

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE	ENHANCING PARTNERSHIP EFFORTS TO RESTORE PEAT SWAMP FORESTS IN SUMATRA
SERIAL NUMBER	PD 735/14 Rev.2 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF INDONESIA
ORIGINAL LANGUAGE	ENGLISH

SUMMARY

Peat swamp forest (PSF) in two major islands in Indonesia, Sumatra and Kalimantan has been estimated nearly 13 millions ha consisting of natural production forest, conservation, protected and other uses forest. There has been a huge deforestation, degradation, inappropriate conversion and forest fire since last several years. In order to reduce the negative impact, sustainable management, conservation of remaining PSF and the restoration of the degraded and deforested areas need to be enhanced. This condition could be achieved through consistent partnership efforts among stakeholders, government authorities, local government, industrial forest plantation, oil palm plantation companies and local communities. This proposed project will be part of the implementation of PSF restoration program, especially those related to awareness raising, capacity building in peatland management and continued establishment of demonstration activities in relatively high forest cover and high rate of deforestation area. The development objective of this project is to contribute to the sustainable management and conservation of PSF in Sumatra through the enhancement of stakeholders roles and responsibilities and field demonstration activities of restoration and rehabilitation of degraded PSF and other private companies operating in PSF. **Specific objective is to accelerate the progress (rate) on restoration and rehabilitation of Sumatran PSF through capacity building, wide application of technology, reconciled role and responsibility and consistent provision of large quantity of planting materials. The expected outputs are: (1). Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided, (2). Viable schemes to accelerate restoration and rehabilitation developed, and (3). Widespread initiatives on restoration and rehabilitation activities promoted**

EXECUTING AGENCY REGIONAL RESEARCH CENTRE OF SOUTH SUMATRA (FORDA)

DURATION 36 MONTHS

APPROXIMATE STARTING DATE TO BE DETERMINED

BUDGET AND PROPOSED SOURCES OF FINANCE	Source Equivalent	Contribution in US\$	Local Currency
	ITTO	453,684	
	Gov't of Indonesia	64,400	(in kind)
	TOTAL	518,084	

PROJECT BRIEF

Peat swamp forest (PSF) in two major islands in Indonesia, Sumatra and Kalimantan has been estimated nearly 13 millions ha which consist of natural production forest, conservation, protected and other uses forest. There has been a huge deforestation, degradation, inappropriate conversion and forest fire since last several years. In order to reduce the negative impact, sustainable management, conservation of remaining PSF and the restoration of the degraded and deforested areas need to be enhanced. This condition could be achieved through consistent partnership efforts among stakeholders, government authorities, local government, industrial forest plantation, oil palm plantation companies and local communities. This proposed project will be part of the implementation of PSF restoration program, especially those related to awareness raising, capacity building in peatland management and continued establishment of demonstration activities in relatively high forest cover and high rate of deforestation area. The development objective of this project is to contribute to the sustainable management and conservation of PSF in Sumatra through the enhancement of stakeholders roles and responsibilities and field demonstration activities of restoration and rehabilitation of degraded PSF and other private companies operating in PSF. **Specific objective is to accelerate the progress (rate) on restoration and rehabilitation of Sumatran PSF through capacity building, wide application of technology, reconciled role and responsibility and consistent provision of large quantity of planting materials. The expected outputs are: (1). Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided, (2). Viable schemes to accelerate restoration and rehabilitation developed, and (3). Widespread initiatives on restoration and rehabilitation activities promoted.** Intended situation after project completions is the improved management of peat swamp forest area, improved PSF ecosystem function and improved community living surrounding the PSF. Improved management of PSF is through awareness raising, capacity building, resolving the existing conflict across government authorities in peatland management. Improve PSF ecosystem is through the enhancement of conservation of remaining PSF and the restoration-rehabilitation of ecosystem by planting indigenous species which are valuable for both environmental purposes and community living.

The improved management will be indicated by improved forest ecosystem function, improved community/stakeholder participation, and improved community prosperity. Concurrently, the improvement will contribute to the reduction of deforestation and degradation by maintaining a good forest condition and artificially restore the degraded one by various community based rehabilitation and restoration activities. Improved community participation in avoiding deforestation, degradation and biodiversity is expected to be achieved through the development of scheme to prevent further deforestation and degradation and participation of community in ecosystem restoration. Alternative sources of income to improve community living from rehabilitation program are identified and enhanced. By the improvement of prosperity and the enhancement of law enforcement, the encroachment and illegal conversion of PSF will also be able to be minimized. The achievement will be indicated by continued reduction of PSF conversion and the increase of rehabilitation activities by planting local species.

From this project, it is also expected that partnership approaches in the conservation of the PSF, in Sumatra, could be a useful lesson learnt to other areas on the reducing degraded areas through plantation of indigenous species. Several deliverables derived from this project which provide benefits to environment, social and economic effect, include the following (1). Increase of restored and rehabilitated areas, (2). Potential for income generation activities realized from plantation of local species, (3). Improved family income in community directly involve in the demonstration activities, (4). Reduced deforestation in the project implementation areas, (5). Communities trained

and assisted in the development and implementation of rehabilitation-restoration technique, (6). Improve interaction among various stakeholders in the target areas.

The primary stakeholders in this proposed project are local communities, District & Provincial Government responsible in peatland management, especially those operate at local level, such as local government, provincial and district forest services other stakeholders, private companies, operating in peatland, universities, NGO and other community group. Each stakeholder involves and participates differently in the project operational activities in accordance with their responsibility in peatland management.

Achieving the project's specific objective and outputs, should contribute to the enhancement of sustainable management of PSF in Sumatra, under the condition that, all relevant stakeholders consistently support project implementation for which the stakeholders are involved since at the stage of project formulation.

To execute the project activities, needed resources must be secured. Funding contributions are expected from ITTO **US\$ 453,684, and the Government of Indonesia US\$ 64,400 (in kind) giving a total project budget of US\$ 518,084.** The allocation of the ITTO budget is approximately 32% for personnel and the rest is for operational field activities.

List of abbreviation and acronyms

CSR	Corporate Social Responsibility
DG	Directorate General
EA	Executing Agency
FGO	Focus Group Discussion
FORDA	Forestry Research and Development Agency
HTI	Hutan Tanaman Industri (Industrial Forest Plantation)
IA	Implementing Agency
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
MoF	Ministry of Forestry
PSC	Project Steering Committee
PSF	Peat Swamp Forest
RAN-GRK	Rencana Aksi Nasional-Gas Rumah Kaca (National Action Plan for Reducing Greenhouse Gas)
RRC	Regional Research Center
R&D	Research and Development

Map of Project Site

Figure 1. Map of geographical location of Sumatra



Note: The colored areas are the specific project sites in the Province of Riau, Jambi and South Sumatra.

TABLE OF CONTENTS

Summary	Error! Bookmark not defined.
Project brief	i
List of abbreviation and acronyms	iii
Map of Project Site	iv
PART 1. CONTEXT	1
1.1.Origin	1
1.2.Relevance	2
1.2.1. Conformity with ITTO's objective and priorities	2
1.2.2. Relevance to submitting country policy	2
1.3.Target Area	3
1.3.1. Geographical Location	3
1.3.2. Social, culture, economic and enviromental aspects	4
PART 2 : PROJECT RATIONALE AND OBJECTIVES	6
2.1. Rationale	6
2.1.1 Institutional set-up and organizational issues	6
2.1.2. Stakeholder analyses	6
2.1.3. Problem analyses	8
2.1.4. Logical Framework	12
2.2. Objectives	13
2.2.1. Development Objective and impact indicator	13
2.2.2. Specific objective and Outcome indicators	13
PART 3. DESCRIPTION OF PROJECT INTERVENTION	14
3.1.Outputs and Activities	14
3.1.1.Outputs	14
3.1.2.Activities	14
3.2. Implementation approaches and methods	16
3.3 Workplan	17
3.4. Budget	18
3.4.1. Master budget Table	18
3.4.2. Consolidated budget by component	23
3.4.3. ITTO Yearly budget	25
3.4.4. Executing Agency Yearly budget (GOI in kind contribution)	27
3.5. Assumption, risk and sustainability	29
3.5.1. Assumption and risk	29
3.5.2.Sustainability After Project Completion	29
PART 4. IMPLEMENTATION ARRANGEMENT	31
4.1.Organization structure and stakeholders involment mechanism	31
4.1.1.Executing agency and partners	31
4.1.2.Project management team	31
4.1.3.Project steering communittee	31
4.1.4.Stakeholders involvement mechanism	32
4.2. Reporting, Review and Evaluation	32
4.3. Dissemination and mainstreaming of Project Learning	32
4.3.1. Dissemination of project learning	32
4.3.2. Mainstreaming of project learning	33
Annex 1: Profile of the executing/implementing agencies	34
Annex 2. Task and responsibilities of key staffs	35
Annex 3. Term of references of personnel and consultants funded by itto	36
Annex 4.Recommendation of the 46 th expert panel and the respective modification	38

PART 1. CONTEXT

1.1. Origin

This proposed project is partially as follow up to the recommendation of several workshops on the sustainable management and conservation of peat swamp forest (PSF) in Sumatra. PSF (peatland) is one of important ecosystems which has given huge contribution to the provision of various services. Major components of PSF are water, accumulated organic materials and vegetation. PSF in Indonesia has been predicted to approximately 20.6 million ha. Large portion of the PSF are distributed in Sumatra, Kalimantan and Papua. In Sumatra the total area of PSF is approximately 6.0 millions ha and distributed in production forests, conservation and protection forest and convertible forests (forest that could be converted to other uses). Convertible forest has been used for the establishment of industrial forest plantation, oil palm plantation and other uses related to human settlements. The conversion of PSF has been excessively carried out lately for the above purposes and this conversion has resulted in various negative impacts to the ecosystem. Illegal and excessive conversion and frequent forest fires have resulted in severe degradation of habitat and PSF ecosystem including the wide spread of haze pollution. The efforts to minimize the negative impact and the causes of deforestation and forest degradation have been conducted. This proposed project is intended to enhance sustainable management, conservation and restoration of Sumatra PSF through the involvement of stakeholders and local community, based on recommendations of workshops and lessons learned from previous project (ITTO REDD-SPD 009/09 Rev.2 (F)):

1. Coordination mechanism accross authorities managing PSF is still weak and therefore needs to be improved by central and local government.
2. Program, policies and action plan on reducing deforestation and forest degradation have not been fully implemented, therefore need to be improved and strengthened.
3. Community development in a wide range of application is limited, requires acceleration.
4. The existing policies for reducing emission are still poorly implemented by stakeholders.
5. Awareness raising program (campaign) and capacity building on rehabilitation, management and PSF restoration including on climate change issues are still insufficient.
6. Rehabilitation and restoration activities of PSF are still in small scale in limited sites, therefore needs to be scaled up and replicated to other areas.
7. The provision of seedlings/planting materials for rehabilitation and restoration activities is still in sufficient, it should be continuously carried out.

This proposal addresses only three major aspects: (1) The promotion of partnership efforts to prevent further degradation and deforestation, (2) The enhancement of the use of applicable technology and schemes for restoration and rehabilitation and (3) The expansion and multiplication of the existing demonstration activities on PSF restoration-plantation.

In addition, the proposed project will also develop model for implementing company's CSR fund, community and NGO in rehabilitation and restoration activities; continue, expand and multiply the existing initiated activities; promote function of the existing fora on PSF (i.e South Sumatra Peat Forum-Forum Gambut); search possibility to establish joint activities with other institution dealing with rehabilitation, restoration and haze pollution control (i.e with Selangor Forest Department).

1.2. Relevance

1.2.1. Conformity with ITTO's objective and priorities

Compliance with ITTA 2006 Objectives, with specific to:

- Point *j*: encouraging members to support and develop tropical forest reforestation, as well as rehabilitation and restoration of degraded forest land, with due regard for the interest of local communities dependent on forest resources.
- Point *m*: encouraging members to develop national policies aimed at sustainable utilization and conservation of timber producing forest, and maintaining ecological balance, in the context of tropical timber trade.
- Point *q*: promoting better understanding of the contribution of non-timber forest products and environmental services to the sustainable management of tropical forest, etc.
- Point *r*: encouraging members to recognize the role of forest-dependent indigenous and local communities in achieving sustainable forest management and develop strategies to enhance the capacity of these communities to sustainably manage tropical timber producing forest.

This proposed project supports:

- The contribution to the sustainable management of PSF through restoration, rehabilitation and plantation of local-indigenous species (point *j*, *r*) which also contribute to promotion of local community and reducing their poverty.
- This proposed project also support point *m* (utilization, conservation and ecological balance) for which this project will contribute to restoring forest covers, ecological function of other forest services (hydrology and carbon emission), and point *r* through the development of viable scheme for reforestation and rehabilitation of PSF.

Compliance with ITTO Strategic Action Plan 2013-2018

The proposed project complies with the ITTO Strategic Action Plan 2013-2018 with specific to : ITTO Strategic Action Plan 4: Reduce tropical deforestation and forest degradation and enhance the provision of environmental services. The proposed project addresses the high potential conflicts of landuse, especially in the areas currently utilized for forest, non-forest, and other human development activities. Capacity building, especially for local communities and indigenous people will be carried out, primarily for income generating activities to improve prosperity. By improving prosperity, the pressure on the existing natural resources will decrease as so to deforestation and forest degradation. In addition, the legal framework developed under the project for utilization and development of environmental services and other economic potentials will also contribute to income generation. Therefore, this project is highly relevant to this ITTO Strategic Action Plan.

1.2.2. Relevance to Indonesia's policy

The use of forest resources in Indonesia is divided into four forest functions/categories: conservation forest, protection forest, production forest and conversion forest. Some convertible PSF have been used for the establishment of industrial forest plantation (HTI), oil palm plantation and other community settlement. Considering the huge impact of PSF management, PSF (peatland in general) has been put as priority or target area for the implementation of options for strategic management intervention and restoration-rehabilitation of PSF ecosystem. In this strategy, awareness raising, capacity building and resolving the conflicting authorities in peatland management are addressed as part of provision of enabling condition. At the same time, the restoration-rehabilitation of deforested-degraded ecosystem is also carried out in selected areas as demonstration activity involving related stakeholders. The plantation of indigenous and valuable

species will provide direct benefit (income) to local communities and environment management and therefore it has been included into national policy related to the conservation of biological diversity. Several indigenous and valuable species have been identified and tested to plant in the restoration-rehabilitation of degraded peatland which show very promising results, not only to improve forest condition but also to improve income to local communities.

In summary, this proposed project is relevant to the national priority programs as follow :

- Biodiversity conservation,
- Re-enforcement of permanent forest estate,
- Forest resources protection and fire control,
- Revitalization of forest utilization and forest industries,
- Empowerment of forest local communities, and
- Rehabilitation and improvement of carrying capacity of catchment areas.

In relation to the issues on climate changes, this proposed project is also relevant to National Action Plan on reducing Green House Gases (Rencana Aksi Nasional Gas Rumah Kaca-RAN GRK) with specific to points (2) the management of peat swamp forest hydrological system and (3) The maintenance of PSF reclamation network. The relevant strategies to the RAN-GRK are to the points (1) to reduce deforestation and forest degradation to reduce emission, (2) to accelerate replantation to increase sequestration and (6) the application of technologies in soil management and agricultural practices with lowest emission.

1.3.Target Area

1.3.1. Geographical Location

The location for the project operational activities is in PSF of Sumatra, Indonesia, especially Riau, Jambi and South Sumatra (see Map of Project sites in Figure 1). Relevant stakeholders involve in the operational activities may come from other place especially for awareness raising, capacity building and resolving the conflicting in overall PSF management. Specific sites for rehabilitation-restoration activities (demonstration activities) will be in protection-conservation areas of industrial forest plantation company (HTI), oil palm plantation company and forest areas managed directly by provincial/district forest services in Sumatra. Most of remaining forest areas have been severely degraded or deforested and therefore could be used as demonstration activities.

Under current government regulation, certain areas from the convertible forest areas that are planted with species for industrial forest plantation (Hutan Tanaman Industry-HTI) and oil palm plantation areas must be maintained and protected as conservation purposes. In this area, the ecosystem must be maintained and the degraded one must be restored by planting local indigenous species. This will contribute to the improvement of local community prosperity by creating job opportunities and alternative source of income.

1.3.2. Social, culture, economic and environmental aspects

a) Social and culture aspects

Peat Swamp Forest (PSF) in Sumatra is located mostly in the eastern parts with functions as production, conservation and protection for other uses, such as settlement and traditional use in agriculture. Local community living in the PSF areas have utilized this PSF resources for living and other sources of income. Recently, PSF has been used intensively for agricultural activities primarily palm oil plantation, agricultural production and fisheries. The proposed project is also expected to contribute to income generation of local community through restoration and rehabilitation of degraded and deforested PSF.

b) Economic aspect

In general, PSF forest has been becoming an important sources of income. Since the agricultural techniques have been improved, the potential benefit to utilize PSF has been opened through plantation of several agricultural species. More economic opportunities is expected to be available from forest related activities, such as industrial forest plantation, rehabilitation and restoration activities, especially to local community.

c) Environmental aspect

PSF is a unique ecosystem comprising the excess of water, organic materials and vegetation. The destruction of this ecosystem has caused negative impactsonenvironmental quality. The traditional way of land clearing (slash and burn) has been becoming serious problems in PSF and pollutions has been becoming a regional issues during the dry season. Various efforts to permanently solve the haze problems have been identified and brought to various fora. Coordination and harmonized approach to resolve conflicting economic interest is expected to reduce the potential degradation and deforestation. Several activities will be carried out to improve the ecosystem and restore their function, which in turn will provide positive contribution to the Sumatra PSF. By reducing deforestation, forest degradation and conversion to other uses, this project will provide significant contribution to reducing emission from forest related restoration activities.

1.4. Expected outcomes at project completion

Intended situation after project completions is the improved management of peat swamp forest area, improved PSF ecosystem function and improved community living surrounding the PSF. Improved management of PSF is through awareness raising, capacity building, resolving the existing conflict across government authorities in peatland management. Improve PSF ecosystem is through the enhancement of conservation of remaining PSF and the restoration-rehabilitation of ecosystem.by planting indigenous species which are valuable for both environmental purposes and community living.

The improved management will be indicated by improved forest ecosystem function, improved community/stakeholder participation, and improved community prosperity. Concurrently, the improvement will contribute to the reduction of deforestation and degradation by maintaining a good forest condition and artificially restore the degraded one by various community based rehabilitation and restoration activities.Improved community participation in avoiding deforestation,

degradation and biodiversity is expected to be achieved through the development of scheme to prevent further deforestation and degradation and participation of community in ecosystem restoration. Alternative sources of income to improve community living from rehabilitation program are identified and enhanced. By the improvement of prosperity and the enhancement of law enforcement, the encroachment and illegal conversion of PSF will also be able to be minimized. The achievement will be indicated by continued reduction of PSF conversion and the increase of rehabilitation activities by planting local species. From this project, it is also expected that partnership approaches in the conservation of the PSF, in Sumatra, could be a useful lesson learnt to other areas on the reducing degraded areas through plantation of indigenous species.

Several deliverables derived from this project which provide benefits to environment, social and economic effect, include the following:

- Increase of restored and rehabilitated areas
- Potential for income generation activities realized from plantation of local species
- Improved family income in community directly involve in the demonstration activities
- Reduced deforestation in the project implementation areas
- Communities are trained and assisted in the development and implementation of rehabilitation-restoration technique
- Improved interaction among various stakeholders in the target areas

PART 2: PROJECT RATIONALE AND OBJECTIVES

2.1. Rationale

2.1.1 Institutional Set-up and Organizational Issues

Indonesia has the fourth largest PSF areas in the world with approximate area of over 20 million ha, which consists of various forest functions as production, conservation, protection and other uses. Recently, after rapid utilization of PSF areas along with economic booming, the problems related to its management raised and conflicting interests between authorities and stakeholders emerged and intensified. This PSF issues have also been linked with climate changes and its consequences. Forestry Research and Development Agency (FORDA), the agency under MoF has responsibility to provide updated scientific data and information on most aspects of the PSF, to develop necessary technologies and methods to protect, conserve the PSF and its biological diversity, also restoration and rehabilitation of the deforested and degraded areas. To achieve the objectives of the program and to disseminated the findings (including techniques and technologies), FORDA works collaboratively with other relevant research institutions, universities, NGO, and local stakeholders. FORDA has also its regional research center (RRC) to operationalize the research, the development, the dissemination and the application of developed techniques and technologies, including in the establishment of field plantation trials (demo plots) and their plantation expansion.

In the implementation of these project activities, FORDA also delegates its responsibilities to its Regional Research Centers (RRC), such as RRC South Sumatra, RRC Kuok (Riau) and RRC Pematang Siantar North Sumatra. In project implementation, FORDA will also work closely with DG of Forest Rehabilitation and Social Forestry, private and state companies and other relevant institutions. The overall project findings and outputs are disseminated and coordinated by FORDA to primarily uses.

2.1.2. Stakeholder analyses

The primary stakeholders in this proposed project are local communities, District & Provincial Government responsible in peatland management, especially those operate at local level, such as local government, provincial and district forest services other stakeholders private companies operating in peatland, universities, NGO and other community group. Each stakeholder involves and participates differently in the project operational activities in accordance with their responsibility in peatland management. Table 1 is the summary of their role, problem and characteristic to overall management of peatland, with specific for Sumatra as a study case.

Table 1. Stakeholders analyses

Institutions	Characteristic	Problem /needs/potential	Involvement
Primary Stakeholders			
Local communities	Highly dependent on natural resources (state forests as main sources of income)	Lack of knowledge and skill, lack of alternative sources of income	<u>Local communities directly involve as labors and plant growers in restoration and rehabilitation activities. Selected community members will participate in training workshops on seedling propagation, the application of technology in PSF demonstration activities. They will also receive special training in preventing potential emergence of haze pollution and fire fightings.</u>
Provincial and district forest services	Key element in the whole management of state forest in each respective area	Weak institutional capacity and limited resources and enforcement of rules	Involve in operational activities in the project, facilitate events related to the site management Provide necessary data and information required for project implementation. Facilitate monitoring activities. Initial involvement: provide data and information on the current issues related to management of forest resources in the areas
Secondary/Tertiary Stakeholder			
Ministry of Forestry	Key element in the whole management of state forest, including those are currently licenced to the companies	Weak coordination, human resource capacity, technology, law enforcement	Facilitate in the discussion, preparation and formulation of project proposal. Provide general guidelines for overall management. Take lead in the implementation and dissemination of project outcome Initial involvement: provide guideline for climate change mitigation and adaptation
FORDA/Executing Agency/DG of Forest Rehabilitation and social Forestry	Key element in the whole management of project	Limited coordination, resource, technology, accessibility	Facilitate discussion, preparation and formulation of project proposal. Take lead in the dissemination of project findings as lessons learned for other sites. Take lead in operational activities together with the management of companies

Universities / Research Institutions	Prominent institution in the development of technologies	Lack of facilitation, media, development / implementation of findings	Involve in the provision of scientific data and information regarding the species and community. Involve in the development and promotion of technology required for operational SFM activities in the area. Involve in the distribution of project findings and outcome. Initial involvement: provide data on research and implementation needs on climate change related program in the target areas
Local NGO (i.e an existing local NGO)	Play an important role in the community development, extension-mediation	Lack of facilities, access to the formal institutions, lack of resources	Involve in community development and income generating activities, continue and expand the existing initiatives

2.1.3. Problem analyses

Peat swamp forests (PSF), which composed of huge accumulative organic materials, excess of water and vegetation is one of the important forest ecosystems in Indonesia. This ecosystem plays very important role in many aspects including habitats of various living organisms and other hydrological role. The protection of PSF serves to conserve key biodiversity resources and other environmental goods and services that the ecosystem provide. The management of PSF needs to be understood in the context of the broader landscape. In the broader landscape, PSF is one of a mosaic of forest, agriculture and settlement zones whose interactions will determine how effective these natural resources serve for human being. The way these forested areas are utilized and regulated, by national, provincial and local governments and the local communities and industry around them, will be a critical factor for effective efforts on reducing deforestation and forest degradation, restoration and rehabilitation activities.

At current stage remaining forests in Sumatra are not managed sustainably. There are continued deforestation and forest degradation, conversion and forest fires, which will accumulate and intensify negative impacts to ecosystem. On the contrary, **the restoration and rehabilitation of the degraded and the deforested areas have not been significant, the progress of existing efforts is also very slow. There are three major causes of the problem as presented in Figure 2 are (1). lack of significant and effective resource allocation to promote restoration and rehabilitation of the existing degraded and deforested areaa, (2). Lack of incentive schemes to accelerate restoration and rehabilitation of PSF and (3). Insufficient or limited initiatives on restoration and rehabilitation activities at large scale.**

Lacking or insignificant resources allocation to promote restoration and rehabilitation activities may be caused by less accurate and updated database on the PSF resource. This causes poor planning strategies which in turn hamper field activities. Data on deforested areas and degraded forest resource to be restored may no longer valid. Awareness on the importance of restoration and rehabilitation of PSF is still also poor, not only at local community but also other stakeholders. Economic importance may be a major factor which drives the use of PSF to non-forest purposes. This economic issue has been becoming a driving force to the present conflict of roles and interest in managing PSF.

Lack of awareness to the importance of PSF ecosystem function make unclear plan to restore and rehabilitation of the deforested and degraded areas of most peat swamp forest in Indonesia.

Lack of incentive schemes to accelerate restoration and rehabilitation of PSF are also barrier in the restoration and rehabilitation of PSF. Peat swamp forest are mostly poor accessibility and slow growing and cause high cost for restoration and rehabilitation. Therefore incentive scheme should be significantly high and should be led by government (local and provincial). In addition, the suitable technology and method for restoration and rehabilitation have not been intensively developed and disseminated. This make stakeholders discourage to actively participate in this action, even though, the possibility for private companies to actively take part in this action is high using their CSR fund. Lessons from Selangor State Forest indicate that by intensive campaign and communication to private companies have resulted in better participation from those stakeholders.

Other cause of poor or insignificant restoration and rehabilitation activities is limited existing initiatives from various stakeholders. The causes come from insufficient and inconsistent supply of planting materials of promising species which have been tested suitable for PSF. Insufficient information regarding the value of the species and the importance of restoring the PSF to all stakeholders. Lacking consistent supports from government to encounter low survival rate in PSF plantation, especially in the maintenance and care. This is because extreme condition between wet and dry occurs in PSF a long the year and threat to wild fire is significantly high. Anticipating the low survival rate should be by providing sufficient and consistent provision of planting materials as also for establishing multi locations demo plot plantation.

Figure 2. Problem Tree

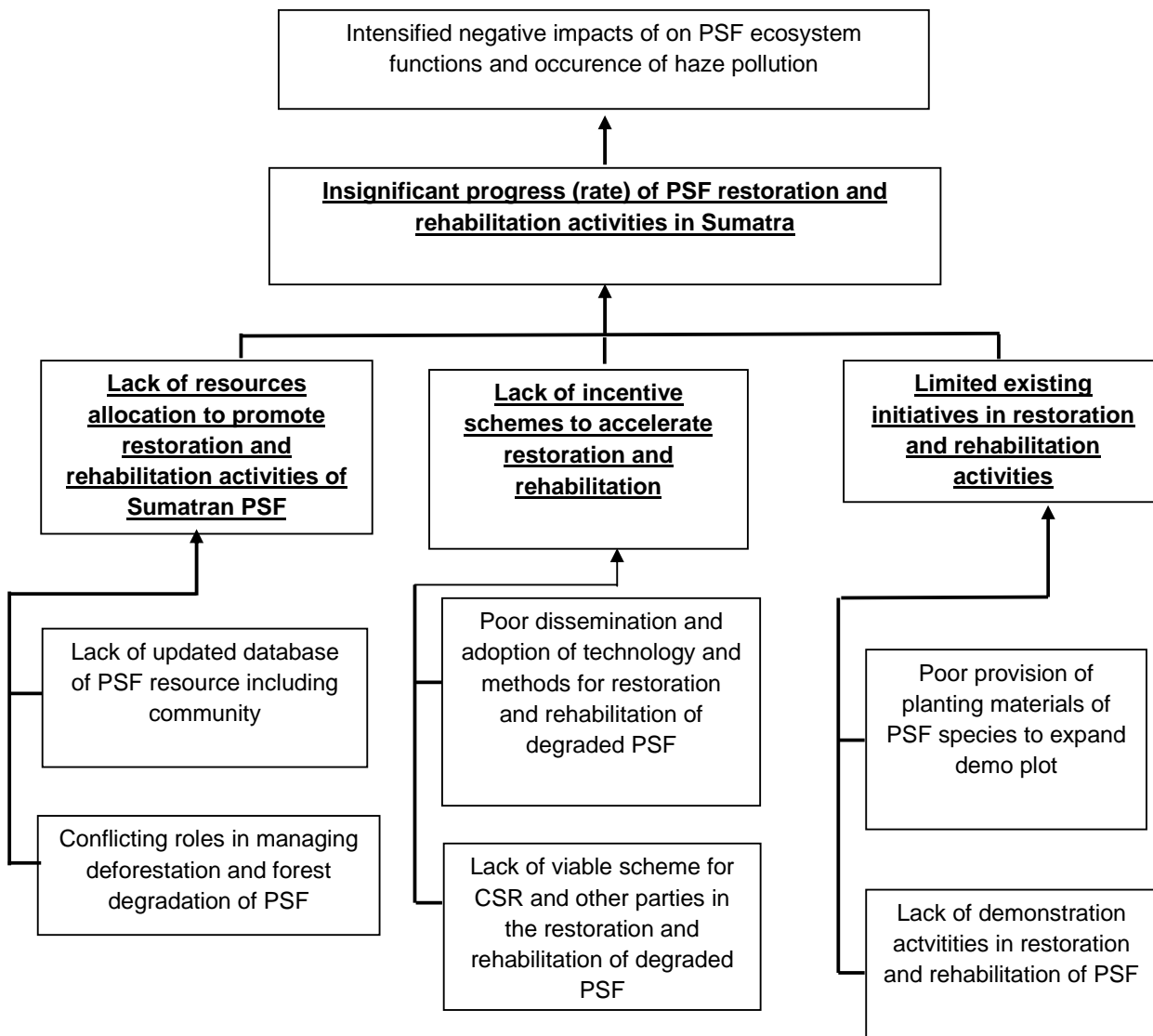
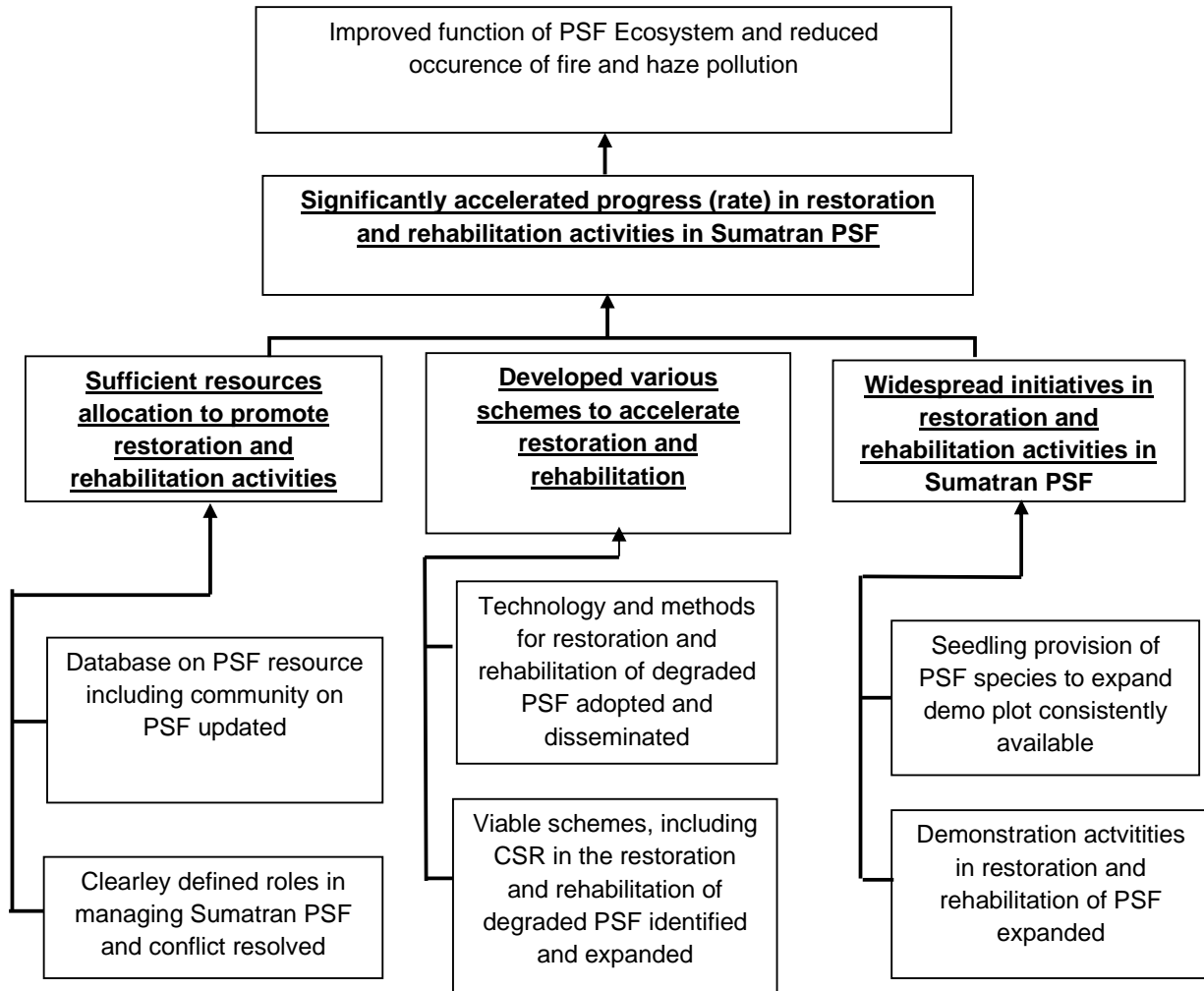


Figure 3. Objective Tree



2.1.4. Logical Framework

Project Elements	Indicators	Means of verification	Assumption
Development Objective: To contribute to the sustainable management and conservation of PSF in Sumatra through the enhancement of stakeholders roles and responsibilities and the expanded restoration and rehabilitation activities.	<ul style="list-style-type: none"> - Reduced rate of deforestation and forest degradation in Sumatra - Improved stakeholder awareness, coordination and communication across stakeholders - Increased restored and rehabilitated PSF areas - 2-3 restoration and rehabilitation sites initiated and expanded. 	MoF Report, Provincial/District Report	Consistent support from concerned authorities at local and central government
<u>Specific objective: To accelerate the progress (rate) on restoration and rehabilitation of Sumatran PSF through capacity building, wide application of technology, reconciled role and responsibility and consistent provision of large quantity of planting materials.</u>	<ul style="list-style-type: none"> - 40 forestry officers and relevant stakeholders involve in the training and capacity building. - 20 people from local community involve in each area of the demonstration activities. - 3 demonstration plots established - 20,000 planting materials for each species available 	<ul style="list-style-type: none"> - Project report - FORDA report - MoF Report 	Relevant parties provide support
<u>Output 1. Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided</u>	<ul style="list-style-type: none"> - 40 officers involved in the workshop and well trained - Updated data/ information on PSF resources including community 	<ul style="list-style-type: none"> - Technical reports of resource base - Workshop report 	Stakeholders are willing to participate
Output 2. Viable schemes to accelerate restoration and rehabilitation developed	<ul style="list-style-type: none"> - 2-3 technologies for restoration and rehabilitation listed and reviewed, - 1 technology adopted and disseminated - 20 local framers involved in the plantation 	<ul style="list-style-type: none"> - Report of disseminated and applied technologies - List of existing technologies - Consultation report 	Stakeholders are willing to participate
<u>Output 3. Widespread initiatives on restoration and rehabilitation activities promoted</u>	<ul style="list-style-type: none"> - Up to 3 nurseries for selected PSF species established in three different province. - 20,000 seedlings for each species produced and planted - 3 plantation sites in Riau, Jambi and South Sumatra identified and planted with PSF species 	<ul style="list-style-type: none"> -Plantation reports -Nursery reports 	Seeds are available for production of planting materials

2.2. Objectives

2.2.1. Development Objective and impact indicator

To contribute to the sustainable management and conservation of PSF in Sumatra through the enhancement of stakeholders roles and responsibilities and the expanded restoration and rehabilitation activities.

Impact indicators

- Reduced rate of deforestation and forest degradation of PSF the three provinces in Sumatra
- The improvement of stakeholder awareness, coordination and communication across stakeholders
- Increased restored and rehabilitated PSF areas in the province of Riau, Jambi and South Sumatra
- At least 2-3 restoration and rehabilitation sites initiated and expanded.

2.2.2. Specific objective and Outcome indicators

To accelerate the progress (rate) on restoration and rehabilitation of Sumatran PSF through capacity building, wide application of technology, reconciled role and responsibility and consistent provision of large quantity of planting materials.

Outcome indicators:

(1). Improved awareness, local capacity and coordination in the management of PSF ecosystem and services in three previous Sumatra (Riau, Jambi and South Sumatra). At least 40 forestry officers and relevant stakeholders involve in the workshop (capacity building). At least 20 people from local community involve in each area for the demonstration activities.

(2). Improved and widely applied technology for rehabilitation and restoration, including adopted methods of canal blocking.

(3). Improved vegetation cover in several degraded sites. At least 4 locations of demonstration activities established in Provincial/District forest services area including in industrial forest plantation areas, oil palm plantation areas and conservation areas. The basis for selection of the sites are accessibility, land security (clear and clean on the ownership status and boundary) and site suitability to the pre-identified and chosen species.

(4). Improved provision of planting materials of local-indigenous and valuable species. At least 20,000 seedlings (planting materials) for each species (4-5 pre-selected species) will be produced and used in the demonstration activities (or total of at least 40,000-50,000 seedlings).

(5). Enhanced restoration activities in degraded PSF at management unit level. More than 4 demonstration activities in each province. Three provinces will be initiated during the project period and it is expected this restoration activities will be followed by local community and other stakeholders for their income generation and other economic reason.

PART 3. DESCRIPTION OF PROJECT INTERVENTION

3.1. Outputs and Activities

3.1.1. Outputs

1. Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided

Enabling condition is pre-requisite to achieve sustainable management of PSF ecosystem. This condition is expected to be achieved through collection of information on community views on the management of PSF including potential drivers for conversion; awareness raising on the importance of PSF ecosystem and service not only for commercial purposes but also for environmental condition. This awareness raising covers the whole management aspects of PSF, including delivering clearly defined roles and responsibilities solve the conflicting interests.

2. Viable schemes to accelerate restoration and rehabilitation developed

Several restoration guideline and technology have been developed and tested by various research institution, universities and NGO. Wetland International, Indonesia Program and WWF have also developed rehabilitation and restoration of PSF ecosystem using water canal blocking to restore water table and promote re-vegetation. The existing examples remain exclusive and not widely disseminated and applied. In this proposed project, the identified technology and methods, will be widely applied, followed by dissemination and application in several degraded PSF, either in private companies, State forests and community properties. These will be conducted in conjunction with other related activities which will give benefit to community. Existing schemes which have been explored will be further examined and the most feasible one will be chosen.

3. Widespread initiatives on restoration and rehabilitation activities promoted

Continued and expanded areas for the establishment of demonstration activities using local-indigenous species. The provision of large quantity of planting materials will be promoted. Some local-indigenous species which are suitable for restoring PSF ecosystem and for improving livelihood (prosperity) of local community have been identified. Those species are *Dyera* species (Jelutong), *Shorea* species, *Alestonia* species, *Melaleuca* and other locally adapted species. The plantation of these species will give direct benefit to the community for production of gums (*Dyera* spp), pole and timbers for other species.

3.1.2. Activities

Output 1. Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided

Activity 1.1. Identify potential drivers to PSF conversion and haze pollution.

The objective of this activity is to review the existing and potential drivers at community level to convert PSF forest to other uses and the production of haze pollution. Preliminary discussion with local policy makers, collecting secondary data and information (questionnaire with its associated guideline), conducting presurvey to local communities, identifying community leaders and key players for forestry related activities, followed by focus group discussion (FGD). Area of Activity in Riau, Jambi and South Sumatra

Activity 1.2. Review policy on PSF management across Sumatra

Activity 1.3. Carry out stakeholders consultations (seminar workshop) on the solution to reduce conversion and potential haze pollution in Riau and Jambi

Results of Activity 1.1.1 will be delivered and discussed in this consultation (seminar-workshop), including the feasible solution such as developing framework for longterm solution for haze pollution. This include the review of existing policy at District Government and potential drivers for conversion of PSF.

Output 2. Viable schemes to accelerate restoration and rehabilitation developed

Activity 2.1. Identify applicable technology and viable scheme to widen the restoration activities (in Riau, Jambi and South Sumatra)*.

***Under this activity all existing information and technology on restoration and rehabilitation will be compiled and further synthesize for wider dissemination and application, including providing guidelines and manuals.**

Activity 2.2. To explore CSR* fund to support restoration activities.

Activity 2.3. Stakeholder consultation on the application of viable scheme and CSR fund on PSF restoration

*CSR is Corporate Social Responsibility which is under the law, the CSR also include to fund environmental services.

Output 3. Widespread initiatives on restoration and rehabilitation activities promoted.

Activity 3.1. Propagate planting materials of species, suitable to be used for rehabilitation restoration activities in three different location.

At least 20,000 nursery grown seedlings for each species of 4-5 pre-selected species (appr. 100,000 seedlings) will be produced and used for the establishment of demonstration activities. These species are proven potential to generate income (i.e. Jelutong and Meranti) and other conservation needs. Several nurseries have been identified and available to be used in Palembang, Jambi and Riau in collaboration with local government institutions.

Activity 3.2. Field rehabilitation-restoration activities in selected areas of Riau, Jambi and South Sumatra using the selected species grown under activity 1.3.1.

Field rehabilitation activities involving local communities will be executed in several representative areas and local community forestry activities, as described earlier, using the nursery grown seedlings. A large number of community members are expected to directly involve in plantation

activities. In this activity, facilitator from local NGO, may be invited to enhance and widen the influence of this activities to other areas.

3.2. Implementation approaches and methods

Ministry of Forestry has coordinated national initiatives on reducing deforestation and forest degradation of PSF by preparing regulatory framework, methodological aspects and capacity building as well as stakeholders' consultations on sustainable management of PSF. This proposed project is the elaboration of the implementation of the frameworks resulted from the various discussion including the issue of haze pollution across continent.

To achieve the objectives, the strategic approaches and methods will be taken:

1. A thorough review of the existing conditions of forest resources of Riau, Jambi and South Sumatra, relevant authorities in the management and other supporting organization.
2. Collect and analyze baseline data in selected areas including the existing efforts and schemes related to the enhancement of restoration and rehabilitation of PSF.
3. Conduct stakeholder consultations and participatory discussions with local communities and other relevant stakeholders.
4. Establish and revitalize methods to restoration-rehabilitation activities, especially those using locally adapted species.
5. Improve awareness raising and local capacity building including coordination to enable effective management of PSF and to resolve the conflict of interest in management of forest resources, by reviewing the existing condition, regulations and their implementations.
6. **Expand the community participation in restoration and rehabilitation as labors, farmers and plant growers in field rehabilitation activities. They are also involved as participants in training workshop on the application of technology and as plant and seedling growers in the establishment of demonstration activities.**
7. Establish demonstration activities by local community planting locally adapted species in selected sites of degraded PSF by provincial and district forest services, research institution and other community.
8. Support provision of planting materials for local-indigenous species which provide direct benefits to local community to improve living.
9. **Compile and synthesize existing information and technology on restoration and rehabilitation for wider dissemination and application, including providing guidelines and manuals.**

The project will mobilize relevant stakeholders and local community participation in the implementation of project activities through stakeholder consultation meetings, community gathering in the preparation of activities, direct involvement in field activities, such as protecting the land from wildfire, income generating activities, and other related field implementation of the project.

3.3. Workplan

Output and Activities	Responsible Party	Year 1				Year 2				Year 3				
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
<u>Output 1. Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided</u>														
Activity 1.1. Identify potential drivers to PSF conversion and haze pollution in Riau, Jambi and South Sumatra	Consulant	■	■											
Activity 1.2. Review policy on PSF management accross Sumatra	CCR-Bogor			■	■	■	■	■	■	■	■	■	■	■
Activity 1.3. Carry out stakeholders consultations on the solution to reduce conversion and potential haze pollution	RRC-Sumatra					■	■							
<u>Output 2. Viable schemes to accelerate restoration and rehabilitation developed</u>														
Activity 2.1. Identity applicable technology and viable scheme to widen the restoration activities (in Riau, Jambi and South Sumatra)	Consultant	■	■											
Activity 2.2. To explore CSR fund to support restoration activities	RRC-Sumatra			■	■									
Activity2.3. Stakeholders consultation on the applicationof viable schme and CSR fund on PSF restoration						■	■	■	■					
<u>Output 3. Widespread initiatives on restoration and rehabilitation activities promoted.</u>														
Activity 3.1. Propagate planting materials of species suitable to be used for rehabilitation-restoration activities in three different location	RRC-Riau RRC-South Sumatra	■	■	■	■	■	■	■	■					
Activity 3.2. Field rehabilitation-restoration activities in selected areas of Riau, Jambi and South Sumatra using the selected species grown under activity 3.1	RRC-Riau RRC-South Sumatra					■	■	■	■	■	■	■	■	■

3.4. Budget

3.4.1. Master budget Table

Outputs / Activities	Description	Budget Component	Quantity		Units	Unit Costs	Total cost (ITTO)	ITTO			Total cost (GOI)	GOI (Executing agency)		
			ITTO	GOI				Year 1	Year 2	Year 3		Year 1	Year 2	Year 3
Output 1.	Sufficient resources to promote restoration and rehabilitation of degraded and deforested PSF area provided													
A1.1.	Identify potential drivers to PSF conversion and haze pollution in Riau, Jambi and South Sumatra													
	1). MM National Expert	13	6	0	Person-month	2,000	12,000	12,000	-	-	-	-	-	-
	2). Technicians	14	6	0	Person-month	400	2,400	2,400	-	-	-	-	-	-
	3). Other labors	34	30	0	Person-day	20	600	600	-	-	-	-	-	-
	4). Return Tickets	331	30	0	Trip	175	5,250	5,250	-	-	-	-	-	-
	5). Local Transport	332	12	3	Trip	200	2,400	2,400	-	-	600	600	-	-
	6). DSA	31	120	0	Person-day	80	9,600	9,600	-	-	-	-	-	-
	7). Fuel and utilities	53	2	0	Package	1,000	2,000	2,000	-	-	-	-	-	-
	8). Consumable item	63	3	0	Package	1,000	3,000	3,000	-	-	-	-	-	-
	9). Miscellaneous	56	3	1	Package	1,000	3,000	3,000	-	-	1,000	1,000	-	-
	Sub Total activity 1.1.						40,250	40,250	0	0	1,600	1,600	0	0
A 1.2.	Review policy on PSF management across Sumatra													
	1). MM National Expert	13	6	0	Person-month	2,000	12,000	4,000	4,000	4000	-	-	-	-
	2). Technicians	14	6	0	Person-month	400	2,400	800	800	800	-	-	-	-
	3). Other labors	34	30	0	Person-day	20	600	200	200	200	-	-	-	-
	4). Return Tickets	331	30	0	Trip	175	5,250	1,750	1,750	1750	-	-	-	-

	5). Local Transport	332	12	3	Trip	200	2,400	800	800	800	600	200	200	200
	6). DSA	31	120	0	Person-day	80	9,600	3,200	3,200	3200	-	-	-	-
	7). Fuel and utilities	53	2	0	Package	1,000	2,000	700	700	600	-	-	-	-
	8) Consumable item	63	3	0	Package	1,000	3,000	1,000	1,000	1000	-	-	-	-
	9). Miscellaneous	56	3	1	Package	1,000	3,000	1,000	1,000	1000	1,000	350	350	300
	Sub Total activity 1.2.						40,250	13,450	13,450	13,350	1,600	550	550	500
A.1.3	Carry out stakeholders consultations on the solution to reduce conversion and potential haze pollution													
	1).Sub contract to Profesional Facilitator	21	5	0	Person-man	1,000	5,000	-	5,000	-	-	-	-	-
	2). Other labors	34	20	0	Person-day	10	200	-	200	-	-	-	-	-
	3). Return Tickets	331	40	0	Trip	175	7,000	-	7,000	-	-	-	-	-
	4). Local Transport	332	6	6	Trip	200	1,200	-	1,200	-	1,200	-	1,200	-
	5). DSA	31	80	0	Person-day	80	6,400	-	6,400	-	0	-	-	-
	6) Consumable item	56	2	0	Package	2,000	4,000	-	4,000	-	0	-	-	-
	7). Miscellaneous	63	1	1	Package	2,000	2,000	-	2,000	-	2,000	-	2,000	-
	Sub Total activity 1.3						25,800	-	25,800	-	3,200	0	3,200	0
	Sub Total Output 1.						106,300	53,700	39,250	13,350	6,400	2,150	3,750	500
Output 2.	<u>Viable schemes to accelerate restoration and rehabilitation developed</u>													
A 2.1.	Identity applicable technology and viable scheme to widen the restoration activities (in Riau, Jambi and South Sumatra)													
	1). MM National Expert	13	4	0	Person-month	1,000	4000	4,000	-	-	-	-	-	-
	2). MM Technician	14	4	1	Person-month	100	400	400	-	-	100	100	-	-
	3). Other labors	34	10	0	Person-day	10	100	100	-	-	-	-	-	-
	4). Return Tickets	331	12	0	Trip	175	2100	2,100	-	-	-	-	-	-

	5). Local Transport	332	6	2	Trip	200	1200	1,200	-	-	400	400	-	-
	6). DSA	31	60	0	Person-day	80	4800	4,800	-	-	-	-	-	-
	7) Consumable item	56	3	0	Package	1,500	4500	4,500	-	-	-	-	-	-
	8). Miscellaneous	63	1	1	Package	2,000	2000	2,000	-	-	2000	2,000	-	-
	Sub Total activity 2.1					19,100	19,100	0	0	2,500	2,500	0	0	0
A 2.2	To explore CSR fund to support restoration activities													
	1). MM National Expert	13	4	0	Person-month	1,000	4,000	4,000	-	-	-	-	-	-
	2). MM Technician	14	4	0	Person-month	100	400	400	-	-	-	-	-	-
	3). Other labors	34	20	0	Person-day	20	400	400	-	-	-	-	-	-
	4). Return Tickets	331	12	0	Trip	175	2,100	2,100	-	-	-	-	-	-
	5). Local Transport	332	6	5	Trip	200	1,200	1,200	-	-	1000	1,000	-	-
	6). DSA	31	60	0	Person-day	80	4,800	4,800	-	-	-	-	-	-
	7). Consumable items	56	3	0	Package	2,000	6,000	6,000	-	-	-	-	-	-
	8). Miscellaneous	63	2	1	Package	2,000	4,000	4,000	-	-	2000	2,000	-	-
	Sub Total activity 2.2.					22,900	22,900	-	-	3,000	3,000	0	0	0
A 2.3	Stakeholders consultation on the application of viable scheme and CSR fund on PSF restoration													
	1). Sub contract to Professional Facilitator	21	4	0	Person-man	1,000	4,000	-	4,000	-	-	-	-	-
	2). MM Technician	14	4	0	Person-man	100	400	-	400	-	-	-	-	-
	3). Other labors	34	20	0	Person-day	20	400	-	400	-	-	-	-	-
	4). Return Tickets	331	40	0	Trip	175	7,000	-	7,000	-	-	-	-	-
	5). Local Transport	332	4	0	Trip	200	800	-	800	-	-	-	-	-
	6). DSA	31	80	0	Person-day	80	6,400	-	6,400	-	-	-	-	-

	7). Consumable items	56	2	0	Package	1,000	2,000	-	2,000	-	0	-	-	-
	8). Miscellaneous	63	2	0	Package	1,000	2,000	-	2,000	-	0	-	-	-
	Sub Total activity 2.3.					23,000	0	23,000	0	0	0	0	0	0
	Sub Total Output 2.					65,000	42,000	23,000	0	5,500	5,500	0	0	
Output 3.	Widespread initiatives on restoration and rehabilitation activities promoted.													
A. 3.1.	Propagate planting materials of species suitable to be used for rehabilitation-restoration activities in three different location													
	1). MM National Expert	13	24	0	Person-month	0	0	0	0	-	0	-	0	-
	2). MM Technician	14	24	10	Person-month	400	9,600	4,800	4,800	-	4000	2000	2000	-
	3). Other labors	34	90	0	Person-day	20	1,800	900	900	-	0	0	0	-
	4). Return Tickets	331	30	0	Trip	175	5,250	2,625	2,625	-	0	0	0	-
	5). Local Transport	332	6	3	Trip	200	1,200	600	600	-	600	300	300	-
	6). DSA	31	60	0	Person-day	80	4,800	2,400	2,400	-	0	0	0	-
	7). Consumable items	56	3	0	Package	1,000	3,000	1,500	1,500	-	0	0	0	-
	8). Miscellaneous	64	3	10	Package	500	1,500	750	750	-	5000	2500	2500	-
	Sub Total activity 3.1.					27,150	13,575	13,575	0	9,600	4800	4800	0	
A. 3.2.	Field rehabilitation-restoration activities in selected areas of Riau, Jambi and South Sumatra using the selected species grown under activity 1.3.1													
	1). MM National Expert	13	24	0	Person-month	500	12,000	-	6,000	6,000	0	-	-	-
	2). Other labors	34	120	10	Person-day	20	2,400	-	1,200	1,200	200	-	100	100
	3). Return Tickets	331	30	0	Trip	175	5,250	-	2,625	2,625	0	-	0	0
	4). Local Transport	332	9	2	Trip	150	1,350	-	675	675	300	-	150	150
	5). DSA	31	90	0	Person-day	80	7,200	-	3,600	3,600	0	-	0	0
	6). Consumable items	56	9	0	Package	2,000	18,000	-	9,000	9,000	0	-	0	0
	7). Miscellaneous	64	6	12	Package	1,000	6,000	-	3,000	3,000	12000	-	6000	6000

Sub Total activity 3.2.						52,200	0	26,100	26,100	12500	0	6250	6250
Sub Total Output 3.						79,350	13,575	39,675	26,100	22,100	4800	11,050	6250
Non Activity based expenses													
1). MM Project Coordinator	11	36	0	Person-month	2,000	72,000	24,000	24,000	24,000	0	0	0	0
2). MM Project Secretary	121	36	0	Person-month	500	18,000	6,000	6,000	6,000	0	0	0	0
3). MM Project Assistance	122	36	12	Person-month	200	7,200	2,400	2,400	2,400	2400	800	800	800
4). International Travel	32	1	0	Trip	3,000	3,000	1,000	1,000	1,000	0	0	0	0
5). Return Tickets	331	15	0	Trip	175	2,625	875	875	875	0	0	0	0
6). Local Transport	332	6	25	Trip	200	1,200	400	400	400	5000	1700	1700	1600
7). DSA	31	30	0	Person-day	80	2,400	800	800	800	0	0	0	0
8). Consumable items	56	2	1	Year	1,000	2,000	700	700	600	1000	350	350	300
9). Raw Materials	51	2	1	Year	1,000	2,000	700	700	600	1000	350	350	300
10). Spares	52	2	1		1,000	2,000	700	700	600	1000	350	350	300
11). Fuel and utilities	53	2	1	Year	1,000	2,000	700	700	600	1000	350	350	300
12). Office Space	55	2	1	Year	500	1,000	350	350	300	500	200	200	100
13). Office supplies	54	2	1	Year	1,000	2,000	700	700	600	1000	350	350	300
14). Vehicles : car rent	41	9	1	Unit	500	4,500	1,500	1,500	1,500	500	200	200	100
15). Auditing	61	3	0		500	1,500	500	500	500	0	0	0	0
16). Coordinator meeting	62	3	1	Event	1,000	3,000	1,000	1,000	1,000	1000	350	350	300
17). Miscellaneous	63	3	12	Year	1,000	3,000	1,000	1,000	1,000	12000	4000	4000	4000
Sub total non activity based expenses						129,425	43,325	43,325	42,775	26,400	9000	9,000	8,400
TOTAL BUDGET						380,075	152,600	145,250	82,225	60,400	21,450	23,800	15,150

3.4.2. Consolidated budget by component

Category	Description	Total	Year 1	Year 2	Year 3
10	Project Personnel				
11	Project Coordinator	72,000	24,000	24,000	24,000
12	Projects staff:				
	121. Secretary	18,000	6,000	6,000	6,000
	122. Office Assistance	9,600	3,200	3,200	3,200
13	National Expert/Consultant	44,000	24,000	10,000	10,000
14	Technicians	19,700	10,900	8,000	800
15	Component Total	163,300	68,100	51,200	44,000
20	Sub Contract				
21	Sub contract for with Profesional Facilitator	9,000	-	9,000	-
22	Component Total	9,000	-	9,000	-
30	Duty Travel				
31	Daily Subsistence Allowance	56,000	25,600	22,800	7,600
32	International Travel	3,000	1,000	1,000	1,000
33	Transport Cost:				
	331. Return ticket	41,825	14,700	21,875	5,250
	332. Local transport	22,650	10,600	8,125	3,925
34	Other labors	6,700	2,200	3,000	1,500
35	Component Total	130,175	54,100	56,800	17,125
40	Capital Items				
41	Vehicles (rent car)	5,000	1,700	1,700	1,600
42	Component Total	5,000	1,700	1,700	1,600
50	Consumable Items				
51	Raw Materials	3,000	1050	1050	900
52	Spares	3,000	1050	1050	900
53	Fuel and utilities	7,000	3,750	1,750	1500
54	Office Supplies	3,000	1050	1050	900
55	Office space	1,500	550	550	400
56	Other Consumable items	46,500	17,050	18,550	10,900
57	Component Total	64,000	24,500	24,000	15,500
60	Miscellaneous				
61	Auditing	1,500	500	500	500
62	Coordinator meeting	4,000	1,350	1,350	1,300
63	Other miscellaneous	64,000	29,450	22,950	11,100
64	Component Total	69,000	31,300	24,800	12,900
	Sub Total	440,475			

70	Executing Agency Management Cost	4,000			
71	Component Total	4,000			
Sub Total					
		444,475			
80	Project monitoring and administration				
81	Monitoring and Review Costs	10,000			
82	Ex-post project evaluation	15,000			
83	Programme Support Costs (12%)	48,609			
84	Donor Monitoring costs	-			
89	Component Total	73,609			
90	Refund of Pre-Project Costs	0			
100	GRAND TOTAL	518,084			

3.4.3.ITTO Yearly budget

Category	Description	Total	Year 1	Year 2	Year 3
10	Project Personnel				
11	Project Coordinator	72,000	24,000	24,000	24,000
12	Projects staff:				
	121. Secretary	18,000	6,000	6,000	6,000
	122. Office Assistance	7,200	2,400	2,400	2,400
13	National Expert/Consultant	44,000	24,000	10,000	10,000
14	Technicians	15,600	8,800	6,000	800
15	Component Total	156,800	65,200	48,400	43,200
20	Sub Contract				
21	Sub contract for with Profesional Facilitator	9,000	-	9,000	-
22	Component Total	9,000	-	9,000	-
30	Duty Travel				
31	Daily Subsistence Allowance	56,000	25,600	22,800	7,600
32	International Travel	3,000	1,000	1,000	1,000
33	Transport Cost:				
	331. Returt ticket	41,825	14,700	21,875	5,250
	332. Local transport	12,950	6,600	4,475	1,875
34	Other labors	6,500	2,200	2,900	1,400
35	Component Total	120,275	50,100	53,050	17,125
40	Capital Items				
41	Vehicles (rent car)	4,500	1,500	1,500	1,500
42	Component Total	4,500	1,500	1,500	1,500
50	Consumable Items				
51	Raw Materials	2,000	700	700	600
52	Spares	2,000	700	700	600
53	Fuel and utilities	6,000	3,400	1,400	1200
54	Office Supplies	2,000	700	700	600
55	Office space	1,000	350	350	300
56	Other Consumable items	45,500	16,700	18,200	10,600
57	Component Total	58,500	23,350	22,850	12,300
60	Miscellaneous				
61	Auditing	1,500	500	500	500
62	Coordinator meeting	3,000	1,000	1,000	1,000
63	Other miscellaneous	26,500	11,750	9,750	5,000
64	Component Total	31,000	13,750	11,750	5,500

70	Executing Agency Management Cost				
71	Component Total				
	Sub Total	380,075			
80	Project monitoring and administration				
81	Monitoring and Review Costs	10,000			
82	Ex-post project evaluation	15,000			
83	Programme Support Costs (12%)	48,609			
84	Donor Monitoring costs	-			
89	Component Total	73,609			
90	Refund of Pre-Project Costs	0			
100	GRAND TOTAL	453,684			

3.4.4.Executing Agency Yearly budget (GOI in kind contribution)

Category	Description	Total	Year 1	Year 2	Year 3
10	Project Personnel				
11	Project Coordinator				
12	Projects staff:				
	121. Secretary				
	122. Office Assistance	2,400	800	800	800
13	National Expert/Consultant				
14	Technicians	4100	2100	2000	
15	Component Total	6,500	2,900	2,800	800
20	Sub Contract				
21	Sub contract for with Profesional Facilitator				
22	Component Total				
30	Duty Travel				
31	Daily Subsistence Allowance				
32	International Travel				
33	Transport Cost:				
	331. Returt ticket				
	332. Local transport	9,700	4,000	3,650	2,050
34	Other labors	200		100	100
35	Component Total	9,900	4,000	3,750	2,150
40	Capital Items				
41	Vehicles (rent car)	500	200	200	100
42	Component Total	500	200	200	100
50	Consumable Items				
51	Raw Materials	1,000	350	350	300
52	Spares	1,000	350	350	300
53	Fuel and utilities	1,000	350	350	300
54	Office Supplies	1,000	350	350	300
55	Office space	500	200	200	100
56	Other Consumable items	1,000	200	200	600
57	Component Total	5,500	1,800	1,800	1,900
60	Miscellaneous				
61	Auditing				
62	Coordinator meeting	1,000	350	350	300
63	Other miscellaneous	37,500	11,850	15,100	10550
64	Component Total	38,500	12,200	15,450	10,850

70	Executing Agency Management Cost	4,000			
71	Component Total	4,000			
80	Project monitoring and administration				
81	Monitoring and Review Costs	0			
82	Ex-post project evaluation	0			
83	Programme Support Costs	0			
84	Donor Monitoring costs	0			
89	Component Total	0			
90	Refund of Pre-Project Costs	0			
100	GRAND TOTAL	64,400			

3.5.Assumption, risk and sustainability

3.5.1. Assumption and risk

Sustainable management of PSF in Sumatra has been set as priority by the Ministry of Forestry, the provincial and District Government, primarily for the Provinces of Riau, Jambi and South Sumatra. However, a lot of barriers and problems remain present. The barriers are primary from the local goverment, community and field physical condition. Coordination and conflicting of interest are some of the issues, which may hamper the existing efforts. The activities under this project will be achieved if local government and other stakeholders are willing to participate and support the activities. **Unwilling to involve in the project implementation by relevant stakeholders and extreme field physical condition caused by uncertain climate change could be major potential risks and beyond project control. Lack of seeds for producing large number of planting materials is also another potential risk which hamper project achievement.**

Potential Risk	Mitigating measures
1. <u>Unwilling to involve in the project implementation by relevant stakeholders</u>	<u>Early information dissemination and hearing with the relevant stakeholders on the importance of the project</u>
2. <u>The occurence of extreme wet and dry condition on site of peat swamp forest.</u>	<u>Prepare alternative plan and technologies to anticipate the extreme condition and carefully set the anticipation</u> <u>Establish cooperation with local stakeholders (i.e fire fighters and canal blocking)</u>
3. <u>The unavailability of seeds to produce large number of planting materials of selected species.</u>	<u>Search and collect wildlings from all possible seed sources</u> <u>Cooperate with existing seedling growers in the production of planting materiaks.</u>

3.5.2.Sustainability After Project Completion

To ensure the sustainabilityafter project completion several approach will be taken.

- Early identification of partners and local community working in PSF for certain activities.
- Dissemination of project findings to key stakeholders.
- To establish more demonstration plots to convince the benefit of restoration and rehabilitation activities of PSF and planting economic valuable species.
- Provide more seedlings of high economic valuable PSF species for community
- Continue discussion and implementation of initiated CSR activities for restoration and rehabilitation led by Peat Forum and other local NGO

In addition, all demonstration activities carried out in this project will be maintained by Regional Research Center of South Sumatra, Riau and Agencies under provincial forestry services. Rehabilitation Centers under Directorate General of Rehabilitation and Social Forestry posses annual funding for the rehabilitation and restoration activities in each working areas, therefore the continuation of the project initiated activities could be part of their existing program. Regional

Research Centers will continue the development of technology, mechanism and expanding demonstration activities to wider areas. This Center will also establish cooperation with the Provincial Forest Services and private companies to restore the degraded habitats. The MOU between this Center and the private companies will be established prior to the implementation of concerned activities. At the initial stage, the most accessible sites/location will be chosen for the demo plots and rehabilitation sites to ease evaluation and monitoring.

PART 4. IMPLEMENTATION ARRANGEMENT

4.1. Organization structure and stakeholders involvement mechanism

4.1.1. Executing agency and partners

The Implementation Agency (IA) to execute this project is the Regional Research Center (RRC) of South Sumatra which is under Forestry Research and Development Agency (FORDA). The execution of activities, the IA will collaborate with Provincial Forest Service of Riau, Jambi and South Sumatra, Rehabilitation Centers of the three provinces, local R&D Centers and Center for Conservation and Rehabilitation (FORDA) Bogor and local private companies and NGO. Local universities may involve in some activities.

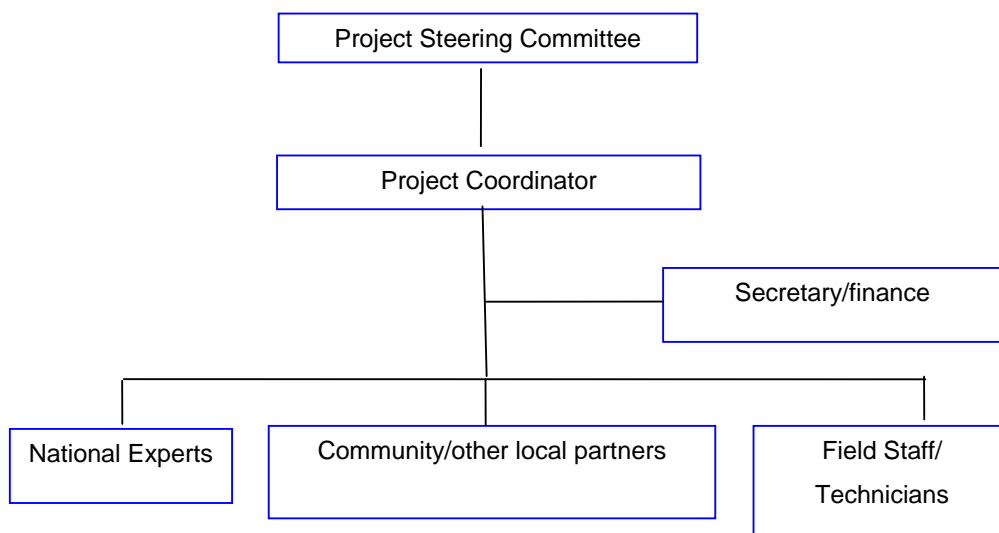
4.1.2. Project steering committee

The Executing Agency (Secretary of FORDA) will form a Project Steering Committee (PSC) which consists of representative of Donor, ITTO Secretariat, DG Rehabilitation and Social Forestry, Center for Conservation and Rehabilitation and Provincial Forest Service of Riau, Jambi and South Sumatra and representative of MoF Technical Cooperation Center. The PSC will function to review operational plan and endorse the proposed YPO; to assess the project progress report and financial matters; and to provide advice and direction to the problems that arise in the project implementation. The PSC also has the right to approve the program and the budgets.

4.1.3. Project management team

Operational activities of the project will be executed day by day by a project management team which consists of a Project Coordinator, Secretary/Finance, Project Staff and National Experts and partners as shown in the project organization structure

Figure 4. Management Structure



4.1.4. Stakeholders involvement mechanism

Relevant stakeholders in the project will be identified in accordance with the previous identification process of stakeholders analysis. All the project stakeholders will be invited in the project preparation, workshop and other meeting organized by the project. Each member of the PSC could also be the contact for the interested stakeholder wishing to involve in the project implementation.

4.2. Monitoring, Reporting, Review and Evaluation

Project Monitoring, Review and Evaluation will be scheduled in accordance with the *Second Edition of the ITTO Manual for Project Monitoring, Review and Evaluation*.

a). Arrangements for reporting

- a. Progress Reports: The Executing Agency will submit to ITTO a bi-annual Project Progress Report no later than 10 weeks before Council Sessions of each calendar year for the duration of the project implementation. Such progress report shall contain all the information relevant to the financing and implementation of the project as set out in the *ITTO Manual for Project Monitoring, Review and Evaluation*.
- b. Technical Reports: This shall be provided as appropriate during the project duration related to the technical activities of the project.
- c. Completion Reports: The Executing Agency will submit to ITTO the Project Completion Report, conforming to the model and content of the ITTO Manual for Project Monitoring, Review and Evaluation within three (3) months after Project Completion.

b). Monitoring, Review and Steering Committee's Visit

ITTO will conduct a monitoring visit in accordance with ITTO schedule. Monitoring/Review mission by ITTO may be conducted together with PSC meeting. Monitoring of the Project may also be conducted by the PSC through its biannual meeting. Whether or not the monitoring and review will be executed, will be decided by ITTO Secretariat.

c). Evaluation

Project evaluation will follow ITTO Manual for project monitoring, review and evaluation. Mid-term evaluation (if any) and Ex-Post Evaluation will be conducted by ITTO Secretariat.

4.3. Dissemination and mainstreaming of Project Learning

4.3.1. Dissemination of project learning

Project result (findings) will be disseminated through various means and existing media at the implementation stage and after project period.

Drivers of PSF conversion

The findings regarding the drivers of PSF conversion will be disseminated through workshop, community awareness and other community approach. Formal policy briefs may be further submitted to relevant authorities.

The Application of Technology

Adopted and feasible technology on rehabilitation and restoration activities will be delivered through technical report and other brochures provided by the project and by EA. FORDA as Executing Agency will formally organize specific event to deliver the findings through regular R&D Expose

Demonstration Activities

Wide application of restoration and rehabilitation technologies through demonstration activities will be delivered and coordinated by the office of Provincial & District Forest Service. The role of local private companies through their CSR fund will be further exposed through media Media to reach wider communities in each areas.

Coordination and conflicting interest

Discussion and formulation on the resolving conflicting issues of PSF management will be further handed over to concerned institution, such as Ministry of Forestry, ministry of Agriculture, Provincial Government and Private companies.

4.3.2. Mainstreaming of project learning

The key findings and result produced by the project are expected to provide significant impact to the sustainable management of PSF in Sumatra. Some other key findings are expanded restoration/rehabilitation activities, the tested rehabilitation/restoration technologies and Technical guideline for restoration & rehabilitation activities in PSF in Sumatra as well as participation of companies CSR.

The demonstration activities are expected to be further carried out by key stakeholders such as rehabilitation centers and Provincial Forest Service in each province as one of their duty in managing forest resources. Other findings and results will be disseminated through various events and formally handed over to partners. FORDA as Executing Agency will carry over all the project findings and outputs to ensure the use, such as holding a workshop to formulate the policy in preventing the events of haze pollution.

ANNEX 1: PROFILE OF THE EXECUTING/IMPLEMENTING AGENCIES

Regional research Center (RRC), Forestry Research and Development Agency (FORDA), a subsidiary body of the Ministry of Forestry will be conducting the project as Executing Agency. FORDA is the holder of scientific authority on forestry, and therefore responsible for the availability of scientific information and technologies to be used for the basis for decision making as well as for practical uses.

Some of RRC/FORDA missions are:

- To conduct research and development to secure forest resource base
- To provide scientific basis for developing techniques and guidelines to secure and to promote recovery of habitat and ecosystem function as a whole including conservation of whole forest.
- To provide information, data and assessment for policy making

FORDA is supported by 4 (four) Research and Development Centres located in Bogor which will directly and indirectly involve in the execution of the proposed project. Those centres are:

- Centre for Conservation and Rehabilitation R&D
- Centre for Forest Product Technology Research and Development
- Centre for Institutional capacity building, Social and Economic Research and Development
- Centre for Forest Plantation Research and Development

In addition to those Centres, there are 15 (fifteen) research institutions in the regions, distributed throughout the archipelago. FORDA employs more than 500 scientists of various disciplines. More than 50 scientists are PhDs, and over half of the total holds Master degree. In terms of facilities, FORDA has various laboratories and many field research sites and station all over Indonesia.

FORDA's research activities encompass all forestry aspects from basic botany and ecology to marketing and policy analysis. Those activities are derived from FORDA's programs articulated in a long-term Strategic Plan. Research activities are distributed accordingly to the four Centers under the FORDA and its Regional Research Institutions.

FORDA's facilities are libraries, laboratories, herbarium collection, office building and experimental forests. FORDA receives annual budget up to Rp. 80 000 000 000 (eighty billion rupiahs) equivalent to US\$ 8 000 000 (eight million US Dollars) distributed to all over the Centers and Regional Research Centers. FORDA has long experience in managing collaborative works between local and international institutions, such as JICA, DFID, European Union, ACIAR, WB, GTZ.

ANNEX 2. TASK AND RESPONSIBILITIES OF KEY STAFFS

Names and position in the Project

1. Bastoni Brata

- Current position : Researcher on silviculture/forest soil
- Position & role in the project : Project Coordinator
- Educational background : B.Sc in Soil Science (1992)
M.Sc in Environmental Science (2013)
- Job Experience : Senior Researcher on ITTO Project (2007-2010)
ITTO Project Coordinator (2010-2013)

2. Adi Kunarso

- Current position : Researcher on Forest Conservation
- Position -role in the project : Project Secretary/ National Expert Act
- Educational background : B.Sc in Forestry (2002)
M.Sc in Water Science Engineering (2012)
- Job Experience : GIS Specialist in Kurnia Silva Consultindo, PT
(2002 – 2003)
Researcher on ITTO Project (2012 -2013)

3. Tajudin Edy Komar

- Current position : Researcher on silviculture/ecology
- Position -role in the project : Supervisor in Formulation/National Expert Act. 1.2
- Educational background : B.Sc in Forestry (1984)
M.Sc in Forest Biology (1997)
- Job Experience : JICA Counterpart (1998-2001)
ITTO-CIFOR Consultant (2003-2004)
ITTO Project Coordinator (2007-2010)

4. Amelia Nani Siregar

- Current position : Instructor/Extension officer on community/Farmers community in School of Agricultural Extension
- Position - role in the project : Senior Expert for Activity 1.1
- Educational background : B.Sc in Agronomy (1987)
M.Sc in Agriculture, social Economy (2006)
- Job experience :
 - World Bank Project on manpower planning in agriculture (1988-2000)
 - Poverty identification and alternative solution (Ministry of Agriculture, Center for Social Economic Studies) (1995-1998)
 - Developing model for extension in fisherman community (2007)
 - Extension officer at School of Agriculture extension (until now)

ANNEX 3. TERM OF REFERENCES OF PERSONNEL AND CONSULTANTS FUNDED BY ITTO

1. Term of references for Project Coordinator

Project Coordinator (PC) will run the project and coordinate the operational activities.

Responsibilities: PC will be responsible for the day to day management of the project. PC will be responsible for coordinating and supervising all activities and ensuring that the overall objectives are achieved. PC will work closely with all parties and personnel involved in the project, integrating all activities of the project, managing and responsible for the fund applied to the project and for the preparation of all reports.

Qualification, duration of contract and payment:

- Postgraduate degree in forestry science (expertise in forest ecology, conservation, or silviculture is preferable)
- Possess good English, both oral and written
- Has Good understanding and broad knowledge on issues on peat swamp forest, rehabilitation, restoration using selected species.
- PC will be hired for duration of contract of 36 months
- The rate of payment starts from US\$ 1,500 per month depending on qualification and experience

2. Term of references for Project secretary/finance

Secretary will be hired to assist the PC, particularly in administrative issues and dissemination of project results.

Responsibilities: Secretary will be responsible in handling administrative issue, financial issue, reporting, publication, and dissemination of project results. He or she will work closely to all parties and personnel involved in the project, particularly with PC and experts. Secretary will report to PC.

Qualification, duration of contract and payment:

- Graduate degree from any discipline with minimum 5 years of working experience is preferable
- Possess good English, both oral and written
- Familiar and have good knowledge on IT is preferable
- Having good understanding and broad knowledge of conservation, environment, and rural community issues is preferable
- Having experience in organizing training/workshop and dissemination practices is preferable
- Outgoing, friendly and willing to work full time for the project is preferable
- Duration of contract is 36 months with annual evaluation of his/her working performance. The extension of contract will be determined based on this annual evaluation.
- The rate of payment is US\$ 500 per month

3. Term of references for National Expert (s)/Consultant (s)

National expert/consultants will be assigned in selected activities. The expert (s) must hold expertise and knowledge in related field.

Responsibilities: the expert will responsible to search and collect all required data and information to develop diagnostic reports which will help the project to properly design the best approaches in achieving all outputs and outcomes in related activities. Expert will prepare one or more technical report related with the assigned activity. These reports and other database must be presented in the meetings held by the projects.

Qualification, duration of contract and payment:

- Postgraduate degree and has expertise in related field (Forest ecology, silviculture, forest management, etc.). Consultant/National Expert for Activity 1.1 requires sufficient experience in community development and field social and cultural studies on farmer community.
- Possess good English, oral and written.
- Broad knowledge on current situation of the selected species
- The project expert (s) or Consultant (s) will be hired for duration of contract for each activity.
- The rate of payment starts from US\$ 2,000 per month depending on qualification

ANNEX 4. RECOMMENDATION OF THE 48TH EXPERT PANEL AND THE RESPECTIVE MODIFICATIONS

No	Recommendations	Modification	Page
1	Further improve the stakeholder analyses by elaborating strategies involving local communities in project implementation such as restoration activities and training programmes.	Improvement has been made in Table 1 by providing more detail involvement of local communities.	Table 1, page 7
2	Further improve the problem analyses by refining the key problem to be addressed by the project. The current description of the key problem appears to be vague and not focused. The Panel noted that the key problem would be related to the fact that the restoration of degraded PSF in South Sumatra has been slow and not sustainably managed, Refine the causes and the sub-causes of the key problem and explain how addressing the causes will lead to eradication of the key problem.	The key problem has been refined in the description, in the problem tree and objective tree (See Figure 2 and 3)	Section 2.1.3., page 8-9
3	Based on the refined problem analyses, refine the problem tree and the objective tree accordingly. The key problem should be translated as the specific objective of the project.	The key problem has been refined in the description and in the problem tree and objective tree in accordance with the the key problem description (See Figure 2 and 3)	Page 10 and page 11.
4	Further improve Section 3.2 (Implementation approach and methods) by specifying the expanded participation of local communities in restoration and rehabilitation, training workshop and the establishment of demonstration activities.	Section 3.2 has been improved by adding some specific types of participation of local communities in the project implementation, training and the establishment of demonstration activities. See also in Table 1. Stakeholder analyses	Page 16
5	Further Improve Section 3.5.1 (assumption and risks) by fully describing the specific risks beyond the control of project management in line with the assumption of the logical framework matrix, The risk mitigation measures should be further detailed to ensure the achievement of the objectives and outputs.	Section 3.5.1 has been improved by adding one more potential risk of the project as in accordance with logical framework “unwillingness of relevant stakeholders to participate in the project implementation” and more detail description of another risk on the unavailability of planting materials during the project period.	Page 29
6	Strengthen the PSF restoration knowledge management strategy by	The strategy has been strengthened through the additional activity under	Page 15

	elaborating activities to synthesize the existing lessons and widely disseminated such lessons.	the Activitiy 1.2. Review policy on PSF management accross Sumatra
7	Revise the project budget in the following ways: a) Scaledown the ITTO budget while increasing the counter part's contribution so as to enhance the projects' sustainability in the long term. b) Restructure the project budget in order to provide a more equitable balance of project personnel cost and other items, d). Include the amount of US\$10,000 for ITTO Monitoring and Review Cost as budget item 81 and the amount of US\$15,000 for ITTO Ex-Post Evaluation Cost as budget item 82.	The ITTO budget has been scaled down and the counter part's contribution (GOI) has been increased accordingly as shown in the Budget Tables. Allocated budgets for personnels has been redistributed to other budget items. ITTO Monitoring and Review costs and Ex-Post Evaluation costs have been added to the total project budget.	See Project Summary, Project Brief and Budget Tables in page 18-28.
8	Include an Annex that shows the recommendation of the 48 th Expert Panel.		