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SYNTHESIS REPORT ON EX-POST EVALUATION OF FOUR ITTO COMPLETED PROJECTS ON FOREST PLANTATIONS/GROWTH AND YIELD

PROJECTS

PD 22/98 Rev.1 (F)
Development of Teak Cloning and Establishment of Industrial Plantations (Côte d'Ivoire)

PD 41/00 Rev.3 (F,M)
Model Development to Establish Commercial Plantation of Dipterocarps (Indonesia)

PD 53/00 Rev.3 (F)
Implementation of a Permanent Network of Stands Dynamics Monitoring Plots for the Gazetted Forests of Côte d'Ivoire

PD 386/05 Rev.1 (F)
Technological Development for the Production of Planting Materials to Support Sustainable Plantation of Bali Indigenous Species through Community Participation (Indonesia)

Prepared for ITTO

by

Hosny El-Lakany (Team Leader)
Kokou Kouami
Kwame Asumadu

Ex-post Project Evaluation

Synthesis Report

1. Development of teak cloning and establishment of Industrial Plantations. PD 22/98 Rev.1 (F), Côte d'Ivoire.
2. Implementation of a Permanent Network of Stand Dynamics Monitoring Plots for the Gazetted Forests of Côte d'Ivoire. PD 53/00 Rev.3 (F), Côte d'Ivoire.
3. Technological Development for the Production of Planting Materials to Support Sustainable Plantation of Bali Indigenous Specious Through Community Participation, PD 386/05 Rev.2 (F), Indonesia.
4. Model Development to Establish Commercial Plantation of Dipterocarps, PD 41/00 Rev.3 (F,M), Indonesia.

A report presented to the International Tropical Timber Organization

By

M. Hosny El-Lakany[1], Team Leader,
Kouami Kokou[2], Consultant (Côte d'Ivoire),
Kwame Asumadu[3], Consultant (Indonesia)

September, 2010

[1] Adjunct Professor and Director of International Program, Faculty of Forestry, University of British Columbia, Vancouver, Canada.
[2] Professeur Titulaire, Écologie Forestière et Gestion des Ressources Naturelles, Laboratoire de Botanique/Ecologie, Faculté des Sciences,Université de Lomé, Togo.
[3] Director, Asumadu Pty Ltd, East Brighton, Victoria, Australia

Executive summary

ITTO engaged three consultants; Dr. M. Hosny El-Lakany, (Team Leader), and Dr. Kouami Kokou (Côte d'Ivoire) and Dr. Kwami Asumadu (Indonesia), to carry out ex-post evaluations of the four projects between May and September, 2010. The Terms of reference are reproduced in Annex 1 and detailed reports are given in Annex 2 (Côte d'Ivoire) and Annex 3 (Indonesia), respectively.

The primary purpose of this evaluation is to provide a concise diagnosis of four projects related to Forest Plantation, Growth and Yield so as to point out the successful and unsuccessful outcomes and the reasons, 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.

I: Côte d'Ivoire[4]

ITTO provided project documents to the consultants who undertook a "Desk study" prior to travel to Côte d'Ivoire. The evaluation team visited the country between July 17 and July 31, 2010. They met with officials of the Executing Agency (SODEFOR) for a further review of project materials at headquarters and to plan field visits. The mission visited several of the projects' area of influence to review field implementation and to evaluate the project results and impact, which included discussions with project stakeholders and target beneficiaries (whenever feasible). At the end of the mission, a detailed report was prepared in French and the team discussed its preliminary findings, conclusions and recommendations with SODEFOR senior management and staff, then incorporated some of their comments.

1) ***Development of teak cloning and establishment of Industrial Plantations.***

The project aimed at providing SODEFOR with the capacity to produce Teak trees based on a clone selection programme with a view to the intensification of Teak reforestation. First and second phases of clone testing should eventually ensure the continuous supply of good quality Teak to local and international markets.

Reviewing the project document and results reveal that this approach is a mixture between Provenance Testing and Plus Tree Selection as procedures for tree improvement. It is concluded that for a simple programme to select and vegetatively propagate superior phenotypes (clones), the present project has fulfilled its objectives.

During the field visits, the consultants noticed that the multi-clonal plantations are performing better than those produced from seeds. However, it was also noticed that clone banks (clone conservation plots), clonal seed orchards, and the nursery are not well maintained. The project has made good use of provenance tests and clonal selections that were established in 1970's and 1980's. The magnitude of work is commendable and more than documented in the final project report.

It is noted that the present provenance trials, clone banks, clonal seed orchards, progeny tests and multi-clonal plantations furnish a golden opportunity for research. In addition, it will be a cost-effective source of planting material.

The government has not yet obliged private companies to reforest logged areas (concessions) using available selected material and only few private sector entities have established multi-clonal industrial plantations using selected material produced by SODEFOR.

Apparently, the project has been of economic and social benefits for local populations during the execution phases although they had not been involved in project design. We noticed some local labourers in the nursery of one site.

[4] For details, see attached reports by H. El-Lakany and K. Kokou , Annex 2 (F and E)

Recommendations to SODEFOR and ITTO .

While the present phase of the project has fulfilled its objectives and brought SODEFOR activities towards expanding teak plantations using selected material to maturation, by now the maintenance of clonal orchards and nurseries and the expansion of multi-clonal plantations should have been self-financing and ready for large-scale investments, which is not the case. SODEFOR need to take this point seriously. It is also recommended that SODEFOR teams up with national and international research institutions to make best use of this valuable asset.

If ITTO is to consider a second phase, it should be understood that the funds would go mainly to subsidizing SODEFOR activities in this connection. The sustainability of this project and its subsequent contribution towards the achievement of ITTO's Objective 2000 depend on sound internal SODEFOR business planning or securing additional external funding.

2) ***Implementation of a Permanent Network of Stand Dynamics Monitoring Plots for the Gazetted Forests of Côte d'Ivoire.***

This project intended to optimize the sustainable management of gazetted forests of Côte d'Ivoire in conformity with the objectives of the national forestry policy. Specifically, it intended to implement a network of permanent sample plots aimed at improving the knowledge of the dynamics of typical natural forest stands in Côte d'Ivoire, and at establishing a computerized data management system to process the data collected from those plots.

A desk study of the project document and subsequent reports revealed that this is a simplified study of Stand Dynamics. Apparently the parameters measured as indicators of Stand Dynamics monitoring are limited to tree : height, diameter and form as well as counting small trees. **Stand dynamics** is more comprehensive than that; it is the study of changes in forest stand structure with time, including stand behaviour during and after disturbances. **Stand structure** is the physical and temporal distribution of trees and other plants in the stand. Distribution is studied by species, vertical and horizontal patterns (size of living and dead crowns, volume, leaf area, stem cross-section and age or their combinations).

Discussions with staff at SODEFOR headquarters and field visits indicated that a series of permanent sample plots have been installed in five gazetted natural forests representing different forest ecosystems in Côte d'Ivoire as recommended by a local consultant who also specified the parameters to be measured on site. A computerized system for database management was established and operationalized (according to project staff), and the collated data was supposed to have been analyzed using the software so developed.
Field visits to two representative sites showed that the plots could be reached through extremely rough roads. The plots have been left in their pre-determined state, which is the objective of the study, but access to the pilots themselves is very difficult. While the plots are established using scientific and systematic procedures, measurements are confined to representative trees of primary species (and secondary ones occasionally). Measurements were taken only once at the onset of the project (starting in 2004) but have not been analysed nor published yet. The whole exercise would be of no value unless the principles of Stand Dynamics Studies are implemented, additional measurements and observations are taken and analyzed periodically (every three years as intended), which does not seem the case at present. Also, there are different treatments within each stand, which means that only within stand comparisons are meaningful, but not between stands. Consequently, drawing general conclusions and recommendations about forest Growth and Yield in Côte d'Ivoire would be unrealistic.

As for the social aspects of the project, no signs of involvement of local populations in project design or execution were noticed during field visits. However, the SODEFOR staff indicated that local labourers were employed occasionally while several supervising staff live in the vicinity of the plots.

At SODEFOR HQ, the consultants sought to inspect the computer programme specifically designed for the project (named KOTIBE). The programme has been installed as SODEFOR intranet, and has been inhabited with raw data. However, the raw data has not been analysed, nor has a narrative comprehensive report been prepared. The director informed that another program is needed for the analysis.

Recommendations to SODEFOR and ITTO:

While the general objectives stated in the project document are clear and valid and the design of the plots is scientifically sound, project execution to date is incomplete. This should be regarded as a long term research

project hence no conclusive results could be attained nor a meaningful final report could be prepared for ITTO

The basic digital programme (KOTIBE) is in place and has been inhabited with raw data, but analysis and reporting are still pending. If SODEFOR intends to pursue this study, corrective measures related to digital data processing and analyses should be put in place and maintained in a good working order and staff trained periodically. It is recommended that SODEFOR teams up with some national and international research institutions, and seeks funds from agencies that support such research.

For ITTO, the two main objectives of this project namely: to implement a network of permanent sample plots and to establish a computerized data management system have been fulfilled. However, the third objective namely: to process the data collected from those plots and consequently to secure knowledge of the dynamics of typical natural forest stands in Côte d'Ivoire remain to be fulfilled. This is a major deficiency that needs to be addressed by SODEFOR.

The sustainability of this research project is doubtful unless SODEFOR process, analyze and report field data. Additional periodic measurements are essential and long-term finances (at least 10-15 more years) are needed to sustain the project as well. These are the necessary ingredients to realize the contribution of the project towards the achievement of ITTO's Objective 2000.

The draft detailed ex-post evaluation report (in French) was submitted to SODEFOR management (and government representatives) and discussed over two meetings, then the final report was prepared (Annex 2).

II- Indonesia[5]

After the Desk Review, the team visited Indonesia between August 2nd and 17th, 2010. The first project (number 3 below) was evaluated between Aug.2nd and 9th with the staff of the Provincial Forestry Service of Bali and Regional Tree Seed Center for Bali and Nusa Tenggara. Accompanied by the staff, the team visited the nursery, seed orchard, several farms and interacted with farmer groups and their leaders in western and eastern Bali.

The team accompanied by project staff visited West Kalimantan between Aug 10th and 13th for field evaluation of the second project (number 4 below). The team evaluated the project activities at the SBK company sites in Nanga Nuak, followed by meetings at the project headquarters (the faculty of Forestry, Gadjah Mada University) in Yogyakarta between Aug 13th and 16th.

At the end of each visit a detailed report was drafted and discussed with the respective project staff then the comments were incorporated into the final report (Annex 3).

3) ***Technological Development for the Production of Planting Materials to Support Sustainable Plantation of Bali Indigenous Specious Through Community Participation (Indonesia), PD 386/05 Rev.2 (F)***

The project aimed to develop appropriate technology for the production of planting materials and establish 2,500 ha of plantation using Bali indigenous tree species with community participation. Specifically, the project intended to identify and implement suitable technology for production of high quality planting materials and plantation establishment. The overall strategy was to improve the capacity of local governments and local communities to carry out successful reforestation and rehabilitation programs of degraded land in line with the Bali Greening Program.

According to project documents and discussions with project staff, the main achievements and outputs generated by the project include the following:

1) Selecting 6 indigenous species, identifying stands in 20 sites as seed sources (seed trees), and developing propagation methods (seed germination).
2) Establishing Seed orchards for 3 indigenous species and availing "improved" seeds for local governments and local communities.
3) Preparing guidelines for seed handling and planting for 6 species and distributing to farmer groups.
4) Updating the land use plan for six Districts across Bali which has been used to identify planting sites and setting up permanent sample plots.

[5] For details, see report by H. El-Lakany and K. Asumadu , Annex 3 (E)

5) Establishing a nursery (Pejarakan village) and distributing > 1 million seedlings to communities and farmers in 6 Districts across Bali.
6) Establishing > 2,500 ha of plantations in 6 Districts across Bali and extension of planting technique to farmer groups.
7) Developing 4 agroforestry models for different areas, tree species and land tenure systems. Conducting training and study tours for farmer leaders.

Desk studies indicated that this has been a simple indigenous species trail and selection exercise (based on pre-identified superior seed sources), maintenance of seed orchards, seedling production and distribution to local communities.

Field observations revealed a widespread introduction of 6 indigenous species into existing agroforestry systems directly on farmers' land with full participation of local communities. No forest tree plantations in the formal sense such as large-scale woodlots have been established, contrary to what has been stated as objective #6 above.

Pre-implementation extension, synthesising and raising awareness of local populations about the environmental, economic, social and cultural values of embedding indigenous species into existing farming systems contributed substantially to the success and sustainability of the project. Direct introduction of trees into the farmers' land saved time and efforts normally associated with experimental trials. Farmers visited were enthusiastic about growing indigenous trees on their farms as "safety nets" and source of future income. Well organized farmer groups with effective leadership contributed to fruitful outcomes.

Devolving the management of nurseries to some local communities and their active involvement in seedling production has been instrumental in sustaining the project. Similarly, entrusting farmer groups and communities with maintaining the seed orchard while using the land for food and fodder cropping under agreement with the forestry department based on traditional Bali laws has ensured the continuity of "improved' seed supply.

Keeping records of beneficiary farmer groups, seedling distribution and extension services are important ingredients of project sustainability. Other lessons learnt include the fact that good ongoing working relationships between local communities and forestry department has been crucial for successful implementation and sustainability of the project.

As for the involvement of local communities in project design and implementation, it was clear from field visits that this objective has been achieved.

Recommendations to ITTO and the government:

ITTO needs to document and publicise this type of successful community-based and participatory embedding of indigenous tree species into existing agroforestry systems. Tree planting in many small farms, such as the present project, could contribute significantly to the supply of timber for local artisans and eventually to wood industries which would relieve pressure on natural forests locally as well as nationally. Encouraging and supporting the national and regional forest services to expand introduction of indigenous species on farms and/or as woodlots in addition to traditional fast growing species can contribute to local economy in addition to environmental, social and cultural values. This is a safety net measure for poor rural communities which deserves replication in other regions. Furthermore, the successful example of devolving the management of nurseries and seed production areas to local communities coupled with the rights to use the land for food and fodder production is a good example of community-based forest management. In fact, this is one of the unique examples of participatory sustainable forest management around the world. ITTO may wish to consider a follow up project to expand similar activities to other regions in Indonesia and perhaps other parts of the world.

For the local and national governments, it is recommended to spread the incorporation of indigenous species into farming systems in addition to traditional introduced species (such as teak and albizia).The governments should also support the forestry department to periodically update project records by collecting data on survival and growth of different species under different agroforestry systems and environmental conditions as well as the analyses of the systems themselves The government is further encouraged to consider supplying more seedlings to communities as well as helping farmers in the eastern region of Bali to secure steady supply of water for irrigating nurseries and young trees. Continued extension services to farmers are also needed. The governments may wish to prepare a follow up large-scale development project in order to capitalize on the outcomes of this project.

4) ***Model Development to Establish Commercial Plantation of Dipterocarps. Indonesia PD 41/00 Rev.3 (F,M)***

The project aimed to;

1) select Dipterocarp species for the establishment of commercial plantations,
2) develop appropriate techniques for mass plant production through vegetative propagation, and
3) evaluate the financial and economic efficiency and competitiveness of commercial forest plantations under the proposed models.

Project strategies and activities included testing up to 25 species then selecting the six best performing ones to be recommended for commercial plantations, vegetative propagation (cuttings) of selected species and economic and financial analyses of the existing and proposed forest management systems.

Desk studies revealed that this has been a basic species selection study whereby a large number of species were tried in several locations, then six species were identified based on growth performance and preliminary financial and economic analyses. The number of species was later on reduced to the 3 best performing species which have been used in large-scale commercial plantations by the private sector. Meanwhile, experiments were conducted to stimulate rooting of cuttings taken from superior trees representing the recommended species, in order to overcome the problems associated with erratic seed yields. The plan is to use mass vegetative propagation for future commercial plantations.

Field visits to one out of six sites showed that the project has undertaken quite successful species trial and evaluation based on growth (and to some extent economic analysis). Progenies of several families (half-sib) of the three best species were tested and the stand was later on thinned to the best individual trees within families to be used as seed sources in the future. Rooting juvenile cuttings has been achieved with mixed success and experiments are underway to root cuttings from mature wood collected from selected superior phenotypes. Large –scale plantations using three selected *Shorea* species were clearly much better than those established from unselected seed sources.

The company where this project has been being implemented has established well-equipped and managed nurseries as well as advanced mass vegetative propagation facilities.

The project has developed an innovative intensive silvicultural system through which seedlings of selected species are introduced into cleared stripes within existing logged-over plots. This approach would guarantee higher yield than naturally regenerated secondary forest which is the current practice. The new silvicultural system compared favourably to existing systems from economic and financial perspectives, although it is too early to draw conclusive results.

The project has been managed by well-qualified and actively engaged university (GMU) researchers and it was clear that all the work undertaken is based on solid scientific knowledge. The integrated team is composed of silviculturalists, tree breeders and economists. Furthermore, the field staff of both the university and the company have been trained and well informed about the work being implemented.

The evaluation team concluded that the objectives of this project have been effectively and efficiently achieved to a large extent. The company management showed full collaboration and is convinced of the benefits of the new approach to planting superior species and improved seed sources within species. They have availed financial and in-kind support to the project.

In conclusion, the sustainability of this project is in place due to the commitment of the scientists and the company management. The partnership among the two parties with serious interest of the GOI is exemplary. It is expected that the project will have a positive impact on the renewal of logged over areas in the region.

Recommendations to ITTO and G.O.I

ITTO may wish to publicise the approach followed by this project and its results among member countries with similar environmental, economic and social conditions. This is a good example of public-private partnership based on good science and demonstration on privately-managed forest land. The newly developed intensive silvicultural system merits serious consideration and testing in other locations. The organization may wish to entertain the proposal to extend the activities of the present project. It would be

useful to convene a regional or international conference to share the experiences and results of this project widely.

The GOI may wish to explore options to fund the GMU to undertake new phases of the project and to support further human resource development. The government may consider possibilities of financial incentives to encourage other private sector companies to adopt the outcomes of this project. Submission of a follow up project for co-funding by ITTO might be in order.

Overall conclusions, recommendations and lessons learned.

Based on the evaluation of these four projects, and their contribution towards the achievement of ITTO's Objective 2000, it is generally concluded that planted forests and agroforestry systems could be a significant source of timber and non timber forest products and services provided that they are compatible with the principles of sustainable forest management. They could also complement goods and services provided by natural forests and eventually reduce pressure on them especially in the tropics and sub-tropics.

In the examples evaluated, tree planting took many forms, including incorporation into existing agroforestry systems to provide the farmers with additional income and to act as a safety net; planting as small community managed woodlots or company managed commercial plantations; rehabilitation of degraded forests or tree planting to enrich natural regeneration after logging.

Comparative impacts and sustainability of the four projects:

The general and specific objectives of the four evaluated project were fulfilled to varying degrees. (See Table 1 below). Project PD 22/98 Rev.1, Côte d'Ivoire (Teak cloning) has capitalized on previous work that involved provenance trials and clonal selection. It has made good strides during the duration of the project, but unfortunately most of the activities slowed down after the end of ITTO financial support. The executing agency has substantially reduced its tree planning programs due to shifting budget to other activities. It is therefore concluded that the project objectives have been achieved but its sustainability is doubtful unless new funds are secured.

Project PD 53/00 Rev.3 Côte d'Ivoire (Stand Dynamics) was also based on a previous project to prepare management plans for native forests. It is a good example of well-conceived research project followed by good experimental design, designation of plots on the ground and development of a computer program for data entry and analysis. Again, the activities almost ceased after the termination of the project and data is being stored awaiting analysis. Therefore, the impact is ``on hold`` until the data is analyzed and results are disseminated. It should be mentioned however that this not entirely the fault of the executing agency. When the project was approved, it was not realized that it is a long-term research activity.

The situation was different in the other two projects. Project PD 386/05 Rev.2, Indonesia, successfully capitalized on a previous project to re-introduce and test few indigenous species. Although it cannot be regarded as large scale forest plantations, it adopted an innovative approach by embedding the trees into existing agroforestry systems with full participation of small farmers. The positive impact of the project was augmented by the ``buying-in`` by local farmers and its sustainability has been assured through devolution of management to well-organized local communities supported by active forest extension services.

Similarly, Project PD 41/00 Rev.3, Indonesia, used scientific approaches to tree improvement to test several Diptrocarp species, and has reached viable recommendations for the best species for large scale forest plantations. It has also implemented a new approach to intensive silviculture to enrich logged over forests which showed to be economically profitable and environmentally compatible. The project's impact has been demonstrated through the adoption of its outcomes by forest companies and its sustainability has been guaranteed through active private-public sector partnership.

Lessons learned: The present evaluation has proved that the success of planted forests depends on the availability of good (improved) planting material that could be developed through "good" science. At the community level, the sustainability of tree plantations depends on the sensitization of the local farmers through effective extension programs and active involvement of local and national governments. For large-scale commercial planted forests, the sustainability depends on viable public-private partnerships and commitment of the forest companies to adopting innovative approaches once they prove economically and financially feasible as well as their willingness to share costs during the experimentation phases.

One of the most important lessons learned from the present evaluation is that failure to capitalize on improvement and selection programs through subsequent implementation of extensive tree planting activities (such as the case of Project No.1 above), would constitute waste of resources, while commitments by forest companies to use the improved material for planting (such as Project No. 4 above), contribute to project sustainability. Furthermore, the devolution of nursery and seed orchards management to local communities based on local traditional laws and recognition of mutual benefits supported by continued technical assistance from the forestry departments (example Project No 3 above) are essential ingredients for success and sustainability.

Another lesson learned is that while in principle studying stand dynamics in the tropics is needed, it should be noted that this is a long-term endeavour that requires long-term financial, technical and administrative commitments by all parties. It is also regarded as "pure" scientific research in contrast to applied research that has furnished the successful basis for projects no. 1 (teak) and no. 4 (Dipterocarps). ITTO may wish to reconsider its support to projects such as No 2 above.

It is recommended that ITTO disseminates these results among member countries with a view of sharing experience and lesson learned from success and failure.

Table (1) Relative evaluation of the four projects

Evaluation Criteria	**PD 22/98 Rev.1 Côte d'Ivoire**	**PD 53/00 Rev. 3 Côte d'Ivoire**	**PD 386/05 Rev. 2 Indonesia**	**PD 41/00 Rev. 3 Indonesia**
Efficiency	**++**	**+**	**+++**	**+++**
Effectiveness				
- **Specific objectives.**	**++ +**	**++**	**+++**	**+++**
- **Development objectives.**	**+ +**	**+**	**+++**	**+++**
Sustainability	**+**	**--**	**+++**	**+++**
Impact				
- **Local**	**++**	**+**	**+++**	**+++**
-	**++**	**+**	**++**	**++**
- **National**	**++**	**+**	**++**	**++**
-				
- **Regional**				

+++ I Important/significant contribution ++ - Medium contribution
+ Low contribution -- No evidence or too early to determine

Annex 1

Terms of Reference

Ex-Post Evaluation of ITTO Projects on Forest Plantation, Growth and Yield

I. Background

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

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

PD 22/98 Rev.1 (F)	Development of teak Cloning and establishment of Industrial Plantations	Côte d'Ivoire
PD 41/00 Rev.3 (F)	Model Development to establish Commercial Plantation of Dipterocarps	Indonesia
PD 53/00 Rev.3 (F)	Implementation of a Permanent Network of Stands Dynamics Monitoring Plots for the Gazetted Forests of Côte d'Ivoire	Côte d'Ivoire
PD 386/05 Rev.1 (F)	Technological Development for the Production of Planting Materials to support Sustainable Plantation of bali Indigenous Species through Community Participation	Indonesia

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

II. Purpose and Scope of Evaluation

A) Purpose

The primary purpose of the evaluation is to provide a concise diagnosis of five projects related to Forest Plantation, Growth and Yield so as to point out the successful and unsuccessful outcomes, the reasons for successes and failures, and the contribution of the projects towards the achievement of ITTO's Objective 2000, and to draw lessons that can be used to improve similar projects in the future.

B) Scope of Work

a) Analyze and assess for each project:

1. The overall role and contribution of the project in light of sectoral policies, development programmes, priorities and requirements to achieve sustainable management of forest resources in the country concerned.
2. The current management status of forest plantations within the project's area of influence, the effectiveness of the project's implementation and its effectiveness in promoting sustainable plantation management as defined in the ITTO Guidelines for the Establishment and Sustainable Management of Planted Tropical Forests and the ITTO Guidelines for the Restoration, Management and Rehabilitation of Degraded and Secondary Tropical Forests.
3. The contributions of the specific studies in various disciplines (genetic conservation, cloning, ecology, socio-economy, silviculture, rehabilitation, stands dynamics, plant materials production, etc.) prepared by the project to the development of forestry in the project's area of influence.

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

b) Provide a synthesis to:

1. assess the overall role and meaningful contribution of the four projects in achieving sustainable management of forest resources in tropical timber producing countries taking into account ITTO's objectives, the ITTO Action Plans and Objective 2000.
2. evaluate the overall contribution of the four projects to plantation establishment/management in the tropics and to the restoration, management and rehabilitation of degraded and secondary tropical forests.
3. evaluate the overall impact on and relevance of the four projects for the Executing Agencies, the forest industry sector and local communities being served and the countries concerned.
4. evaluate the overall attainment of the objectives and to assess the overall effectiveness of the four projects.
5. evaluate the overall appropriateness of the costs and cost structure and use of resources within the four projects.

And make recommendations on:

1. the needs for similar projects in the future;
2. innovative approaches/designs for projects aiming at promoting plantation establishment and management in the tropics and at the restoration, management and rehabilitation of degraded and secondary tropical forests;
3. appropriate target groups, e.g. countries, government, organizations, forestry sector, local communities;
4. the organizational arrangements of such projects;
5. follow-up and evaluation practices; and
6. further actions needed to sustain or increase the intended effects on sustainable management of forest resources and Objective 2000 and to draw conclusions which may be of relevance to other ITTO projects.

III. Approach

A) Composition of the evaluation team

The team will be composed of three consultants. One of the consultants will be team leader in charge of the final report and the presentation of the results at the Forty-sixth Council Session in Yokohama, Japan, in December 2010. He will be accompanied by one French speaking consultant on the missions to Côte d'Ivoire and by one English speaking consultant in Indonesia. The assignment of specific tasks within the TOR will be left to the Team Leader based on the individual expertise of the consultants.

B) Consultation during evaluation exercise

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

C) Activities and report of the team

The work required in this evaluation will consist of:

1. Desk review of project-related documents and materials provided by ITTO.
2. Missions in Côte d'Ivoire and Indonesia. The respective evaluation teams will visit each project's Executing Agency headquarters for a further desk review of project materials and to carry out evaluation work in collaboration with the Executing Agencies. The missions shall also include a field visit to each of the projects' area of influence to review field implementation and to evaluate the project results and impact, and should include discussions with project stakeholders and target beneficiaries. Approximately five to six working days are required for each project.
3. Preparation of an Ex-post Evaluation Report for each project in accordance with the Scope of Work and the checklist contained in the ITTO Manual for Project Monitoring, Review, Reporting and Evaluation. The reports for Indonesia should be in English and the report for Côte d'Ivoire should be in French;
4. Preparation of a synthesis report [see b) Scope of Work] of the four ex-post evaluation reports in one of ITTO's working languages, focusing on the overall assessment of the projects' relative success in contributing to ITTO's Objectives, the Objective 2000 and the ITTO Action Plans, summarizing the key lessons learnt; and identifying any issues or problems which constrained their contribution to the achievement of Objective 2000.
5. Presentation of the synthesis report (to be called: Overall Executive Summary) at the Forty-sixth Council Session in Yokohama, Japan, in December 2010.
6. Preparation of an article for possible publication in the ITTO Tropical Forest Update (TFU), in consultation with the editor, containing an overview of the projects and summarizing the lessons learned from the evaluation work.
7. Appropriate high-resolution photographs should be provided.

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

D) Duration of the assignment

The duration of the assignment will be 1 to 2 months (2 months for the Team Leader) and will consist of approximately one to two weeks traveling in the countries concerned and the remaining time for preparation of the evaluation and report writing.

E) Proposed Work Schedule

- May 2010 — Desk review
- June/July 2010 — Field visits in Côte d'Ivoire and Indonesia
- 30 August 2010 — Submission of draft reports to ITTO and to each of the Project Executing Agencies for comments and suggestions.
- 15 September 2010 — Submission of the overall executive summary and the final ex-post evaluation reports to ITTO.
- 13-18 December 2010 — Presentation of the Final Report at the Forty-sixth Council Session in Yokohama, Japan, in December 2010. (Team Leader).

F) Proposed Consultants

- Team Leader (2 months): **Mr. Hosni El LAKANI** (Côte d'Ivoire and Indonesia)
- 2 Consultants (1 month each): **Mr. Kokou KOUAMI** (Côte d'Ivoire's projects) and **Mr. Kwame ASUMADU** (Indonesia's projects)