

COMPLETION REPORT

THE ASSESSMENT OF RAMIN PLANTATION REQUIREMENT AND THE ESTABLISHMENT OF RAMIN GENETIC RESOURCES CONSERVATION GARDENS

ITTO-CITES PROJECT PHASE-2

Support to ITTO-CITES Implementation for Tree Species and
Trade/Market Transparency (TMT)



EXECUTING/IMPLEMENTING AGENCY

Center for Conservation and Rehabilitation Research and Development
Forestry Research and Development Agency (FORDA)
Bogor, Indonesia 2014



PROJECT NUMBER

ITTO PROGRAM ON CITES

**Support to ITTO-CITES implementation for tree species and
trade/market transparency (TMT)**

STARTING DATE

September 2012

DURATION OF THE PROJECT

12 months, extended to 18 months

PROJECT COST (US\$)

ITTO	US\$	108,935,-
GOI (in-kind)	US\$	60,724,-

Bogor, 28 February 2014

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EXECUTIVE SUMMARY

1. Activity Context, Origin and problem to be addressed

Ramin is one of the CITES listed species growing naturally in PSF. Several efforts to ensure the sustainable management and conservation of this species have been launched, but the results have not been fully satisfied, still insufficient to protect and conserve ramin. This Activity is attempted to contribute to the enhancement of the conservation and sustainable management through several activities and approaches.

2. Activity Objectives

The overall objective of this Activity is to contribute to the achievement of ITTO-CITES program objective on SFM and conservation of CITES listed species especially on ramin. The specific objective of this Activity is to enhance field conservation and restoration of ramin population through the rehabilitation and plantation of ramin in its original habitats.

Main activities: identification of suitable sites for rehabilitation and plantation, provision of planting materials and the establishment of genetic resource conservation gardens.

3. The most critical differences between planned and realized Activity implementation

Activity Personnel: Personnels involved in both administrative and field activities are slightly different from that mentioned in original documents with similar in qualification. Therefore, the quality of the project remains similar.

Time schedule: Only a slight delay in the schedule from the starting date and some extension of implementation. The first extension was from 12 months to 18 months, September 2012 through December 2013 and the second extension is from January through February 2014. The extension was made to strengthen the achievement of some activities and to expand the target areas.

Budget Amendment: There are some reallocated unspent funds to support and to strengthen some additional activities during the extension period.

4. The situation prevailing after Activity completion, as compared to the Pre-Activity situation including the situation of the target beneficiaries, and indicates the post- Activity sustainability (a brief description)

There are several conditions which have been reversed from the original situations as described below:

- (a). The recommended sites for rehabilitation and replantation of ramin in Sumatra and Kalimantan have been identified through literature search, field survey, and discussion meetings (workshop). This information is useful for the institutions or

stakeholders mandated to rehabilitate PSF and replant indigenous species, such as ramin.

- (b). The estimate of required ramin planting materials to support the rehabilitation and replantation of ramin.
- (c). The establishment and expansion of genetic resource conservation garden which also function as source of cuttings in Kedaton (OKI), Tumbangnusa and Lubuk Sakat, Riau. The Lubuk Sakat is a newly established conservation garden. These sources of cuttings are important to ensure continuous production of planting materials.
- (d). The strategy needed to sustain the provision of planting materials including potential cooperation for the production.
- (e). Continue production of rooted cuttings from OKI and Tumbangnusa Hedge Orchard.

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

5. The most relevant outcome of the analysis of the Project implementation

The longterm program on the provision of planting materials and replantation of ramin could be adopted from the outputs and findings of this Activity.

6. The lessons learned

In this Activity, the phrase of Activity 3.1 and 3.2 are slightly confusing in the separation of each resource to achieve the activity, including its associated achievement and indicators of progress. Therefore in the future, it is necessary to clearly describe each individual activity and its associated achievement indicator.

7. Recommendations

It is recommended that similar activity be carried out for species currently harvested to avoid further degradation and potential extinction. This activity could be replicated for other threatened species. Since the implementation of activity requires long term effort, cooperation with other relevant stakeholders and continued financial support is essential.

1. ACTIVITY IDENTIFICATION

1.1. Context

Replantation is the only way to restore ramin population as in addition to slow growth natural generation. The replantation of this species is still facing serious challenges due to scarcity of seeds and planting materials. Change of stand structure and forest habitats has suspectedly caused change in flowering and fruiting behaviour, intervals between flowering and high quality seed production. In addition, seed sources of ramin in natural habitats are not fully secure from illegal logging and other disturbances. This disturbance occurs not only in production forest, but also in conservation areas in Sumatra and Kalimantan, such as National Park, natural reserves etc. These seed sources also continue degrading resulting in serious scarcity of planting materials. The National Workshop on " *Identification of Information Gaps toward the SFM and Conservation of Ramin and Thematic Program to be Included into 2009 and 2010 Work Program of ITTO-CITES Project*", held on 21-22 January 2009, in Bogor, Indonesia has emphasized the need to ensure conservation of ramin through plant genetic conservation and plantation. These two recommendations could only be achieved through (i) The development of mass propagation technique for ramin using the existing nursery system and the establishment and the expansion of plant genetic resources conservation gardens, and (ii) The assessment of the status of plant genetic resources conservation and its genetic diversity for *G. bancanus*. In relation to the two recommendations, the subsequent Technical Meeting held in FORDA on 6 February 2009, attended by all FORDA directors and relevant scientists made a decision to support the two recommendations. However, in this Activity only two aspects are addressed (1) Assessing the areas for ramin plantation and its estimated number of required seedlings and (2) The establishment and expansion of ramin genetic resources conservation gardens in Sumatra and Kalimantan.

1.1.1. Activity Location

Project secretariat is in Bogor (West Java) and the field activities are implemented mostly in Sumatra and Kalimantan. The assessment of sites, the expansion of conservation gardens which also function as Hedge Orchard (Source of cuttings) were carried out in Sumatra and Kalimantan. Conservation gardens in OKI (South Sumatra) and Tumbangnusa (Central Kalimantan) were intensively cared and expanded. A new conservation garden was established in Lubuk Sakat, Pekanbaru Riau (Sumatra).

1.1.2. Relevant to National and regional policy and programme

Indonesia has imposed logging moratorium policy since 2001 and still in effective until today. One of the purposes of the moratorium is to ensure the conservation and sustainable management of ramin including its habitat, peat swamp forest. The conservation and sustainable management are expected to be achieved through the suspension of logging permit. Only those passed SFM certificate quality for the logging permit. On the other side, restoration of population is necessary to be carried out in order to enhance the recovery of standing stock. Various plantation programs, not specifically to ramin, have been launched by government. One of them is rehabilitation

and restoration programs set out by Ministry of Forestry until 2015. However, since the scarcity of seeds and planting materials, the progress in the restoration and replantation of ramin is progressing very slowly and remain insignificant until today. ITTO and ITTO CITES project have given valuable contribution to this purpose.

1.2. The origin and the main problem to be addressed

This Activity is originally formulated based on the recommendation of a National Workshop on *"Identification of Information Gaps toward the SFM and Conservation of Ramin and Thematic Program to be Included into 2009 and 2010 Work Program of ITTO-CITES Project"*, held on 21-22 January 2009, in Bogor. This workshop was conducted under ITTO-CITES phase-1 project. The two recommendations are related to the conservation of ramin plant genetic resources and the enhancement of restoration of ramin population. There are three approaches recommended to be taken: (i) the development of mass propagation technique using the existing nursery system (ii) the establishment of plant genetic resources conservation gardens, which could also function as the sources of stem cuttings and (iii) the identification of deforested and degraded PSF areas to be replanted with ramin.

The primary problems addressed under this Activity, as described earlier, are rapid degradation of ramin habitats which has also caused decrease in natural populations and ramin plant genetic resources with those habitat conditions, its natural regeneration is also unsatisfactory. Intervention through rehabilitation and artificial regeneration need to be taken. However it still faces serious barrier due to the scarcity of planting materials. Eventhough, the holders of forest concession in Peat Swamp Forests have the program to plant ramin and other indigenous species in their area, they could not plant ramin due to the barrier.

Seed sources of ramin are currently limited. Only a few numbers of mother trees are recorded in their original areas and in general, they have poor accessibility. Predators of ramin seeds have also reduced the potential production of ramin seeds. Long flowering period between 4-5 years or more, with peak flowering season taking place only once between the intervals, has caused poor seedling production for both natural and artificial regeneration. This condition has been worsened by its short seed storability. The scarcity of seedlings from seeds could only be overcome through vegetatively propagated planting materials or as also called rooted cuttings.

The vegetative propagation technique has been developed and ready for routine use with relatively high rooting percentage. The only stage needs to be further observed is acclimatization (hardening) period. Acclimatization of the vegetatively propagated seedlings (rooted cuttings), tested in Ogan Komering Ilir (OKI), South Sumatra and Tumbangnusa Research Forest, central Kalimantan has indicated promising results with high percentage of survival rate at early growth. At later growing stage, the existing environmental condition, such as extreme wet - dry, competition and predation by insects and wild animal also influence the survival rate of ramin. In general, the growth at early stage is relatively better for seedlings grown from seed, compared with those from rooted cuttings.

2. ACTIVITY OBJECTIVES AND IMPLEMENTATION STRATEGY

The main objective of this activity is to contribute to SFM and conservation of ramin through the enhancement of recovery of ramin population and habitats and conservation of plant genetic resources in Sumatra and Kalimantan. The objective could be achieved through the assessment of the suitable areas for replantation and the estimated number of planting materials required for ramin plantation and the establishment of ramin genetic conservation gardens, which also serve as source of cuttings.

Rationale and Specific Objectives

The area of deforested and degraded ramin habitat are vast. To enhance rehabilitation and replantation of ramin is through the identification of deforested and degraded PSF to be restored and planted based on several criteria or considerations. The number of required ramin planting materials as well as the expansion and establishment of ramin conservation garden in Sumatra and Kalimantan as source of cuttings is also needed to be carried out. The representative ramin populations in their natural range of habitat are pooled in the gardens to ensure the capture of genetic variation.

Adjustments made in the implementation phase:

No major change in the implementation. Slight extension period was made for several months. This extension is without additional funding from ITTO. This extension was made to strengthen the findings obtained from the executed-planned activities. The extension made to continue the provision of planting materials and the establishment of new conservation gardens in Lubuk Sakat, Pekanbaru Riau.

Implementation Strategy

Some of the benefits of this activity are (i) identified sites of deforested-degraded ramin habitat to be replanted, (ii) the estimated number of ramin planting materials required for plantation activity and (iii) ramin plant genetic resources are well conserved in Sumatra and Kalimantan, (iv) continuous production of ramin planting materials; (v) capacity building; and (vi) compliance with CITES general objective and WCMC on the SFM and conservation of internationally traded timber species.

The achievement of longterm Activity objectives and benefits are through

- (1). Identification of qualified and experienced parties and personnels to be involved in the project activities, discussion on the future collaboration in ramin replantation activities,
- (2). Organize several technical discussions on the findings of desk study, the field findings on rehabilitation sites,
- (3). Invited a review team to improve the technical reports, the drafts and other documents,
- (4). Organized several National workshops for presenting the findings to obtain inputs and comments,
- (5). Organized several stakeholders consultations to discuss the operationalization of the findings on the

replantation of ramin in each province, (6). Dissemination of final and other relevant documents to concerned stakeholders through mail, email, forestry exhibitions, web sites and the visits, (7). Internal FORDA evaluation to review and evaluate the progress, the problems and the solutions faced by the Activity and to enhance the achievement of Activity Outputs in conjunction with other events organized by FORDA. (8). Enhanced the use of Activity findings, recommendation and technical guideline for propagation and handling of ramin seed and wildlings.

3. ACTIVITY PERFORMANCE

(i) Performance of each Activity

Outputs and Operational Activities	Schedule (Duration)	Remarks
Output 1. Deforested-degraded ramin habitats to be restored and planted		
Activity 1.1. Identification of degraded and deforested site for ramin plantation in Sumatra	Jan – June 2013	Completed with a technical report
Activity 1.2. Identification of degraded and deforested site for ramin plantation in Kalimantan	Jan – June 2013	
Output 2. The number of ramin planting materials required for plantation predicted		
Activity 2.1. Identification of the number of planting materials required for plantation and its potential production in Sumatra and Kalimantan	Jun - Sept. 2013	Completed with a proceeding workshop
Activity 2.2. National workshop to determine plantation scheme and institutions responsible for future maintenance	Sept. – Oct 2013	
Output 3. Ramin genetic resource conservation gardens expanded		
Activity 3.1. Collection and production of planting materials from representative sources .	Sept. 2012-Feb 2014	Completed
Activity 3.2. Planting of naturally regenerated seedlings and vegetatively propagated seedling and maintenance.	Sept. 2012-Feb 2014	
Additional Activities - A revised version of Technical Guideline for Propagation - A workshop to evaluate and strenghten cooperation	February 2014	Completed

(ii) Output achievement

Output 1. Identified areas to be rehabilitated and replanted with ramin

Deforested and degraded areas of PSF in the province of Riau, Jambi and South Sumatra (Sumatra island) and West and Central Kalimantan (Kalimantan island) have been identified through collection of published and unpublished data and information and field survey to selected sites. The selected areas have also been discussed in several meetings and workshop organized under this Activity. A complete technical report (*Identifikasi Lokasi Penanaman Kembali Ramin (Gonystylus bancanus Kurz) di Sumatera dan Kalimantan*) has been printed and distributed to the concerned stakeholders. The contents of the report are primarily related to the total deforested and degraded PSF areas, in each province, the recommended areas for rehabilitation and restoration and specific and high priority site for ramin plantation and genetic resource conservation garden.

Output 2. The estimated number of required planting materials for replantation of ramin

The approximate number of planting materials required for restoration and replantation of deforested and degraded PSF has been presented and discussed in a workshop carried out in 12 September 2013. The assessment on the number of required planting materials and capacity to provide the planting materials from rooted cuttings has been carried out prior to the discussion in the workshop. Representative from each province (Riau, Jambi, South Sumatra, West Kalimantan and Central Kalimantan) has made presentation in the workshop. It was widely known that ramin planting materials from seeds is still insufficient for those purpose and therefore rooted cuttings is the only alternative at the current stage. Therefore, the workshop also recommended the consistent support from various agencies in providing planting materials from seeds, rooted cuttings as well as in vitro propagation. The expansion and multiplication of existing conservation gardens, which also function as sources of cuttings is also highly recommended.

Specific issue on the required planting materials from rooted cuttings is the possible expansion of existing conservation gardens (Hedge Orchard) through collaborations with other parties, such as Center for Seed Production (DG Land Rehabilitation and Social Forestry, MoF) and private companies.

The immediate expansion of Conservation Garden (Hedge Orchard) has been executed in Tumbangnusa Research Forest with the addition of 1800 wildlings grown for as ramin source plant. A newly established conservation garden, which will also function as source of cuttings has been established in Lubuk Sakat, Pekanbaru, Riau Province. In this newly established Conservation garden, 4800 wildlings have been pooled at the initial stage of establishment.

Output 3. Genetic resources conservation gardens

The establishment of ramin genetic resources conservation gardens has been previously carried out in Sumatra and Kalimantan. In the initial stage, the total area allocated for the conservation garden was 2 ha and expanded based on the needs for the improvement program and other trials to 20 ha. From 2 ha or more, plant genetic conservation gardens with approximately 4,000 stock plants originated from wildlings

become the source of stem/shoot cuttings for vegetative propagation. Assuming, 80% of the stock plants produce healthy stem/shoots cuttings, nearly 3000 rooted cuttings could be produced annually.

In addition, a conservation garden has also been established in Lubuk Sakat Research Forest, Riau. Approximately 4800 wildings have been planted and pooled in this garden.



Photo: The visit of head and staffs from RRC of Kuok and CCR review team.

4. ACTIVITY OUTCOME, TARGET BENEFICIARIES INVOLVEMENT

4.1. The achievement of specific objectives

Outputs

The above objectives have been achieved through the production of three outputs below:

- (1). Identified sites for restoration, rehabilitation and replantation of ramin in five provinces (Riau, Jambi and South Sumatra, West and Central Kalimantan). This includes description of sites, the position, the accessibility and other necessary information.
- (2). The estimated number of required ramin planting materials for ramin replantation.
- (3). The establishment of conservation gardens and expansion. The purpose of expansion is to ensure sufficient genetic resources.
- (4). In addition, the schemes for cooperation to ensure sustainability of initiated activities have also been explored and developed in a national workshop.

The impact/Outcome.

The four outputs above could have been sufficient to influence sectoral policies and programs of MoF to move forward, especially for (1). the identified recommended areas for replantation of ramin, (2). the estimated number of required ramin planting materials and (3). the expansion and the establishment of conservation garden, which also functions as source of cuttings.

These four outputs could also provide longterm impacts for ramin sustainable management. Methods for ramin propagation could also be further elaborated and applied at any scale for their uses. Ramin field planting methods could also be further explored for each site condition.

4.2. Situation at Activity completion

At the Activity completion several situations below have been available.

1. Technical Report containing the recommended areas (sites) for rehabilitation and replantation of ramin.

Recommended areas (sites) in Sumatra :

- Hutan Wisata Sungai Dumai (Riau)
- Research Forest Lubuk Sakat, (Riau)
- Hutan Lindung Gambut Sungai Buluh (Jambi)
- Hutan Produksi Terbatas Padamaran (South Sumatra)

Recommended areas (sites) in Kalimantan :

- Hutan Wisata Sungai Raya, Pontianak (West Kalimantan)
- Taman Nasional Sebangau (Central Kalimantan)

2. The estimated number of required planting materials based on current technique and state of the art on research and development on seedling production.
3. The established ramin plant genetic resources conservation gardens.

Two conservation gardens in Sumatra:

- Kedaton, OKI with the total area allocated for ramin is 20 ha and the number of growing ramin plants recorded in 2013 are approximately 1000 plants. More ramin planting materials will be pooled in the garden.



- Tumbangnusa, Central Kalimantan with the total area allocated is more than 4 ha. In this garden, three different plots (sets) of garden have been established. Shaded garden nearby camp with 1300 wildlings, line- shaped planting garden with 5000 wildlings and space gap-shaped planting garden with 5000 wildlings. The mortality is high and replenishment has been carried out to replace the dead wildling. The shaded garden has been expanded with 1800 additional wildlings.



- Conservation garden of Lubuk Sakat with 4,800 wildlings have been pooled in the garden. This garden will be further expanded in future.



- Hedge Orchard Sukomoro which is able to hold large number of rooted cuttings for hardening (acclimatization) stage. This Hedge Orchard will also be further expanded in the future which function as source of cuttings.



- Other initiated cooperation with relevant stakeholder includes with Center for Seed Production (BPTH) of Sumatra and PT. Arara Abadi (Sinarmas Group). Cooperation with Center for Seed Production focuses on the Hedge Orchard establishment and rooted cuttings production. Cooperation with PT. Arara Abadi (Sinarmas) deals with genetic materials exchange between CCR, Center for Biotechnology and Tree Improvement-Yogyakarta and PT. Arara Abadi.



4. Revised version of technical guideline (manual) for rooted cuttings.

The technique for rooted cutting production which has been developed earlier has been applied and widely used. Based on the inputs from users and further observation on the content, it is recommended to make revised version. In order to make its revision, a series of technical meetings with competent parties has been organized and the final version is finally made for distribution.

4.3. Participation the target beneficiaries

Relevant stakeholders have involved in project implementation since the beginning of the Activity. The method and mode of participation were discussed in the preparatory meeting of the Activity. Specific stakeholders (individuals) were also appointed for expansion of ramin genetic resource conservation garden in OKI (South Sumatra), Tumbangnusa (Central Kalimantan) and Lubuk Sakat, Pekanbaru Riau. Provincial and District Forest Services involved in the identification of deforested-degraded areas to be restored with ramin. Some other relevant stakeholders have involved in various meetings and discussions on identification of sites, requirement, alternative mechanism for replantation and potential parties for restoration of ramin through plantation.

4.4. Expectation of outputs and sustainability after Activity completion

Sustainability after Activity completions have been prepared as follows:

Outputs 1 and 2 (the identified deforested and degraded forests areas to be restored and planted with ramin and estimated required ramin planting materials) will have been disseminated to DG of Forest/land Rehabilitation and Social Forestry, Provincial, District offices and other parties. Provincial and district forest services will also use the data and information for their short and long term program in rehabilitation and restoration of PSF in their working areas.

Output 3, which is the conservation gardens of ramin genetic materials will be used as for short and longterm program for conservation of plant genetic materials and for production of rooted cuttings. Both CITES MA and SA will use these data and information for various purposes. FORDA and its regional research Centers (RRC South Sumatra, RRC South Kalimantan and RRC Kuok, Riau) will keep on going and expanding the conservation gardens for various purposes, including for research and development. FORDA may establish further collaboration with DG of Forest Protection and Nature Conservation (as well as Directorate of Biodiversity Conservation) in situ on conservation of ramin, as has been done for gene pool establishment in Sebangau National Park.

Plant propagation for continuous availability of ramin planting materials has been set as long term program by FORDA in collaboration with Center for Seed Production (BPTH) and Forest Companies. Potential collaboration has been explored in a workshop under this Activity.

5. ASSESSMENT AND ANALYSIS

- (i). The Activity design has been suitable to achieve the objectives and to answer key issues raised in the Activity document. Minor confusing is only in the statement of activities 3.1 and 3.2 which make slight confusion in operational activities between the two.

- (ii). Implementation strategies which have been taken, through desk study, field survey and stakeholder consultation (Meetings) have been effective in the execution of operational activities and to achieve Activity objective.
- (iii). In general, the execution has been in accordance with the expectation made during the identification process. There is also adequate involvement of most stakeholders, and the outputs achieved has been achieved using the planned approach.
- (iv). Activity was implemented on schedule with slight extension with no additional funding *from ITTO*.
- (vi). Most of relevant stakeholders including regulators for Production Forest Management, Provincial and District Forest Services, Forest Association, Private companies and both CITES MA and CITES SA have involved in the Activity in various ways, primarily in discussion meeting and workshops. A number of qualified personnels from FORDA and its Regional Research Centers (RRC South Sumatra and RRC South Kalimantan *RRC-Kuok, Riau*) have actively involved in this Activity.
- (vii). Several outputs, such as identified sites for restoration, rehabilitation and replantation of ramin, the estimated number of required planting materials have been achieved. Conservation gardens have been established and expanded. Four printed documents and other unprinted materials have been also produced and distributed.
- (viii). The expected outputs achieved through this Activity are better management plan for replantation of ramin, for provision of planting materials and for setting program on ramin conservation.
- (ix). Cooperation with other institutions has been initiated and made such as in production of rooted cuttings, the establishment of conservation garden and future genetic materials exchange.

6. LESSONS LEARNED

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

The Activity has identified correct existing issues on ramin and has made alternative solution on the issues or on specific problem. Rapid decrease in plantation could be solved through restoration and replantation. However, in order to restore or replant ramin, the correct and feasible sites need to be identified including the number of required planting materials. The conservation of the threatened genetic materials such as on ramin is necessary to be carried out through the establishment of genetic resources conservation gardens.

Relevant stakeholders, which have capacity to execute the above activities have been well identified, consisting of FORDA institution, Forest Services and Center for Seed Production (under DG of *Forest and Land* rehabilitation and Social Forestry).

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

Cooperation between relevant parties has been sufficient and productive, therefore no additional arrangement made during the implementation of this Activity.

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

Activity design involving of deskstudy (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 Project planning;

The implementation of Activity met between planned and actual implementation. The Activity has been executed more efficiently. Slight extension was made to strengthen the outputs.

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

Several approaches have been taken to ensure the sustainability:

- Identification of individuals from each representative partners from the beginning of the Activity implementation.
- Activity findings disseminated through meetings and workshop has been effective.
- Dissemination has been done through workshops, formal and informal meetings, and other events organized by FORDA and other event organizer.

Other Activity document that is also useful for stakeholders is the technical manual for vegetative propagation. This document is important to enhance the provision of ramin planting materials for rehabilitation and plantation.

The follow up of the findings of the Activity will be very much dependent on the dissemination of results and each individual institution. However, during the execution of the Activity, the involvement of relevant stakeholders in the discussion and other activity have been intensively made.

Activity organization and management

The organization and the management structure of this Activity has been sufficient to organize the project operational activities.

Flow of funds

The flow and the use of Activity fund has been appropriate to support the implementation of operational activities.

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

In this Activity, Center for Conservation and Rehabilitation (formerly called as Forest and Nature Conservation R&D (CFNCRD) as part of FORDA is the Executing Agency of this Activity. The role of Executing Agency is to make decision regarding the activities, direction and the appointment of project staffs, team leader and national experts. Consultation was also carried out in the internal PTC meeting under FORDA attended by Division of Research Cooperation of FORDA (KPI) and other members.

Activity documentation

All documents of the Activity are kept in Activity secretariat and CCR for records. In this Activity a several printed materials are produced as follows :

1. Technical Report on "*Identifikasi Lokasi Penanaman Kembali Ramin (Gonystylus bancanus Kurz) di Sumatra dan Kalimantan*".
2. Proceeding of National Workshop "*Lokasi Penanaman Kembali, Jumlah Kebutuhan Bibit dan Skema Penanaman Berkelanjutan Jenis Ramin*"
3. Technical Guideline for Vegetative Propagation for Ramin (Gonystylus bancanus (Miq.) Kurz.)
4. An Executive Summary on "The Assessment of Ramin Plantation Requirement and The Establishment of Ramin Genetic Resources Conservation Gardens"

List of technical reports and other documents are as listed above.

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 are two monitoring and evaluation of the Activity by ITTO Regional Project Coordinator-Mr. Thang HC, in April 2013 in Palembang and field site of OKI, in August 2013 and in Bogor, in conjunction with recording for videos for ramin. Internal monitoring and field visits have also been made by internal CCR staffs, in August and Oktober 2013.

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

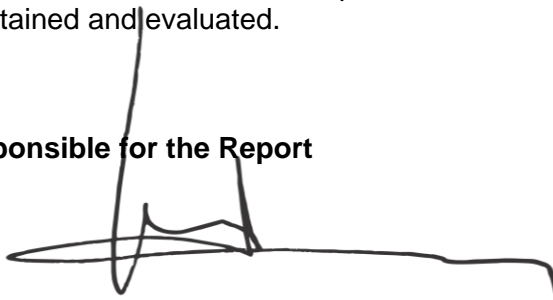
External factors that influenced the Activity implementation is primarily due to physical condition on site in the execution of field activity. Extreme wet during the collection has delayed the collection of wildings. At the dry season, the canals dried out and water transportation is not possible.

The physical condition in PSF, especially related to the excess of water is not predictable. This has caused significant delay in wildling collection and field survey for site identification.

7. CONCLUSIONS AND RECOMMENDATIONS

The Activity objective has been successfully achieved in accordance with the Activity document, with full involvement of stakeholders and wise use of resources. Additional activities have been carried out during the extension period to strengthen the application of outputs. In relation to that, it is recommended that similar Activity could be replicated in the future. The initiated cooperation/ collaboration with after institutions need to be maintained and evaluated.

Responsible for the Report



Name : Tajudin Edy Komar,
Date : April 2014

Position held: Project Coordination Team

ANNEX 1. ACTIVITY FINANCIAL STATEMENT

Activity Financial Statement (in US Dollar) (ITTO contribution)

Programme Title: Support to ITTO CITES Implementation for Tree Species and Trade/Market Transparency (TMT)

Period Covered (ending on): 28 February 2014

Activity Title : The Assessment of Ramin Plantation Requirement and The Establishment of Ramin Genetic Resources Conservation Gardens.

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	\$ 19,500.00	\$ -	\$ 19,500.00	\$ 19,500.00	\$ -
12. Other Labour	\$ 4,600.00	\$ -	\$ 4,589.62	\$ 4,589.62	\$ 10.38
13. Team Leader	\$ 9,000.00	\$ -	\$ 9,000.00	\$ 9,000.00	\$ -
14. Secretary	\$ 9,000.00	\$ -	\$ 9,000.00	\$ 9,000.00	\$ -
15. Asisstance	\$ 5,500.00	\$ -	\$ 5,427.25	\$ 5,427.25	\$ 72.75
17. Personnel Total	\$ 47,600.00	\$ -	\$ 47,516.87	\$ 47,516.87	\$ 83.13
20. Sub-contract					
21. Sub-contract	\$ -	\$ -	\$ -	\$ -	\$ -
29. Component Total	\$ -	\$ -	\$ -	\$ -	\$ -
30. Duty Travel					
31. DSA	\$ 12,500.00	\$ -	\$ 12,448.93	\$ 12,448.93	\$ 51.07
32. Return Ticket	\$ 5,900.00	\$ -	\$ 5,859.26	\$ 5,859.26	\$ 40.74
33. Local Transport	\$ 4,500.00	\$ -	\$ 4,446.39	\$ 4,446.39	\$ 53.61
39. Component Total	\$ 22,900.00	\$ -	\$ 22,754.58	\$ 22,754.58	\$ 145.42
40. Capital Items					
41. Office Space	\$ -	\$ -	\$ -	\$ -	\$ -
42. Land	\$ -	\$ -	\$ -	\$ -	\$ -
43. Trial Site	\$ -	\$ -	\$ -	\$ -	\$ -
44. Computer/Printer	\$ 1,288.07	\$ -	\$ 1,288.07	\$ 1,288.07	\$ -
49. Component Total	\$ 1,288.07	\$ -	\$ 1,288.07	\$ 1,288.07	\$ -
50. Consumable Items					
51. Materials	\$ 8,000.00	\$ -	\$ 7,963.48	\$ 7,963.48	\$ 36.52
52. Fuel and Utilities	\$ 2,400.00	\$ -	\$ 2,321.46	\$ 2,321.46	\$ 78.54
53. Other consumable items	\$ 1,400.00	\$ -	\$ 1,358.28	\$ 1,358.28	\$ 41.72

59. Component Total	\$ 11,800.00	\$ -	\$ 11,643.22	\$ 11,643.22	\$ 156.78
60. Miscellaneous					
61. Printing and Editing	\$ 5,400.00	\$ -	\$ 5,391.31	\$ 5,391.31	\$ 8.69
62. Workshop Package	\$ 8,000.00	\$ -	\$ 7,811.01	\$ 7,811.01	\$ 188.99
63. Other miscellaneous	\$ 11,946.93	\$ -	\$ 11,817.73	\$ 11,817.73	\$ 129.20
69. Component Total	\$ 25,346.93	\$ -	\$ 25,020.05	\$ 25,020.05	\$ 326.88
100. GRAND TOTAL:	\$ 108,935.00	\$ -	\$108,222.79	\$ 108,222.79	\$ 712.21

Notes: Financial statement period February 2014

ANNEX 2. ACTIVITY CASHFLOW STATEMENT

ACTIVITY CASH FLOW STATEMENT (In US Dollar) (ITTO Contribution)

Programme Title : Support to ITTO CITES Implementation for Tree Species and Trade/Market Transparency (TMT)

Activity Title : The Assessment of Ramin Plantation Requirement and The Establishment of Ramin Genetic Resources Conservation Gardens.
Period Covered (ending on): 28 February 2014

Component	Reference	Date	Amount	
			in US \$	Local Currency
A. Fund received from ITTO				
1. First Installment		Sep-12	\$ 55,000.00	Rp 527,340,000.00
2. Second Installment		Jun-13	\$ 53,935.00	Rp 535,628,485.00
3. Transfer fee			\$ 30.00	Rp 143,820.00
4. Administration and statement fee			\$ 87.33	Rp 917,963.53
5. Loss and Gain*)			\$ 4,820.18	Rp -
Total Funds Received:			\$ 113,637.85	Rp 1,061,906,701.47
B. Expenditures (by Executing Agency):				
10. Personnel				
11. National Expert			\$ 19,500.00	Rp 189,024,000.00
12. Other Labour			\$ 4,589.62	Rp 44,990,000.00
13. Team Leader			\$ 9,000.00	Rp 86,292,000.00
14. Secretary			\$ 9,000.00	Rp 87,492,500.00
15. Asistance			\$ 5,427.25	Rp 52,869,100.00
17. Personnel Total			\$ 47,516.87	Rp 460,667,600.00
20. Sub-contract				
21. Sub-contract			\$ -	Rp -
29. Component Total			\$ -	Rp -
30. Duty Travel				
31. DSA			\$ 12,448.93	Rp 121,851,170.00
32. Return Ticket			\$ 5,859.26	Rp 57,126,200.00
33. Local Transport			\$ 4,446.39	Rp 43,299,578.00
39. Component Total			\$ 22,754.58	Rp 222,276,948.00
40. Capital Items				
41. Office Space			\$ -	Rp -
42. Land			\$ -	Rp -
43. Trial Site			\$ -	Rp -
44. Computer/Notebook			\$ 1,288.07	Rp 12,350,000.00
49. Component Total			\$ 1,288.07	Rp 12,350,000.00

50. Consumable Items					
51. Materials			\$ 7,963.48	Rp	77,908,700.00
52. Fuel and Utilities			\$ 2,321.46	Rp	22,660,795.00
53. Other consumable items			\$ 1,358.28	Rp	13,193,270.00
59. Component Total			\$ 11,643.22	Rp	113,762,765.00
60. Miscellaneous					
61. Printing and Editing			\$ 5,391.31	Rp	53,541,000.00
62. Workshop Package			\$ 7,811.01	Rp	77,572,094.00
63. Other miscellaneous			\$ 11,817.73	Rp	116,184,064.00
69. Component Total			\$ 25,020.05	Rp	247,297,158.00
Total Expenditures To-date:			\$ 108,222.79	Rp	1,056,354,471.00
Remaining Balance of Funds (A-B) :			\$ 5,415.06	Rp	5,552,230.47

Notes:

- Cash flow statement period February 2014
- *) The difference exchange rate
 - Bank : Floating exchange rate
 - Cash flow : Fix exchange rate when fund was received

ANNEX 3. ACTIVITY FINANCIAL STATEMENT (GOI)

ACTIVITY FINANCIAL STATEMENT (in kind contribution) GOI (in US Dollar)

Programme Title: Support to ITTO CITES Implementation for Tree Species and Trade/Market Transparency (TMT)

Period Covered (ending on): 28 February 2014

Activity Title : The Assessment of Ramin Plantation Requirement and The Establishment of Ramin Genetic Resources Conservation Gardens.

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	\$ -	\$ -	\$ -	\$ -	\$ -
12. Other Labor	\$ -	\$ -	\$ -	\$ -	\$ -
13. Team Leader	\$ -	\$ -	\$ -	\$ -	\$ -
14. Secretary	\$ -	\$ -	\$ -	\$ -	\$ -
15. Asisstants	\$ -	\$ -	\$ -	\$ -	\$ -
16. Project Finance	\$ -	\$ -	\$ -	\$ -	\$ -
17. Personnel Total	\$ -	\$ -	\$ -	\$ -	\$ -
20. Sub-contract					
21. Sub-contract	\$ -	\$ -	\$ -	\$ -	\$ -
29. Component Total	\$ -	\$ -	\$ -	\$ -	\$ -
30. Duty Travel					
31. DSA	\$ -	\$ -	\$ -	\$ -	\$ -
32. Return Ticket	\$ -	\$ -	\$ -	\$ -	\$ -
33. Local Transport	\$ -	\$ -	\$ -	\$ -	\$ -
39. Component Total	\$ -	\$ -	\$ -	\$ -	\$ -
40. Capital Items					
41. Office space	\$ 4,500.00	\$ -	\$ 4,500.00	\$ 4,500.00	\$ -
42. Land	\$ 33,600.00	\$ -	\$ 33,600.00	\$ 33,600.00	\$ -
43. Site Trials	\$ 7,200.00	\$ -	\$ 7,200.00	\$ 7,200.00	\$ -
44. Computer/Notebook	\$ -	\$ -	\$ -	\$ -	\$ -
49. Component Total	\$ 45,300.00	\$ -	\$ 45,300.00	\$ 45,300.00	\$ -
50. Consumable Items					
51. Materials	\$ -	\$ -	\$ -	\$ -	\$ -
52. Fuel and Utilities	\$ -	\$ -	\$ -	\$ -	\$ -
53. Other consumable items	\$ -	\$ -	\$ -	\$ -	\$ -

59. Component Total	\$ -	\$ -	\$ -	\$ -	\$ -
60. Miscellaneous					
61. Printing and Editing	\$ -	\$ -	\$ -	\$ -	\$ -
62. Workshop Package	\$ -	\$ -	\$ -	\$ -	\$ -
63. Other miscellaneous	\$ -	\$ -	\$ -	\$ -	\$ -
69. Component Total	\$ -	\$ -	\$ -	\$ -	\$ -
70. Executing Agency Management Cost	\$ 15,424.00	\$ -	\$ 15,424.00	\$ 15,424.00	\$ -
100. GRAND TOTAL:	\$ 60,724.00	\$ -	\$ 60,724.00	\$ 60,724.00	\$ -

Notes: Financial statement periode September 2012 - February 2014

ANNEX 4. ACTIVITY CASHFLOW STATEMENT (GOI)

ACTIVITY CASH FLOW STATEMENT (In kind contribution) GOI (in US Dollar)

Programme Title : Support to ITTO CITES Implementation for Tree Species and Trade/Market Transparency (TMT)

Period Covered (ending on): 28 February 2014

Activity Title : The Assessment of Ramin Plantation Requirement and The Establishment of Ramin Genetic Resources Conservation Gardens.

Component	Reference	Date	Amount	
			in US \$	Local Currency
A. Fund received from ITTO				
1. Remaining Balance September 2012		Sep-12	\$ 60,724.00	Rp 582,221,712.00
2. Transfer fee			\$ -	Rp -
3. Administration and statement fee*)			\$ -	Rp -
4. Loss and Gain			\$ -	Rp -
Total Funds Received:			\$ 60,724.00	Rp 582,221,712.00
B. Expenditures (by Executing Agency):				
10. Personnel				
11. National Expert			\$ -	Rp -
12. Other Labour			\$ -	Rp -
13. Team Leader			\$ -	Rp -
14. Secretary			\$ -	Rp -
15. Asisstance			\$ -	Rp -
16. Project Finance			\$ -	Rp -
17. Personnel Total			\$ -	Rp -
20. Sub-contract				
21. Sub-contract			\$ -	Rp -
29. Component Total			\$ -	Rp -
30. Duty Travel				
31. DSA			\$ -	Rp -
32. Return Ticket			\$ -	Rp -
33. Local Transport			\$ -	Rp -
39. Component Total			\$ -	Rp -
40. Capital Items				
41. Office space			\$ -	Rp -

			4,500.00		43,146,000.00
42. Land			\$		Rp
			33,600.00		322,156,800.00
43. Site Trials			\$		Rp
			7,200.00		69,033,600.00
44. Computer/Notebook			\$		Rp
			-		-
49. Component Total			\$		Rp
			45,300.00		434,336,400.00
50. Consumable Items					
51. Materials			\$	-	Rp -
52. Fuel and Utilities			\$	-	Rp -
53. Other consumable items			\$	-	Rp -
59. Component Total			\$	-	Rp -
60. Miscellaneous					
61. Printing and Editing			\$	-	Rp -
62. Workshop Package			\$	-	Rp -
63. Other miscellaneous			\$	-	Rp -
69. Component Total			\$	-	Rp -
70. Executing Agency Management Cost			\$	15,424.00	Rp 147,885,312.00
Total Expenditures To-date:			\$	60,724.00	Rp 582,221,712.00
Remaining Balance of Funds (A-B) :			\$	-	Rp -

Notes: Cash flow statement periode September 2012 - February 2014

ANNEX 3. LIST OF CAPITAL ITEMS

No.	Items	Qty	Value		Date of Purchased	Remarks
			Rp.	US \$		
1.	Camera Nikon D3100 18-55 mm and accessories	1 unit	8,750,000.00	912.60	22 May 2013	Good
2.	Printer Laser Jet HP CP 1025 and Scanner Canon Lide 700 F	1 unit	3,600,000.00	375.47	22 May 2013	Good
Total			12,350,000.00	1,288.07		



1-2 years old ramin in Hedge Orchard, Ogan Komering Ilir (OKI), South Sumatra.
Photo by Tajudin E. Komar



2-3 years old ramin seedling in Hedge Orchard, Ogan Komering Ilir (OKI), South Sumatra. Photo by Tajudin E. Komar







**PEMBANGUNAN GENEPOOL RAMIN
DAN PLOT PENGAMATAN EKOLOGI
DI KAWASAN TAMAN NASIONAL SEBANGAU**

Lokasi : S. Koran
 Luas : 3 Ha
 Jumlah Bibit : 2.050 Pohon
 Jenis : Ramin (*Gonystylus bancanus*)

KERJA SAMA
 BTN, SEBANGAU - BPK Banjar Baru - ITTO-CITES PROJECT

