaries.
- To successfully implement and complete a project involving laboratory testing, careful selection of project key personnel including consultant and research assistant, timely acquisition, installation and calibration of the primary testing machines and equipment, as well as close cooperation with ITTO and target beneficiaries are indispensable.

h. Effectiveness of technology transfer

- The project had successfully transferred the furniture testing technologies to target groups through the various means including participation to exhibition, conduct of awareness seminar on furniture testing, production of printed information and materials as well as radio and television interviews.
- As technology transfer of any technologies to target groups are required for sustaining benefits of a project it is strongly advisable to consider taking in activity on technology transfer as the essential activity of any project.

i. Contribution to ITTA 1994 and ITTO Action Plan

- The project had significantly contributed to the achievement of ITTA 1994 and ITTO priorities in various ways by achieving its overall objective which was to enhance quality of wood furniture export and improve competitiveness of the furniture industry.
- Relevance of a proposed project to ITTO's mandate and policies as well as to host country's development policies and priorities should remain as the pre-requisite for any project and be clearly elaborated in any project proposal.

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**ITTO Project PD 94/90 Rev.3 (I)**

**The Integration of Forest-based Development in the  
Western Amazon - Phase II – Technology for  
Sustainable Utilization of Raw Forest Materials  
(Brazil)**

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Ms. Erika del Rocío López Rojas

## **Executive Summary**

### **1) Introduction**

This report presents the results of the ex-post evaluation of Project PD 94/90 Rev.3 (I) "The Integration of Forest-based Development in the Western Amazon - Phase II - Technology for Sustainable Utilization of Raw Forest Materials" that has been conducted by Ms. Erika López Rojas for ITTO.

### **2) Rationale of the Ex-post Evaluation**

The Committee on Economic Information and Market Intelligence and the Committee on Forest Industry (CEIMI-CFI), through the International Tropical Timber Council at its Thirty-eight Session in May 2006 decided that an ex-post evaluation of the completed project PD 94/90 Rev.3 (I) "Integrated Development of the Western Amazon based in the Forest resources Phase II - Technology to sustained uses of forest raw materials" should be carried out to establish how well the project served its purpose and to draw up recommendations for future action.

### **3) Project Identification and Context**

- Project Budget :

Government of Brazil	: US\$1,550,000
ITTO Contribution	: US\$1,875,000
Total	: US\$3,425,000

- Duration: 128 months

### **4) Evaluation, Scope, Focus and Approach**

- This ex-post evaluation seeks to look at operational aspects, inputs as well as outputs, activities carried out, and tangible products in terms of both efficiency and effectiveness, with emphasis on the impact and effects on the forest situation in Brazil.
- The primary purpose of the evaluation is to provide an in-depth diagnosis of the project 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.
- As part of the evaluation, the consultant Ms. Erika Del Rocío Lopez Rojas, master in Cooperation and International Economic Relations visited Rio Branco, State of Acre from March 28 to April 6 of 2009. During the visit, she met with Mrs. Tânia Guimarães, Technical Director of FUNTAC and other members of the project team and held meetings with community representatives. A visit to the Extractive settlement PAE Limoeiro and the Productive Base Unit "First Point" in the Antimary State Forest (ASF) was also held for in- depth review.
- The evaluation presented in this report was based on a combination of desk research, field visits and discussion with stakeholders, beneficiaries and authorities dealing with the forestry sector.

### **5) Origin of the Project**

The project was presented by the Brazilian government to develop the following approaches:

- Wood Use, including use of less well-known species and fewer used;
- Development of natural forest;
- Development of infrastructure for harvesting and technical personnel's training; and
- Mark institutional and national planning.

## **6) Development, Specific Objective and Outputs**

The main objective in long term was to promote the development based on the forests of Western Amazon, as part of a policy of integrated land use inside of the area, using the State of Acre as a Model. This development was based on the administration of forest resources for the sustained production in order to elevate the living standards of rural population, the economic prosperity of the State of Acre and the wealth of the area, with means adapted to environmental and economic aspects.

The specific objective of the project was to develop and implement techniques for the sustained management of the different forests in the Antimary State Forest according to the ITTO Guidelines, by extrapolating the results in the project area and in the State; evaluate the feasibility of incorporating integrated forest industries into the sustained management of the resources by studying the potential outputs, wood properties and the marketing and industrialization possibilities; to establish a follow-up and evaluation system so as to verify the effectiveness of the management techniques in the forest and the land use trends, including the deforestation in the State; to contribute to the development of a state land use policy, with special emphasis on the conservation and utilization of forest resources; development of personnel and institutions in the State, Brazil and neighboring countries.

The following results were expected in Phase II: an integrated management plan, a participatory system with local community for planning and implementation of the activities, access roads, market strategies for timber and non timber products from ASF, establishment of cooperatives for the production and marketing of non-timber products (chestnut and natural rubber), integrated logging primary and secondary timber processing operations, local latex and brazil chestnuts processing units, monitoring system of ASF products, series of permanent plots to monitor effects of forest utilization on productivity and the natural environment, social services improved for the population that live and work in ASF and two workshops for the presentation of results.

## **7) Lessons Learned**

The project contributed to public policies of the state of Acre as well as to join value to the timber and non timber forest products coming from the ASF and consequently to provide social and economic benefits. Projects that develop actions in inhabited areas should give more importance to the community subjects.

As occurred in this project. The project envisaged people in the forest as partners in a common enterprise. It demonstrated how forest management can directly benefit local people and their participation through autonomous decisions on how to use their land better. The community was trained on reduced impact logging techniques and on how to harvest other forest products, such as oil, seeds and fruit, on techniques to improve the quality of latex and better ways to store Brazilian nuts. The aim was a multiple use of ASF products.

Long term institutions aligned with the long-term cycles of the forest itself are needed, and of course the demonstrated success in extracting economic benefits from managed forests is imperative. A series of independent pro-forest institutions will help to insulate the forest from politics.

The overall impacts of the project demonstrated positive outcomes achieved for the target beneficiaries. Although specific objectives should have been more concrete and the indicators were not helpful measure of success. Recommendations are directed to the importance of the Logical Framework Matrix and measurable indicator of success. The LFM is a performance framework that captures the project strategy and set out the projects objective outputs, indicators, assumptions and expected results.

## **8) Conclusions and Recommendations**

The Antimary project went through three important moments and produced positive results. The implementation of the physical and social infrastructure was done in a second moment and was completed with organization of the local community in two rubber tapper's association and one cooperative of agro-extravist producers. During the project development, training was provided which focused on improvement on processes for the production of timber and non-timber products.

The project was a landmark in bringing forth the rational use of forest resources and promoting development policies based on sustainable forest production as part of one integrated policy of land use in the area.



Community forest projects as ASF has created a great deal of interest for social scientists, environmentalists, researchers and academicians whom such experiences offer invaluable lessons in rural development, poverty eradication and natural resource conservation.

It can be said that Antimary State Forest is important as the pioneer experience of a contract of forest concession to the beginning of the certification process, going by community forest concession, research activities and pilot area for the development and implementation of the technological package of SFM system integrated to be adopted at all state forests.

For the implementing agency:

- Set concrete targets to evaluate achievements within a time set horizon and a clear monitoring follow-up program.
- Continue capacity strengthen of the community for the understanding of the producers in relation to rational use of the forest resources, for the market, the quality of the product and the valuation of labor.

For ITTO:

- ITTO should disseminate the results of ASF experiences in Acre, including potentials and the obstacles presented during its implementation.

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**ITTO Project PD 46/97 Rev.3 (I)**

**Community Forest Product Processing in the  
Puerto Dias Extractive Reserve  
(Brazil)**

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Ms. Erika del Rocío López Rojas

## **Executive Summary**

### **1) Introduction**

This report presents the results of the ex-post evaluation of Project PD 46/97 Rev.3 (I) "Community Forest Processing in the Puerto Dias Extractive Reserve" that has been conducted by Ms. Erika López Rojas for ITTO.

### **2) Rationale of the Ex-post Evaluation**

At the Thirty-eight Session held in Merida, Yucatan Mexico on 29 May to 2 June 2006, the International Tropical Timber Council endorsed a recommendation by the Committee on Economic Information and Market Intelligence and Committee on Forest Industry (CEIMI-CFI) that an ex-post evaluation of the completed project PD 46/97 Rev.3 (I) "Community Forest Product Processing in the Puerto Dias Extractive Reserve" be carried out to establish how well the project served its purpose and to draw up recommendations for future action. This report has been prepared pursuant of this decision.

### **3) Project Identification and Context**

- Project Budget :

Government of Brazil	: US\$ 80,000.00
ITTO Contribution	: US\$462,090.00
Total	: US\$542,090.00

- Duration : 31 months

### **4) Evaluation, Scope, Focus and Approach**

The primary purpose of the evaluation was to provide an in-depth diagnosis of the project so as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the project towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

The evaluation was conducted in such way as to answer the questions identified in the ex-post evaluation checklist provided in the ITTO Manual for Project Monitoring, Review and Evaluation, third edition. As part of the evaluation, the consultant Ms. Erika López Rojas, Master in Cooperation and International Economic Relations, visited Rio Branco from March 28 to April 06, 2009. During the visit she met with Mrs. Nívea Silva Marcondes, General Coordinator of CTA and other members of the project team, members of the cooperative and representatives from the forest industry. For in-depth review the consultant visited the Community of Puerto Dias, where she had the opportunity to interact with its members and register their views about the projects achievements.

### **5) Origin of the Project**

The project was proposed in order to implement a program for the processing of forest resources from PAE Porto Dias, through the installation of an industrialization unit; the qualified training of the community in forest harvesting techniques, timber preservation/drying and forest products processing; and the incorporation of public policy.

### **6) Development, Specific Objective and Outputs**

The development objective was to demonstrate the economic, social and environmental viability of forest utilization and its significance as part of a suitable development model for the Amazon Region.

The specific objective was to implement a forest product processing program through the training of the community living in Puerto Dias Extractive Reserve in logging techniques, timber preservation/drying, and the establishment of an industrial unit for the production of small wooden objects and prefabricated houses.

The following outputs were expected to be achieved: preparation and implementation of a training program in the fields mentioned above; installation of a forest processing unit, and the definition of a trademark and marketing program for the forest products from the Puerto Dias Extractive Reserve.

The project outputs were selected based on the need of harmonization of economic viability and forest sustainability, the strategy was aimed to carry out secondary processing which would add value to the products and therefore ensure economic viability of management and increase the average family income of the local communities.

## **7) Lessons Learned**

Community started to valorize forest resources as an economic development alternative, also increasing their feeling on the need of a greater environmental control to decrease deforestation and other illegal activities related to the forest.

CTA adopted a strategy to promote the self management of the project, the strengthening of the social base through a continuous process of formation, community organization and training in administration and management.

Incorporating relevant stakeholders since the project design is a sensible point to manage and to absorb the necessary concepts for execution of the proposal.

Baseline information is of the essence for project design, and an important tool for evaluation of results.

Project risks should have been better identified especially the implications for the sustainability of the project, determining feasibility indicators of production particularly after project completion.

As for the shaping and strengthening of the local communities, the objective of the current proposal is to follow the production and all the processes co-related to the productive chain (productive base, formation, administration, commercialization) that influence directly on the enterprise sustainability, and not simply implant the productive unit.

Monitoring and evaluation of actions are tools to be used in the joint reflection process regarding the developed work, together with the involved stakeholders, to orient the decision making and identify and correct the course of activities.

It is important to reflect with the community members and managers about the economic sustainability of the enterprise. The control of costs referring to the forest management is essential for establishing product prices and for monitoring of the productive process.

The creation and strengthening of institutions that represent the communities is fundamental for the participation and political articulation of the community members, giving them autonomy and willingness to influence in the creation of multiple use forestry policies.

Marketing strategy of products should also give priority to market site initially and then gradually conquer new markets (national and international).

Monitoring and evaluation are important tools in the process of reflection on the development of work and should be done with all stakeholders in order to correct the direction of activities when necessary. These assessment tools should be built together with the community and adapted to their conditions.

## **8) Conclusions and Recommendations**

Project PD 46/97 Rev.3 (I) at the moment of its completion overall achieved the specific objective contributing to the general objective which aimed to demonstrate the economic, social and environmental viability of forest utilization and its significance as part of a suitable development model for the Amazon Region.

Although provisions were taken within the revised work plan as to increase the productive scale and managerial efforts, the processing unit at the end proved to be unsustainable if maintained in Puerto Dias Extractive Reserve.

The community was challenged to decide about the continuity of the project, and found a way to disseminate the results obtained through the project and benefit broader number of stakeholders. The equipment was given to the Cooperative Cooperfloresta, and executes training after the set-up at its new location is completed.

Recommendations for CTA:

- When a project is aiming at the initiation of for-profit venture, it is essential to carry out a serious cost-benefit analysis of the investment as part of its feasibility study during the project design stage. The use of baseline information is of the essence for project design, and an important tool for evaluation of results.

Recommendations for ITTO:

- More reliable information should be presented when evaluating project proposals submitted for funding, presenting through clear measurable indicators the results aimed to be achieved.
- ITTO should continue to support projects that increase the technical capacity of communities in assuming the management of their productive process enabling them with a development economic alternative.

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**ITTO Project PD 68/01 Rev.2 (I)**

**Training in Reduced Impact Logging in Guyana**  
(Guyana)

**EX-POST EVALUATION REPORT**  
**EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Ms. Erika del Rocío López Rojas

## Executive Summary

### 1) Introduction

This report presents the results of the ex-post evaluation of Project PD 68/01 Rev.2 (I) "Training in reduced Impact Logging in Guyana" that has been conducted by Ms. Erika López Rojas for ITTO.

### 2) Rationale of the Ex-post Evaluation

At its Thirty- eight Session held in Merida, Yucatan Mexico on 29 May to 2 June 2006, the International Tropical Timber Council endorsed a recommendation by the Committee on Economic Information and Market Intelligence and Committee on Forest Industry (CEIMI-CFI) that an ex-post evaluation of the completed Project: PD 68/01 Rev.2 (I) "Training in Reduced Impact Logging in Guyana" be carried out to establish how well the project served its purpose and to draw up recommendations for future action.

### 3) Project Identification and Context

- Project Budget :

Government of Guyana	: US\$395,650.00
ITTO Contribution	: US\$427,710.00
Forest Industry	: US\$182,000.00
TFF	: US\$158,150.00
Total	: US\$1,163,510.00

- Duration : 38 months

### 4) Evaluation, Scope, Focus and Approach

This ex-post evaluation seeks to look at operational aspects, inputs as well as outputs, activities carried out and tangible products in terms of both efficiency and effectiveness, with emphasis on the impact and effects on the forest situation in Guyana.

The primary purpose for undertaking the evaluation was to provide an in-depth diagnosis of the project so as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the project towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

The evaluation was conducted in such a way as to answer the questions identified in the ex-post evaluation checklist provided in the ITTO Manual for Project Monitoring Review Evaluation, third edition. As part of the evaluation, the consultant Ms. Erika del Rocio Lopez Rojas, Master in Cooperation and International Economic Relations, visited Guyana from 15th to 21st February, 2009. During the visit, she met with Mr. Godfrey Marshall who serves as Project Director and other members of the project team and held meetings with representatives of the forestry industry, non-government organizations (NGOs) and other key stakeholders. A visit to the Forestry Training Center Incorporated was also held for in-depth review.

### 5) Origin of the Project

The Project PD 68/01 Rev.2 (I) approved by the Thirty-first Session of the International Tropical Timber Council (ITTC) on November 2001 aimed to develop a curriculum, a training program, a demonstration site that promoted field-based learning opportunities, and the provision of the skills and conceptual knowledge necessary for regional forest sector personnel to advance the economic and environmental returns from the region's tropical forest timber operations.

## **6) Development, Specific Objective and Outputs**

The development objective was to improve the quality and efficiency of the forest operations by implementing sound forest management and reduced impact logging (RIL) practices, which would contribute to a more competitive sector and enhanced livelihood for forest operators and communities.

The specific objective of the project was to strengthen the national capacity to deliver practical training in forest operational and managerial skills and knowledge to personnel at all levels of forest sector, by developing and implementing training programme in RIL that met the needs of forest operatives. The major outputs approved were RIL training programme - including curricula and training materials, trained trainers, a number of site specific RIL models developed as a demonstration of RIL good practices, a RIL good practices, a set of RIL field - training facility, and delivery of training courses for forestry managers/supervisors and operators.

## **7) Lessons Learned**

- The adoption of RIL has come slowly because of the natural skepticism that exists when any new set of practices is introduced.
- The field operatives, the core target group to be trained in RIL, should have been consulted more in the determination of training requirements and willingness to meet the costs of training.
- The RIL model used is oriented to large logging enterprises that use similar equipment, meanwhile the medium size and small scale operations and community based forest enterprises are much more numerous, and use simpler technologies that also result in severe environmental impacts. These considerations should have been taken in consideration when designing the project.
- FTCl will not be able to sustain itself if only on training fees based on RIL courses, it needs to expand. Although the corporate status of FTCl gave it considerable flexibility in addressing emerging revenue options. Training institutions should therefore acquire corporate status before the donor funds are exhausted.

## **8) Conclusions and Recommendations**

FTCl was established with the purpose to disseminate RIL techniques; it became clear that the implementation of RIL depends largely on the timber industry's willingness to pay.

Convincing company management of the benefits of RIL is not enough. Field managers should be supportive of the necessary changes as well. Coordinating the correct implementation of the RIL components demands better supervision and communication, this may mean a fundamental change to a logging company's organizational structure (Jonkers 2002, Klassen 2002).

According to Klasen (2002), lack of serious intent remains a major reason for the failure of companies to adopt RIL practices. He explains that companies are not interested in RIL because it disrupts the status quo and because many companies are mainly concerned with their immediate supply of raw material, in the case of Guyana most logging operations are order driven. (FAO, 2004).

For the successful application of RIL, it is necessary to have technically competent planners, operators, and supervisors. Well-trained operators need equally well-trained supervisors to ensure that work is carried out properly and to provide feedback that will help them to improve their practices continually. Forest managers need to appreciate the cost of various operational elements in order to benefit from studies on the financial benefits of RIL. (Dykstra, 2002).

It would have been useful for FTCl to know about the cost (Tropenbos International is preparing feasibility study on RIL practices base on their work in Guyana). FTCl does training which is not the ideal platform for garnering costs; FTCl hopes to obtain data from Iwokrama which will be engaged in RIL on a commercial scale of production using RIL practices, since this has been asked frequently. FTCl should record and analyze data cost.

With the new forestry legislation passed early 2009, Code of Practice (CoP) is mandatory and can only be addressed by trained technicians; FTCl was an important contributor in its promotion and in demonstrating the feasibility of its prescriptions. Certainly, now FTCl will be a major asset in the implementation of sound forest management and reduced impact logging techniques. In conclusion, FTCl



came timely on board, hands on training is the fastest and most effective way to promote the widespread adoption of reduced impact logging.

For the Government of Guyana:

- It is recommend the need to set up policies that would encourage forest industry to make available to their workers training on a constant basis. As to identify positions that demand obligatory training to become operators.

For FTCL:

- In order to address the needs of medium small size operators and communities it will be need to broaden the current RIL technologies used since they represent an important area in the country.
- FTCL would have to build on its current strengths and acquire new competencies in wood technology, business administration and social work.
- A follow-up mechanisms for tracking the post training performance of field operatives should be addressed, particularly regarding the cost-benefit analyzes.
- Special attention should be given to evaluating the long-term sustainability of the effects of the project, including developing a strategic plan for institutionalization of project benefits that includes roles and responsibilities for relevant stakeholders and other actors.

For ITTO:

- In order to address future sustainability when establishing training facilities it is recommended that funding should be made accessible when RIL is incorporate as an integral part of the project program.

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**ITTO Project PD 146/02 Rev.1 (I)**

**Promoting Sustainable Utilization of Bamboo through  
Community Participation in Sustainable Forest Management  
(Myanmar)**

**EX-POST EVALUATION REPORT  
EXECUTIVE SUMMARY**

Prepared for the ITTO

by

Dr. Antonio C. Manila

## Executive Summary

The Project PD 146/02 Rev.1 (I), entitled, "Promoting Sustainable Utilization of Bamboo through Community Participation in Sustainable Forest Management" was approved in the 32<sup>nd</sup> Session of the International Tropical Timber Council (ITTC) Meeting at Bali, Indonesia in 2002 for implementation by the Government of Myanmar through the Forest Department (FD), as the project's executing agency (EA). The main objective of the project was to promote the sustainable management and use of bamboo in the country, where bamboo resources are quite abundant, but their management and utilization are quite very limited. The project strategy was anchored on the active involvement of rural community in sustainable forest management (SFM), including the use of bamboo resources to enhance their socio-economic benefits and alleviate poverty incidence of forest communities. It was carried out for 48 months or 4 years duration which started operations on January 1, 2003 to December 31, 2006, with a 3-month no-cost extension period until March 31, 2007.

The development objective of the project was to enhance the socio-economic benefits of bamboo to rural communities through their active participation in sustainable management and utilization of bamboo forests. In this way, this project also contributed to SFM in Myanmar.

The specific objectives of the project are shown below:

- (a) To develop and disseminate technical guidelines for sustainable management of bamboo forests and quality production of bamboo products, and
- (b) To increase income of rural communities in Mandalay, Bago and Yangon Divisions through the establishment of bamboo production cooperatives based on improved processing technologies and marketing.

The total project budget approved by the ITTC was US\$ 453,256.00, with in-kind contribution from the Government of Myanmar a total of local currency Kyats 1,309,620.00.

Considering the potential value of the lessons learned and experiences gained from the project, the ITTO through the Committees on Economic and Market Intelligence and the Forest Industry at their 41<sup>st</sup> ITTC Session in November 2007 in Yokohama, Japan, has decided that a thematic ex-post evaluation of the project be undertaken to determine how well the project served its purpose and to draw up lessons and recommendations to improve the implementation of future projects.

The ex-post evaluation involved consulting a range of project documents and relevant background materials and data, conducting an evaluation mission in Myanmar on July 26, 2009 to August 1, 2009 (one week), cross-checking information and clarifying contextual issues or concerns, including thorough follow-up via email communications after the mission and preparing the report following the ITTO Manual for Project Monitoring, Review and Evaluation (3<sup>rd</sup> edition, 2008).

At the outset, the bamboo project contributed to the attainment of ITTO Objective 2000 & ITTO Yokohama Action Plan (2002-2006) through the promotion and implementation of R & D activities in the management of secondary forests, restoration and rehabilitation of degraded forest land, promotion of non-timber forest products (NTFPs) in close cooperation with local forest owners and communities living in the forest areas and through trainings of local folk and implementers in bamboo forest management, among others. The actual contribution to ITTO's SFM work is on the conduct of six (6) in-house trainings conducted for local communities or target beneficiaries and the international cross-visits/study tours of implementers serving as pool of trained FD staff, with multiplier-effect geared towards continuous implementation of bamboo conservation work and the influence of those trained FD staff on national forest policy.

In addition, the in-house training documents/designs produced and 29 technical bamboo guidelines/manuals/reports compiled and published by the project out of R & D programs, which, when disseminated will provide the tools for more widespread implementation. Project-sponsored bamboo seminars/workshops, both locally and internationally, have served to increase the awareness of all stakeholders in the importance and value of bamboos in SFM.

Another significant project output was the establishment of expanded demonstration areas comprising of 150 hectares of natural bamboo stand and plantations, with 26 bamboo species in 3 project

areas, as compared to the planned 100 hectares only of 10-15 bamboo species, and broken down as follows:

- 50 hectares bamboo plantation established; 25 has. in Pauk khaung, Pyay District, Bago Division and 25 has. in Pyinmana, Nay Pyi Taw, managed by their respective rural communities;
- 50 hectares bamboo plantation in Yedashe village, Kawhmu, Yangon Division, of which 10 has for Bambusetum with 26 species managed by FRI and 40 hectares community-based plantation managed by villagers under the Community Forestry Instruction Programme (CFIP,1995);
- 10 hectares natural bamboo forest managed by FRI located in Ngalaik Reserve, Pyinmana, Nay Pyi Taw, Myanmar;
- 10 hectares trial planting of bamboo species in dry-zones of Tatkone, Nay Pyi Taw (supported by Myanmar Government funding); and
- 30 hectares of natural Hmyin (*Dendrocalamus strictus*) bamboo forest in Pyay District, Bago Division, handed over to rural villagers under CFIP strategy.

This evaluation confirmed that the project strategy was sound, given the information available and circumstances at the time the project was developed. The logical framework matrix (LFM) captured the project strategy and design, such that the LFM can be used as an effective monitoring and performance framework. This was demonstrated by the positive impacts provided by the project to its intended beneficiaries and stakeholders through the provision of training courses/seminars/workshops for government implementers and the rural people in three (3) project sites. The rural population was further exposed to the means, methods, management, establishment of bamboo plantations and natural bamboo forests, including value-added bamboo by-products, within the framework of the project. They had ample opportunities to increase their income by adopting the guidelines and directives provided in various publications of the project. These opportunities were not available to them during the pre-project situation.

At present, despite the influence of external factors, e.g. political will of government to support bamboo sector and willingness of partners in development, three (3) project outcomes for target beneficiary groups were identified, to wit:

- Stakeholders are collaborating and building linkages – Close collaboration was a necessary part of the project implementation plan through the conduct of its workshop/seminar in early 2003, and as a result they began to build and establish linkages, share ideas and generate inspiration for follow-up work. Even after project termination in March 2007, FD personnel were continuously assigned to assist and monitor rural communities in their income-generating activities on bamboos and its by-products. These initiatives would not have taken place if it were not for the ITTO project bringing those stakeholders together.
- Good information base on bamboo has been developed – The project outputs generated a dearth of data and information (e.g. 29 technical reports/manuals and guidelines) about bamboo resources in Myanmar that did not either exist before or was scattered around different locations or places. At present, two (2) bamboo publications, e.g. Manual on Bamboo Forest Management (in Myanmar language) and Bamboo Shoot Products Manual (in Myanmar language) were always sought for by the public, particularly those retired government officials from FD and military sector, to be used as basic references in their participation in CFIP strategy, whereby unproductive and idle public lands are opened or allowed for developmental activities through the involvement of private sector/individuals (personal communication with Dr. San Winn, 2009).
- Training-of-trainers (ToT) – The project was successful in ToT involving government implementers and rural folk, and in developing targeted course design and documentation for future use, thereby allowing in-house staff from FD and Forest Research Institute (FRI) to lead in the conduct of local training courses for rural folks/communities instead of relying on the services of outside experts. In fact, a continuing in-house training program or capacity-building exercises for local FD and FRI staff is in place to ensure efficient and effective transfer of bamboo technologies to its beneficiaries (personal communication with Dr. Nyi Nyi Kyat of FRI, 2009).

The project was concluded more than 2 years ago, and it has been observed that Myanmar Government has continuously supported the bamboo sector development with local community participation through the CFIP strategy. These financial and policy support of Myanmar government were very encouraging to the project's sustainability.

## Lessons Learned

There are a number of lessons learned from this project, as indicated or broken down into different categories or aspects, which should be taken into consideration when designing similar projects in the future, to wit:

### A. Project Management

1. The project organization and structure were appropriately created following a collaborative method of project governance and involving a wide variety of stakeholders in the project design and implementation. Outstanding project results or outputs were achieved through multi-sectoral linkages under the guidance of the Project Steering Committee (PSC) and direct supervision of the national project manager.
2. The PSC monitored and evaluated the progress reports and accomplishments every 6 months interval providing regular feedback to all stakeholders to enhance project activities and outputs. This meant the project was continuously improved and ensured the project activities were targeted towards the needs and requirements of beneficiaries.
3. The project staff turn-over is a significant risk, especially involving national project manager, but when it is unavoidable, efforts should be made to ensure that key knowledge is documented, key documents located and secured, and important contacts were passed on to organic staff. A specific case was the GIS-generated maps of the project sites, as mentioned in the project documents, cannot be located and/or produced and shared with other users for information and reference.

### B. Technical Aspects

1. A number of relevant information on bamboo, e.g. guidelines, manuals, reports, etc. have been produced and disseminated by the project to a wider audience/stakeholders that were necessary for the sustainability of project impacts.
2. On LFM, the indicator of success should have been better targeted to desired outcomes, and should be more specific than using the national level information, particularly for specific objective no. 2, in order to effectively measure the project outcomes at the end of the project.
3. The project risks were easily identified, especially at the level of government support and direction, and considered its consequent implications towards the sustainability of project.

### C. Government Policy

1. The government's CFIP strategy of opening up degraded and idle public lands for private investors or individuals has consequently increased the coverage of bamboo plantation areas under this project indicating continued support on bamboo sector development to alleviate poverty of rural communities.
2. The establishment of bambusetum in Yedashe village, Kawhmu Township, with 26 bamboo species was planted intentionally to serve as show window for general public awareness, and eventually promote the introduction of more bamboo species in Kawhmu rather than just a single dominant species of Wa Pyaut (*Oxytenanthera nigrociliata*) in said project area.

### D. Executing Agency and Stakeholders Involvement

1. The key project strategy is the direct involvement of rural communities in the proper utilization and management of bamboo resources through capacity-building activities undertaken by the FD, to acquire and adopt new technologies and methods in bamboo plantation establishment and natural bamboo forest management. Some other villagers outside the project areas were also motivated to replicate at their own initiatives and welfare the bamboo plantation schemes under the CFIP strategy considering their inherent traditional know-how and expertise on bamboos.
2. As mentioned earlier, the prominent feature of the project was the formation of the PSC and the Project Advisory Committee with FD senior officials and other stakeholders from other government agencies and non-government agencies (NGOs) closely collaborating 2 times in a year, to provide advise and direction for the project. The frequent fraternization of senior officials, project staff and relevant parties during meetings and trainings further ensure camaraderie and good will between and among stakeholders in the interest of project sustainability.

3. It is worth mentioning that great care was considered at the project planning phase in 2003 and onwards to avoid any deviation between the planned and actual implementation of the project. All relevant parties or stakeholders in FD's central and field offices, including rural folks, were informed through channels and actively involved in different project phases.
4. The physical distance between project sites and existing rough roads connecting them, with poor tele-communication facilities hampered the project implementation especially during rainy season, including the non-availability of socio-economic specialist at the end of the project, which served as unforeseen factors that affected specific project outcomes mentioned in B.2 above.

## Conclusions

The following conclusions in the whole evaluation process of the project are shown below, to wit:

- 1) A number of outstanding bamboo R & D researches and findings focused on plantation management and production of edible bamboo shoots, including value-added bamboo products, e.g. bamboo curtains, woven, mat-ply bamboo board, bamboo handicraft and furniture for rural communities had been done and documented through guidelines, manuals and reports. The project produced a dearth of information and data on bamboo resources, such as the 29 technical papers/reports which were very comprehensive and impressive, however, none of them have been published in any of the international journals, periodicals and newsletters (e.g. INBAR) for wider distribution and utility.
- 2) Bamboo demonstration areas of the project had expanded in three (3) sites from 100 hectares to 150 hectares, with component bamboo species from planned 10-15 species to 26 species planted (in bambusetum area), in view of continued support of Myanmar government on bamboo sector development to alleviate poverty of rural people through the CFIP strategy.
- 3) The project was collaboratively governed and the budget well managed through the PSC at its inception phase (in 2003) until the project completion. Close collaboration between and among key stakeholders enabled them to build linkages and share information and updates in the interest of proper project management and sustainability aspects.
- 4) The project strategy was sound and selected outputs appropriate, as indicated in the LFM and this meant that there was no need to revise the project logframe. Together with the unexpected government support to bamboo sector development through the CFIP as the project was implemented, a significant number of activities were achieved at the level of outputs than originally envisaged. Likewise, project activities were constantly improved based on feedbacks and updates at the PSC meetings conducted twice a year.
- 5) A stronger political leadership is needed to safeguard the positive impacts of the project in the future, aside from the continuous implementation of CFIP strategy, but also the formulation of a long-term national bamboo development strategy and action plan as a "road map" for all stakeholders to follow and adhere to.
- 6) Finally, the project has been found successful in improving the conditions of target beneficiary groups or IGGs in a cost-effective manner, with the exception of Ledi village group in Paukkhaung Township that could still change for the better or improve over time with invigorating encouragement and less competitiveness from implementers and co-workers.

## Recommendations

The following recommendations for future actions will further support the sustainability of project benefits and help further development of the bamboo sector in Myanmar, such as:

- 1) The bamboo industry should be promoted further by the government through FD in collaborative partnership with private enterprises and cottage industries, and with rural communities' active participation.
- 2) Key stakeholders group should continue working together towards the preparation of a framework concerning the long-term national bamboo development strategy which will guide and support all future action plans of the bamboo sector.

- 3) There is still significant need in Myanmar for information and trainings on all aspects of bamboo sector requiring continued assistance of donor community like ITTO, including dissemination of information or public awareness programme that require improvement, i.e. with enhanced and expanded extension services that are consistent with any agreed bamboo development strategy.
- 4) A number of bamboo demonstration plots located in dry zones and upper Myanmar regions should be encouraged and established to further develop and test systems for potential upscaling and replication.
- 5) Bamboo plantation establishment and natural bamboo forest management should be included as an integral part of the District Management Plan of the government through the FD.
- 6) A Section or Unit on bamboo should be created either in the FD or FRI hierarchy to mainstream the learning and best practices on improved bamboo technologies. The Unit should be tasked with responsibility of putting together and disseminating bamboo researches, analysis and other development news to rural community and industry stakeholders.
- 7) Bamboo forest survey should be undertaken to determine the existing and remaining bamboo growing stock, in collaboration with the GIS section of the planning and statistics division of FD. The GIS-based maps of these project sites and/or demonstration plots should come handy for easy reference and guide.
- 8) Strengthen key stakeholders' capacity through trainings and improved bamboo technologies by enhancing the planning, programming and implementation activities. In particular, rural people's capacities be developed and improved not only in technical aspects, but also through skills development, e.g. simple book-keeping, recording, filing and accounting procedures, which are prerequisites for organizing farmers' cooperatives or IGGs.
- 9) Specific guidelines could be developed for bamboo in terms of harvesting practices and associated regulations towards developing quality standards and achieving certification as a tool for future marketing efforts especially for high-value markets.
- 10) The importance of regional networking with neighboring countries in ASEAN should also be emphasized and pursued to exchange and share the wealth of bamboo information and technologies generated by this project for future marketing strategies and collaborative partnerships. For instance, the project can link with the existing "Bamboo Networks" established in ASEAN to enhance and harness the best available bamboo science and technologies for sustainable development of the people and the environment of the region.

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