

COMPLETION REPORT

ASSESSING SILVICULTURAL SYSTEM ON RAMIN: REVIEW ON THE CURRENT PRACTICE AND RE-VITALIZATION OF EXISTING PERMANENT SAMPLE PLOTS

ITTO-CITES PROJECT
INDONESIA'S WORK PROGRAMME FOR 2008 ON

Ensuring International Trade in CITES-listed timber Species is Consistent with
their Sustainable Management and Conservation



EXECUTING AGENCY

Forestry Research and Development Agency (FORDA), Ministry of Forestry, Indonesia
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THEMATIC PROGRAM ON ITTO-CITES

ENSURING INTERNATIONAL TRADE IN CITES-LISTED TIMBER SPECIES IS
CONSISTENT WITH THEIR SUSTAINABLE MANAGEMENT AND CONSERVATION

STARTING DATE

15 December 2008

DURATION OF THE ACTIVITY

12 months, extended to 20 months

ACTIVITY COST (US\$)

| | |
|---------------|--------------|
| ITTO | US\$ 97,455 |
| GOI (in-kind) | US\$ 28,418 |
| Total | US\$ 125,873 |

ACTIVITY COMPLETION REPORT

ACTIVITY TECHNICAL AND SCIENTIFIC STAFF

Activity Coordinator

Tajudin Edy Komar

Activity Secretary

Siti Nurjanah

Activity Finance

Dian Tita Rosita

National Expert and Team Leader

Evalin S.S. Sumbayak

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Bogor, 30 October 2010

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EXECUTIVE SUMMARY

1. Activity Context, Origin and Problem to be Addressed

To ensure the sustainable management of ramin, a review of silviculture system and practice is necessary to be carried out. In addition, collection of biological-ecological data for growth and yield and population dynamics of ramin and other species in PSF is also important for setting management plan. As such, this small Activity was proposed in order to improve and achieve SFM and conservation of ramin in Indonesia.

2. Activity Objectives

Overall objective

The overall objective is to ensure the international trade of ramin in Indonesia is consistent with its sustainable management and conservation as part of global concern on ensuring sustainable management and conservation of CITES-listed timber species, especially for ramin (*Gonystylus* spp.) in Indonesia.

Specific objective

Specific objective is to review the existing silvicultural system and its practices and the existing permanent sample plot in PSF where ramin is growing, as well as to re-vitalize (re-establish) long-term ecological study plots both in Sumatra and Kalimantan.

3. Most Critical Differences between Planned and Realized Activity Implementation

Activity personnel: There were no major changes in personnel in implementing this Activity.

Time schedule: Only a slight delay in the starting date and there was an extension from 12 months to 20 months to execute some additional activities (January 2009 through August 2010).

Budget amendment: Some amounts of unspent fund were reallocated to support some additional activities.

4. Situation Prevailing after Activity Completion, as Compared to the Pre-Activity Situation including the Situation of the Target Beneficiaries, and the Post-Activity Sustainability

There are several conditions which have been reversed from this Activity as described below:

- The review on the current system and practice of silvicultural on ramin
- The proposed revision of the silvicultural system
- The review on the existing permanent sample plots for ramin and PSF
- The newly established long-term ecological study plots
- The presence of a technical manual for monitoring flowering, fruiting and seed production of ramin
- The formulation of a technical guideline for vegetative propagation using stem/shoot cuttings for ramin

The above outputs are necessary to support and enhance SFM and conservation of ramin.

5. *Most Relevant Outcome of the Analysis of the Activity Implementation*

The revised draft for the silvicultural system which has been prepared based on the review and evaluation of silvicultural system and its practice could provide essential contribution to the Ministry of Forestry, Indonesia as an addition to the technical guidelines developed. The technical guidelines will contribute to continued provision of planting materials used for ramin plantation.

6. *Lessons Learned*

- 1) It is important to comprehensively evaluate silvicultural system after several decades of application. This review has given significant inputs to improve silvicultural system and its practice in the future, regardless that the existing forest has been decreasing.
- 2) Peat Swamp Forests are unique with the present of excess of water, organic material and certain types of vegetation which are different from other forests. This condition requires different technique and methods for logging operation.
- 3) Poor accessibility in PSP is mostly becoming primary barrier in monitoring, supervision and control of logging. This also includes collection of data from PSP. Special treatments, methods and measures are required to maintain the desired condition.
- 4) Clarity in the role and responsibility of institutions involved in the management of PSP is critically important to ensure the regular collection of data and other associated information.
- 5) The follow-up action to the findings of the Activity will be very much dependent on the dissemination of the results. It is important that during the execution of the Activity, the involvement of relevant stakeholders is critical for awareness raising, capacity building and effective dissemination.
- 6) In this Activity wider stakeholders and field staff were involved.

7. *Recommendations*

It is recommended that similar activities be carried out for species currently harvested to avoid further degradation.

1. ACTIVITY IDENTIFICATION

1.1. Context

Social, economic and environment

Exploited since 1980s, ramin has been popular for furniture and other indoor ornament and uses. Its economic value has given valuable contribution to local and national economy of Indonesia.

This economic value has resulted in excessive harvest, including illegal logging. This harvest has caused degradation of habitat and population in Sumatra and Kalimantan. Conversion of ramin habitat to other uses has escalated the decrease in population, which in turn will produce negative impact on the environment.

Project location

Activities were carried out in Bogor, Riau (Sumatra) and Sebangau (Central Kalimantan) for collecting data and information required for review and evaluation of silvicultural system, permanent sample plots and the establishment of long-term ecological study sites for ramin and PSF.

Relevant national and regional policies and programs

Due to various threats, Indonesia has imposed a logging moratorium of ramin since 2001 and only one concession company is allowed to harvest ramin which is located in Sumatra. Other concession areas which have ramin potentials are not allowed to harvest and trade ramin before they achieve sustainable forest management (SFM) and certified by recognized certification company. Since 2001, ramin as a genus was also listed into CITES Appendix III to assist in the trade control by both exporting and importing countries. In 2004, ramin was up-listed into Appendix II of CITES which has implication that more requirements must be complied before they are allowed to be harvested and internationally traded. Those requirements include NDF assessment prior to harvest and setting yearly quota.

1.2. Origin and the Main Problem to be Addressed

This Activity is part of the global project on “Ensuring international trade of CITES-listed timber species is consistent with their sustainable management and conservation”. This Activity was designed to solve problem related to excessive harvest on ramin using existing silvicultural system. Current silvicultural system used in peat swamp forest is the Selective Cutting with Enrichment Planting. This system has been practiced on all forest types with some minor adjustment for peat swamp forest. Comprehensive review and evaluation, and to re-design reliable and representative permanent sample plots for long-term ecological study sites is of critical importance. In order to obtain a deeper understanding on growth, yield and population dynamics of ramin and other species found in peat swamp forests, long-term ecological studies would need to be carried out. The existing permanent sample plots for ramin and other species were established primarily for monitoring growth and yield, and hence, may not be sufficient for observing their population dynamics. Due to the termination of most concessions in peat swamp forest area, the existing permanent sample plots are hardly accessible for regular monitoring. Therefore in this Activity, the existing permanent sample plots would be re-visited and evaluated, and newly designed permanent sample plots would be established by considering, primarily, their accessibility and representativeness.

2. ACTIVITY OBJECTIVES AND IMPLEMENTATION STRATEGY

The overall objective is to ensure the international trade in CITES-listed species is consistent with its sustainable management and conservation.

Rationale

Since early 1980, timber harvest in PSF was using similar selective cutting system as those in dryland forest, with several adjustments. Some modifications were made, especially on diameter limits adjusted based on existing growing stock and market demands. This system has not been evaluated on its appropriateness and its field implementation. Recent fact shows that existing PSF and ramin population have been degraded and their potency, especially logged-over areas have decreased. The knowledge on population dynamics, regeneration and growth are still insufficient. This Activity is intended to review the system and its application, as well as, to obtain sufficient knowledge and enhance understanding on population dynamic of PSF, through the re-vitalization of permanent sample plots (PSP) to be long-term ecological study sites.

Specific objectives

- 1) To review and evaluate the silvicultural system and its practice.
- 2) To re-vitalize the existing permanent sample plots so as to obtain a better understanding on the population dynamics, growth and yield of ramin and the other species found growing in peat swamp forests.

Adjustments made in the implementation phase

There were some extended additional activities to strengthen the findings obtained from the executed-planned activities. The four additional activities were the development of guidelines for monitoring flowering-fruiting and seed handling on ramin, and the guideline for vegetative propagation techniques, as well as the conduct of a training workshop on the application of the guidelines as part of capacity building.

Implementation strategy

- 1) Identify qualified and experienced parties to be involved in the project activities, discussion and workshops.
- 2) Organize several technical discussions to discuss the findings of desk study and the field findings.
- 3) Invite a review team to improve the technical reports, the drafts and other documents.
- 4) Organize several stakeholder consultations to discuss and finalize the revised drafts.
- 5) Organize several national workshops and present the findings to obtain inputs and comments.
- 6) Submit and disseminate final and other relevant documents to concerned stakeholders through mail, email, forestry exhibitions and web sites.
- 7) Internal FORDA evaluation to review and evaluate the progress, the problems and the solutions faced by the Activity and to enhance the achievement, organize separately and/or in conjunction with other events organized by FORDA.
- 8) Organize monitoring and evaluation (M&E) attended by EC Monitors, ITTO Monitoring Mission, and Regional Project Coordinator (Asia) meeting.
 - The first visit of M&E team dated 25 – 26 September 2008
 - The second visit of M&E team dated 14 – 15 September 2009
 - The Mid Term Review dated 9 – 12 November 2009
 - The FORDA review and evaluation meeting dated 22 March 2010
 - The third visit of M&E team dated 31 August – 3 September 2010
- 9) Enhance the use of findings through the following:
 - The development of guidelines for monitoring flowering-fruiting

- The development of technical guideline for vegetative propagation for wider use
- Holding a training workshop to improve capacity on monitoring flowering and vegetative propagation technique

Assumptions and risks

The Activity has very minimal risks since most of the activities are related to the collection of data through *literature search*, interviews and field visit (survey) in selected areas, especially in forest concessions currently in operation. For field survey, the accessibility influenced the schedule but did not cause failure in the achievement of the overall Activity objectives.

3. ACTIVITY PERFORMANCE (Activity elements planned and implemented)

(i) Performance of each activity

| Outputs and Operational Activities | Schedule (Duration) | Applied inputs |
|---|--|---|
| Output 1.1 Review and evaluation on the silvicultural system and its practice | | |
| Activity 1.1.1 Collection of rules, regulation and concepts underlying the practice of the current silvicultural system | Jan – Mar 2009 | Team leader and members, other labors. National Expert Dr. Istomo, IPB |
| Activity 1.1.2. Collection of information through interviews, stakeholders consultation and field visits | Mar – May 2009 | Similar to Activity 1.1.1. |
| Output 1.2. Draft revision of the silvicultural system in peat swamp forest area, with specific reference to ramin and the other species found in peat swamp forests (PSF) | | |
| Activity 1.2.1. Formulation of draft revision of the silvicultural system and its practice | May – Jul 2009 | Similar to Activity 1.1.1. |
| Activity 1.2.2. Stakeholders consultation on the draft revision of the silvicultural system on ramin | Aug – Oct 2009 | National Expert of Activity 1.1.1., Invited speakers, stakeholders and other participants |
| Output 2.1. Review and re-design permanent sample plots for ramin and the other species found in PSF | | |
| Activity 2.1.1. Review and evaluation on the existing permanent sample plots of ramin and the other species found in PSF | Mar-Jun , Extended to Jan-Feb 2010 | Team leader and members. National Expert: Dr. Hesti LT |
| Activity 2.1.2. Re-design and re-establish the accessible and reliable permanent sample plots for PSF species in Sumatra and Kalimantan | Jul – Oct Extended to Jan-Apr 2010 | Team leader and members National Expert: Dr. Istomo |
| Extended Additional Activities | | |
| Activity 1.1. Developing guideline for monitoring flowering-fruiting and ramin seed handling | Feb-Mar 2010 | National Expert: Mr. Nurhasybi and members |
| Activity 1.2. Developing manual for vegetative propagation technique | Feb-Mar 2010 | National Expert: Evalynn SS and members |
| Activity 1.3. A short training workshop on the manual for monitoring flowering and vegetative propagation techniques | May-Jun 2010 | Invited speakers, trainers in vegetative propagation |

(ii) **Outputs achieved**

Output 1.1 Review and evaluation on the silvicultural system and its practice

Review and evaluation on the silvicultural system and its field practice (Output 1.1.) and the development of revised draft on silvicultural system on ramin and PSF are completed. The revised draft for silvicultural system for ramin (along with harvest protocol) has been discussed involving concerned stakeholder. This draft has been forwarded to the Directorate General of Forest Production Management (DG BPK), the primary institution responsible for legal aspect for its application. This is similar to that for the Guideline for NDF which requires legal aspect before field implementation.

Output 1.2. Draft revision of the silvicultural system in peat swamp forest area, with specific reference to ramin and the other species found in peat swamp forests (PSF)

The review of current silvicultural system and practices has indicated that the system requires modification and improvement. This is also co-incidence with the issuance of Minister Regulation No. 11 which allows cutting of ramin ≥ 30 cm in diameter. The Activity has also accommodated the discussion on the possible link between Activity results and the Minister Regulation (P.11) which is very relevant to the newly drafted silvicultural system on ramin. As raised during the consultation meeting, it is strongly recommended that this draft be submitted to the regulator (DG of Forest Production Management) to make this system applicable and become a reference for logging operation.

Output 2.1. Review and re-design permanent sample plots for ramin and the other species found in PSF

Another Output (Output 2.1.) is the review and re-design of PSP for ramin and other species in PSF to be used for the establishment of long-term ecological study sites in Sumatra (Berbak National Park) and Sebangau National Park with variable in size and design. These plots are expected to be sufficient for population dynamics studies on ramin and other PSF species, even though the ideal representative plots, such as high accessibility, intact natural population distribution and composition, are currently impossible to find.

To enhance the Outputs to achieve sustainable management and conservation of ramin several additional activities were executed, such as the development of manual/guideline for monitoring flowering and ramin seed handling, vegetative propagation technique and capacity building related to the guidelines. These activities and the publication produced are important to achieve SFM and conservation of ramin through continued provision of planting materials for forest rehabilitation and plantation programs.

The technical reports and the two guidelines produced by the Activity are:

- 1) *The Evaluation of the Silvicultural System in Peat Swamp Forest Area in Indonesia (Evaluasi Sistem Silvikultur Hutan Rawa Gambut di Indonesia).*
- 2) *Draft Revision Silvicultural System in Peat Swamp Forest Area (Draft Revisi Sistem Silvikultur di Hutan Rawa Gambut).*
- 3) *Review and Evaluation of Permanent Plot Samples of Peat Swamp Forest (Tinjauan dan Evaluasi Petak Ukur Permanen di Hutan Rawa Gambut).*
- 4) *Design and the Establishment of Long-term Ecological Study Plots (Desain dan Pembuatan Plot Pengamatan Ekologi dan Dinamika Populasi Ramin dan Jenis-jenis lain pada Hutan Rawa Gambut di Sumatra dan Kalimantan; Buku I).*
- 5) *Design and the Establishment of Long-term Ecological Study Plots (Desain dan Pembuatan Plot Pengamatan Ekologi dan Dinamika Populasi Ramin dan Jenis-jenis*

lain pada Hutan Rawa Gambut di Sumatra dan Kalimantan; Buku II: Data base Hasil Pengukuran Tahap I).

- 6) *Technical Guideline for Monitoring Flowering and Fruiting of Ramin (Manual Monitoring Musim Berbunga – Berbuah dan Produksi Benih Ramin (Gonystylus bancanus)).*
- 7) *Technical Guideline for Vegetative Propagation of Ramin (Gonystylus bancanus) (Pedoman Teknis Pembuatan Stek Pucuk Ramin (Gonystylus bancanus))*

Total amount of expenditures and analysis

From the ITTO contribution of US\$ 97,455.00, at total of US\$ 94,323.39 was spent while leaving a balance of US\$ 3,335.63 (including bank interest rate) as reflected in the 'Activity Financial Statement - ITTO contribution' and the 'Activity Cash Flow Statement - ITTO contribution' in **Annex 1 and 2**. In this regard from the in-kind contribution of US\$ 28,418.00 from Indonesia, a total of US\$ 28,418.00 was spent as shown in the 'Activity– Financial Statement Government of Indonesia (Gol) contribution' and the 'Activity Cash Flow Statement -Gol contribution' in **Annex 3 and 4**.

Note:

All inquiries regarding the expenses for sub contract please contact:

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Kampus Dramaga, IPB
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Fax. 62 – 251 – 8626886

4. ACTIVITY OUTCOME, TARGET BENEFICIARIES INVOLVEMENT

4.1. Achievement of specific objectives

The improvement of silvicultural system and practice on ramin and other PSF species will give significant impact to future management of PSF and ramin, when properly implemented. The improvement is based on the Activity findings on (i) a review and evaluation of silvicultural system and its practice on ramin and PSF, and (ii) re-vitalization of the existing permanent sample plots to obtain a better understanding on the population dynamics, growth and yield of ramin and other species found growing in peat swamp forests.

Outputs

The above objectives are achieved through the production of five tangible outputs as follows:

- 1) A review and evaluation on the silvicultural system and practice.
- 2) Revised draft of the silvicultural system in peat swamp forest area, with specific reference to ramin and other species found in peat swamp forests (PSF). This draft has also accommodated the newly issued Ministerial Regulation on silvicultural system (No. 11/2009).

- 3) Review and re-establishment of PSP which could be long-term ecological study plots for ramin and other species growing in PSF. These study plots are established representing most conditions of PSF in Sumatra and Kalimantan.
- 4) Technical guideline for monitoring flowering-fruiting and seed production and vegetative propagation technique to enhance rehabilitation and plantation of ramin.

Impact/outcome

The five outputs above could influence sectoral policies and programs of the Ministry of Forestry, Indonesia (MoF), more specifically the following:

- 1) The newly revised draft of silvicultural system which also incorporates PP No. 11, 2009 on determining diameter limits.
- 2) The management plan based on data collection of the existing and newly established observation plots.
- 3) Rehabilitation program through the provision planting materials using shoot/stem cuttings techniques.

The newly revised draft for silvicultural system which is the improvement of the existing system which is the Selective Cutting with Enrichment Planting should also be useful to improve the practice of forest management.

The other result that could provide improvement on regeneration are (i) the development of guideline for monitoring flowering and fruiting, (ii) the development of guideline for vegetative propagation technique for wider use, and (iii) capacity building through training workshop.

4.2. Situation at Activity Completion as compared to the pre- Activity situation (the tangible Outputs of the Activity, sectoral policies and programs; and the physical environment)

- 1) Problems and weakness on the existing silvicultural system and application identified for further improvement.
- 2) The implementation of sustainable management could be better executed, especially through the practice of silviculture and understanding on population dynamics.
- 3) The presence of long-term ecological study sites for monitoring growth, yield and population dynamics in PSF. By the presence of the study plots, biological-ecological studies including population dynamics of PSF could be consistently conducted and monitored.

4.3. Participation of the Target Beneficiaries had in the implementation of the Activity and how its results have been used by them or will be used in the future

The primary beneficiaries of the Activity are the Ministry of Forestry, Indonesia (MoF), CITES – MA/CITES – SA, research institutions, universities and forest concession companies. They have been involved in various discussions during the execution of the Activity. Further benefits are disseminated and delivered through Activity publications, workshops, consultative meetings and other related public events organized by MoF and other institutions.

4.4. Expectation of Activity Sustainability after Activity Completion

The newly drafted silvicultural system will be utilized by relevant institutions in the practice of SFM on ramin. In addition, long-term ecological study sites will also be utilized by nearby institutions and universities for scientific and practical purposes. Other guidelines are also likely to be used for field application. Relevant field institutions will utilize those documents as part of sustainability of the Activity.

5. ASSESSMENT AND ANALYSIS

- 1) The Activity design has been efficient in achieving the Activity objectives and to answer key issues raised in the Activity documentation.
- 2) Implementation strategies which have been taken through desk study, field survey and stakeholder consultations (Meetings) have been effective in the execution of the operational activities and produce outputs.
- 3) In general, the execution of the Activity has been in accordance with the expectation made during the Activity identification process with adequate involvement of most stakeholders, the problems raised and the outputs achieved through the implementation approach as they have been executed.
- 4) The Activity was implemented on schedule including the extended additional activities. A number of qualified personnel from FORDA and the Bogor Agricultural University, Indonesia were involved in the activities. No major equipment was purchased under this Activity.
- 5) Most of relevant stakeholders including regulators were involved in the Activity in various ways, primarily in discussion meetings and workshops.
- 6) Several of the Activity outputs, such as comprehensive result of field review on silvicultural system and its correspondent revised draft will be likely to be adopted fully or partially in the sustainable utilization of PSF and ramin by the Ministry of Forestry (DG Forest Production Management). Other products including technical guidelines for monitoring for flowering-fruiting and seed handling of ramin, and that on the vegetative propagation techniques will be adopted and used by concerned stakeholders in the rehabilitation and plantation programs of PSF.
- 7) Long-term ecological study sites (observation plots) which are important for data collection on biological-ecological data for population dynamic studies are likely to be further utilized and managed by local universities and research institutions.
- 8) The expected outputs achieved through this Activity are better management practices through improved silvicultural prescriptions, supervision and monitoring. Weakness and problems related to the system and practice of silviculture have been identified through in-depth review on the system and practice of silviculture in PSF. A new draft of silvicultural system which contains improvement from the existing one has been prepared.
- 9) Other in-depth understanding on the growth, yield and population dynamics of ramin and the other species found growing in peat swamp forests will be obtained after the established well-designed and accessible permanent sample plots are regularly monitored and documented.

6. LESSONS LEARNED

Activity identification and development, including problem analysis and stakeholder identification and participation

The Activity has addressed the issue on sustainable management of ramin through the review and evaluation of silvicultural system and its practices, and the existing permanent sample plots and management, as well as the re-vitalization of study plots to observe wider biological-ecological aspects of ramin and PSF.

Several stakeholders identified are the Ministry of Forestry as regulator, provincial and district forest services, Scientific and Management Authorities of CITES and concession companies involved in the Activity. Other research institutions and university were also involved.

Within the Ministry of Forestry, representative from Directorate General of Forest Production Management (DG BPK), which is the key institution in the issuance of regulation on sustainable management policy, has also participated in this Activity. Active involvement of stakeholders in the implementation of this Activity is key important and considered successful to address the issue as described earlier in the Activity documents.

Additional arrangements that could improve cooperation between the relevant parties interested in the Activity

Arrangements made in the implementation of activities are through the formation of a team work consisting of senior researchers of FORDA, university and Activity staff. The team carried out the desk study, the field survey and discussion meeting on the finding obtained in the workshop and/or meeting organized by the Activity. A senior researcher and lecturers were appointed to be the national expert and as team leader to each individual activity.

Activity design, including implementation strategy, which most contributed to success or failure in achieving the Specific Objective

The Activity design which consisted of desk study (review and evaluation), field survey and workshops (meetings) participated by relevant stakeholders has been appropriate to achieve the specific objective of the Activity.

Actions to be taken to avoid variations between planned and actual implementation (schedule, costs, etc); quality of Activity planning

The implementation of the Activity has met the planned and actual implementation. The Activity has been executed more effectively with the additional extended activities.

Activity sustainability after completion including dissemination strategy, post Activity strategy, and involvement stakeholders

Several of the Activity findings are likely to be followed up. The newly revised draft silvicultural system on ramin and PSF will be likely to be adopted either partly or fully to replace or improve the existing system. The Activity documents have been submitted to relevant authority (including to DG BPK) through the Forestry Research and Development Agency (FORDA).

Other Activity output is the newly established study plots which are expected to be followed up by research institutions and university. These plots are likely to be further developed and managed either by research institutions and universities for academic purposes.

The Activity documents that could be useful and implemented by involved stakeholders are the technical manual for monitoring flowering, fruiting and seed handling, and the technical guideline for vegetative propagation. These documents are important to enhance the provision of ramin planting materials for rehabilitation and plantation programs of PSF.

However, the use of the Activity findings to improve forest management will be very much dependent on the relevant stakeholders.

Activity organization and management

The organization and the management of this Activity have been sufficient to implement the planned operational activities.

Flow of funds

The flow and the use of the Activity fund have been appropriate to enable the implementation of the planned activities.

Definition of the roles and responsibilities of the institutions involved in the Activity implementation

In this Activity, the Center for Forest and Nature Conservation Research and Development (CFNCRD) as part of FORDA is the implementing agency of this Activity. All decisions regarding the Activity, direction and the appointment of the Activity staff, team leader and national experts were undertaken in close consultation with CFNCRD directors. Consultation was also conducted with the Division of Research Cooperation of FORDA (KPI), especially for meeting arrangement, review and evaluation of the Activity. Technical and financial reports were also forwarded to both CFNCRD and KPI for their records and further action.

Activity documentation

All documents of the Activity are kept at the Activity secretariat and CFNCRD for records.

Monitoring and evaluation

Internal monitoring and evaluation by FORDA has been organized within FORDA by inviting all relevant stakeholders.

During the implementation of the Activity there were three monitoring and evaluation of the Activity by ITTO, which were before the actual execution of the Activity (independent monitoring mission by EC (Ms. Anne Martin) and the Regional Project Coordinator (Asia) - Mr. Thang Hooi Chiew, in September 2008), in the mid period of the Activity (independent monitoring mission by EC (Ms Anne Martin) and the Regional Project Coordinator (Asia) - Mr. Thang Hooi Chiew, in September 2009), the Monitoring mission by ITTO undertaken by Jorge Malleux in October 2009, and at the end of the Activity by the Regional Project Coordinator - Mr. Thang Hooi Chiew in August/September 2010.

External factors that influenced the Project implementation and that could have been foreseen and that could not have been foreseen

External factors that influenced the Activity implementation are the involvement of relevant stakeholders and physical condition on site in the execution of field activity. The stakeholders are CITES-MA and CITES-SA, provincial and district forest services, forest companies and other key stakeholders.

7. CONCLUSIONS AND RECOMMENDATIONS

The Activity objective has been successfully achieved in accordance with the problems raised in the Activity document, with the full involvement of stakeholders, wise use of resources to produce the outputs. In relation to that, it is recommended that similar activities could be replicated in different geographical zones.

Responsible for the Report



Name: Tajudin Edy Komar
Date: 30 October 2010

Position held: Project Coordination Team

Annex 1. Activity Financial Statement – ITTO Contribution

Programme Title: Ensuring International Trade in Cites-Listed Timber Species is Consistent with their Sustainable Management and Conservation **Period ending on:** 30 September 2010

Activity No.: Activity Document II

Activity Title: Assessing Silvicultural System on Ramin: Review on the Current Practice and Revitalization of Existing Permanent Sample Plots

| Component | Original Amount (A) | Expenditure To-date | | | Available Funds (E) (A-D) |
|---|---------------------|---------------------|---------------------|------------------------|---------------------------|
| | | Accrued (B) | Expended (C) | Total Expended D (B+C) | |
| I. Funds managed by Executing Agency | | | | | |
| 10. Personnel | | | | | |
| 11. National Expert | \$ 16,200.00 | \$ - | \$ 16,200.00 | \$ 16,200.00 | \$ - |
| 12. Other Labour | \$ 1,100.00 | \$ - | \$ 1,010.49 | \$ 1,010.49 | \$ 89.51 |
| 13. Project Coordinator | \$ 4,250.00 | \$ - | \$ 4,250.00 | \$ 4,250.00 | \$ - |
| 14. Project Secretary | \$ 1,400.00 | \$ - | \$ 1,400.00 | \$ 1,400.00 | \$ - |
| 15. Project Team Leaders | \$ 6,000.00 | \$ - | \$ 5,500.00 | \$ 5,500.00 | \$ 500.00 |
| 16. Project Finance | \$ 1,050.00 | \$ - | \$ 1,050.00 | \$ 1,050.00 | \$ - |
| 17. Personnel Total | \$ 30,000.00 | \$ - | \$ 29,410.49 | \$ 29,410.49 | \$ 589.51 |
| 18. Workshop/Seminar and training | | | | | |
| 18.1 Travel/Transportation | \$ 1,690.00 | \$ - | \$ 1,682.03 | \$ 1,682.03 | \$ 7.97 |
| 18.2 DSA | \$ 1,400.00 | \$ - | \$ 1,399.27 | \$ 1,399.27 | \$ 0.73 |
| 18.3 Venue and Logistic | \$ 2,160.00 | \$ - | \$ 2,155.87 | \$ 2,155.87 | \$ 4.13 |
| 18.4 Workshop materials | \$ 650.00 | \$ - | \$ 648.05 | \$ 648.05 | \$ 1.95 |
| 18.5 Others | \$ 1,055.00 | \$ - | \$ 1,054.75 | \$ 1,054.75 | \$ 0.25 |
| 19. Training Total | \$ 6,955.00 | \$ - | \$ 6,939.97 | \$ 6,939.97 | \$ 15.03 |
| 20. Sub-contract | | | | | |
| 21. Sub-contract | \$ 29,850.00 | \$ - | \$ 29,840.50 | \$ 29,840.50 | \$ 9.50 |
| 29. Sub-contract Total | \$ 29,850.00 | \$ - | \$ 29,840.50 | \$ 29,840.50 | \$ 9.50 |
| 30. Duty Travel | | | | | |
| 31. DSA | \$ 10,110.00 | \$ - | \$ 10,107.38 | \$ 10,107.38 | \$ 2.62 |
| 32. Return Ticket | \$ 3,200.00 | \$ - | \$ 3,188.94 | \$ 3,188.94 | \$ 11.06 |
| 33. Local Transport | \$ 1,800.00 | \$ - | \$ 1,797.50 | \$ 1,797.50 | \$ 2.50 |
| 39. Travel Total | \$ 15,110.00 | \$ - | \$ 15,093.82 | \$ 15,093.82 | \$ 16.18 |
| 40. Capital Items | | | | | |
| 41. Office space | \$ - | \$ - | \$ - | \$ - | \$ - |
| 42. Capital equipment (computer) | \$ 1,500.00 | \$ - | \$ 1,496.94 | \$ 1,496.94 | \$ 3.06 |
| 43. Vehicles | \$ - | \$ - | \$ - | \$ - | \$ - |
| 49. Capital items Total | \$ 1,500.00 | \$ - | \$ 1,496.94 | \$ 1,496.94 | \$ 3.06 |

| | | | | | |
|-----------------------------------|---------------------|-------------|---------------------|---------------------|--------------------|
| 50. Consumable Items | | | | | |
| 51. Materials | \$ 170.00 | \$ - | \$ 125.85 | \$ 125.85 | \$ 44.15 |
| 52. Fuel and Utilities | \$ 1,250.00 | \$ - | \$ 1,209.17 | \$ 1,209.17 | \$ 40.83 |
| 53. Office supplies | \$ 420.00 | \$ - | \$ 417.52 | \$ 417.52 | \$ 2.48 |
| 54. Other consumable items | \$ 500.00 | \$ - | \$ 397.71 | \$ 397.71 | \$ 102.29 |
| 59. Consumable items Total | \$ 2,340.00 | \$ - | \$ 2,150.25 | \$ 2,150.25 | \$ 189.75 |
| 60. Miscellaneous | | | | | |
| 61. Sundry | \$ 500.00 | \$ - | \$ 373.82 | \$ 373.82 | \$ 126.18 |
| 62. Printing and Editing | \$ 6,500.00 | \$ - | \$ 5,976.16 | \$ 5,976.16 | \$ 523.84 |
| 63. Other miscellaneous | \$ 4,700.00 | \$ - | \$ 3,041.44 | \$ 3,041.44 | \$ 1,658.56 |
| 69. Miscellaneous Total | \$ 11,700.00 | \$ - | \$ 9,391.42 | \$ 9,391.42 | \$ 2,308.58 |
| | | | | | |
| 100. GRAND TOTAL: | \$ 97,455.00 | \$ - | \$ 94,323.39 | \$ 94,323.39 | \$ 3,131.61 |

Annex 2. Activity Cash Flow Statement – ITTO Contribution

Programme Title: Ensuring International Trade in Cites-Listed Timber Spesies is Consistent with their Sustainable Management and Conservation **Period ending on:** 30 September 2010

Activity No.: Activity Document II

Activity Title: Assessing Silvicultural System on Ramin: Review on the Current Practice and Revitalization of Existing Permanent Sample Plots

| Component | Reference | Date | Amount | |
|--|----------------|-------------------|---------------------|--------------------------|
| | | | in US \$ | Local Currency |
| A. Fund received from ITTO | | | | |
| 1. First Intallment | G0183471864001 | December 15, 2008 | \$ 45,000.00 | Rp 499,500,000.00 |
| 2. Second Installment | G0193220746301 | November 19, 2009 | \$ 42,179.00 | Rp 399,435,130.00 |
| 3. Third Installment | G0101970704701 | July 19, 2010 | \$ 10,276.00 | Rp 93,264,976.00 |
| 4. Interest bank deposit*) | | | \$ 204.02 | Rp 2,263,928.37 |
| 5. Losses on exchange rate | | | | Rp (64,800,201.05) |
| Total Funds Received: | | | \$ 97,659.02 | Rp 929,663,833.32 |
| B. Expenditures (by Executing Agency): | | | | |
| 10. Personnel | | | | |
| 11. National Expert | | | \$ 16,200.00 | Rp 154,188,000.00 |
| 12. Other Labour | | | \$ 1,010.49 | Rp 10,577,300.00 |
| 13. Project coordinator | | | \$ 4,250.00 | Rp 38,560,000.00 |
| 14. Project Secretary | | | \$ 1,400.00 | Rp 12,689,250.00 |
| 15. Team Leaders | | | \$ 5,500.00 | Rp 58,270,000.00 |
| 16. Project Finance | | | \$ 1,050.00 | Rp 9,506,000.00 |
| 17. Personnel Total | | | \$ 29,410.49 | Rp 283,790,550.00 |
| 18. Workshop/Seminar and traning | | | | |
| 18.1 Travel/Transportation | | | \$ 1,682.03 | Rp 15,030,700.00 |
| 18.2 DSA | | | \$ 1,399.27 | Rp 12,502,000.00 |
| 18.3 Venue and Logistic | | | \$ 2,155.87 | Rp 19,267,125.00 |
| 18.4 Workshop materials | | | \$ 648.05 | Rp 5,788,775.00 |
| 18.5 Others | | | \$ 1,054.75 | Rp 9,425,000.00 |
| 19. Workshop/Seminar and training total | | | \$ 6,939.97 | Rp 62,013,600.00 |
| 20. Sub-contract | | | | |
| 21. Sub-contract | | | \$ 29,840.50 | Rp 273,958,800.00 |
| 29. Sub contract Total | | | \$ 29,840.50 | Rp 273,958,800.00 |
| 30. Duty Travel | | | | |
| 31. DSA | | | \$ 10,107.38 | Rp 103,436,100.00 |
| 32. Return Ticket | | | \$ 3,188.94 | Rp 31,628,800.00 |
| 33. Local Transport | | | \$ 1,797.50 | Rp 18,803,225.00 |
| 39. Travel Total | | | \$ 15,093.82 | Rp 153,868,125.00 |

| | | | | |
|------------------------------------|--|--|---------------------|--------------------------|
| 40. Capital Items | | | | |
| 41. Office space | | | \$ - | Rp - |
| 42. Capital equipment (computer) | | | \$ 1,496.94 | Rp 17,125,000.00 |
| 49. Capital items Total | | | \$ 1,496.94 | Rp 17,125,000.00 |
| 50. Consumable Items | | | | |
| 51. Materials | | | \$ 125.85 | Rp 1,257,375.00 |
| 52. Fuel and Utilities | | | \$ 1,209.17 | Rp 11,443,268.00 |
| 53. Office supplies | | | \$ 417.52 | Rp 4,224,850.00 |
| 54. Other consumable items | | | \$ 397.71 | Rp 4,017,675.00 |
| 59. Consumable items Total | | | \$ 2,150.25 | Rp 20,943,168.00 |
| 60. Miscellaneous | | | | |
| 61. Sundry | | | \$ 373.82 | Rp 3,615,350.00 |
| 62. Printing and Editing | | | \$ 5,976.16 | Rp 54,662,500.00 |
| 63. Other miscellaneous | | | \$ 3,041.44 | Rp 29,919,585.00 |
| 69. Miscellaneous Total | | | \$ 9,391.42 | Rp 88,197,435.00 |
| Total Expenditures To-date: | | | \$ 94,323.39 | Rp 899,896,678.00 |
| Remaining Balance of Funds (A-B) : | | | \$ 3,335.63 | Rp 29,767,155.32 |

Notes: Cash flow statement period: 15 December 2008 - 30 September 2010

*) Interest bank rate until 30 September 2010

Annex 3. Activity Financial Statement – GoI in kind Contribution

Programme Title: Ensuring International Trade in Cites-Listed Timber Spesies is Consistent with their Sustainable Management and Conservation **Period ending on:** 30 September 2010

Activity No.: Activity Document II

Activity Title: Assessing Silvicultural System on Ramin: Review on the Current Practice and Revitalization of Existing Permanent Sample Plots

| Component | Original Amount (A) | Expenditure To-date | | | Available Funds (E) (A-D) |
|---|---------------------|---------------------|---------------------|------------------------|---------------------------|
| | | Accrued (B) | Expended I | Total Expended D (B+C) | |
| I. Funds managed by Executing Agency | | | | | |
| 10. Personnel | | | | | |
| 11. National Expert | \$ - | \$ - | \$ - | \$ - | \$ - |
| 12. Other Labour | \$ - | \$ - | \$ - | \$ - | \$ - |
| 13. Project Coordinator | \$ - | \$ - | \$ - | \$ - | \$ - |
| 14. Project Secretary | \$ - | \$ - | \$ - | \$ - | \$ - |
| 15. Project Team Leaders | \$ - | \$ - | \$ - | \$ - | \$ - |
| 16. Project Finance | \$ - | \$ - | \$ - | \$ - | \$ - |
| 17. Personnel Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 18. Workshop/Seminar and traning | | | | | |
| 18.1 Travel/Transportation | \$ - | \$ - | \$ - | \$ - | \$ - |
| 18.2 DSA | \$ - | \$ - | \$ - | \$ - | \$ - |
| 18.3 Venue and Logistic | \$ - | \$ - | \$ - | \$ - | \$ - |
| 18.4 Workshop materials | \$ - | \$ - | \$ - | \$ - | \$ - |
| 18.5 Others | \$ - | \$ - | \$ - | \$ - | \$ - |
| 19. Training Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 20. Sub-contract | | | | | |
| 21. Sub-contract | \$ - | \$ - | \$ - | \$ - | \$ - |
| 29. Sub-contract Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 30. Duty Travel | | | | | |
| 31. DSA | \$ - | \$ - | \$ - | \$ - | \$ - |
| 32. Return Ticket | \$ - | \$ - | \$ - | \$ - | \$ - |
| 33. Local Transport | \$ - | \$ - | \$ - | \$ - | \$ - |
| 39. Travel Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 40. Capital Items | | | | | |
| 41. Office space | \$ 10,000.00 | \$ - | \$ 10,000.00 | \$ 10,000.00 | \$ - |
| 42. Capital equipment (computer) | \$ - | \$ - | \$ - | \$ - | \$ - |
| 43. Vehicles | \$ 2,000.00 | \$ - | \$ 2,000.00 | \$ 2,000.00 | \$ - |
| 49. Capital items Total | \$ 12,000.00 | \$ - | \$ 12,000.00 | \$ 12,000.00 | \$ - |

| | | | | | |
|---|---------------------|-------------|---------------------|---------------------|-------------|
| 50. Consumable Items | | | | | |
| 51. Materials | \$ - | \$ - | \$ - | \$ - | \$ - |
| 52. Fuel and Utilities | \$ - | \$ - | \$ - | \$ - | \$ - |
| 53. Office supplies | \$ - | \$ - | \$ - | \$ - | \$ - |
| 54. Other consumable items | \$ - | \$ - | \$ - | \$ - | \$ - |
| 59. Consumable items Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 60. Miscellaneous | | | | | |
| 61. Sundry | \$ - | \$ - | \$ - | \$ - | \$ - |
| 62. Printing and Editing | \$ - | \$ - | \$ - | \$ - | \$ - |
| 63. Other miscellaneous | \$ - | \$ - | \$ - | \$ - | \$ - |
| 69. Miscellaneous Total | \$ - | \$ - | \$ - | \$ - | \$ - |
| 70. Executing Agency Management Cost | \$ 16,418.00 | \$ - | \$ 16,418.00 | \$ 16,418.00 | \$ - |
| 79. Component Total | \$ 16,418.00 | \$ - | \$ 16,418.00 | \$ 16,418.00 | \$ - |
| 100. GRAND TOTAL: | \$ 28,418.00 | \$ - | \$ 28,418.00 | \$ 28,418.00 | \$ - |

Annex 4. Activity Cash Flow Statement – Go in kind Contribution

Programme Title: Ensuring International Trade in Cites-Listed Timber Spesies is Consistent with their Sustainable Management and Conservation **Period ending on:** 30 September 2010

Activity No.: Activity Document II

Activity Title: Assessing Silvicultural System on Ramin: Review on the Current Practice and Revitalization of Existing Permanent Sample Plots

| Component | Reference | Date | Amount | |
|--|-----------|------|---------------------|--------------------------|
| | | | in US \$ | Local Currency |
| A. Fund received from ITTO | | | | |
| 1. First Installment | | | \$ 12,000.00 | Rp 130,680,000.00 |
| 2. Second Installment | | | \$ 16,418.00 | Rp 178,792,020.00 |
| Total Funds Received: | | | \$ 28,418.00 | Rp 309,472,020.00 |
| B. Expenditures (by Executing Agency): | | | | |
| 10. Personnel | | | | |
| 11. National Expert | | | \$ - | Rp - |
| 12. Other Labor | | | \$ - | Rp - |
| 13. Project coordinator | | | \$ - | Rp - |
| 14. Project Secretary | | | \$ - | Rp - |
| 15. Team Leaders | | | \$ - | Rp - |
| 16. Project Finance | | | \$ - | Rp - |
| 17. Personnel Total | | | \$ - | Rp - |
| 18. Workshop/Seminar and traning | | | | |
| 18.1 Travel/Transportation | | | \$ - | Rp - |
| 18.2 DSA | | | \$ - | Rp - |
| 18.3 Venue and Logistic | | | \$ - | Rp - |
| 18.4 Workshop materials | | | \$ - | Rp - |
| 18.5 Others | | | \$ - | Rp - |
| 19. Workshop/Seminar and training total | | | \$ - | Rp - |
| 20. Sub-contract | | | | |
| 21. Sub-contract | | | \$ - | Rp - |
| 29. Sub contract Total | | | \$ - | Rp - |
| 30. Duty Travel | | | | |
| 31. DSA | | | \$ - | Rp - |
| 32. Return Ticket | | | \$ - | Rp - |
| 33. Local Transport | | | \$ - | Rp - |
| 39. Travel Total | | | \$ - | Rp - |

| | | | | |
|---|--|--|---------------------|--------------------------|
| 40. Capital Items | | | | |
| 41. Office space | | | \$10,000.000 | Rp 108,900,000.00 |
| 42. Capital equipment (computer) | | | \$ - | Rp - |
| 43. Vehicles | | | \$ 2,000.00 | Rp 21,780,000.00 |
| 49.Capital items Total | | | \$ 12,000.00 | Rp 130,680,000.00 |
| 50. Consumable Items | | | | |
| 51. Materials | | | \$ - | Rp - |
| 52. Fuel and Utilities | | | \$ - | Rp - |
| 53. Office supplies | | | \$ - | Rp - |
| 54. Other consumable items | | | \$ - | Rp - |
| 59. Consumable items Total | | | \$ - | Rp - |
| 60. Miscellaneous | | | | |
| 61. Sundry | | | \$ - | Rp - |
| 62. Printing and Editing | | | \$ - | Rp - |
| 63. Other miscellaneous | | | \$ - | Rp - |
| 69. Miscellaneous Total | | | \$ - | Rp - |
| 70. Executing Agency Management Cost | | | \$ 16,418.00 | Rp 178,792,020.00 |
| 79. Component Total | | | \$ 16,418.00 | Rp 178,792,020.00 |
| Total Expenditures To-date: | | | \$ 28,418.00 | Rp 309,472,020.00 |
| Remaining Balance of Funds (A-B) : | | | \$ - | Rp - |

Notes: Cash flow statement period: 15 December 2008 - 30 September 2010