Activity Document II

PROJECT ABSTRACT

Title Assessing silvicultural system on ramin: Review on the current practice and re-vitalization of existing permanent sample plots.

Summary

The current silvicultural system for peat swamp forest in Indonesia is the Selective Cutting with Enrichment Planting. This system has been practised throughout the country since the last three decades. This system was applied to all the forest types with some minor adjustments for the peat swamp forest area, especially in the way logs are transported. Scattered assessments and evaluation on the appropriateness and effectiveness of this system to ensure sustainability may have been conducted elsewhere. However, the review and evaluation has not been convincing enough to make substantial revision to the system, especially in relation to the provision of reliable data and scientific information on growth and yield, as well as the stand dynamics of ramin in peat swamp forest area, which is generally poor in accessibility. In this regard, the project will conduct comprehensive review and evaluation, and to re-design reliable and representative permanent sample plots for long-term study of ramin and the other species found growing in the peat swamp forests in Sumatra and Kalimantan. The development objective is to improve the silvicultural practice of ramin so as to ensure its sustainability for timber production. Specific objectives are (i) to review and evaluate the silvicultural system and its practice, and (ii) 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. The expected outputs are (i) review and evaluation on the silvicultural system and practice, (ii) 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), and (iii) review and re-design of permanent sample plots for ramin and the other species found in PSF in Sumatra and Kalimantan.

Executing/Implementing Agency

Center for Forest and Nature Conservation Research and Development (CFNCRD), Jalan Gunung Batu No. 5, Bogor. Telp./Fax: 0251-633-234, 0251-638-111.

Collaborating Agencies

(i) Southeast Asian Ministers of Education Organization, Regional Center for Tropical Biology (SEAMEO-BIOTROP), Jalan Raya Tajur Km 6, Bogor, INDONESIA. Telp./Fax: 0251-323-848, 0251-326-851.

(ii) Sumatra Regional Research and Development Center (FORDA Station in South Sumatra),Jalan Jend Sudirman, Km 5, Punti Kayu, Palembang, Sumatra Selatan.

Duration 12 months.

Starting date Upon receiving funding for the project.

Budget	ITTO	US$ 97,455
	GOI (in-kind contribution)	US$ 28,418
	Grand Total	**US$ 125,873**

This activity is submitted to ITTO for consideration under its Work Program activity "Ensuring international trade in CITES-listed timber species is consistent with their sustainable management and conservation," with primary funding provided by the European Commission and additional support from the USA, Japan, New Zealand and Norway.

PART I. CONTEXT

Origin/Background

The project is as an addition to the current project being implemented by the Forestry Research and Development Agency (FORDA): ITTO PD426/06 Rev.1 - *The Prevention of Further Loss and the Promotion of Rehabilitation and Plantation of Gonystylus spp. (Ramin) in Sumatra and Kalimantan*, with specific reference to ensuring sustainable harvest of ramin and the other species found growing in peat swamp forests in Indonesia, as this has not been covered in the current project.

Based on the findings of another ITTO project PPD87/03 Rev.2 - *Identification of Gonystylus spp. (Ramin), Potency, Distribution, Conservation and Plantation Barrier,* one of the causes of the rapid decrease in ramin population is over-exploitation and ineffective implementation of rules and regulation related to the current silvicultural system, as well as a lack in supervision. Most of the species in peat swamp forests, including *G. bancanus* (ramin), are relatively slow growing. The current silvicultural system using diameter limit of over 40 cm in diameter with rotation of 35 years is suspected to be unsustainable since the average growth rate of most peat swamp forest species is below 1 cu cm per ha per year, which is the assumption adopted under the current silvicultural system.

In order to obtain a deeper understanding on growth, yield and population dynamics of ramin and the other species found growing in peat swamp forests, long-term ecological studies would need to be carried out. The existing permanent sample plots for ramin and the other species were established primarily for monitoring growth and yield, and hence, may not be appropriate 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 project, the existing permanent samples plots will be re-visited and evaluated, and newly designed permanent sample plots will be established by considering, primarily, their accessibility and representativeness.

PART II. THE PROJECT

1. Project Objectives

The objectives of the project are:

(i) to review and evaluate the silvicultural system of peat swamp forest and its practice.

(ii) 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.

2.1. Problems to be Addressed

Ramin, especially *Gonystylus bancanus*, has been logged since the last three decades. Current report indicates that its population in nature has decreased significantly due to various factors. As a result, the Government of Indonesia has imposed a moratorium on ramin meaning that ramin is not allowed to be cut unless they are harvested sustainably and that such harvesting will not cause detrimental effects to the rest of the population. Ramin as

a genus has also been listed in CITES Appendix III since 2001 and was transferred to Appendix II in October 2004 at COP 13, in Bangkok, Thailand and became effective in 2005.

One of the causes related to the rapid decline in the ramin population is over-exploitation. Over-exploitation takes place due to several conditions, namely (i) insufficient scientific justification of silvicultural prescriptions, (ii) inappropriate inclusion of growth assumption, diameter limit for cutting and rotation, (iii) supervision deficiency in logging practices, and (iv) poor law enforcement.

What will happen if no project intervention? The existing silvicultural prescriptions will remain unchanged and continue to be practised in peat swamp forest, the rapid degradation of ramin population and habitats will continue to take place, the growing stocks will reduce over time, and revenue from the forest industry will also continue to decline.

On the other hand, in-depth understanding on the growth, yield and population dynamics of ramin and the other species found growing in peat swamp forests is still insufficient due to the limitation of obtaining regular and reliable data from permanent sample plots. The existing permanent sample plots for ramin, as well as for the other species, were established primarily for monitoring the growth and yield of these species, and hence, may not be appropriate for observing their population dynamics. In addition, the plots are currently hardly accessible for regular monitoring. Therefore in this project, the existing permanent sample plots will be re-visited and evaluated, and newly designed permanent sample plots will be established by considering, primarily, their accessibility and representativeness.

2.2. Intended Situation after Project Completion

Through the execution of this project, several information gaps could be obtained and filled. Overall expected situation after project completion is better management practices of peat swamp forests through improved silvicultural prescriptions, supervision and monitoring. In-depth understanding on the growth, yield and population dynamics of ramin and the other species found growing in peat swamp forests could be obtained through the establishment of well-designed and accessible permanent sample plots.

By obtaining accurate information on growth rates, stem distribution and regeneration, a stronger scientific justification could be presented for formulating policy and decisions on diameter limits and assumptions used in harvesting operations, as well as the rotation adopted.

2.3. Target Beneficiaries

The benefits of the project are the review and evaluation on the current silvicultural system and its practice used in Indonesia, the appropriateness of the permanent sample plots, including their accessibility, to produce reliable data and in-depth understanding on population dynamics, growth and yield of ramin and the other species found growing in peat swamp forests.

The primary beneficiaries of the project are the Ministry of Forestry (MoF), research institutions, universities and forest concession companies. The benefits will be disseminated and delivered through project publications, workshops, consultative meetings and other related public events organized by the MoF and other institutions.

2.4. Risks

The project activities will have 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 may influence the schedule but this will not cause a complete failure in the achievement of the overall project objectives.

3. Outputs

The expected outputs of the project are:

Objective 1: To review and evaluate the silvicultural system of peat swamp forest and its practice.

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

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).

Objective 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.

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

4. Activities

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.

Activity 1.1.2. Collection of information through interviews, stakeholders consultation and field visits.

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.

Activity 1.2.2. Stakeholders consultation on the draft revision of the sivicultural system on ramin.

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.

Activity 2.1.2. Re-design and re-establish the accessible and reliable permanent sample plots for PSF species in Sumatra and Kalimantan.

5. Work Plan

Outputs and Activities	Responsible Party	Schedule (in months)											
		1	2	3	4	5	6	7	8	9	10	11	12
Output 1.1 Review and evaluation on the silvicultural system and its practice	CFNCRD*												
Activity 1.1.1 Collection of rules, regulation and concepts underlying the practice of the current silvicultural system	CFNCRD												
Activity 1.1.2. Collection of information through interviews, stakeholders consultation and field visits	CFNCRD												
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)	CFNCRD												
Activity 1.2.1. Formulation of draft revision of the silvicultural system and its practice	CFNCRD												
Activity 1.2.2. Stakeholders consultation on the draft revision of the sivicultural system on ramin	CFNCRD												
Output 2.1. Review and re-design permanent sample plots for ramin and the other species found in PSF	CFNCRD												
Activity 2.1.1. Review and evaluation on the existing permanent sample plots of ramin and the other species found in PSF	CFNCRD												
Activity 2.1.2. Re-design and re-establish the accessible and reliable permanent sample plots for PSF species in Sumatra and Kalimantan	CFNCRD												

Note: *CFNCRD – Center for Forest and Nature Conservation Research and Development.

6. Budget

6.1. Worksheet and Budget Components

Outputs and Activities	Inputs			Unit Cost	Quarter Year	Budget Compo-nent	Total	
	Units and quality	No						
		ITTO	GOI				ITTO	(GOI)
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	1). MM National Expert+	0	0	1,500	Q1	11	-	-
	2). MD Other labors	12	0	15		12	180	
	3). Days-Daily Sub-Allowance	20	0	60		31	1,200	-
	4). Return Tickets	0	0	200		32	-	-
	5). Local Transport	4	0	150		33	600	-
	6). Capital equipment (computer notebook)	1	0	1500		43	1,500	-
	7). Materials	0	0	200		51	-	-
	8). Fuel and Utilities	3	0	250		52	750	-
	9). Office supplies	0	0	100		53	-	-
	10). Other consumable items	1	0	250		54	250	-
	11). Sundry	1	0	250		61	250	-
	12). Other miscellaneous	1	0	250		63	250	-
Sub total activity 1.1.1							**4,980**	**-**
Activity 1.1.2. Collection of information through interviews, stakeholders consultation and field visits	1). MM National Expert+	2	0	1,500	Q1 - Q2	11	3,000	-
	2). MD Other labors	20	0	15		12	300	-
	3). Days-Daily Sub-Allowance	60	0	60		31	3,600	-
	4). Return Tickets	9	0	200		32	1,800	-
	5). Local Transport	6	0	150		33	900	-
	6). Materials	3	0	200		51	600	-
	7). Fuel and Utilities	3	0	250		52	750	-
	8). Office supplies	0	0	100		53	-	-
	9). Other consumable items	2	0	250		54	500	-
	10). Sundry	2	0	250		61	500	-
	11). Other miscellaneous	2	0	250		63	500	-
Sub total activity 1.1.2.							**12,450**	**-**
Sub Total Output 1.1							**17,430**	**-**

Note: +Refer to **Annex 1** for the Terms of Reference.

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	1). MM National Expert[+]	2	0	1,500	Q2 - Q3	11	3,000	-
	2). MD Other labors	20	0	15		12	300	-
	3). Days-Daily Sub-Allowance	20	0	60		31	1,200	-
	4). Return Tickets	4	0	200		32	800	-
	5). Local Transport	2	0	150		33	300	-
	6). Materials	0	0	200		51	-	-
	7). Fuel and Utilities	2	0	250		52	500	-
	8). Office supplies	0.5	0	100		53	50	-
	9). Other consumable items	1	0	250		54	250	-
	10). Sundry	1	0	250		61	250	-
	11). Other miscellaneous	1	0	250		63	250	-
Sub total activity 1.2.1.							**6,900**	**-**
Activity 1.2.2. Stakeholders consultation on the draft revision of the sivicultural system on ramin	1). MM National Expert[+]	0	0	1,500	Q3	11	-	-
	2). MD Other labors	20	0	15		12	300	-
	3). Days-Daily Sub-Allowance	45	0	60		31	2,700	-
	4). Return Tickets	9	0	200		32	1,800	-
	5). Local Transport	3	0	150		33	450	-
	6). Materials	2	0	200		51	400	-
	7). Fuel and Utilities	2	0	250		52	500	-
	8). Office supplies	0.5	0	100		53	50	-
	9). Other consumable items	1	0	250		54	250	-
	10). Sundry	1	0	250		61	250	-
	11). Other miscellaneous	1	0	250		63	250	-
Sub total activity 1.2.2.							**6,950**	**-**
Sub Total Output 1 2.							**13,850**	**-**
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 plot of ramin and other species found in PSF	1). MM National Expert[+]	2	0	1,500	Q1 - Q2	11	3,000	-
	2). MD Other labors	15	0	15		12	225	-
	3). Days-Daily Sub-Allowance	30	0	60		31	1,800	-
	4). Return Tickets	6	0	200		32	1,200	-
	5). Local Transport	3	0	150		33	450	-
	6). Materials	0	0	200		51	-	-
	7). Fuel and Utilities	3	0	250		52	750	-
	8). Office supplies	0	0	100		53	-	-
	9). Other consumable items	1	0	250		54	250	-
	10). Sundry	1	0	250		61	250	-
	11). Other miscellaneous	1	0	250		63	250	-
Sub total activity 2.1.1.							**8,175**	-

Note: [+]Refer to **Annex 1** for the Terms of Reference.

Activity 2.1.2. Re-design and re-establish the accessible and reliable permanent sample plots for PSF species in Sumatra and Kalimantan	1). MM National Expert[+]	4	0	1,500	Q3 - Q4	11	6,000	
	2). MD Other labors	120	0	15		12	1,800	
	3). Days-Daily Sub-Allowance[1]	270	0	60		31	16,200	
	4). Return Tickets	18	0	200		32	3,600	
	5). Local Transport	6	0	150		33	900	
	6). Materials	9	0	200		51	1,800	
	7). Fuel and Utilities	3	0	250		52	750	
	8). Office supplies	0.5	0	100		53	50	-
	9). Other consumable items	9	0	250		54	2,250	-
	10). Sundry	1	0	250		61	250	-
	11). Other miscellaneous	9	0	250		63	2,250	-
Sub total activity 2.1.2							**35,850**	**-**
Sub Total Output 2.1							**44,025**	**-**
Non-activity Based Expenses								
	1). MM Project coordinator	12	0	0	Q1 - Q4	13	0	-
	2). MM Project Secretary	12	0	0		14	0	-
	3). MM Team Leader[+]	12	0	500		15	6,000	
	4). Daily Subsistence allowance	10	0	60		31	600	-
	5). Return Ticket	3	0	200		32	600	-
	6). Local Transport	3	0	150		33	450	-
	7). Office space	0	1	10,000		41	0	10,000
	8). Operational Vehicles	0	1	2,000		42	0	2,000
	9). Fuels and utilities	4	0	250		52	1,000	-
	10). Office supplies	5	0	100		53	500	-
	11). Other consumable items	2	0	250		54	500	-
	12). Sundry	2	0	250		61	500	-
	13). Printing report and editing	2	0	3,500		62	7,000	-
	14). Other miscellaneous	20	0	250		63	5,000	-
Sub total Non-activity Based Expenses							**22,150**	**12,000**
Total Budget							**97,455**	**12,000**

Note: [+]Refer to **Annex 1** for the Terms of Reference.

[1] The activity is distributed in 5 provinces (Riau, Jambi, South Sumatra, West and Central Kalimantan). Hence, 5 locations x 3 researchers x 10 days = 150 mandays; 5 locations x 2 technicians x 10 days = 100 mandays; and 5 locations x 4 local staff = 20 mandays. This gives a total of 270 mandays.

6.2. Overall Project Budget by Activity

Outputs and Activities	Budget Components														
	10. Project Personnel		20. Sub-contract		30 Duty Travel		40. Capital Items		50. Consumable Items		60. Miscellaneous		Quarter Year	Grand Total	
	ITTO	GOI	ITTO	GOI	ITTO	GOI	ITTO	GOI	ITTO	GOI	ITTO	GOI		ITTO	GOI
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	180	-	-	-	1,800	-	1,500	-	1,000	-	500	-	Q1	4,980	-
Activity 1.1.2. Collection of information through interviews, stakeholders consultation and field visits	3,300	-	-	-	6,300	-	-	-	1,850	-	1,000	-	Q1 - Q2	12,450	-
Sub total	**3,480**	**-**	**-**	**-**	**8,100**	**-**	**1,500**	**-**	**2,850**	**-**	**1,500**	**-**		**17,430**	**-**
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	3,300	-	-	-	2,300	-	-	-	800	-	500	-	Q2 - Q3	6,900	-
Activity 1.2.2. Stakeholders consultation on the draft revision of the sivicultural system on ramin	300	-	-	-	4,950	-	-	-	1,200	-	500	-	Q3	6,950	-
Sub total.	**3,600**	**-**	**-**	**-**	**7,250**	**-**	**-**	**-**	**2,000**	**-**	**1,000**	**-**		**13,850**	**-**
Output 2.1. Review and re-design permanent sample plots of 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	3,225	-	-	-	3,450	-	-	-	1,000	-	500	-	Q1 - Q2	8,175	-
Activity 2.1.2. Re-design and re-establish the accessible and reliable permanent sample plots for PSF species in Sumatra and Kalimantan	7,800	-	-	-	20,700	-	-	-	4,850	-	2,500	-	Q3 - Q4	35,850	-
Sub total	**11,025**	**-**	**-**	**-**	**24,150**	**-**	**-**	**-**	**5,850**	**-**	**3,000**	**-**		**44,025**	**-**
Non-activity Based Expenses															
Activity Coordination	6,000	-	-	-	1,650	-	-	12,000	2,000	-	12,500	-	Q1 - Q4	22,150	12,000
Sub total Non-activity Based Expenses	**6,000**	**-**	**-**	**-**	**1,650**	**-**	**-**	**12,000**	**2,000**	**-**	**12,500**	**-**		**22,150**	**12,000**
GRAND TOTAL	**24,105**	**-**	**-**	**-**	**41,150**	**-**	**1,500**	**12,000**	**12,700**	**-**	**18,000**	**-**	**-**	**97,455**	**12,000**

6.3. Total Project Budget

Budget Components		ITTO	GOI	Total
10. Project Personnel				
	11. National Expert	15,000	-	15,000
	12. Other labors	3,105	-	3,105
	13. Project coordinator	-	-	-
	14. Project Secretary	-	-	-
	15. Team Leader	6,000	-	6,000
	19. Component Total	**24,105**	-	**24,105**
20. Sub-contract				
	21. Sub-contract	-	-	-
	29. Component Total	-	-	-
30. Duty Travel				
	31. DSA	27,300	-	27,300
	32. Return Ticket	9,800	-	9,800
	33.Local transport	4,050	-	4,050
	39. Component Total	**41,150**	-	**41,150**
40. Capital Items				
	41. Office Space	-	10,000	10,000
	42. Vehicles	-	2,000	2,000
	43. Capital equipment (computer notebook)	1,500	-	1,500
	49. Component Total	**1,500**	**12,000**	**13,500**
50. Consumable Items				
	51. Materials	2,800	-	2,800
	52. Fuels and utilities	5,000	-	5,000
	53. Office Supplies	650	-	650
	54. Other consumable items	4,250	-	4,250
	55. Component Total	**12,700**	-	**12,700**
60. Miscellaneous				
	61. Sundry	2,250	-	2,250
	62. Printing and editing	7,000	-	7,000
	63. Other miscellaneous	8,750	-	8,750
	69. Component Total	**18,000**	**-**	**18,000**
Total Budget by Component		**97,455**	**12,000**	**109,455**
70. Executing Agency Management				
	Executing Agency Management costs (15% of Total of Overall Project Budget by Activity	-	16,418	16,418
	79. Component Total	-	**16,418**	**16,418**
Grand Total		**97,455**	**28,418**	**125,873**

6.4. Project Budget by Source

Budget Components	Source		Total
	ITTO	GOI (in-kind)	
10. Project Personnel	24,105	-	24,105
20. Sub-contract	-	-	-
30. Duty travel	41,150	-	41,150
40. Capital Items	1,500	12,000	13,500
50. Consumable Items	12,700	-	12,700
60. Miscellaneous	18,000	-	18,000
70. Executing agency Management Cost	-	16,418	16,418
Total	**97,455**	**28,418**	**125,873**

PART III. OPERATIONAL ARRANGEMENTS

1. Management Structure

This project is treated as complementary to the existing ITTO Project PD 426/06 Rev. 1 (F). and therefore the Management Structure of this project is similar to that project except for the use of a Technical Advisory Committee (instead of a Project Steering Committee), Team leader and members of the field team. The Technical Advisory Committee will consist of representatives from four (4) agencies: (i) Center for Forest and Nature Conservation Research and Development, (ii) Forest Biology Division of SEAMEO-Biotrop, (iii) Directorate of Natural Forest Development, and (iv) Division of Research Cooperation and Information (FORDA). Composition of the staff is as follows:

Technical Advisory Committee : as listed above
Project Coordinator (PC) : PC ITTO PD426/06 Rev.1 (Ir. Tajudin Edy Komar, MSc)
Project Secretary/Finance (PS/F) : PS/F ITTO PD426/06 Rev. 1 (Siti Nurjanah, SP., MP)

Team Leader** (to be determined)

Team Members:

(i) Dr. Irnayuli R Sitepu (Ecology, FORDA)
(ii) Ir. Atok Subiakto, MSc (Silviculture, KOMATSU)
(iii) Ir. Bastoni (Silviculture, FORDA)
(iv) Ir. Evalin SS. Sumanjak (Ecology, FORDA)

** will be adjusted based on availability

2. Monitoring, Reporting and Evaluation

(i) Monthly Project Progress Reports

The monthly project progress report will be prepared based on the achievement of project activities/outputs as described in the Work Plan.

(ii) Project Technical Reports

Three technical reports, one technical report for each Output, will be prepared. The completion and submission of the reports will be in accordance with the schedule of activities.

Language of the report could be Indonesian to achieve a wider range of readers in Indonesia and the executive summary will be presented in English.

(iii) A Project Completion Report

A Project Completion Report will be submitted within two months of the project completion.

Annex 1

TERMS OF RERERENCE (TOR)

1. National Expert

Position: National Experts who will be assigned should have expertise and have been working at least 2 years on silviculture and sufficient knowledge on forest botany, taxonomy and ecology.

Responsibilities: The expert(s) will be responsible to carry out activities assigned (Activities 1.1.1, 1.1.2, 1.2.1, 1.2.2, 2.1.1 and 2.1.2), with agreed team work and or collaborative institution. Detail work description is provided based on each activity (assignment). The expert(s) prepares one technical report in accordance with the activity concerned. The submission of the technical report, final draft of technical report is within the period of assignment based on agreement normally within 2 months. The technical report must be presented in the meeting held by the project or concurrently with other meetings.

Qualification, time and payment: Hold at least a Master degree with 2-3 years experience as described above, good understanding in English both oral and written. Expert will carry out activity concerned within time allocated by the project (1 – 4 months). Rate of payment is in accordance with the budget allocated as appear in the Budget Worksheet and the experience of the expert.

2. Team Leader

A Team Leader will be hired to lead operational activities under this project. The hiring is based either on individual activity or a set of activities in the project. The team leader will be determined and assigned by Project Coordinator PD 426/06 Rev.1 (F), as this project is considered as Complimentary to project PD 426/06 Rev.1 (F), and based on his qualification, time availability and the recommendation (approval) of the Technical Advisory Committee

Responsibilities: Lead operational field activities as assigned and work closely with parties and personnel involved in the project team, and responsible to Project Coordinator as above and prepare progress and final technical reports under the direction of the Project Coordinator.

The Team Leader and members of the team, along with their CVs, will be decided and included into Inception Report/Work Plan of the Project. If necessary, the name of Team Leader will be forwarded to ITTO for obtaining the 'No Objection Letter' (NOL). Nominated team leader and its members have been provided in the section on Management Structure.

3. Project Coordinator and Project Secretary

Project Coordinator and Project Secretary are as in ITTO PD 426/06 Rev.1 (F). This is to ensure that small projects under ITTO-CITES are as an integral part to the current ITTO Project on ramin in Indonesia (see Management Structure).