REPORT OF THE JOINT MID-TERM REVIEW ON

THE INTEGRATED MANGROVE REHABILITATION AND MANAGEMENT PROJECT THROUGH COMMUNITY PARTICIPATION IN THE AYEYAWADY DELTA

3 March 2011

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1. Introduction

1.1 Objectives of the Review

The review activities were performed with the following objectives:

- (1) To verify the accomplishments of the Project compared to those planned;
- (2) To identify obstacles and/or facilitating factors that have affected the implementation process;
- (3) To analyze the Project in terms of the five evaluation criteria (i.e. Relevance, Effectiveness, Efficiency, Impact, and Sustainability); and
- (4) To make recommendations on the Project implementation regarding the measures to be taken for the remaining period as well as the post-project period.

1.2 Members of the Joint Review Team

(1) The Japanese Team

Title	Name	Position
Team Leader	Shuichi IKEDA	Deputy Director General
		Forestry and Nature Group,
		Global Environment Department,
		Japan International Cooperation Agency
Mangrove Forest	Hiroyuki HATORI	Senior Advisor (Forest Environment)
Management		Japan International Cooperation Agency
Forest	Kunio SHIMIZU	Policy Coordinator
Administration		National Forest Department, Forestry Agency Ministry of Agriculture, Forestry and Fisheries
Cooperation	Naomi MATSUE	Associate Expert
Planning		Forestry and Nature Conservation Division 1,
		Global Environment Department,
***************************************		Japan International Cooperation Agency
Evaluation Analysis	Yasuyo HIROUCHI	Permanent Expert
		International Development Associates Ltd.

(2) The Myanmar Team

Title	Name	Position
Team Leader	U Zaw Win (4)	Director
		Planning and Statistics Division,
		Forest Department, Ministry of Forestry
Mangrove Forest	U Win Myint	Assistant Director
1		Forest Research Institute,
Management		Forest Department, Ministry of Forestry
Community	U Hla Wai	Deputy Regional Manager (Ayeyawady Region)
Daniel		Myanmar Agricultural Service,
Development		Ministry of Agriculture and Irrigation
Forest	U Min Maw	Assistant Director
A 1		Planning and Statistic Division,
Administration		Forest Department, Ministry of Forestry
Cooperation	U Khin Maung Htay	Deputy Director
1		Foreign Economic Relations Department, Ministry
Planning		of National Planning and Economic Development

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1.3 Schedule of the Review

The review of the Project was conducted from 7 February to 3 March 2011. The Joint Review Team (hereinafter referred to as "the Team") collected the information through questionnaires and a series of interviews with Myanmar Project Personnel and Japanese experts. The Team also conducted a field observation in the Ayeyawady Delta for four days. Based on the results of the review, the Team prepared a draft report and finalized it through a series of discussions from 28 February to 3 March 2011.

2. Outline of the Project

2.1 Background of the Project

In Myanmar the Ayeyawady Delta is one of seriously deforested areas, where decades of unchecked expansion of agricultural land, unsustainable forest use, and more recently, harmful methods for aquaculture have severely damaged the remaining mangrove forests in the region. The loss of the forest has most affected local residents using mangroves as fuelwood. Farmers growing traditional paddy varieties in the brackish water areas have suffered from salinity and bank erosion from lack of protection from the mangroves in the riverbanks. Fishermen have also suffered from smaller catches in the degraded mangrove environment, where the loss of tree cover has destroyed the wetland fish-breeding habitat.

In view of the significance of managing the forest resources in the Ayeyawady Delta, during the period of 2002 to 2005, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a team of experts to conduct the Study on Integrated Mangrove Management through Community Participation in the Ayeyawady Delta. The results of the Study have contributed to formulating a master plan, "the Integrated Mangrove Management Plan (2005-2044) (hereinafter referred to as "IMMP") which aims to support sustainable coexistence of mangrove forests and communities in the Kyakankwinpawk, Pyinalan, Kadonkani and Pyindaye Reserved Forests. It has been approved by the Government of Myanmar (hereinafter referred to as "GOM").

In order to initiate the implementation of the IMMP Phase I, a technical cooperation was requested by GOM to JICA in May 2005. A Preparatory Study was conducted by JICA in December 2005 and GOM and JICA signed the Record of Discussions (R/D) for a project in September 2006, and it was scheduled to implement from December 2006 to March 2012.

In May 2008, however, Cyclone Nargis hit the Ayeyawady Delta and caused crucial damage in the project area, including mangrove forests, local residents and infrastructure. Due to this natural disaster, the project was interrupted for 8 months (until December 2008). In January 2009, Japanese experts and Myanmar counterparts reviewed a project schedule at the meeting of Joint

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Coordinating Committee (hereinafter referred to as "JCC") and decided to add the perspective of disaster prevention in the project and revise the Project Design Matrix (PDM). As a result, the project period has been extended until March 2013.

2.2 Summary of the Project

(1) The Project Purpose

The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities are implemented within the Ayeyawady Delta.

(2) The Overall Goal

The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta.

(3) The Outputs

- 1) Output 1: The selected communities practice environmentally and economically sustainable community forestry (CF).
- 2) Output2: The management and the support system of the Forest Department for CF is effective.
- Output 3: Some silvicultural techniques for the rehabilitation of the degraded and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.
- 4) Output 4: A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.

3. Review of the latest PDM and PO

For evaluation of a technical cooperation of JICA, Project Design Matrix (hereinafter referred to as "PDM") and Plan of Operations (hereinafter referred to as "PO") are used as essential documents. Prior to the start of the evaluation, the Team reviewed the current PDM (PDM1 (draft)) and PO (PO1) approved in January 2009, and agreed to prepare a PDM for evaluation (PDME) (Annex 1) and PO for evaluation (POE) (Annex 2) as a basis of the evaluation. The PDME as well as POE was prepared by the Team through consultation with Myanmar project personnel and Japanese Experts.

4. Methodology of Review

4.1 Data Collection Method

The Team made interviews with the Myanmar Project Personnel and the Japanese experts engaged in the Project. The Team also collected information through questionnaires from the concerned personnel. The team also conducted field survey from 22 to 25 February 2011.

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4.2 Items of Analyses

(1) Accomplishment of the Project

The accomplishment of the Project was measured in terms of the Inputs, the Outputs and the Project Purpose in comparison with the Objectively Verifiable Indicators of PDM as well as the plan delineated in the R/D.

(2) Implementation Process

The implementation process of the Project was reviewed to see if the activities have been implemented according to the schedule delineated in the latest PO, and to see if the Project has been managed properly as well as to identify obstacles and/or facilitating factors that have affected the implementation process.

(3) Evaluation based on the Five Evaluation Criteria

- (a) Relevance: Relevance of the Project was reviewed to see the validity of the Project Purpose and the Overall Goal in connection with the needs of the beneficiaries and policies of Myanmar and Japan.
- (b) Effectiveness: Effectiveness was analyzed by evaluating the extent to which the Project has achieved and contributed to the beneficiaries.
- (c) Efficiency: Efficiency of the Project implementation was analyzed focusing on the relationship between the Outputs and Inputs in terms of timing, quality, and quantity.
- (d) Impacts: Impacts of the Project were forecasted by referring to positive and negative impacts caused by the Project.
- (e) Sustainability: Sustainability of the Project was analyzed in institutional, financial and technical aspects by examining the extent to which the achievement of the Project would be sustained and/or expanded after the Project is completed.

5. Summary of Accomplishment and Implementation Process of the Project

5.1 Accomplishment of the Project (Details are described in Annex 3)

(1) Inputs (Details are described in section (1) of Annex 3)
Summary of Inputs is shown in the tables below.

Table 1: Summary of Myanmar Inputs

Allocation of	Management personnel:9 persons	Running Expenses:	US\$ 97,016
project personnel:	Technical personnel:27persons	(as of Mach 2011)	(excluding salary)

Table 2: Summary of Japanese Inputs

Dispatch of Experts:	10 persons in total (92 M/M)	Provision of Equipment:	21,277,000 Yen
(as of Sep 2010)	10 persons in total (22 linivi)	(as of Sep 2010)	
Project personnel	8 persons in total	Local Activity Cost:	138,127,195 Yen
Trained in Japan	o persons in total	(as of Sep. 2010)	(equivalent to US\$ 1.534.747)





- (2) Outputs (Details are described in section (2) of Annex 3)
 - 1) Output X: Damage and recovery surveys on the local communities have been conducted as planned, results of which have already been compiled. A hazard map was developed in March 2009 based on the satellite images and its copies have been distributed to the local communities and the relevant government agencies. Four Centers for CF Extension and Nursery (CFCEN) in four target Reserved Forests, which had been destroyed by the Cyclone Nargis, have already been reconstructed with reinforced structure for cyclone proof. Materials and equipment necessary for disaster recovery or prevention works have been provided to the FD and MAS based on the needs. Damage and recovery surveys on mangrove forests have been conducted, results of which are expected to be compiled by December 2011.

Output X is likely to be achieved by December 2011.

- 2) Output 1: So far, a total of 690 acres has been rehabilitated by the CFUSGs supported by the Project. Meanwhile, the possibility for all the active CFUSGs to gain profits from income generation activities supported by the Project is yet to be confirmed.
 - Output 1 has been partly achieved but is not likely to be fully achieved by the Project end because of the following reasons: (i) the actual number of CFUSGs to be organized/reorganized through the Project as well as an average area to be rehabilitated by each of the CFUSGs would be less than the assumptions, based on which the planned value of the Indicator was calculated: and (ii) current income generation support is not well integrated in the CF.
- 3) Output 2: The achievement level of Output 2 is unknown because of the following reasons: (i) the data for the Indicators is not available due to insufficient monitoring by the Project: and (ii) the Indicators are not relevant for Output 2. Judging from the progress of the activities, achievement of Output 2 is presumed to be less than expected due to the adverse effects posed by the Cyclone Nargis in May 2008.
- 4) Output 3: As planned, monitoring reports on AR on the silviculture techniques have been

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After the Cyclone Nargis, a total of 11 CFUSGs have been organized/re-organized: eight were newly organized through the Project while the other three were the pre-existing ones that had been initially organized prior to the Project. The CF Management Plans for newly organized 8 CFUSGs were prepared in 2009 and 2010. On the other hand, the CF Management Plans of the 3 pre-existing CFUSGs, which were prepared and certified 7~15 years ago, have not been updated yet though the natural and socio-economic conditions have been changed due to the damage caused by the Cyclone Nargis. All the 8 CF Management Plans, prepared through the Project, have been submitted to the District Forest Office for review and certification. None of them, however, has been certified yet because the District Forest Office opts for monitoring and confirming the participation & performance of the CFUSGs before issuing the CF certificates, considering poor performance of other CFUSGs in the Target Area in the past.

produced on periodic basis. A technical report, compiling the monitoring results, is expected to be produced by the Project end. Development of a draft technical guidelines is ongoing, which are expected be finalized by December 2012.

Output 3 has been partly achieved and is likely to be fully achieved by the Project end.

5) Output 4: An official and permanent_inter-agency committee could not be formulated yet. As planned, land use information of the Target Area has been updated based on the satellite images. The updated information has not been discussed by the committee as originally envisaged; but has been shared with the relevant agencies through posters, newsletters. etc. As planned, seminars have been organized annually.

Output 4 has been partly achieved but is not likely to be fully achieved by the Project end because formation of an official and permanent inter-agency committee is considered to be very difficult.

(3) Project Purpose (Details are described in section (2) of Annex 3)

The achievement level of the Project Purpose and its likelihood of the achievement by the Project end could not be assessed due to unavailability of the relevant data. For reference, a total of 1,816 acres has been rehabilitated through CF and AR plantations.

5.2 Implementation Process (Details are described in Annex 4)

6. Summary of Evaluation based on the Five Evaluation Criteria

6.1 Relevance

The Overall Goal is still relevant with the needs of Myanmar. The Project Purpose is consistent with the organizational needs of the FD. It is relevant with the needs of local communities in the Project Area because their livelihood depends either directly or indirectly on the mangrove forests. The Overall Goal and the Project Purpose are relevant with the National Development Plan of Myanmar as well as Official Development Assistance (ODA) policies of Japan. Technical advantage of Japan is confirmed.

Overall, the Project is considered to be still relevant. (Details are described in Section 1 of Annex 5)

6.2 Effectiveness (Prospect)

Progress has been made towards achievement of the Project Purpose but the exact degree of achievement cannot be assessed because of unavailability of the relevant data and lack of



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realistic planned value for the Indicators. Judging from the overall achievement level of the Outputs, achievement level of the Project Purpose is presumed to be lower than expected due to adverse effects posed by the external condition beyond the control of the Project (i.e. Cyclone Nargis). Since the exact level of overall achievement of the Outputs is not clear because of unavailability of the relevant data and lack of realistic planned value for some of the Indicators, the degree of delay in achieving the Project Purpose cannot be presumed. Meanwhile, all of the Outputs, although their level of achievement varies, have contributed to the achievement of the Project Purpose. If the Outputs had been achieved as planned without being affected by the Cyclone Nargis, the achievement level of the Project Purpose would have been as planned.

The prospect of the effectiveness is not clear at the moment. (Details are described in Section 2 of Annex 5)

6.3 Efficiency

In general, the Inputs from the both Myanmar and Japanese sides have been appropriate in producing the Outputs in terms of timing, quality and quantity. Production level of some of the Outputs is less than expected, however, due to adverse effects posed by the external condition that was beyond the control of the Project (i.e. Cyclone Nargis). It is noted that, through the efforts of the Project staff as well as the support provided by the Japanese Experts, the negative impacts on production of the Outputs have been alleviated to a certain extent.

On the whole, the efficiency of the Project has not been sufficient because of the adverse effects posed by the external condition. (Details are described in Section 3 of Annex 5)

6.4 Impacts

It is still early to assess the likelihood of achievement of the Overall Goal. Meanwhile, some positive impacts have been observed already, including application of the techniques acquired through training in Japan, technical exchange programs in Vietnam and Thailand, Action Research activities, etc. in the plantation activities of the FD; creation of temporary employment for local villagers in rehabilitation of CFCENs and establishment of AR plantation; and provision of shelter to local villagers from a high tide, which hit Pyindaye Reserved Forest in Pyarpon in 2010, by the nearest CFCEN. Negative impacts have not been observed. They are not foreseen, either. (Details are described in Section 4 of Annex 5)

6.5 Sustainability (Forecast)

<u>Institutional and organizational aspects</u>: The legal and policy support for integrated mangrove management, including CF, is likely to continue. All of the project staff members are permanent staff of the Government of Myanmar, whose employment is ensured. They are





expected to be assigned to the relevant posts in the post project period so that they could utilize the techniques/experiences obtained through the Project continuously. With a regular inter-agency project coordination meeting at regional level and a regular donor/NGO coordinating meeting at district level in place, the coordination/cooperation with the relevant organizations is expected be enhanced. Post-project strategy for promotion of integrated mangrove management, including CF, in the Ayeyawady Delta is yet to be developed, however.

<u>Financial aspects</u>: So far, the Government of Myanmar has allocated necessary budget to implement the Project activities except for transportation costs for field visits, which have been often borne by the Japanese side. Unless measures to secure the transportation costs for the field visits are secured, continuation and expansion of the related activities in the post-project period would be difficult.

Technical aspects: In the field of silviculture techniques/Action Research, the technical capacity of the FD staff has been enhanced steadily. The transferred techniques have been already utilized in other departmental works. The techniques and the deliverables (i.e. technical report and technical guidelines) are expected to be utilized and disseminated in the post-project period. In the field of CF management and support system, the continuous utilization/dissemination of the transferred techniques and the deliverables, including a training program and a SOP for CF in mangrove area, is expected to be ensured because the Project plans to develop them based on the existing training program of CFDTC and existing regulations of the FD (e.g. Departmental Instructions and CFI); to field-test them before finalization; and to incorporate the final deliverables into the existing institutional framework of the FD. With regard to CF in the Target Area, the Mid-term Review Team reserves its judgment due to insufficient information. The provided equipment, which is essential to carry out the activities related to integrated mangrove management, is likely to be utilized after the Project end.

Taken together, sustainability is likely to be ensured if certain issues, including development of the post-project strategy and securing the budget for transportation costs for field visits, are addressed before the end of the Project (Details are described in Section 5 of Annex 5)

7. Conclusion

The Project was launched for a five-year period starting from April 2007, but in May 2008, Cyclone Nargis struck Myanmar and caused great damage to the Project activities. This natural disaster forced the Project to suspend the activities for eight months and ruin the achievements thus far. In January 2009, PDM was modified as PDM1 being added various recovery activities, and the Project extended its cooperation period for one more year until March 2013 was resumed.





Through the Mid-term review in February 2011, the Team has confirmed that the indicators set by the PDM1 are obviously too excessive to achieve during the project period in spite of great damage for the Target Area and the various recovery activities. In addition, the Team has identified there were some cases in which process of implementing the activities was not so effective and efficient for the expected Outputs.

In order to achieve the four Outputs steadily and realize the Project Purpose, "the coexistence between communities and mangrove forests in a sustainable manner", it is essential to strengthen the Project implementation strategies and revise the PDM and PO. Japanese Expert Team and Myanmar counterparts are required to clarify their tasks and to conduct them efficiently in the remaining two years of the Project. Detailed explanation for necessary revision of the Project is described in the Recommendations below.

8. Recommendations and Lessons

8.1 Recommendations

8.1.1 Recommendations for Output 1

(1) Selection and categorization of monitoring CF Target Villages in the remaining period In the beginning, the Project had a plan to select 20 villages as CF Target by 2011; however, due to damage to the Target Area by Cyclone Nargis, only 11 CF Target Villages were selected, and CFUSGs were organized by 2010.

Considering the remaining period, it is recommended to further focus on 6 villages according to the 5 criteria: land use conflict, illegal pond, accessibility to the village, other conflicts in the village and the level of community participation. Following table shows the CF extension activities that should be conducted in the 6 villages.

Village Category of CF extension activities	Kwa Kwa Ka Lay (Kyakank wainpauk RF)	Nyaung Ta Pin (Pyinalan RF)	Thar Yar Kone (Pyinalan RF)	Shwe Pyi Thar (Pyindaye RF)	Gaw Du (Pyindaye RF)	Htaung Gyi Tan (Pyindaye RF)	Relevant PDM Activities.
Monitoring of CF activities and support for preparation of annual report on CFMP	√	1	. √	٧.	√	√	1.8
Public awareness-raising	1	√	√	√	√	√	2.8
Organizational strengthening of MCs	√	1	1	√	√	√	1.8
Technical support for mangrove maintenance of the	V	1	√	V	√	√	1.8





rehabilitated area					
Technical support for mangrove rehabilitation	1	1	1		 1.8
Support for updating CF Management Plan		V	V		1.4

(2) Activities for livelihood Improvement

It is advisable to implement trial activities for livelihood improvement, such as technical training on charcoal production, through use of forest products from NFIO on the basis of a CF Management Plan.

(3) The early issue of CF certificates

CF certificates should be issued promptly to CFUSGs that have already drawn up CF Management Plans.

(4) CF Management Maps

According to PDM1, CF Management map was supposed to be prepared for planning land use of the entire village including CF plantations, paddy field and residential area. However, CFUSGs were not actually organized by all the villagers in the Target Villages and had difficulty in producing a land use map in the entire area. It is recommended to make a CF management map in which only CF management areas are specified.

(5) Assistance to establish by-laws within CFUSGs

As many CFUSGs did not conduct CF activities in accordance with their byelaws, the Project should consider assisting CFUSGs to develop by-laws with reference to samples developed by the previous development study.

(6) Implementation of oyster culture

Oyster culture has been implemented as an income-generation activity in the villages though some are different from the above 6 CF Target Villages. This activity could be continuously supported by the Project. However, the rights to sell oyster and rules of managing profits from sale of oyster should be confirmed amongst FD, DOF and CFUSGs.

8.1.2 Recommendations for Output 2

(1) Collaboration with CFDTC

It is recommended to collaborate with CFDTC in designing training courses, developing education materials for CF activities and implementing the courses for CFTF members (i.e. Staff

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officers, Ranger officers and Foresters at the district and township level).

(2) Organizing workshops

It is recommended to organize workshops for all CFTF members to design training courses and produce CFSOP. At the time, necessary resource persons could be invited from the other organizations, such as CFDTC and Forest Research Institute.

(3) Public awareness raising activities to CFUSGs

In order to promote CF activities, it is suggested to organize an event to raise public awareness in the CF villages on the occasion that CF certificates are issued by FD. Educational tools, such as posters on functions of mangroves and how to grow and use them effectively, and outline of each CF Management Plan, should be continuously produced in the Project and be distributed to the Target Villages.

8.1.3 Recommendations for Output 3

(1) Research plot allocation by research item

In order to show the justification of AR, a research plot allocation table should be prepared. An example of format is shown as below.

Ex. Research Plot Allocation Table

Research	Site Condition	Plot(Com-	FC	Area	Year of	Condition
Item		parative)			Planting	
	Tide, elevation, soil	Plot 11				Av. officinalis, 3x3
ST-1		Plot 12				S. apetala, 3x3
		Plot 13				******
	Tide, elevation, soil	Plot 21				Mono species, 3x3
ST-2		Plot 22				Mixed type A, 3x3
		Plot 23				Mixed type B, 3x3
	Tide, elevation, soil	Plot 31				Av. officinalis, 3x3
ST-3		Plot 32				Av. officinalis, 6x6
		Plot 33				Av. officinalis, 9x9
ST-4	Tide, elevation, soil	Plot 41				M. leucadendron
51*4	Tide, elevation, soil	Plot 42				Casuarinaexisitifolia
	Tide, elevation, soil	Plot 51				Without Mound
LT-1		Plot 52				With Mound type A
		Plot 53				With Mound type B
LT-2	Tide, elevation, soil	Plot 61				Without Weeding
		Plot 62				With Weeding type A





		Plot 63	With Weeding type B
	Tide, elevation, soil	Plot 71	Without Mulching
LT-3		Plot 72	With Mulching type A
		Plot 73	With Mulching type B
	Tide, elevation, soil	Plot 81	Without Ploughing
LT-4		Plot 82	With Ploughing type A
		Plot 83	With Ploughing type B

The number of comparative plots may be more than two depending on research items.

(2) Plot Record

In order to ensure the sustainability of effectiveness of AR even after the Project term, data sets of each research plot should be compiled (and ready to be updated) in the form of forest inventory book. An example format of plot record is given below.

Ex. Plot Record

AR Plot No.:	21		Reserved Forest:	KKKP
Research Item:	ST-2		Compartment:	26
Overview: (Land	data with GPS p	osition)	Area:	250 acre
ŗ			Site Condition	
N15'10",			Ground level:	
	N15'10",		Tide level:	
		Located at the north	Soil condition: (de	scription)
		western edge of RF		
N15'40		KKKP FC 26		
N15'10",	N15′10″,			
Planting measures	• • • • • • • • • • • • • • • • • • • •			
Spacing, special t		ing, etc.		
Tending history: (c	description)			
With / without wee	eding, etc.	1	-	
	No. of seedlings /m	ean No.	of survived seedlings/mean he	ight





	height		414-7-4-4-44-4-4	11-7-7-10-14
Species	(Year of plantation)			
A. officinalis	/			
	cm			
S. apetala	. /		1	
	cm			
C. decandra	/			
	cm			

Note: a signboard on each AR site should describe an outline of records, such as plot number, acre, species planted, number of trees, and a year of plantation.

(3) Data on nursery activities

Instead of formulating a guideline for nursery techniques, all the data of nursery activities implemented by the Project, including actual performances, should be recorded, which are to be compiled in the form of a nursery guideline by FD after the Project.

(4) Sharing the ARP and RMS among CFTF members

CFTF members should share the results of ARP and RMS and exchange opinions. They should also produce technical guidelines. For the purposes, it is useful to organize a series of workshops. The results of the workshops could be reflected into producing technical guidelines.

8.1.4 Recommendations for Output 4

(1) Coordination meetings among relevant agencies

Coordination meetings among relevant agencies should be held during the Project, where they share information, such as the situation of CF activities and Reserved Forests in the Ayeyawady Delta, prior to consideration of a permanent committee as the district level of coordination mechanisms.

(2) Organizing meetings with donors and NGOs in the Target Area

Different donors and NGOs have implemented a project in the Target Area, but the Project did not share sufficient information with them. Therefore, it should hold meetings with such the donors and NGOs and exchange information, which can be given mutual benefits for activities in the Target Area. Moreover, the Project is expected to consider and promote possibilities of cooperation with other donors and NGOs in the Target Villages and collaborative education and training activities using CF Extension Centres through the meetings.





8.1.5 Recommendations to improve Impact and Sustainability

- (1) Effective use of CFSOP and technical guidelines on mangrove forests

 In order to effectively use products in the remaining period, the following action should be taken by FD:
 - (a) Authorize a draft CFSOP;
 - (b) Authorize a technical guideline on mangrove plantation
 - (c) Notify the above CFSOP and technical guideline to Ayeyawady Division;
 - (d) Consider using the CFSOP and technical guideline as education materials in training organizations such as CFDTC and university;
 - (e) Consider continuing the CF mangrove training courses developed by the Project in cooperation with CFDTC; and
 - (f) Monitor the ARP sites after the Project and fill out in the plot record.

(2) Policy aspect of Sustainability

CF activities include both development of plantations and their utilization as well. The Project should; i) encourage communities to consider an effective and efficient way of using forest resources, and ii) give them necessary advice on how to conduct their forestry activities in a sustainable manner.

(3) Financial aspect of Sustainability

In order to secure a part of the financial aspect of sustainability, the FD should clarify contents and examine frequency of monitoring activities to be continued in the Target Area after the Project. It should also estimate costs of those activities. Besides, the GOM should consider a budget for the above activities in FY 2012, to the possible extent and begin to secure such budget in the post-Project period.

8.1.6 Recommendations to the overall Project

- (1) Organizing regular meetings among personnel concerned with the Project The following meetings should be held regularly to enhance internal monitoring:
- (a) Monthly township-level meetings between the FD and the Japanese Expert Team;
- (b)Quarterly district-level meetings between the FD and the Japanese Expert Team; and
- (c) Quarterly project management meetings, consisting of the Project Manager, the Project Coordinator, the Field Manager, and the Japanese Expert Team.

(2) Assignment of sufficient personnel to the Project

During the remaining period of the Project, FD should secure a sufficient number and period of staff and assign them appropriately to complete the tasks of the Project. Moreover, CFTF members should participate in a number of workshops and actively contribute into discussions

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and preparation of products.

(3) Modification of PDM

PDM should be modified as PDM2 as a result of the mid-term review. The draft PDM 2 is attached to this report (See Annex 6). At the early time of FY 2011, PO should also be modified according to the PDM2, and the revised PDM and PO should be agreed by FD and JICA.

(4) Identification of planned values for some indicators of the Overall Goal, Project Purpose and Outputs

Planned values of some indicators should be decided by the middle of 2011 and be authorized by JCC in 2012.

8.1.7 Other Recommendation

It should be considered to properly utilize equipments, such as computers, a copy machine and generators in the Project Office of Myaung Mya District.

8.2 Lessons Learned

Extensive establishment of models would not be effective, or even reckless, as a strategy for a project with the limited term. Especially for such the project as its target sites are scattered in really remote areas, the number of so-called models should be carefully examined and decided in the beginning of the project. In case of formulating a similar project, the following procedures are to be taken into consideration: (1) to collect information about possible candidates for target sites and to conduct initial survey on the sites. If possible candidates are so many, they can be screened by first information before conducting on-site survey, (2) to identify criteria for selection and to select target sites considering possible input, (3) to support target sites to organize stakeholders' consortium / users' group and to make a management plan, (4) to technically support stakeholders' consortium / users' group activities, and (6) to compile experiences in the form of guideline, manual or case study report.

End of Document





ANNEX 1-1 PDM for Evaluation (PDME) (Addition to the draft PDM1 is shown as underlined and deletion as struck-through)

Project Title: Integrated Mangrove Rehabilitation and Management Project through Community Participation in the Ayeyawady Delta
 Project Duration: April 2007-March 2013
 Target Area: Four reserved forests (Kyakankwinpauk, Pyinalan, Kadonkani, Pyindaye) in the Ayeyawady Delta
 Beneficiaries: Communities practicing community forestry in the four reserved forests (Kyakankwinpauk, Pyinalan, Kadonkani, Pyindaye) in the Ayeyawady Delta
 Community Forestry Task Force and other relevant staff from the Forest Department

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta	 a. Mangrove forest coverage increases by 12,000 acres-^{t-th} in the Target Area of the current Project. (i.e. 4 RFs) within three years after the completion of the Project b. Income levels of communities in the Target Area is improved than that of 2004 	a. Forests resource assessment by FD (remote sensing) b.Agricultural Census report	
Project Purpose: The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta.	a. By the Project end, mangrove forest coverage is increased by 6,200 acres- ^{t-3} in the selected areas where project were implemented (i.e. CF and Action Research Plantation sites) b. At the end of the Project, in more than 80% of the villages, where the CF user groups (CFUSGs) were organized reorganized during 2009-2011, the percentage of households earning less than the average income of 100,000 kyats equivalent per year (base year 2002) decrease from the base year of CF organization/reorganization. c, At the end of the Project, among the registered members of the CFUSGs organized/reorganized during 2009-2011, more than 80% consider CF useful.	a. Project reports b. Results from the CF Impact survey c. Results from the CF Impact survey	1 Favorable markets exist for CF products. 2 FD's policy on the management of the four reserved forests does not change significantly. 3 Sufficient financial and other resources are allocated for the sustainable management of mangrove forests.
Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).	ha) (3) during organiz nt Plans	1a,1b CF management plans, monitoring reports	No drastic increase the population with the four reserv forests.
The m syster (FD) f	At the end of the Project, more than 80% of all re organized/reorganized during 2009-2011 are active Each year, new communities continue to express interest in org	ZaProject reports 2b Project reports	convert the mangrove forests to other land uses does not
 Some silvicultural techniques for the rehabilitation and the management of the mangrove and its associated forests for the Ayeyawady Delta are established. 	3a By the Project end, a technical report on Action Research (AR) is prepared in English and Myanmar 3b By the Project end, technical guidelines for field FD staff on silvicultural techniques for rehabilitation of mangrove and its associated forests in Ayeyawady Delta, developed based on AR findings, is published (in English and Myanmar)	3a Project reports 3b Project reports	increase.
4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.	 4a Inter-agency committee is officialized. 4b Land use information of the Target Area is updated based on the satellite images of 2007, 2009 and 2012 for discussion by the committee meetings. 4c Specific recommendations are made and/or actions are taken by the committee. 4d Seminars to promote synergy among the relevant sectors are organized annually 	4aAuthorities' letter of announcement 4b:Land use maps 4c: Meeting records 4d Seminar records	
X (Additional Output after the Cyclone Nargis in May 2008) Recovery from damage of Cyclone Nargis is promoted.	Xa: By March 2009, a hazard map of the Target Area is developed based on the latest satellite images (2009) for distribution to the local communities Xb By March 2010, data on damage & recovery survey on the communities in the Target Area is compiled Xc By March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated with reinforced structure that is cyclone-proof. Xd In 2009 & 2010, materials necessary for disaster recovery or prevention work are provided to the FD and the Cooperating Agencies based on the needs Xe By Dec 2011, data on recovery condition of mangrove vegetation (2008-2010) is compiled	Xa:Hazard map, project report	



ANNEX 1-1 PDM for Evaluation (PDME) (Addition to the draft PDM1 is shown as underlined and deletion as struck-through)

Act	Activities.	in as underlined and deletion as struck-through)	_
1	Select villages to introduce CF from the ones that express interest	Inputs	1 No significant
1-2	Conduct baseline survey on the basic socio-economic conditions of the selected villages	<myanmar side=""></myanmar>	natural hazards
7.	Organize/reorganize CFUSGs in the selected villages	Personnel (Members of CF Task Force members:	occur that will
4	Assist the CFUSGs in preparing/updating their CF Management Plans ^(*4) and proposals for CF certificates through	MCFTF)	impact the
,			rehabilitation of
ر ب	Issue CF certificates to the CFUSGs based on the proposals as per the CF Instruction (CFI)		mangrove
- γ - γ		3. Project Coordinator	forests (e.g.
<u>.</u>	Connecting Actions capacity Stengthening programs to enhance the income levels of the CFUSGs in partnership with		cyclones,
1-8	Notice and evaluate the implementation of the certified CE Management Disc.	6. Other personnel mutually agreed upon as	tsunami, floods,
<u>_</u>	Conduct impact survey regarding the effects of CE on the livelihoods of the members of the CELISON	necessary	pests,
2-1	Identify necessary activities for CF management (**) and CF extension & support** by each Reserve Forest (RF) based on		diseases).
	review of the CF contents of the Integrated Mangrove Management Plan (IMMP).	Duilding Land Duilding	2 Relevant
2-5	Confirm the s roles and responsibilities of the technical members of CF Task Force (technical MCFTF)(7) for the identified	1 Office building and facilities	authorities and
	activities	implementation of the Project	stakeholders
?	Assess the needs of the technical MCFTF (e.g. financial, logistics and human resource development needs) to implement the identified activities	2. Office space and necessary facilities for the	ડ
2-4	Develop training plan & materials based on the assessment of the human resource develonment needs conducted in 2.3		to promote
2-5	Train the technical MCFTF according to the plan	3. Land for the action research	sustainable
2-6	Construct/renovate the CF Extension Center & Nurserv in each RF	 act, and space flecessary for storage of boats and vehicles 	management of
2-7	Provide extension services and support to the CFUSGs	5. Other facilities mutually agreed upon as	forects
20 20 20 20 20 20 20 20 20 20 20 20 20	Carry out public awareness campaigns regarding CF and the conservation of mangrove forests	-	Significant
2.3	The reduction SUP 10 CF 10 CF 10 The mangrove forests based on the existing SOP of the FD (i.e. Departmental Instructions)	:	
2-10		Local Operational Costs	Pre-Conditions
1,6	Conduct surveys for identification of silvicultural techniques for both community and account.	Minimum of US\$100,000 equivalent in 5 years	1 No significant
		Slananese Sides	natural hazards
3-2	Prepare the specific Action Research (AR) test designs for each of the identified silvicultural techniques on unready	Personnel	occur that will
(planting and natural forest operation techniques)	1. Chief Advisor	impact the
φ. 	Execute the AR in each RF	2. Participatory community development	rehabilitation of
ა ი 4 դ	Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP)	3. Mangrove forestry	mangrove
ှ မ	riepate a technical teport on action research (AR) is prepared in English and Myanmar Develop fechnical quidelines for silvicultural techniques for rehabilitation of monacour and its	4. Coordinator F. Other extracts in security (2. 2. 17.15.	forests (e.g.
	the findings of the AR	 Other expension specific heids (e.g. Extension, GIS, Agro-forestry Fish culture Forestry Value. 	cyclones,
4	Formulate an inter-agency committee, consisting of relevant authorities (e.g. agriculture, fisheries, settlement and land	added Production, Marketing and Distribution)	tsunami, noods,
		upon mutual agreement	diseases).
4-2	Update the land use information on periodic basis based on the up-to-date satellite images for discussion by the committee	Machinery and Equipment	2 Relevant
4	members, including overall forest resource assessment of the region and mangrove forest conversion.	1. Boat(s)	authorities and
4-4	Conduct Coordination among the committee members upon demand to coordinate instructions for the implementation of	2. Vehicle(s)	a)
4-5	Organize seminars to promote synergies among the relevant sectors for the sustainable management of the management	Other equipment would be provided it necessary upon mutual agreement	ซี ก
1) ;		to promote
× ×	Prepare hazard map based on analysis of damage of the cyclone Nargis	T <u>raining in Japan</u>	sustaillable management of
χ×	Conduct yillage profile survey in the Target Area Conduct village profile survey in the Target Area	Costs	mangrove
×	Conduct surveys for recovery condition of mandrove vegetation from damage of Cyclone Naries in the Target Area		forests
× ;			
۲ ۲	Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through		, c
X-7	Conduct public awareness activities on disaster prevention in the Target Area		付盾
۶ X	Arrange necessary coordination among donors in the integrated mangrove management		
		William Commission Com	[木





ANNEX 1-1 PDM for Evaluation (PDME) (Addition to the draft PDM1 is shown as underlined and deletion as struck-through)

- *1-"12,000 acres" is a tentative target, which was set based on the assumption that an annual target of the IMMP phase I for mangrove plantation (i.e. 4,000 acres) is achieved by 2016. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review
- "2: "6,000 acres" is a tentative target, which was set based on the following assumptions: (i) 20 CFUSGs are organized or reorganized during FY2009-FY2011; (ii) 200 acres is rehabilitated/ managed by each of the 20 CFUSGs (200 acres X 20=4,000 acres): and (iii) a total of 2,000 acres is planted through AR. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review
- <u>.9</u> *3: "4,000 acres" is a tentative target, which was set based on the following assumptions: (i) 20 CFUSGs are organized or reorganized during 2009-2011; and (ii) 200 acres rehabilitated/managed by each of the 20 CFUSGs. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review
- *4: CF Management Plan, including CF Management Maps for planning land use of the village, where in which CF Plantation, paddy, residential area, etc are identified, would be prepared through introducing land use rule for applying CFI; and-identified areas would be delineated by putting land marks in the field.
- '5: "CF management" by FD is defined as planning, supervision, monitoring and evaluation, and data organization and analysis of the activities related to CF. "CF support" consists of extension service and extension support to CF.
- '6: "CF extension services" may include organization of the CFUSGs, strengthening of the organizational/management capacity of CFUSGs, provision of technical support for preparation and implementation of the CF Management Plans and income generation activities of CFUSGs, etc. "CF extension support" is defined as material support to CFUSGs, which include provision of seedlings for CF plantation delineated in the CF Management Plans, making the facilities of the CF Extension and Nursery available to the CFUSGs for their activities, etc.
- *7: "Technical MCFTF" in Output 2 include the Field Project Manager and field FD staff (Staff Officers(SOs), Range Officers(ROs), Deputy ROs(DROs), & Foresters) relevant to the Target



ANNEX 1-2 Modification made in the PDME (Addition to the draft PDM1 is shown as underlined and deletion as struck-through)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta	a. Mangrove forest coverage increases f rom 110,000 acres. (45,000ha) in 2007 to 136,000 acres (5,5200 ha) by 12,000 acres- ⁽⁴³ -of-the-total-project-area-in 20168 in project target-area the Target Area of the current Project.(i.e. 4 RFs) b. Income levels of communities in the Ayeyawady-Delta project target area improve than that of 2004	a. Forests resource assessment by FD (remote sensing) b.Agricultural Census report	
Project Purpose: The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta.	a. <u>By the Project end, mangrove forest coverage is increased by 6,200 acres⁽⁴⁾ from 140,000 acres (45,000ha) in 2007to 146,200 acre (47,000 ha) in 2013-in the selected areas where project activities were implemented. (i.e. CF plantation and Action Research plantation sites) b. At the end of the Project, in more than 80% of the CF-villages, where the CF user groups (CFUSGs) were organized reorganized during 2009-2011, the percentage of households earning less than the average income of 100,000 kyats equivalent per year (base year 2002) decrease from the base year of CF establishment. organization/reorganization c. At the end of the Project, among the registered members of the GFparticipants supported by the Project CFUSGs organized/reorganized during 2009-2011, more than 80% consider CF useful</u>	a. Project reports b. Results from the CF Impact survey c. Results from the CF Impact survey	1 Favorable markets exist for CF products. 2 FD's policy on the management of the four reserved forests does not change significantly. 3 Sufficient financial and other resources are allocated for the sustainable management of management of
Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).	19 <u>By the Project end, more than 4,2000 acres (1,800 ha) ⁽³⁾ of mangrove forests are rehabilitated and managed <u>by the CFUSGs organized/reorganized during 2009-2011 through CFbased on the certified CF Management Plans by the end of the Project.</u> 1c <u>By the Project end, all new active CFUSGs launched organized/reorganized during FY-2009-FY2011 under-the Project gain profit from CF activities <u>determined in the certified CF Management Plans & income generation activities supported by the Project.</u></u></u>	1a,1b CF management plans, monitoring reports 1cProject reports	No drastic increase the population with forests.
2.1he management and the support system of the Forest Department (FD) for CF is effective.	2a At the end of the Project, more than 80% of all registered CF-user groups members are active among of the CFUSGs activated organized/reorganized during FY-2009-FY-2011 under the Project are active. 2b Each year, new communities continue to express interest in forming-organizing CFUSGs each year.	2aProject reports 2b Project reports 2c: Project reports	nal pressure ert the mangr is to other k
Some silvicultural technique the rehabilitation of the degrand and the management of mangrove and its assor forests for the Ayeyawady are established.	3a <u>By the Project end</u> , a technical report/draft guidelines are prepared based on action research findings on action research (AR) is prepared (in English and Myanmar) 3b <u>By the Project end, technical quidelines for the field FD staff on silvicultural techniques for rehabilitation of mangrove and its associated forests in Ayeyawady Delta, developed based on the AR findings, is published (in English and Myanmar) 3b Foundations for propelling HMMP is prepared including recevery from the damages of eyclone. ⇒to Xc</u>	3a Project reports 3b Project reports	uses does not increase,
4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.	4al nter-agency disciplinary committee is officialized 4b Land use information of the Target Area is updated based on the satellite images of 2007, 2009 and 2012 for discussion by the committee members 4c Specific recommendations are made and/or actions are taken by the committee. 4d Seminars to promote synergy among the relevant sectors are organized annually	4aAuthorities letter of announcement 4b Meeting records 4c: Project reports	
X (Additional Output) Recovery from damage of Cyclone Nargis (May 2008) is promoted.	 Xa. By March 2009, a hazard map of the Target Area is developed based on the latest satellite images (2009) for distribution to the local communities. Xb By March 2010, data on damage and recovery survey on the communities in the Target Area is compiled. Xc By March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated with reinforced structure that is cyclone proof. Xd In 2009 & 2010, materials necessary for disaster recovery or prevention work are provided to the FD and the Cooperating Agencies based on the needs. Xe By Dec 2011, data for recovery condition of mangrove vegetation (2008-2010) is compiled. 		





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e ones that express interest.
e t recovery-survey-and-village-profile-survey-based-on-needs-and eConduct baseline survey on th
nities.villages

Organize/reorganize CFUSGs in the selected villages Mebilize the selected communities for user-group formation and Assist the CFUSGs in preparing/updating their CF Management Plans and proposals for CF certificates through conduct introductory meetings on CF. <u>რ</u> 4

participatory planning process, Introduce-participatory-planning-processes and land use rule for applying GFI to facilitate preparation of proposals for CF certificates and formulation of management plans including 1) prepare CF management map for planning land use of the village where CF Plantation, paddy, residential area, etc., and 2) setting land mark for delineate

issue CF certificates to the CFUSGs based on the proposals as per the CF instruction (CFI) 1-5 1-6

Facilitate <u>Assist the CFUSGs in implementation of the certified</u> CF Management Plans, of the user groups for protection related GF activities (CF river-bank / coastal-woodlot, CF WLS, CF paddy, etc.)

Implement various Mangrove CF capacity strengthening programs to enhance the income levels of the CFUSGs user group in the selected villages in partnership with Cooperating Agencies such as Department of Fisheries (DOF), Myanmar Agriculture Service (MAS), and other institutions. 1-7

Establish Monitoring and evaluateion system for implementation of the CF Management Plans formulated by the user 1

based on the review of the CF contents of the Integrated Mangrove Management Plan (IMMP) phase I, specifying the Conduct impact survey regarding the effects of CF on the livelihoods of the <u>selected communities,</u>the CFUSGs. Identify necessary activities for CF management "and CF extension/ support" for the first phase by each Reserved Forest 8 2-1

activities covered by the Project

Confirm the various roles and responsibilities of the technical members of CF Task Force (MCFTF) (7) at each level to implement the IMMP the identified activities Assess the needs of the technical <u>MCFTF organization related to the integrated-management</u> (e.g. financial, 2-3 2.2

Review the institutional system related to the integrated mangrove management and support development of the system logistics and human resource-development needs) to fulfill the identified activities for action by the FD 4

Develop training <u>plan & materials technical MCFTF on the standard operational procedures</u> for <u>CF management and CF extension/ support for the mangrove forests based on the assessment of human resource development needs conducted to the mangrove forests based on the assessment of human resource development needs conducted to the mangrove forests based on the assessment of human resource development needs conducted to the mangrove forests based on the conducted to the cond</u> (new organization, mandate, budget, etc) ⇒To Activity 2.10 2-54

Train FD staf the technical MCFTF according to the training plan on-CF and integrated mangrove-management including 2-65

Construct/renovate the CF Extension Center & Nursery in each RF (A/f Nargis, conducted as Activity X.4) ←From Activity technology exchange program at third countries through collaboration with multi or bilateral donors. 2-6

3.3 of PDM1

Train CF user group related to the integrated mangrove management and CF activities Provide extension services/support identified in 2.1 to the CFUSGs in each RF 2.7

Carry out public information awareness campaigns regarding CF and the conservation of mangrove forests, including patrol From Activity 4.6&4.8 of PDM1 2-8

Draft detailed SOP for CF for the mangrove forests based on the CFI and the "Department Instructions" of FD as well as <u>Review the institutional system related to the integrated mangrove management and support development of the system</u> eedbacks from the Project activities 2-89 2-10

Activity 2.4 of PDM1 Conduct surveys for identification of silvicultural techniques for both community and non-community forestry with respect to the eco-geographical / management zones in the Ayeyawady Delta including recovery condition of mangreve-vegetation <u>Develop post-project strategy for CF management & CF extension/support (new organization, mandate, budget, etc)</u>←From 5

planning-designs-and methods, thinning, pruning, forest-managementnursery, planting and natural forest operation <u>techniques)</u> Prepare the facilities (e.g. nurseries) for integrated mangrove management<u>, and for attaining support recovery from damage</u> Prepare the specific AR test designs with respect to <u>the identified</u> silvicultural models <u>techniques</u> (e.g. seedling production, 3.2

of the eyelone Nargis.(To Activity 2.6 & Output X)

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Inputs lyanmar Side>

significant

occur that will

natural hazards

t t

impact

rehabilitation of

mangrove

(e.g.

forests

tsunami, floods,

cyclones,

CF Task Force ਰ sonnel (Member (MCFTC)

2. Project Manager Project Director

3. Project Coordinator

4. Field Project Manager

5. Other CF Task Force members 6. Other personnel mutually agreed upon as necessary

Land, Building and Facilities

and

authorities

diseases) Relevant

2

pests,

are supportive promote

stakeholders

1. Office building and facilities necessary for the implementation of the Project

Office space and necessary facilities for the Japanese experts and related staff members ď

management of

sustainable

2

Land for the action research က်

Jetty and space necessary for storage of boats and vehicles 4.

Other facilities mutually agreed upon as necessary S

Minimum of US\$100,000 equivalent in 5 years Local Operational Costs

rehabilitation of

impact

mangrove

natural hazards occur that will

1 No significant Pre-Conditions

(e.g.

forests

Isunami, floods,

cyclones,

<Japanese Side> Personnel

Chief Advisor

Participatory community development
 Mangrove forestry

(e.g. Fish culture, Forestry Value-added Production, Marketing and Distribution) upon mutual Other experts in specific fields Agro-forestry, GIS, 4. Coordinator 5. Other expe Extension, agreement

are supportive promote

stakeholders

authorities

diseases)

pests,

Relevant

management of

sustainable

Machinery and Equipment

Boat(s)

Other equipment would be provided

:=

necessary upon mutual agreement. 2. Vehíclé(s) 3. Other equ



Modification made in the PDME (Addition to the draft PDM1 is shown as underlined and deletion as struck-through) Training in Japan Prepare plots and test materials (e.g. seeds, seedlings) and Execute the AR tests ANNEX 1-2

Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP) 3-54

Prepare a technical report on AR tests findings

Local Costs Prepare-draft technical guidelines for silvicultural techniques for rehabilitation of mangrove and its associated forests based on the findings of the AR tests-activities

3.7Support recovery of Implementation Body, material supply for recovery work of damaged mangrove or development of river bank / Ceastal weedlet (→Output X (X.4))da

Formulate an inter-disciplinary agency committee, consisting of relevant authorities (e.g. agriculture, fisheries, settlement Update the most recent land use information on periodic basis based on the up-to-date satellite images for discussion by the and land records) at the District level to examine the underlying causes for mangrove deforestation in the Ayeyawady Delta. 4-1 4-2

committee members, including overall forest resource assessment of the region and mangrove forest conversion.

Prepare hazard map based on analysis of damage of the cyclone Nargis(--) To Activity X.1) 443

Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta appropriate land use policies. 4-54

-Prepare-material for-public-information (→To Activity 2.8 & X.6) 46

public-information-for-support integrated mangrove-management including-disaster-prevention and patrol. (→To Activity 2.8 4-65—Atrange necessary coordination among denors in the integrated mangrove rehabilitation and management4-8-

Prepare a hazard map based on analysis of damage of the cyclone Nargis (←From Activity 4.3 of PDM1)

Conduct quick damage survey &recovery survey in the Target Area (+From Activity 1.2 of PDM1) Conduct village profile survey in the Target Area (-From Activity 1.2 of PDM1) Ϋ́

Conduct surveys for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area. (-From Activity 3.1 of PDM1 X

Rehabilitate the CF Extension Center and Nursery in each RF with reinforced structure that is cyclone proof (

From Activity 3.3 of PDM1

Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through

material supply (←From Activity 3,7 of PDM1) 낅

Arrange necessary coordination among donors in the integrated mangrove rehabilitation and management in the Project Conduct public awareness activities on disaster prevention in the Target Area ~ (From Activity 4-5 of PDM1) Area ← (From Activity 4-6 of PDM1)

TEstimated to be achieved IMMP-phase-Larget of 26,000 acre mangrove plantation at 2018 after five years of the Project completion. Will be reviewed based on recult of mid-term evaluation during FY2009/2010.—12,000 acres " is a tentative target, which was set based on the assumption that an annual target of the IMMP phase I for mangrove plantation (i.e. 4,000 acres) is achieved by 2016. The figure will be reviewed & finalized based on the results of the Joint Mid-

evaluation during FY2009/2040. '6,000 acres.' is a tentative target, which was set based on the following assumptions: (1) 20 CFUSGs are organized or reorganized during FY2009-FY2011; (ii) 200 acres is rehabilitated, managed by each of the 20 CFUSGs (200 acres); and (iii) a total of 2,000 acres is planted through AR. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review.

*3. Estimated to be rehabilitated 200 acres of mangrove forest by each CFUSG and will be activated 22 CFUSGs under the Project (fall for FY2008-CF wildge). Will be reviewed based on results of mid-term evaluation during assumptions: (i) 20 CFUSGs are organized or reorganized during 2009-2011; and (ii) 200 acres is rehabilitated/managed by each of the 20 CFUSGs. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review.

*4.000 acres is rehabilitated/managed by each of the 20 CFUSGs are organized during 2009-2011; and (ii) 200 acres is rehabilitated/managed by each of the 20 CFUSGs. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review.

*4. CF Management Plan, including CF Management Maps for planning land use of the village, where in which CF Plantation, paddy, residential area, etc. are identified, would be prepared through introducing land use rule for applying CFt; and and 2) estimpland mark for delineate the land-use identified areas are delineated by putting land marks in the field. 22-Estimated to be increased 6000 acre (4000 acre-plantation-through CFL and 2000 acre-plantation through action research) of mangrove forest cover when the Project completion (f),2012). Will be reviewed based on result of mid term

*5. "CF management" by FD is defined as planning, supervision, monitoring and evaluation, and data organization and analysis of the activities related to CF. "CF support" consists of extension service and extension support to CF. *6. "CF extension of the CFUSGs, strengthening of the organizational/management capacity of CFUSGs, provision of technical support for preparation and implementation of the CF Management Plans and income generation activities of CFUSGs, etc. "CF extension support" is defined as material support to CFUSGs, which include provision of seedlings for CF plantation delineated in the CF Management Plans, making the facilities of the CFUSGs for their activities, etc.

*T. *Technical MCFTF** in Output 2 include the Field Project Manager and field staff (Staff Officers (SOs), Range Officers (ROs), Deputy ROs (DROs), & Foresters) relevant to the Target Area



Activity as per PDME	Expected		Schedule	ę <u>s</u>			Person in	Person in Implemento	Other Major losuts	
		2007 2008	2009	2010	2011	2012 13		!		•
		07 FY2	DOS FY2009	-	ш.	걸		1		Remaraks
		Apr. Jul. Oct. Jan. Apr. Jul. C Jun Sep Dec Mar Jun Sep C	Oct. Jan. Apr. Jul. Oct. Dec Mar Jun Sep Dec	Dec Met Jun Sep Dec	Jan- Apr- Jul- Oct- Mar Jun Sep Dec	Jan- Apr- Jul- Oct- Jan- Mar Jun Sep Dec Mar	1 6		Japanose Мапшел	lar
Output 1: The selected communities practice environmentally and economically sustainable community forestry (CF).	ommunity	Cyclone					Project Coordinat or (PC)			Initial plan (Principle activities)
1.1 Setect villages to introduce CF from the ones that express interest.	n/a	Before Nargis	Batch	Batch II	Batch IV	\ <u>2</u>	Field Project Manager(FPM)	SO(LPT,B GL,PYP), RO, DRO, F(KDK,KK K,PND,PN	JE: PCD Participatory Community development)	nilled progress & current plan Actual progress & current plan
1.2 Conduct baseline survey on the basic socio- economic conditions of the selected communities.	n/a	Before Nargis				- parky films of Africa (1000 A	ditto	ditto	UE: PCD LC: (Subcontract) - Baseline and market survey,	
FUSGs) in the	n/a	Before Nargis			2		dilto	ditto	JE: PCD	
1.3.1 Mobilize the selected communities			4							
1.3.2 Conduct introductory meeting on CF			-0							
1.3.2 Facilitate formation/reorganization of CFUSGs			-0-							and the first of t
1.4 Assist the CFUSGs in preparing/updating CF ManagmentPlans and proposals for CF certificates through participatory processresidential area, etc.,	n/a	Before Nargis					ditto	ditto	JE: PCD Eq:GPSs, Boats (passenger and cargo)	CF Management Plans are to be developed/upsided and approved prior to the beginning of the planting season in June
	n/a		E			5	Director of FPM AYW		JEPCD	No Certification yet for Project CF target villages which submitted proposals. Proposals remained at District Office
ng and managing certified CF	n/a						FPM	SO(LPT,B GL,PYP), RO(KDK,K KK,PND,P NL)	SO(LPT,B JE: PCD GL,PYP), (MF:mangrove RO(KDK,K forestry+MA: KK,PND,P marketing) NL)	
	n/a		Planting Maintenance				ditto	,		
(6 in total)	n/a		Planting Maintena	Joe July 1			ditto			
	n/a			Pla	Planting manage Maintenance no se		ditto			
1.6.4 Assist the CFUSGs IV	n/a				Planting ====================================	g removal	ditto			



	Activity as per PDME	Expected	!		Schedule					-	Person in Implemento	plemento				
			2007	2008	5009	2010		2011	2012	13	charge	<u>د</u>	Other Major Inpuls	황		
			MFY&JFY2007	FY2008	FY2009		FY2010	FY2011	7	2012		.J			Remaraks	
			Apr. Jul. Oct. Jan. Jun Sep Dec Mar	Apr- Jul. Oct. Jun Sep Dec	Jan- Apr. Jul. Oct.	Jan- Apr- Jul- Mar Jun Sep	Oct- Jan- Dec Mar	ri N	Jan- Apr- Jub Mar Jun Sep	Oct. Jan.			Japanese	Маптаг		
mple svels soop ishe stitu	1.7 Implement various programs to enhance the income levels of the CFUSGs in partnership with the Cooperating Agencies such as Department of Fisheries, Myanma Agriculture Service, and other institutions.	n/a	Before Nargis								ditto	ottito	JE: PCD + (MF, AF:agroforestry, FC: fish culture and MA) LC: procurement cost for coconut			
Des	needs	n/a									ditto	8	seeds, seeding	- Anna Anna Anna Anna Anna Anna Anna Ann		_
Assi	' in total)	n/a								pin	ditto					\neg
Agro		n/a			Agroforestry program suspended a/f Nargis	rogram sus	spended a/		(see X/*)	· ē	ditto			MAS		Τ.
Fish		n/a		<u> </u>		1				0	ditto			DOF		Т
Trai	cts	n/a				 			 -		ditto			DOF		
Assi	1.7.3 Assist the CFUSGs II (6 in total)	n/a						+	+		ditto					
Agro	The state of the s	n/a			Agroforestry	program suspended	Uspended 8	a/f Narois (see X/*	# X/*)	15	ditto					
Fish	b Fish culture (2 in total)	n/a				 		-	-	<u> </u>	ditto					_
Traic	f the products	n/a) -			dilto		, many			<u> </u>
Assi	1.7.4 Assist the CFUSGs III	n/a						+		Į.	ditto					1
Assi	1.7.5 Assist the CFUSGs IV	n/a								P	diffo					
stab iana	1.8 Establish monitoring and evaluation systems for the management plans formulated by the user groups.	n/a									ditto	ditto	JE:PCD		monitoring forms were drafted but such forms have not applied	15
ondt.	1.9 Conduct impact survey regarding the effects of CF non the livelihoods of the selected communities.	n/a						2			ditto		JE:PCD			
ut2:	Output2: The management and the support system of the Forest Department (FD) for CF is effective.	m of the							NAME OF THE PARTY	OR	Overall: P.M.					 -
entif Ippo View	2.1 Identify necessary activities for CF extension and support by each Reserve Forest (RF) based on the review of the CF contents of the IMMP Phase I, specifying the activities covered by the Project	n/a								S		+ ctor, (SO,	JE:CA& PCD		Explaination of IMMP by JET to FD counterparts at first year and when new counterparts were assigned	1
Confirm t Force at a	Confirm the roles and responsibilities of the CF Task na Force at each level to implement the identified activities.	12		<u>I</u>					i ii	<u>0</u>	ditto		JE:PCD		During 2007, as part of Needs Assessment of CF task force, coffmed roles and responsibilities of CF Task Force	80
Assess the (MCFTC) resource activities	Assess the needs of members of CF Task Force Inst (MCFTC) (e.g. financial, logistics and human resource development) to fulfill the identified activities	e							9 9	ii C	diff		JE:PCD + MF, AF, FC		Conducted Neod Assessment of CF Task Force during FY2007	
•							=					4				





										PO for Evaluation (POE)	
		Remaraks			Iraining may include QJT,training through existing CEtraining course, and development of CE training program for mangrowe.					CFECN TYK: Thar Yar Kone CFECN TYK: Thar Yar Kone CFECN BYME Byone Hinwe CFECN TGT: Haung Gyi Tan CFECN HKT: Higet Kyi Taung CFECN	
	2		Маптаг								
Olhar	Sindia tolem isono		Japanese	JE: CA, PCD, MF, AF, FC	ditto	ditto	JE; ET + PCD, MF, AF, FC	ditto	ditto	JE: PCD, FC	JE:PCD
Person in Implemento	2			FPM, RO, SO	ditto	ditto	SOs +	ditto	ditto	SOS + ROS JE: GS Construction C	ditto
Person in	3			5 2	ditto	ditto	FPM	ditto	dilto	ditto ditto	dilto
	2012 13	2012	Apr. Jult. Oct. Jan- Jun Sep Dec Mar								
	2011	FY2011	4 5								
	2010	FY2010	Apr. Jul. Oct. Jan. Jun Sep Dec Mar					0			
Schedule 2009 2	FY2009	Jan					0				
	2008	FY2008	Sc. Jan							Informitent Discussion	
	2007	MFY&JFY2007			14						
Expected		<u></u>] (7	r/a	n/a	п/а	n/a	rifa	rı/a	TYK: Renovation TYK: Renovation BYM: Renovation TGT:Construction. If T Construction. If T Construction. It T	n/a n/a
Activity as per PDME				2.4 Develop training plan & materials for CF extension service and support for the mangrove forests based on the needs for human resource development identified in 2.3	2.4.1 Develop overall training plan and training materials	2,4,2 Update the training materials based on feedbacks	2.5 TrainFD staff based on the plan.	2.5.1 Implement & monitor the training program	2.5.2 Evaluate the training program & conduct the follow- r/a up as appropriate	2.7 Provide exension services and support to the CFUSGs 2.7.1 Develop extension materials 2.7.2 Implemnt extension materials 2.7.2 Implemnt extension services & support (i.e. Activity 1.3-1.7) 2.8 Carry out public awareness campaigns regarding CF and the conservation of mangrove forestsconservation of mangrove forests CF for the mangrove forests. 2.9 Draft detailed standard operational procedures for CF for the mangrove forests.	2.9.2 Finalize the draft 2.1(Develop post-project strategy for CF management and CF extension&support





Activity as per PDIME	Expected		0)	Schedule				Person in	Person in Implemento		-	
	Mesuns	1 .	2008	2009	2010	2011	2012 13	charge	Ę	Other Major Inputs	á	
		MFY&JFY2007	FY2008	FY2009	FY2010	FY2011	FY2012					Remaraks
		Apr. Jul. Oct. Jan. Apr. Jul.	Oct- Jan- Dec Mar	Apr. Jul. Det. Jan- , Jun Sep Dec Mar	Apr. Jul. Oct. Jun.	Apr. Jul. Oct. Jan. Jun Sep Dec Mar	Apr. Jul. Oct. Jan- Jun Sep Dec Mar	TIE		Japanese	Малтаг	
Output 3: Some silvicultural techniques for the rehabilitation of the degraded and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.	nent of the		a distance to a second distance of the second		NAMES OF THE PROPERTY OF THE P	1//	TANANA IN SERVICE SERV	Overall: PC				
<u>F</u>	n/a							W	SOs + ROs	JE: NF		
search test designs ıral techníque	n/a							FPM	SOs + ROs	JE: MF		
	n/a							ditto	ditto			
2 Prepare an annuai execution plan	n/a					-11	-8	ditto	ditto			***************************************
	n/a							M W	SOs +	JE: MF LC: seedling production& transportation cost, labour cost for forestry activities		
ninary	n/a	ASSESSED OF ASSESSED						MET	SOS + ROs	JE: MF LC: labour cost for monitoring		Major monitoring activities are fimited only when presence of JE
	n/a		0_					dilto	ditto			
no bi	n/a							ditto	SOs + ROs, DRO, F			To the state of th
	n/a	resistance in the second					11	ditto	SOs + Ros		o. is	PC for data organization & analysis for ARP is necessary
bove	n/a							dillo	ditto			······································
3.5 Prepare draft technical guidelines based on progress of the action research activities	n/a			STATE OF THE PARTY				FPM	SOs +	JE; MF		
draft	n/a							ditto	왉			
ldraff	nla							dilto	difto			
3.5.3 Finalize the draft	n/a			***************************************				ditto	ditto		<u> </u>	The draft would be snalized beed on the feedbacks from the feld and results of the AF





Activity as per PDME	Expected				ပြ	Schedule			***************************************			Person in	Person in Implemento	Other Meire Inches			,
		2007	L	2008	20	2009	2010	_	2011	2012	2 13				 g		
		MFY&JFY2007	-Y2007	FY2008	_	FY2009	FY2010		FY2011	****	FY2012					Remainks	
		Apr. Jul- Oct- Jan- Jun Sep Dec Mar	Oct- Jan- J Dec Mar	Apr. Jul. Oct.	Jan-App	Oct- Jan- Agr. Jul. Oct- Jan- Dec Mar Jun Sep Dec Mar	Apr-Jul Apr-	ct- Jan- Ap	Apr. Jul. Oct. Jan. Apr. Jul. Oct. Jan. Apr. Jul. Oct. Jan.	Jan-Apr- J	UF Oct- Jan	···		Japanese	Wanmar		
Output 4: A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.	ed uses of			TATELOGIES DAA - HISBOOK		Branco de del como Branco Bran				ILAG SPEANWRING TREMS		Overall: PM					·
4.1 Formulate an inter-agency committee consisting of relevant authorities (e.g. agriculture, fisheries, settlement and land records) at the District level to examine the underlying causes for mangrove deforestation in the Ayeyawady Delta.	n/a		1				-				us	AYVV Director		PC, FPM JE: PCD	- 0	no practical activites have been conducted so far,	
4.2 Update the land use information on periodic basis, in including overall forest resource assessment of the region and mangrove forest conversion.	n/a											2	SO (GIS Section), FPM	JE: GIS + PCD	0.000	Satelite Images were p.ocured during 2007 and 2009 and not 5:1 2010. It was also decided by concorent project starkeholders to procure and analyze 2012 image actain in the remaining poject	
4.2.1 Procure the satelite images	Image for 2007, 2009, 2012 procured						1							Satelite Image (LADSAT- ETM+(2007), ALOS AVNIR-2(2009)	Company of the second of the s		
	n/a									-U 		- indicate and indicate and		Eq. Computer for GIS, GIS/Remote sensisning software			r
4.3 Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of appropriate land use policies.	nla							I		ı	. 1	FD PM,	FPM+ SOs	ari GDA iii	E = A	no practical activities in relation to the satement of this Activity have been conducted so far.	f_
4.4 Organize Seminars to Promote Synergies among the na relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta	nla		No.			-0		10			li li	Mdd	SO, RO, DRO	JE: CA, PCD, MF, GIS LC: Seminar oraganizing cost	20000	2007: Three Mangrove serrinars 2008: Two Mangrove serrinars 2009: One post workshop 2010:One Mangrove seminar and one DOF serrinar	· · · · · · · · · · · · · · · · · · ·
Output X: Recovery from Cyclone Nargis is promoted	moted		***************************************	200 191 1000 - 100					w	ozemvenzu.							,
X.1 Prepare hazard map based on analysis of damage of the cyclone Nargis (←moved from Act.4-3)	Hazard map prepared by March 2009			Initial map		Final map						FD PD,	GIS section JE: GIS Eq: AL(2(2008)	LE: GIS Eq: ALOS AVNIR- 2(2008)			



_				1				Y	·		<u>, </u>	
77		Remaraks				The state of the s						The Project participated in relief and recovery coordination meetings
	뒭		Маптаг						SOS + ROS + DROS + FRS			
Compression of the compression o	Other Major Inputs		esaurder	JE; MF	JICA Program Officer JICA expert team local staff			MF LC: Labour cost for survey.	JE: GIS + ET LC: Boring Survey + F Boring Survey + F Boring Calculation (contract work). Supervision Work (contract work). Office Construction (contract work). Renovation and Construction of Contract C	Sos + ROs JE: PCD + MF Eq:Pagu boat x 3, FRP boat x2		JE; PCD
mpiemento	e.									tos + ROs		SO, RO, DRO
Person in Implemento	charge			FPM, SOS ROS	PC, FPM			FPM, SOS ROS	FPM, SOs SOs ROs ROs +	FPM		FPM
	13		ec Mar				o o o o o o o o o o o o o o o o o o o					I
	2012	FY2012	iş ş					<u> </u>				
	\vdash	-11	Oct. Jan-					å report				<u>a</u>
	2011	FY2011	Apr. Jul. Oct.				Data oraganization & report	Data oraganization				
		FY2010	Oct. Jan- Dec Mar				nization	Data ora				
	2010	FY	Apr. Jul. Oct.			ļ	a oraga					
횰		600	Oct. Jan- Dec Mar			Ho.	┼╂┤╌╸	Survey	Implementation			1.
Schedule	2009	FY2009	Apr. Jul. Oct. Jan- Jun Sep Dec Mar				Survey					
		2008	Dec Mar					0				
	2008	FY2			10				KKKI TTT TGT			
	Ц,	MFY&JFY2007	Apr. Jul. Oct. Jan. Apr. Jul. Jun Sep Bec Mar Jun Sep									
	2007	MFY&J	Apr. Jul. Jun Sep									
Expected					n/a	n/a	Report prepared by Jun. 2011	Report prepared by Sep. 2011	Rehabilitation completed by March 2010	Materials supplied based on needs	Hazard map prepared by	
Activity as per PDME				X.2 Conduct recovery survey and village profile survey based on needs. (←moved from Act.2-3)	K.2.1 Conduct a quick damage survey in Laputa & Pogalay (21 villages)	K.2.2 Conduct recovery surveys in Laputta & Bogalay n	K.2.3 Conduct village profile survey of 39 villages in the R Target Area	X.3 Conduct surveys for recovery condition of mangrove Report vegetation from damage of cyclone Nargis Sep. 20	X.4 Rehabilitate the facilities for Center for Extension and Nursery in each RF for attaining support recovery from damage of the cyclone Nargis M	X.5 Support recovery or disaster prevention work of Minplementation and Cooperative Organizations in the Target Area through material supply in	X.6 Conduct public awareness activities for disaster H prevention	X.7 Arrange necessary coordination among donors in the integrated mangrove management.





I Accomplishment of Inputs

Discompnishment of hipats	Ca	Double
Plan as per PDME	Source/ Method	Results
1 Myanmar side		
1.1 Personnel (Members of CF Task Force) (1)Project Director	of record of Inputs	At present, a total of 26 staff members of the FD are assigned as the Project Personnel.
(2)Project Manager (3)Project Coordinator (4)Field Project Manager (5)Other members of CF Task Force (6)Other personnel mutually agreed upon as necessary	(RMA)	(For details, please see RM A-1)
1.2 Land and building (1)Office building and facilities necessary for the implementation of the Project (2)Office space and necessary facilities for the Japanese experts and related staff members (3)Land for the action research (4) Jetty and space necessary for storage of boats and vehicles (5)Other facilities mutually agreed upon as necessary	ditto	Land and building has been provided in timely manner.
1.3Local Operational Costs Minimum of US\$100,000 equivalent in 5 years	ditto	In Myanmar FY 2007-2010, the budget equivalent to US \$97,000 were allocated for the local operational costs for the Project, apart from the salaries for the project personnel. Major items include costs for construction of the Project Office in MYM, Action Research Plantation (ARP), seedlings for CF Plantation, etc.
2 Japanese side		(For details, please see RM A-2)
2.1 Experts (1)Chief Advisor (2)Participatory community development (3)Mangrove forestry (4)Coordinator (5) Other experts in specific fields (e.g. Extension, GIS, Agroforestry, Fish culture, Forestry Value-added Production, Marketing and Distribution) upon	Review of record of Inputs (RMB)	As of September 2010, a total of 10 Experts (91.94m/m) in the following fields had been dispatched: (i) Chief Advisor, (ii) Participatory Community Development/Coordinator, (iii) Mangrove Forestry I, (iv) Mangrove Forestry II/Agroforestry, (v)GIS I, (vi) GIS II, (vii) Training/Extension, (viii) Fish Culture, (ix) Marketing, and (x) Coordinator)
mutual agreement 2.2 Machinery & equipment (1) Boat(s) (2) Vehicle(s) (3) Other equipment would be provided if necessary upon mutual	ditto	(For details, please see RM B-1) So far, the equipment equivalent to 21.3 million Japanese Yen has been provided. Major items include boats, vehicles, GIS software, satellite images, total stations, photocopy machines, generators, etc.
agreement. 2.3 Training in Japan	ditto	(For details, please see RM B-2) So far, 8 staff members of the FD (i.e. members of CF Task Force) have been trained in Japan.
2.4 Local cost	ditto	(For details, please see RM B-3) As of September 2010, approximately 138.1 million Japanese Yen, equivalent to approximately US\$ 1.5 million, had been disbursed as local administrative and operational costs. Major items include costs for rehabilitation of CF Centers for Extension and Nursery (CFCENs), training costs for technical exchange programs in Thailand and Vietnam, salaries for local staff, etc.
		(For details, please see RM B-4)





II Accomplishment of Outputs

(1) Output X (Additional Output created in response to the damage caused by the Cyclone Nargis in May 2008): Recovery from the damage of the Cyclone Nargis is promoted:

Objectively Verifiable	Source/]	R	esults (a	as of 1 March 2011 un	nless otherwise mentioned)
Indicators(PDM)	Method		Whenterd very grown			·
Xa: By March 2009, a hazard map of the Target Area is developed based on the latest satellite images for	Project reports	satelli Augus includ	te imag st 2009 ing the	ges (i.e). Its c e membe	ALOS/AVNIR 2 (2 opies have been rs of the CFUSG	in March 2009 based on the latest 2008)). The map was finalized in distributed to the stakeholders, as supported by the Project, the al government agencies.
distribution to the stakeholders.	į		clusion ndicator		n already achieved	i .
Xb By March 2010, the results of damage & recovery survey on the communities in the Target Area is compiled	ditto	recove condu was p Project March	ery more ted from the content of the	nitoring su om 2008- d in June ell. Resu which has	urveys) on the con 2010. A report on 2008, which was	
Xc By March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated with reinforced structure that is cyclone proof.	ditto	Eack Back Be 3 CF Product a r A lm Cy de: de: CF CF	ground fore the RFs (i.e. CEN to ject. Enew one mediate clone, stroyed cided t	E Cyclone E Cyclone E KYK, I O be cor By March E had bee Ely after the facilit Basec O rehabil	e: As per the origing PYNL, & KDK) wastructed in the constructed as some constructed.	nal plan, three existing CFECNs in ere to be renovated; and a new other RF (i.e.PYDY) through the g CFECN had been renovated and
		delaye shorta boom	ilitation d for 4 ge of co in publi	months donstruction recover	lue to (i) unsucces n materials and tra y works in the stric	ted in July 2010. Completion was still tender in March 2009; and (ii) ansportation boats resulted from a cken areas. Xc has been already achieved.
Xd In 2009 & 2010,	ditto	Follow	ing ma	terials an	d equipment have	been provided in order to assist
materials necessary for disaster		disaste Agenc	er reco	very or p	prevention work	of the FD and the Cooperating
recovery or prevention work		Tabl		terials and		for disaster recovery & prevention
are provided to			Year	Organi zation	Item	Purpose
the FD and the Cooperating Agencies based	10 mg	1	2009	FD	Boats	For replacement of the boats destroyed by the Cyclone
on the needs		2	2009	FD	Cargo Boats	For transportation of materials for disaster recovery
			2009 &	FD	Seedlings of Acasia spp. &	For windbreak and river bank stabilization (also for firewood &
	Ì		2010 2009	MAS	Eucalyptus spp Coconut	poles) For distribution to the target
			&		seedlings	villages where the damage to





Objectively Verifiable Indicators(PDM)	Source/ Method		Re	esults (a	s of 1 March 2011 unl	ess otherwise mentioned)
			2010			the coconut trees for agroforestry were severe
		5	2010	FD	CDMA telephones for CFCENs	For replacement of the radio telephones destroyed by the Cyclone
		6	2010	FD	TV & Video sets for CFCENS	For public awareness on disaster prevention
			clusion>		een achieved as p	lanned
Xe By Dec 2011, data on recovery condition of mangrove vegetation is compiled	ditto	surve sever monit devel rehab	y plots on the oring respond the oping the opi	located in monitor monitor are sults are techniof mangr	n 5 locations, who ring was continu e being compile cal guidelines fo	on was conducted in total of 42 ere damage of the Cyclone was ed up to January 2010. The d, which would be utilized in the silviculture techniques for 3). The monitoring results have
		The s		rogress h	as been made. To be achieved by [he Indicator Xe has been mostly December 2011.

(2)Output 1: The selected communities practice environmentally and economically sustainable community forestry (CF).

Objectively Verifiable Indicators(PDME)	Source/ Method		Results (as of 1 M	arch 2011 unless o	therwise mentioned)	
1a By the Project end, more than 4,000 acres (1,600 ha) (*note 3) of mangrove forests are rehabilitated and managed by the CFUSGs	ditto	According the defined from the defined f	Definition According to the personnel concerned with the Project, "rehabilitation" of the degraded area is a part of CF "management". Other major "management" would include "maintenance" of the rehabilitated area; and Natural Forest Improvement Operation (NFIO) when applicable. Note: NFIO was not taken into account in calculating the planned value of the Indicator. Background Organization of the CFUSGs: In 2009 and 2010, a total of 11 CFUSGs were organized/re-organized at the Target Villages re-selected after Cyclone Nargis. Among the 11 target CFUSGs, eight were newly organized through the Project while the other three were the pre-existing ones that had been initially organized prior to the Project.			
organized/reorg anized during 2009-2011 based on the certified CF Management Plans.(i.e. CF- plantation)		➤ Ord we Cy- org				
"(note3) "4,000 acres" is a tentative target,			Table 2: CFUSG orga	1st batch of	2nd batch of	one Total
which was set based on the following		1	No. of Target Villages selected	CGUSGs 7 (Feb 2009)	5 (Oct 2009)	12
assumptions: (i) 20 CFUSGs are organized or		2	No. of CFUSGs organized through the Project	5	3 (Mar-Sep 2010)	8
reorganized during 2009-2011; and (ii) 200 acres is		3	No. of pre-existing CFUSGs reorganized through the Project	2	1	3
rehabilitated/mana ged by each of the 20 CFUSGs. The		4	No. of CFUSGs yet to be organized	0	1	1
figure will be reviewed & finalized based on the results of the Joint Mid-term		Vill	reference, the Projec ages and (re)organiza iod and the available	tion of CFUSGs	s, considering the	remaining

Las



Objectively Verifiable	Source/	Possition / on af 4 M	-ab 2044			
Indicators(PDME)	Method	Results (as of 1 March 2011 unless otherwise mentioned)				
Review		sides.				
		Preparation of the CF Manifor newly organized 8 CFU the other hand, the CF CFUSGs, which were prepared been updated yet though have been changed due to	SGs were prepai Management Pla ared and certified the natural and	red in 2009 and ans of the 3 p l 7~15 years ag socio-economic	2010. ore-exist o, have conditie	On ting not ons
		Certification of the CF Mar Plans, prepared through District Forest Office for however, has been certified for monitoring and confirm CFUSGs before issuing performance of other CFUS	the Project, hav review and cert d yet because the ling the participat the CF certifi	e been submit ification. None District Forest tion & performa icates, conside	ted to e of the Office o ince of ering p	the em, opts the
		Table 3: Progress of C	CF Management F	Plan developme	nt	
			1st batch of CFUSGs	2nd batch of CFUSGs	Total	
		1 No of new MP prepared through the Project ye to be certified	5 (May-Sep 2009)	3 (Jul-Dec 2010)	8	
		2 No of pre-existing MP yet to be updated	2	1	3	
		3 Total	7	4	11	
		Note: During a series of discuss confirmed that CF Management PI <results 4:="" 615="" 75="" acres="" by="" cer="" cf="" cfus="" hased="" management="" of<="" on="" other="" pi="" progress="" rehabilitated:="" rehabilitation="" table="" td="" the="" their="" threexisting="" yet-to-be=""><td>ans would be revieue of the second of the se</td><td>wed certified as p al of 690 acres tated by the 8 ement Plans and e yet-to-be upo</td><td>er the CF has be CFUS the oth</td><td>een Gs</td></results>	ans would be revieue of the second of the se	wed certified as p al of 690 acres tated by the 8 ement Plans and e yet-to-be upo	er the CF has be CFUS the oth	een Gs
		Area of Rehabilitation	1st batch	2nd batch	Total	1
		1 Planned area (acres)	(7 CFUSGs)	(4 CFUSGs)		=
		a As per the MP develo		135	1,118	
		b As per the pre-existing MP to be updated (3 in total)		40	n/a	
		c Total area to be rehabilitate	d n/a	175	n/a	
		2 Rehabilitated area (acres) a By the CFUSGs with the	MP 480	405	045	-
		developed through the Projet By the CFUSGs with the	ect		615 75	
	and the second s	existing MP yet to be update	ed 530		690	
		3 Achievement rate		100	080	
	-	a The new MP develo through the Project		100%	55%	
		b The pre-existing MP yet to	be n/a	62.5%	n/a	



п/а

91%

n/a

> Maintenance of the rehabilitated area by the CFUSGs: According to

c Average rate of achievement

updated

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 Mar	ch 2011 unless otherwise mentioned)		
madatoro(i simila)	i wether	field confirmation of the FD staff, the rehabilitated area has been kep			
		intact so far.	(See RM C-1 for more data)		
			(SSS TAN S TISI MOIS data)		
		Conclusion The current Indicator has been partly achieved. The "planned value" of the Indicator (i.e. 4000 acres), which was calculated from the assumptions that (i) 20 CFUSGs are organized or reorganized during 2009-2011; and (ii) 200 acres is rehabilitated/managed by each of the 20 CFUSGs, would not be achieved by the Project end because (i) the number of CFUSGs organized/reorganized during 2009-2011 would remain about a half of the one mentioned in the assumption; and (ii) as per the CF Management Plans developed through the Project, average area to be rehabilitated by each of the CFUSGs within the Project period is less than 70 % of the one mentioned in the assumption.			
*		calculated from the assumption with the more practical one be certified CF Management Plans planned value, the area to be	dicator 1b (i.e. 4,000 acres), which was as of January 2009, need to be replaced ased on the actual plans indicated in the s of the target CFUSGs. In calculating the managed through NFIO should be taken all of the CF Management Plans under the		
1b By the Project	Project	ta be u	target CFUSGs within the Project because (i) the pre-existing C	total area to be rehabilitated by the entire ect period), however, is not clear at present F Management Plans have not yet been gement Plans have not been certified yet.	
end, all active CFUSGs organized/reorg anized during 2009—2011	reports	Before the Cyclone: Prome used/sold as firewood/pol	otion of fast-growing species that can be es, agroforestry, and aquaculture were ting activities for the CFUSGs as shown in		
gain profit from CF activities		Table 5: Income generation activities examined by the Project			
determined in the certified CF		Activities	Examples		
Management		1 Fast-growing species with market value(*1)	Melaleuca (for firewood, poles) Casuarina equisetifolia (ditto)		
Plans & income generation		2 Agriculture	Salinity resistant paddy spp.		
activities	ļ	3 Agroforestry	Pepper production under coconut trees as shade		
supported by the Project.		4 Aquaculture	Oyster culture		
,		Aqua-agroforestry (*1)Promotion of fast-growing species would be initiated after the results of the relevant Action Research (AR) tests become available			
		> After the Cyclone: Promo	tion of agroforestry has been suspended in the Target Area were severely damaged		
		Casuarina equisifolia are findings of the AR tests, the coming rainy season. Sin grows to marketable size conditions are favorable, the	market value: AR tests on Meraleuca and ongoing under Output 3. Utilizing the Project plans to start promotion of in the ace Melaleuca and Casuarina equisetifolia in one-two years (as firewood) if the ose who would participate in planting of the pe able to start gaining profits by the end of		

Las



Objectively Verifiable Indicators(PDME)	Source/ Method		Results (as of 1 Marc	h 2011 unless othe	erwise mentioned)	
		CF in of an cui	uaculture: At present, oys FUSGs on trial basis. M the coming rainy season. the 5 CFUSGs would be d to make some profits b ture has been practiced rface use license betwee the Project period.	arketing and dis The Project ho able to harvest by the Project e based on a ve n the Project ar	stribution tests a pes that all the marketable size nd. It is noted erbal agreemen nd the DOF, wh	re planned sub-groups of oysters that oyster t on water
			Table 6. Out	ne of oyster-cul	2 nd batch	Total/ average
		1	No. of CFUSGs which have sub-groups for oyster culture trial	4	1	5
		2	Timing of the first harvest	Jun-Sep 2011	Jun-Sep 2012	
		3	No of sub-group members	67	32	89
To the state of th		4	No of members of mother CFUSGs	156~295	100	256 ~395
		5	% of number of sub- group members to the mother group members	23%~43%	32%	23% ~35%
		In CF	addition, aqua-agrofores USG on trial basis as a m Table 7: Outline	eans for liveliho	od improvement	up of one
			TO COMPANY AND	CFUSGs	CFUSGs	rotar
		2	No. of CFUSGs No of sub-group members	6	0	6
		3	Timing of the first harvest	Mar 2010		
				•	See RM C-2 for r	,
		ger has all con	activities delineated in neration support based of s not been seriously examinated of the five CFUSGs in Leading or the products is allowed to the serious of the serious delication of the serious de	n the CF Mana ined by the Pro aputta (KYK ar gement Plans a	agement Plans, ject so far. It is nd PYNL RF) h	however, noted that ave NFIO
		<concl It is stil</concl 	usion> I early to assess the achie	vement of the Ir	ndicator.	

(3) Output 2: The management and the support system of the Forest Department (FD) for CF is effective.

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 March 2011 unless otherwise mentioned)
2a At the end of the Project, more than 80% of all registered	Project reports	No information was available. Definition of "active" members is not clear, either. Moreover, the registered members are not clear for some CFUSGs.
members of the CFUSGs		<conclusion></conclusion>

Ly

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 March 2011 unless otherwise mentioned)
organized/reorg anized during 2009-2011 are		The achievement level of the Indicator 2a cannot be assessed because of unavailability of the relevant data.
active		Note: The Indicator 2a is considered to be irrelevant as an Indicator to measure the achievement of the Output 2 since activeness of the members of the CFUSGs is affected by various factors aside from management & support by the FD.
2b Each year, new communities continue to express interest in organizing CFUSGs.	ditto	No information was available <conclusion 2b="" achievement="" assessed="" be="" because="" cannot="" data.<="" indicator="" level="" of="" relevant="" td="" the="" unavailability=""></conclusion>
		Note: The Indicator 2a is considered to be irrelevant as an Indicator to measure the achievement of the Output 2 since the interests of the communities for CF is affected by various factors aside from management & support by the FD.

(4) <u>Output 3</u>: Some silvicultural techniques for the rehabilitation and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 March 2011 unless o	therwise mentioned)	
3a By the Project end, a technical report on Action Research (AR) is prepared in English and Myanmar	Project reports	Technical monitoring on Action Research (AR) on the silviculture techniques has been conducted on periodic basis. Monitoring reports have been produced as appropriate. A technical report, compiling the results of AR monitoring, is planned to be developed by October 2012 (in English and Myanmar). It is expected the report will be published by the end of the Project.		
		Conclusion > Steady progress has been made. It is exposed by the Project end.		
3b By the Project end, technical guidelines for silvicultural techniques for	Project reports	Development of a preliminary draft is ongoing ready by the end of March 2011. The draft of developed by September 2011, which Table 8: Tentative schedule for development	juidelines are expected to be	
rehabilitation of mangrove and its associated forests in Ayeyawady Delta, which is developed		Major steps 1 Development of a preliminary draft 2 Development of the draft guidelines 4 Finalize the guidelines 5 Approval of the guidelines by JCC 6 Distribution of the guidelines to**	Tentative Schedule By March 2011 By September 2011 By October 2012 By March 2013 By March 2013	
based on AR findings is published (in English and Myanmar)		<conclusion> The Indicator 3b is partly achieved and is experience end.</conclusion>		

(5) Output 4: A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 March 2011 unless otherwise mentioned)	
4a Inter-agency committee is officialized	Authoritie s' letter of announce ment	The Inter-agency committee has not been formulated /officialized yet because both Myanmar and Japanese sides were too much occupied with the bulky disaster recovery works, in particular rehabilitation of 4 CFCENs, which was caused by the Cyclone Nargis, an external condition beyond the control of the Project. Moreover, the Project has found it administratively difficult to formulate an	





Annex 3 Accomplishment of the Project

Objectively Verifiable	Source/	Results (as of 1 March 2011 unless otherwise mentioned)
Indicators(PDME)	Method	
		official and permanent inter-agency committee meeting at regional level
		For reference, the Project plans to materialize regular inter-agency project coordination meeting at regional level, which has been already approved by the JCC, as a start.
		<conclusion></conclusion>
41. 1	6	No achievement has been made
4b Land use information of the Target Area is updated for discussion by	Project reports	As planned, a land use map, using satellite images (LANDSAT-ETM+) was produced in 2007. The land use information was updated using ALOS/AVNIR images in 2009. It is expected that the land use information would be updated using ALOS/AVNIR images in 2012.
the committee (based on the satellite images of 2007, 2009 and 2012)		The update information has not been utilized as expected because the delay of formulation of the Inter-Agency Committee (See the results of the Indicator 4a). Meanwhile, the land use maps updated in 2007 and 2009 have been utilized for public awareness activities under Output 2. The posters, newsletters, etc. including land use information has been distributed to the relevant government organizations among others.
		< Conclusion > Steady progress has been made. It is likely that the Indicator would be achieved as planned.
4c Specific recommendation s are made	Meeting reports	Since the inter-agency committee has not been formulated, neither specific recommendations have been made nor actions have been taken.
and/or actions are taken by the Committee.		 Conclusion No achievement has been made due to delay of the achievement of Indicator 4a. It is not certain if the Indicator 4d would be achieved by the end of the Project
4d Seminars to promote synergy among the relevant sectors are	Project reports	Seminars to promote synergy among the relevant sectors have been organized every year. (See RM C-3 for more data)
sectors are organized annually		Conclusion > Steady progress has been made. It is likely that the Indicator would be achieved by the Project end.

III Accomplishment of Project Purpose

Project Purpose: The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta.

Objectively Verifiable Indicators(PDME)	Source/ Method	Result	is (as of 1 March 2011 u	ınless otherwise menti	oned)
a. By the Project end, mangrove forest coverage is increased by 6,200 acres (*note2) in the selected areas where project were implemented (i.e. CF and Action Research	Project reports	For reference, a	e change of mangrove total of 1,816 acr R plantations as show Table 9: Area of CF at the second comments of the s	es has been reha vn in the table below and AR plantation	abilitated/planted w.
plantation sites)		CF plantation	n/a	690	n/a
		AR plantation	1,398	1,126	80.5%
		Total/average	n/a	1,816	n/a

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Annex 3 Accomplishment of the Project

Objectively Verifiable Indicators(PDME)	Source/ Method	Results (as of 1 March 2011 unless otherwise mentioned)
b. At the end of the Project, in more than 80% of the villages, where the CF user groups (CFUSGs) were organized/reorganized during 2009-2011, the percentage of	Results from the CF Impact survey	Conclusion The Indicator has been partly achieved. The exact level of achievement could not be assessed due to unavailability of the relevant data. Evaluator's note for the planned value The planned value of the Indicator a (i.e. 6,200 acres), which was calculated from the assumptions as of January 2009, need to be replaced with the more practical one based on the actual plans. The actual planned value, however, is not clear at present because (i) the pre-existing CF Management Plans have not yet been updated; and (ii) the CF Management Plans have not been certified yet. No information was available for the Indicator b. Conclusion The achievement level of the Indicator cannot be assessed because of unavailability of the relevant data.
households earning less than the average income of 100,000 kyats equivalent per year (base year 2002) decrease from the base year of CF organization/reorganization.		achievement of the Project Purpose since household income of the villagers, including non CFUSG members, is affected by various factors which are external to the Project
c, At the end of the Project, among the registered members	Results from the CF	No information was available for the Indicator c.
of the CFUSGs organized/reorganize d during 2009-2011, more than 80% consider CF useful.	Impact survey	< Conclusion > The achievement level of the Indicator cannot be assessed because of unavailability of the relevant data.





ltem	Source/	Findings
	Methods	-
1 Progress of Activities		Overall: The initial PDM of the Project (PDM 0) has been modified once in order to facilitate post-Cyclone Nargis recovery. A variety of activities have been added (i.e. activities under Output X of PDME). Accordingly, Japanese Inputs have been increased from the original plan; and the Project duration has been extended for one year until March 2013. The modified PDM, accommodating the above, was approved in January 2009.
(1) Activities under Output X		The Activities defined in the POE are mostly on schedule and are expected to be completed by the end of the Project.
(2) Activities under Output 1	Review of PO, progress reports, question naire &intervie w with relevant P/P (Project personn el) and J/E (Japan ese experts)	Some of the Activities are on schedule, while others are behind the schedule. It is not certain if all of the planned Activities would be completed by the Project end because the expected results are not clarified. Issues/Points 1. Number of target CFUSGs: Although the target number per se is not shown in any of the official document related to the Project, it has been generally assumed that a total of 20 CFUSGs would be formed by the Project end as one can see in the note 3 of the PDM1 (PDME). In 2009 and 2010, a total of 11 CFUSGs were reportedly "organized/re-organized" at the villages re-selected after Cyclone Nargis. Since then, the Project has withheld activities related to organization of CFUSGs, considering the remaining period of the Project and the available resources of both Myanmar and Japanese sides. 2. Process of organization of CFUSGs: Major steps for organization of the CFUSGs consists of (i) election of the Management Committee (MC) members, (ii) registration of the CGUSG members; and (iii) development of by-laws. A total of 11 CFUSGs, however, members of MCs and/or general members have not been fixed. Most of the CGUSGs have not developed the by-laws yet. 3. Delay in updating the pre-existing CF Management Plans: The CF Management Plans for newly organized 8 CFUSGs were prepared in 2009 and 2010. On the other hand, the CF Management Plans of the 3 pre-existing CFUSGs, which were prepared and certified 7~15 years ago, have not been updated yet though the natural and socio-economic conditions have been changed due to the damage caused by the Cyclone Nargis. 4. Certification of the CF Management Plans: All the 8 CF Management Plans, prepared through the Project, have been submitted to the District Forest Office for review and certification. None of them, however, has been certified yet because the District Forest Office opts for monitoring and confirming the participation & performance of the CFUSGs before issuing the CF certificates, considering poor performance of other CFUSGs in the Targe
		almost all the members are subsistence farmers or fishers who depend on daily wages from casual labors for cash income. Without tangible &





Item	Source/ Methods	Findings
	Nicariodo	short-term benefits that can compensate their opportunity costs, the would not be motivated enough to participate in the activities of the CFUSGs.
(3) Activities under Output 2	-ditto-	7. Income generation activities: It is a common view of the Project Personne that income generation support provided by the Project is not effective a incentive since it has failed to provide the members with immediate/short term benefits. In fact, the income generation support has not been neither designed nor implemented as integral part of the CF Managemer Plans. A strategic link between the current income generation support and environmentally & economically sustainable community forests seems to be weak. Reorientation of the income generation activities needs to be considered. The Activities are mostly behind the schedule due to adverse effects pose by an external condition beyond the control of the Project (i.e. Cyclon Nargis).
		<u>Issues/Points</u>
		1. Training program for CF Mangrove: As per the original plan, an initial training program was going to be developed by September 2009, which was to be updated and finalized based on the feedbacks. Although discussions were held from time to time, the full-fledged activities have not been started yet. The Mid-term Review Team found it difficult to produce the exact causes of the delay. An explanation provided by the Project was that both Myanmar and Japanese sides, including the Experimentary of the Training/Extension, were so occupied with the bulk recovery works from the damage of the Cyclone Nargis, in particular rehabilitation of the 4 CFCENs, that the training related activities were lessed to the training program shown below.
		Table 10: Tentative schedule for development of training program
		Major steps Tentative Relevant PDM Schedule Activities
		1 Identification of necessary activities for May 2011 2.1 CF management & extension services
		2 Confirmation of the roles of each ditto 2.2 technical MCFTF
		3 Assessment of the human resource ditto 2.3 development needs for each level of technical MCFTF
		4 Development of training program, including curriculum, syllabus & training materials, based on the existing ones and the needs assessment
		5 Implementation & monitoring of training Oct- Dec 2.5 program 2011
		6 Evaluation and follow-up Oct-Dec 2.5
		7 Update the training program Jan- Mar 2.4 2013
		8 Submission to the Project Director for Mar 2013 confirmation for further action
		2. SOP: As per the original plan, a draft SOP was going to be developed be March 2010, which would be updated and finalized based on the feedbacks. Although discussions were held from time to time, the full fledged activities have not been started yet. It was difficult to pin dow the exact causes of the delay. An explanation provided by the Project that both Myanmar and Japanese sides were so occupied with the bulk

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Item	Source/	Findings
	Methods	recovery works from the damage of the Cyclone Nargis, in particular rehabilitation of the 4 CFCENs, that the SOP related activities were not be able to be initiated in full-scale. Tentative schedule for development of the SOP is shown below.
(4) Activities	-ditto-	Table 11: Tentative schedule for development of SOP Major steps Tentative Schedule Development of a draft SOP (in English & By Dec 2011 Myanmar) Finalization of the draft Submission to the Project Director for Confirmation for further action The Activities are mostly on schedule and are expected to be completed by
under Output		the end of the Project.
		1. <u>Items for Action Research (Activity 3.1)</u> : Silviculture techniques for rehabilitation and management of mangroves are essential for the achievement of the Project Purpose. The research items are, however, to be identified considering the Project term and possible input. Such items as mulching, ploughing and fast-growing species may be of less priority. On the other hand, the survey on recovery of vegetation, which was not included in the original design, will provide precious information making best use of what the tragic event of the Cyclone Nargis brought forth.
		2. AR test designs (i.e. Activity 3.2): Concepts of each research item are clearly identified in the present technical report of the Project, i.e. the attachment 2.3.1 of IT/R. Technological advantage of Japan should be recognized more in making research designs than in their results themselves, since it should be physically impossible to obtain overall results of these research activities within the remaining Project term. In this context, the above report is lacking of information about research plot allocation by research item. It is also not clear whether survey on Site Condition (SC) were conducted for all the plots or not. Although 'nursery (techniques)' and 'natural forest operation techniques' are mentioned in PDM, 'planting (techniques)' are to be focused considering the remaining Project term.
		3. Execution of AR (i.e. Activity 3.3): So long as the each specific design is explained in well advance to Range Officer and workers employed for planting activities, it should not be difficult for them to prepare necessary seedlings and to set plots.
		4. Monitoring (i.e. Activity 3.4): Monitoring activities are not technically difficult. It is said that monitoring was not fully conducted in some sites, however, as for growth rate and survival rate, the delay of monitoring would not lessen the significance of the research (Although it is needless to say that monitoring on the mutually comparative plots must be conducted at the same timing).
		5. Technical report (i.e. Activity 3.5): Technical reports on AR are to be made by the end of the Project. Contents of the reports will be what are summarized in the Attachment 2.3.1 of IT/R together with data on plot setting and dataset of monitoring results by plot.
		6. <u>Technical guidelines (i.e. Activity 3.6)</u> : A guidelines for silviculture techniques for rehabilitation of mangrove and its associated forests is expected to be formulated by the end of the Project. However, implemented so far and planed activities under Output 3 could not

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Item	Source/ Methods	Findings
(5) Activities under Output 4	-ditto-	logically conclude effective management model of mangroves and its associated forests but survival rate and growth rate in their initial stage only. Since an external factor, the Cyclone Nargis, destructed the results of prior research activities and plots. Some of the Activities are on schedule, while others are behind the schedule. It is not certain if all of the planned Activities would be completed by the Project end, however.
		<u>Issues/Points</u>
		1. Formulation of an official and permanent inter-agency committee: The Inter-agency committee has not been formulated /officialized yet because both Myanmar and Japanese sides were too much occupied with the bulky disaster recovery works, in particular rehabilitation of 4 CFCENs, which was caused by the Cyclone Nargis, an external condition beyond the control of the Project. Moreover, the Project has found it administratively difficult to formulate an official and permanent inter-agency committee meeting at regional level. For reference, the Project plans to materialize regular inter-agency project coordination meeting at regional level, which has been already approved by the JCC, as a start.
2Implementatio n System	Review of progress reports, question naire &intervie w with relevant P/P,J/E,	The Project is implemented by the FD in cooperation with Myanmar Agricultural Services, Ministry of Agriculture and Irrigation (MAS) and Department of Fisheries, Ministry of Livestock and Fisheries (DOF), and with support from Settlement and Land Record Department, Ministry of Agriculture and Irrigation (SRLD). As for the FD, at the Headquarter level, Director General of the FD, as the Project Director, will bear overall responsibility for the administration and implementation of the Project. Director of Planning and Statistic Division of the FD, as the Project Manager, is responsible for the managerial and technical matters of the Project. Assistant Director of the Planning and Statistic Division, as the Project Coordinator, is responsible for the coordination of the Project.
		In addition, Assistant Director of the FD Myanug Mya District Office, as the Field Project Manager, is responsible for the implementation of the Project at the field level.
3 Project Management	Review of progress reports, question naire &intervie w with relevant P/P,J/E, review of PDM/PO	Implementation system has been considered appropriate. 1. Joint Coordinating Committee (JCC): According to the Record of Discussions (R/D), functions of the JCC are: (i) to approve the Annual Plan of Operation (APO) formulated by the Project in accordance with the R/D; (ii) to review the overall progress of the Project and activities carried out under the above mentioned APO in particular; (iii) to review and exchange views on major issues arising from or concerning the Project; (iv) to make decisions relevant to the overall management of the Project; and (v) to facilitate coordination with other relevant authorities. The JCC is chaired by Director General of the FD (i.e. Project Manager). Members include a representative of Department of Planning and Statistics, MOF; Directors of Administration Division, Finance Division, and Training & Research Division of the FD; Director of FD Ayeyawady Division; Representatives of DOF, MAS, and SLRD. So far, five JCC meetings have been held (in June 2007, March 2008, January & June 2009, and August 2010).
		2. Internal monitoring system: Overall progress of the Activities of PDM/PO and achievement of the Indicators of the PDM has not been monitored by the Project sufficiently. The Project Operation Manual has been

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Item	Source/	Findings
	Methods	
		prepared/updated every year, which was approved by the JCC. The Manual, however, has not been put into practice. Although ad-hoc meetings have been held as needed, periodic meetings to systematically monitor day-to-day activities have not been held. In order to enhance internal monitoring, the Project plans to have different level of regular meetings:(i) weekly Japanese Expert Team meetings who are in Myanmar: (ii) monthly township level meetings between the FD and the Japanese Expert Team; (iii) quarterly district-level meetings between the FD and the Japanese Expert Team: and (iv) quarterly project management meetings, consisting of the Project Manager, the Project Coordinator, the Field Project Manager, and the Japanese Expert Team. Progress of the previous period and the plan for the current period as well as issues and actions would be discussed in such meetings among others.
		3. PDM and the PO: The PDM as well as the PO is an essential tool for the project management for the projects supported by JICA. The PDM and the PO of the present Project, however, has not been used effectively. a. As for the PDM, description of some of the Activities is vague. Activities under Output 2, in particular, are not strategically linked with each other. Most of the "Objectively Verifiable" Indicators are not objectively verifiable. Most of them lack criteria to judge the achievement level. Some of them are not well defined. In addition, some of the Indicators of the Outputs are not directly linked to their Activities. Monitoring of the Indicators has not been conducted. The relevant activities are not included in the PDM (or PO), either. b. As for the PO, information necessary for planning and monitoring, including sub-activities of the Activities of the PDM and "expected result(s)" for each sub-activity have not been identified. Although "responsible parties" are shown, they are not specific enough. In the monitoring process, these issues have not been addressed. This has made it difficult for all those concerned to have common understanding of the overall implementation process and progress of the Project based on the PO as well as expected achievement level of the Outputs and the Project Purpose of the PDM.
4 Communication	Questionn aire and interview with P/P and J/E	Communication within the Project has been generally sufficient in order to implement the Activities of the Project.
5. Coordination with relevant organizations	ditto	The Project has been implemented in coordination/cooperation with various organizations, including DOF, MAS, and SRLD.
6. Other factors that have affected the implementati on process	-ditto-	Positive factors: a Initiative and commitment of Director General of the FD (as Project Director) concerning the Project has promoted smooth implementation of the Project. b The Project Personnel of the FD have been very cooperative, motivated, and hardworking. Negative factors: Not found.

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I. RELEVANCE: The Project is still relevant

Item	Source/ Method	Evaluation
1.1 Necessity	Method	
(1) Relevance with the needs of Myanmar	Review of the relevant docume nt	The Overall Goal ("The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta") is relevant with the needs of Myanmar and Ayeyawady Delta region, in particular. The mangrove forests in the Ayeyawady Delta provide both direct and indirect benefits to the population inside and outside of the reserved forests. As for those outside the project target area, they also receive benefit from the supply wood products such as fuelwood and charcoal, non-wood products such as fish and shellfish, and from the none-use value from biodiversity conservation, coastal erosion and flood protection, and carbon sequestration. In sum, rehabilitation and sustainable management of mangroves will imply that such benefits will continue to reach people outside the project target area, and thus manage to meet the needs of the Government of the Myanmar.
(2) Relevance with the needs of the target group (i.e. communiti es practicing community forestry in four Reserve Forests).	Review of the reports, question naire and interview with the relevant P/P and J/E,	The Project Purpose ("The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta") is relevant with the needs of the Target Group-the CFUSGs supported by the Project. The members of the CFUSGs are dependent either wholly or partly on mangrove resources for their livelihoods for the direct consumption or sales of materials such as fuelwood, nipa thatching, poles, and other wood and non-wood forestry products. Once the mangrove resources are lost to the point of that the trend is irreversible, the local communities, already highly dependent on the mangrove resources for their livelihoods, would be the first to suffer the consequences. Thus alleviation of the current situation and encouraging the communities to take control over the management of such valuable resources is very much in line with meeting their needs.
(3) Relevance with the needs of Implementi ng Organizati on	Review of the relevant docume nt,	The Project Purpose is relevant with the organizational needs of the Forest Department (FD) of the Ministry of Forestry (MOF), which has the mandate for the protection and conservation of biodiversity and sustainable management of the forest resources.
1.2 Priority		
(1) Relevance with national plan and policies of Myanmar	Review of the relevant docume nts	The Overall Goal and the Project Purpose are consistent with national plan and policies of Myanmar. ➤ According the latest National Short-Term Five-Year Plan (2005/6~2010/11) that afforestation works throughout the country including the mangroves is one of the national priority objectives. ➤ The National Forestry Sector Master Plan (2001-2031), reflecting the Forest Policy of 1995, identifies four major areas in the forestry sector where local communities shall be mobilized for: 1) the management of local supply of reserved forests and protected public forests; 2) participation in afforestation efforts; 3) participation in agro-forestry activities and 4) in the management of state-owned forest management.
(2) Relevance with ODA policies of Japan	ditto	 The Overall Goal and the Project Purpose are consistent with ODA policies of Japan. According to the ODA Charter, published by the Government of Japan, "consideration to global warming and environmental problems," is one of the four priority issues. In addition, the Japan's Medium-Term Policy of ODA, 2005, also states that the environmental sector is one of the most important sectors of international cooperation. According to the Japan's "Medium-Term Policy of Official Development Assistance (ODA)", issued in 2005, the Government of Japan has been setting the environmental sector as one of the most important sector of international cooperation.

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Item	Source/ Method	Evaluation
1.3 Adequacy as means		
(1) Technologi cal Advantage of Japan	Review of Question naire, interview s with P/P and J/E	Technological advantage of Japan is confirmed. Since 1990s, JICA has promoted CF and sustainable forest management in partnership with the FD through a series of Projects supporting the Central Forestry Development Training Centre (CFDTC), latest one being the Aftercare Program of 1999-2001) and "Community Forestry Training and Extension Project in Dry Zone Project" (COMFORT, 2001-2006). In addition, "The Study on Integrated Mangrove Management through Community Participation in the Ayeyawady Delta" was carried out in 2002-2005. The experiences and know-how accumulated the past assistance could be applied in the current Project.

II. **EFFECTIVENESS** (**Prospect**): The Prospect of the effectiveness is not clear at the moment.

Items	Source/ Method	Evaluation
2.1Achievement level of the Project Purpose & contribution of the Outputs	Review of "Accompli shment of the Project"	Progress has been made towards achievement of the Project Purpose but the exact degree of achievement cannot be assessed (*). Judging from the overall achievement level of the Outputs, achievement level of the Project Purpose is presumed to be lower than expected due to adverse effects posed by the external condition beyond the control of the Project (i.e. Cyclone Nargis). Since the exact level of overall achievement of the Outputs is not clear because of unavailability of the relevant data and lack of realistic planned value for some of the Indicators, the degree of delay in achieving the Project Purpose cannot be presumed. Meanwhile, all of the Outputs, although their level of achievement varies, have contributed to the achievement of the Project Purpose. If the Outputs had been achieved as planned without being affected by the Cyclone Nargis, the achievement level of the Project Purpose would have been as planned. (*) The exact level of current achievement as well as likelihood of achievement by the end of the Project was not able to be assessed because (i) the planned value of the first Indicator is based on the assumptions that have been changed since then; (ii) the second Indicator does not reflect the contents of the Project Purpose properly and (ii) no information was available for the third Indicator due to lack of monitoring.
2.2 Important Assumptions	Review of progress reports	The Important Assumptions for the Project Purpose ("No drastic increase in the population within the four reserved forests" and "External pressure to convert the mangrove forests to other land uses does not increase") have been satisfied, so far.
2.3 Other promoting /hampering factors	ditto	Specific factors have not been found.

III **EFFICIENCY:** Efficiency of the Project has not been sufficient mainly due to the adverse effect posed by an external condition that was beyond the control of the Project (i.e. Cyclone Nargis in May 2008)

items	Source/	Evaluation
	Method	
3.1Production level of Outputs	Review of the results of "accompli	i Overall. I floadclich level of most of the Onlon's is for is presumen to be t

Lay



Items	Source/ Method	Evaluation
	shment of the Project", and	Output 1, 2, 4 have been partly achieved but is not likely to be fully achieved by the Project end.
	"Impleme ntation Process"	Output X: Production level of the Output X is almost as planned. Output X has been mostly produced and is likely to be produced by December 2011.
		 Output 1: The Output has been partly achieved but is not likely to be fully achieved by the Project end because of the following reasons: (i) the number of the CFUSGs organized/reorganized during 2009-2011(i.e. 11 CFUSGs) would be about a half of the original plan (i.e. 20 CFUSGs): (ii) an average area to be rehabilitated by the CFUSGs (i.e. 140 acres) is about 70% of the original estimate (i.e. 200 acres): and (iii) current income generation support is not well integrated in the CF. Output 2: The production level of Output 2 is unknown because of the following reasons: (i) the data for the Indicators is not available due to insufficient monitoring: and (ii) the Indicators are not relevant for Output 2. Judging from the progress of the activities, production of Output 2 is presumed to be behind the schedule. The delay of the activities is mainly caused by the adverse effects posed by the Cyclone Nargis (See Annex 4 "Implementation Process" for details) Output 3: The Output has been partly achieved but is likely to be fully achieved by the Project end. Output 4: The Output has been partly achieved but is not likely to be fully achieved by the Project end because formation of an official and permanent inter-agency coordination committee for mangrove management (or any other purpose) is considered to be administratively very difficult
3.2 Important Assumptio ns	Review of progress reports	
3.4 Inputs		
(1) Myanmar side	,	
(a) Project personnel	Questionn aire &interview with the relevant P/P and J/E	 Timing and quantity: All of the current Project Personnel engage in the Project on part-time basis. They are often too busy with other work to focus on the Project activities. Allocation of full-time project personnel was agreed in the second JCC meeting in March 2008. One full-time personnel was assigned from September 2009 to November 2010. The successor has not been assigned yet. Quality: In general, the Project personnel with adequate background and technical level have been assigned.
(b) Building, and facilities	-ditto-	 Timing, Quantity & Quality: Timing of provision, space and quality is considered to be appropriate. Utilization: Generally, appropriate. The Project Office newly constructed in MYM has not been utilized as much as expected, however.
(c) Local cost	ditto-	> Timing & Quality: On average, the FD has allocated the budget

Tay



Items	Source/ Method	Evaluation
		equivalent to more than US D 20,000 per year for project implementation, apart from the salaries for the project personnel. In general, necessary amount has been disbursed without delay except for FY2008 (March-April), in which Myanmar side concentrated its budget on post-Cyclone Nargis recovery. In addition, transportation costs and allowance for filed visits have not been often allocated sufficiently in timely manner.
(2) Japanese side		
(a) Japanese Expert	Question naire &intervie w with P/P and J/E	 Timing: The Experts have been dispatched according to the annual plan of dispatch. Quantity: Taking into account the additional activities after Cyclone Nargis, a total assignment period of Japanese Expert Team was increased approximately 29 m/m compared with the original plan. Allocation & Utilization: As per the PO, the Expert in Participatory
		Community Development was assigned to most of the Project Activities under Output 1, Output 2 and Output4. In addition, he was responsible for logistics coordination. Obviously the Expert was overloaded, which made it difficult to focus on his supposedly primary activities. In addition, the Expert in Training/Extension had been actually assigned to construction management for rehabilitation of CFCENs, which took time and efforts (of not only the said Expert but also other Experts and the FD staff) so much that training related activities were left behind.
(b) Training in Japan	-ditto-	 Timing: Training in Japan has been implemented as scheduled Quantity: Most of the SOs and ROs relevant to the Project have been sent for training in Japan. Quality, field, contents: They are relevant with the needs and level of the trainees. Utilization: Most of the ex-trainees still engage in the Project. They have
(d)Equipment	-ditto-	applied skills and knowledge acquired in the field and have shared them with their colleagues. > Timing: Timing of procurement and delivery of the equipment is generally
		 appropriate. Quantity: Mostly appropriate. It would be more efficient if a PC is provided to each township office of the FD for data analysis and management related to CF and AR. (So far, SOs and ROs have been using their private PCs). Quality, items, specifications: Quality and items of the provided equipment are considered appropriate. Specifications are also generally appropriate. Operation and maintenance (O/M): Since most of the equipment was procured locally, spare parts and consumables are readily available in Myanmar. O&M manuals in English are available. The equipment, except the one being used by the Japanese Expert Team in the Project Offices in Yangon and MYM, has been handed over to the Myanmar side already. The handed-over equipment has been managed without a major problem so far. Utilization: Most of the equipment is fully utilized for the project implementation except for of the equipment for the Japanese Expert
		Team located in the Project Office in MYM, including a generator and a photocopier.
(e) Local cost	-ditto-	 Timing & Quantity: Necessary amount has been disbursed without delay in general except for payment of labor costs for .rehabilitation of CFCEN and Action Research plantations in the middle of 2010. Others: It is noted that since December 2007, meeting allowance, On-JT/Off-JT allowance, and travel allowance for the project personnel have been paid by the Japanese side based on the agreement made in a meeting between the Implementing and Supporting Organizations (/FD, MAS, DOF, and SLRD) and JICA Expert Team in September 2007. During the same meeting, it was agreed that "sharing cost by the project

to



Items	Source/ Method	Evaluation
		(i.e. the Japanese side) would be decreased" over the Project Period.
3.5Preconditi ons	Progress reports	The preconditions of the Project ("No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases" and "Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests") had been satisfied prior to the commencement of the Project.
3.6Coordinati on with other relevant projects	Progress reports, J/E	 With other Japanese projects: The Technology Exchange Programme was conducted in 2008 in Vietnam in coordination with the "JICA Afforestation Technology Development Project in Acid Sulphate Soil in the Mekong Delta "(1997~2000, 2000~2002). With other donors: The Technology Exchange Programme was conducted in 2 2009(Thailand) in collaboration with Regional Community Forestry Training Center (RECOF/TC). Through the above collaboration, the project staff of the FD was able to learn good practices in neighboring countries which have similar socioeconomic conditions to Myanmar.
3.7 Other promoting /hamperin g factors	Progress reports, interview with P/P, J/E	Specific factors are not identified,

IV. IMPACT: Some positive impacts have been already observed.

Items	Source/ Method	Evaluation			
4.1 Impact at the Overall Goal level		•			
(1) Likelihood of achievement of the Overall Goal	Results of "Accomplish ment of the Project"	It was found too early to assess the likelihood of the achievement of the Overall Goal at this stage.			
(2) Important Assumption	Questionnair e &interview with the relevant P/P and J/E	ditto			
4.2 Other impacts	Questionnair e &interview with the relevant P/P and J/E, interview with target groups	 <a. acquired="" action="" activities="" already.<="" and="" applied="" been="" etc,="" exchange="" fd="" have="" in="" japan,="" knowledge="" of="" p="" plantation="" program="" research,="" skills,="" techniques,="" techniques:="" technology="" thailand,="" the="" through="" training="" utilization="" utilized="" vietnam=""></a.> b. Creation of temporary employment: In rehabilitation of CFCENs and establishment of AR plantations, local villages, including men and women, were employed as casual labor. c. Provision of shelter from high-tide by a CFCEN: In September 2010, high tide hit the Reserve Forest in Pyarpon. Local villagers, who evacuated their home, took shelter in the CFCEN rehabilitated through the Project with reinforced structure that is resistant to natural disaster. d. Awareness: It should not be only Cyclone Nargis that raise peoples' awareness on mangrove conservation. The Project started even before the Cyclone Nargis and fermented peoples' mind of coexistence with mangroves through promoting approaches of Forest Department staff to local communities. For this, there are some people who voluntarily plant mangroves on their own farmland, instead of continuation of unproductive agriculture. Negative impacts have not been observed. They are not foreseen, 			
		Negative impacts have not been observed. They are not foreseen, either.			





V. SUSTAINABILITY (Forecast): Sustainability is likely to be ensured if certain issues, including development of the post-project strategy and securing the budget for transportation costs for field visits, are addressed before the end of the Project.

Items	Source/ Method	Evaluation
5.1 Institutional & Organizational Aspects		
(1) Policy and legal supports	Review of the relevant document questionn aire to P/P	It is likely that current policy and legal supports for mangrove conservation and community forestry would continue. As the basic concept of the CF is stipulated in the Forest Law (1992), Forest Policy (1995) and CFI (1995), CF is expected to serve as an important policy tool to promote sustainable forest management and contribute to improving livelihoods of the communities in the forest area. In addition, the Government of Myanmar has been conducting CF training programs systematically for not only the FD staff members but also people in forest communities at CFDTC, which was originally provided by JICA. This is another indication of the Government's strong commitment to CF policy. Considering that CF itself has a special importance in the Government as stated above and conducting an in-depth mid-term review of the Project, the Team was convinced that FD would be sufficiently capable of utilizing the results of the Project to promote CF activities for mangrove forests effectively in cooperation with other authorities concerned even after the completion of the Project
(2) Organizational strategy (post- project strategy)	Questionn aire and discussio n with manageri al P/PJ/E	Post-project strategy for promotion of integrated mangrove management, including CF, in the Ayeyawady Delta is yet to be developed,
(3) Deployment of Project Personnel	ditto	All of the Myanmar project staff members are permanent employees of the FD, which ensures their continuous employment. They are expected to be assigned to the relevant posts after the end of the Project. If they are assigned in Ayeyawady Delta region, they will be able to fully utilize their knowledge and skills in their work. (For those assigned to other regions, utilization/application of the skills and knowledge is also possible except for the ones that are specific to mangrove forest area).
(4) Management capacity	dítto	The FD has managed the relevant activities without serious problems so far. It is expected that they will be able to manage the relevant activities for themselves after the end of the Project.
(5) Coordination with relevant organizations	ditto	The FD has coordinated their activities with concerned organizations as mentioned in Annex 4. With a regular inter-agency coordinating meeting at regional level and a regular donor/NGO coordinating meeting at district level in place, which are planned to be initiated by the Project, in place, the coordination/cooperation with the relevant organizations is expected be enhanced.
5.2 Financial Aspects	ditto	So far, the FD has allocated necessary budget for implementation of the Project, except for transportation costs for filed visits, e.g. AR planation and CF villages. For example, allowances of meetings, field trips, and travel have been borne by the Japanese side based on the agreement made in a meeting between the Implementing and Supporting Organizations and JICA Expert Team in September 2007. Unless measures to secure the transportation costs for the field visits are secured, continuation and expansion of the related activities in the post-project period would be difficult.
5.3Technical Aspects		
(1) Technical capacity of the	Question naire	Output 1 (Participatory approach in particular): Due to lack of organized records related to technical transfer associated with CF





Items	Source/ Method	Evaluation
Project Personnel (i.e. field level staff)	and interview with the relevant P/P,J/E	activities, the Mid-term Review team was not able to assess the technical level of the field staff on this subject. For reference, most of the SOs and ROs have prior exposure to CF either through participation in the training at CFDTC or through working as project staff in the past CF projects supported by UNDP/FAO or JICA pilot projects. As for Foresters, their previous experience and knowledge are limited because (i) they are not entitled to receive CF training at CFDTC and (ii) the assignment period in one post is normally 1-2 years > Output 2 (CF management and support system): As little progress has been made in the related activities due to adverse effects caused by the Cyclone Nargis, technical transfer has not yet been implemented in full-scale. > Output 3 (Silviculture techniques/Action research): Technical capacity of the Project staff has been enhanced steadily. They have been playing main role in planning, implementation and monitoring of current activities with advisory support from the Japanese experts. It is likely that they will gain enough skills and knowledge to continue, and develop the relevant activities by the end of the Project.
(2) Utilization and dissemination of the transferred techniques and project deliverables	ditto	and develop the relevant activities by the end of the Project. Output 1 (Participatory approach in particular): As for utilization and dissemination of the transferred techniques in the post-project period, the Mid-term Review Team was not able to obtain the relevant information. Output 2 (CF management and support system): A training program as well as SOP for Mangrove CF is expected to be produced by the Project end for distribution to the FD field staff in Ayeyawady Delta among others. At the moment, it is uncertain if these deliverables would be continuously utilized and disseminated after the Project end. In order to make sure the continuous utilization and dissemination, the deliverables should be relevant with local needs, levels, and the prevailing laws and regulations. They should be also field-tested and modified as appropriate. The final deliverables should be incorporated in the existing institutional framework of the FD. In view of the above, the Project plans to develop the training program and the SOP based on the existing ones, exploring the possibilities of involving the CFDTC. The final deliverables are planned be submitted to the Director General of the FD for his confirmation and further action. Output 3 (Silviculture techniques/Action Research): The techniques and methods transferred through the Project as well as the deliverables are considered to be relevant with the local needs and levels. They have been already utilized by the FD staff in their other Departmental works. In addition, technical guidelines for field FD staff and a technical report, compiling the results of AR, are scheduled to be produced by the Project end. Taking into account appreciation of the FD staff, it is likely that the transferred techniques/methods and the project deliverables will be continuously utilized and disseminated after the end of the Project.
(3) Utilization of the provided machinery and equipment	ditto	Machinery and equipment provided by the Project has been utilized fully. As most of the machineries provided are general items such as vehicles, computers, GPS, etc., the technical capacity to utilize the machinery and equipment after the completion of the Project is likely to be ensured for the most part. As for maintenance, spare parts and consumables are available in Myanmar.





ANNEX 6-1 Proposed draft for PDM2

Project Title: Integrated Mangrove Rehabilitation and Management Project through Community Participation in the Ayeyawady Delta

 Project Title: Integrated Mangrove Rehabilitation and Management Project through Community Participation in the Ayeyawady Delta
 Project Duration: April 2007-March 2013
 Project Area: Four reserved forests (Kyakankwinpauk, Pyinalan, Kadonkani, Pyinalan, Radonkani, Pyinalan, Py

Narrative Summary	Objectively Verifiable Indicators	Means of	Important Assumptions
TERROLINATION CONTRACTOR CONTRACT	Transport to the state of the s	Verification	
Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta	 a. Mangrove forest coverage increases by X acres (Y ha) (*1) in the Target Area of the current Project. (i.e. 4 RFs) within three years after the completion of the Project b. Income levels of communities in the Target Area is improved than that of 2004 	a. Forests resource assessment by FD (remote sensing) b.Agricultural Census report	
Project Purpose: The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta.	 a. By the Project end, mangrove forest coverage is increased by X acres (Y ha) (*2) in the selected areas where project were implemented(i.e. CF plantation, CF-Natural Forest Improvement Operation (NFIO), and ARP sites) from the base year 2009. b. At the end of the Project, among the registered members of all the target CFUSGs reselected in 2011 more than 80% consider CF useful 	a. Project reports b. Results from the CF Impact survey	1 Favourable markets exist for CF products. 2 FD's policy on the management of the four reserved forests does not change significantly. 3 Sufficient financial and other resources are allocated for the sustainable management of
Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).		1a: CF Management Plans, 1b~1e: Monitoring report, project report	1 No drastic increase in the population within the four reserved forests. 2 External pressure to convert the mangrove forests to other land uses does not increase.
	By the end of the Project, capacity of X % of technical members of CF Task Force, engaged in the Project more than two years reaches the Yth level of the Z evaluation rating set by the Project for each level on CF management and extension/support on average. On average, more than 80% of all registered members of the CFUSGs reselected in 2011 give the highest or medium rate on three-level rating about "degree of understanding", "degree of applicability", and "degree of satisfaction" of the CF extension they received. By the Project end, a training program for CF for mangrove forest, including materials, is developed based on the existing ones for confirmation by the DG for further action (in English & Myanmar) By the Project end, Standardized Operational Procedures (SOP) for CF for mangrove forest is developed based on the existing SOP of the FD (i.e. Departmental Instructions and CFI) for confirmation by the DG for further action (in English & Myanmar).	Za-Zd: Project reports	
Some silvicultural te rehabilitation of the o management of the associated forests fo Delta are established.	prepared (in English and Myanmer) Id management of mangrove forests, ar)	3a~3b; Project reports	
		4aMeeting records 4b:Land use maps 4c: Meeting records 4d: Project reports 4e: Meeting records	
X (Additional Output after the Cyclone Nargis in May 2008) Recovery from damage of Cyclone Narigis is promoted.	 Xa. By March 2009, a hazard map of the Target Area is developed based on the latest satellite images (2009) for distribution to the local communities. Xb By March 2010, a report on damage & recovery survey on the communities in the Target Area is prepared XC By June 2011, a report on village profile survey in the Target Area is prepared Xd By June 2010, Centre for CF Extension & Nursery in each RF is rehabilitated. Xe In 2009 & 2010, materials necessary for disaster recovery or prevention work are provided to the FD and the 	Xa.Hazard map. Xb-f:project reports	州加馬貝介



Proposed draft for PDM2 ANNEX 6-1

Xf By December 2011, a report on recovery condition of mangrove vegetation (2008-2010) is prepared Cooperating Agencies based on the needs

	<u>sindui</u>	<pre></pre>	Personnel (Members of CF Task Force: MCFTF	1. Project Director	2. Project Manager	3. Project Coordinator
Activities:	-1 Select villages to introduce CF from the ones that express interest.	 -2 Conduct baseline survey on the basic socio-economic conditions of the selected villages. 	1-3 Organize/reorganize CFUSGs in the selected villages	. Management Plans and proposals for CF certificates through	participatory planning process	1-5 Issue CF certificates to the CFUSGs based on the proposals as per the CF Instruction (CFI)
٩	-	<u>-</u>	+	<u>-</u>		+

	p with 5.	rtions. 0.			based 1 a
1-6 Assist the CFUSGs in implementing the certified CF Management Plans	1-7 Implement various capacity strengthening programs to enhance the income levels of the CFUSGs in partnership with $\frac{5}{2}$.	Cooperating Agencies such as Department of Fisheries (DOF), Myanmar Agriculture Service (MAS), and other institutions.	1-8 Monitor and evaluate the implementation of the certified CF Management Plans	1.9. Conduct impact survey regarding the effects of CF on the livelihoods of the members of the CFUSGs.	2-1 Identify necessary activities for CF management (*4) and CF extension & support (*5)t by each Reserve Forest (RF) based
<u>۳</u>	1-1		Υ	7	7-

and

authorities supportive

Relevant

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Other personnel mutually agreed

necessary

Field Project Manager

4,

Other MCFTF

stakeholders

mangrove forests

rehabilitation

mpact

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cyclones, floods,

(e.g.

pests, diseases).

tsunami,

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that

OCCUF

natural

significant hazards ₽

management

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sustainable

promote

1. Office building and facilities necessary for the

Land, Building and Facilities

mplementation of the Project

mangrove forests

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	at, logistics and human resource development needs) to implement	
	financi	
	s of the technica	ctivities
activities	Assess the need	the identified a
	2-3	

Assess the needs of the technical MCFTF (e.g. financial, logistics and human resource development needs) to implement	the identified activities 2-4 Develop training plan & materials based on the assessment of the human resource development needs conduc
2-3	4

	נום ותפונווופת סכוואוופה
4	2-4 Develop training plan & materials based on the assessment of the human resource development needs condi-
4	2.5 Train the technical MCETE according to the plan

2-4	2-4 Develop training plan & materials based on the assessment of the human resource development needs conducted
2-5	2-5 Train the technical MCFTF according to the plan
2-6	2-6 Construct/renovate the CF Extension Center & Nursery in each RF
2-7	2-7 Provide extension services and support to the CFUSGs in each RF
2-8	2-8 Carry out public awareness campaigns regarding CF and the conservation of mangrove forests
5-9	2-9 Draft detailed SOP for CF for the mangrove forests based on the existing SOP of the FD (i.e. Departmental Instr
	and feedback from the Design of nation

_			_
5-1 Conduct surveys for identification of silvicultural techniques for both community and non-community forestry with respect to	the eco-geographical / management zones in the Ayeyawady Delta	3-2 Prepare the specific Action Research (AK) test designs for each of the identified silvicultural technique (e.g. seedling .	

3-2	3-2 Prepare the specific Action Research (AR) test designs for each of the identified silvicultural technique (e.g. seedl
	production, planning designs and methods, thinning, pruning, forest management).
ς (γ)	3-3 Execute the AR in each RE

are to

stakeholders

and

authorities supportive

Relevant

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2. Participatory community development

Chief Advisor

Personne

Mangrove forestry

Coordinator
 Other expense

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rehabilitation

Minimum of US\$100,000 equivalent in 5 years

<Japanese Side>

Local Operational Costs

significant hazards

that

occur

impact

natural

as

Other facilities mutually agreed upon

and vehicles

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necessary

Pre-Conditions

4. Jetty and space necessary for storage of boats

Land for the action research

Japanese experts and related staff members Office space and necessary facilities for

mangrove forests

cyclones, floods

(e.g.

pests, diseases).

tsunami.

₽

management

sustainable

promote

Other experts in specific fields (e.g. Extension, GIS Agro-forestry, Fish culture, Forestry Valueadded Production, Marketing and Distribution)

upon mutual agreement achinery and Equipment

mangrove forests

3-6 Develop technical guidelines for rehabilitation and management of mangrove forests based on the findings of the AR	4-1 Organize an inter-agency coordination meeting, consisting of relevant authorities (e.g. agriculture, fisheries, settlement and	land records) at the Regional level to examine the underlying causes for mangrove deforestation in the Ayeyawady Delta.	4-2 Update the land use information on periodic basis based on the up-to-date satellite images for discussion by the	
Υ,	4		4	

_					
		Machinery and Equipment	1. Boat(s)	2. Vehicle(s)	3. Other equipment would be provided if necessary
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	coordination meetingmembers, including overall forest resource assessment of the region and mangrove forest conversion.	4-3 Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove $\mid Mi$	ecosystem in the Ayeyawady Delta.	h donors/NGOs	X-1 Prepare a hazard map based on analysis of damage of the cyclone Nargis
		4		4	×:

upon mutual agreement.

Training in Japan

Local Costs

Supply

?	Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area.
×	Rehabilitate the CF Extension Center and Nursery in each RF with cyclone-proof structur
χ̈́	
×-7	Conduct public awareness activities on disaster prevention in the Target Area

2012, reflecting the actual plans delineated in the CF Management Plans of the CFUSGs reselected in 2011. (*4): "CF management" by FD is defined as planning, supervision, monitoring and evaluation, and data organization and analysis of the activities related to CF. "CF support" consists of extension service and extension support to CF. (*5): "CF extension services" may include organization of the organizational/management capacity of CFUSGs, provision of technical support to CFUSGs, which include X-8 Arrange necessary coordination among-donors in the integrated management management (*1). The planned value will be determined by March 2012, reflecting the actual plans delineated in the CFUSGs which were not reselected. (*3): The planned value will be determined by March 2012, reflecting the actual plans delineated in the CFUSGs reselected in 2011 and Action Research as well as the area rehabilitated during 2009-2010 by the CFUSGs which were not reselected. (*3): The planned value will be determined by March



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Proposed draft for PDM2
provision of seedlings for CF plantation delineated in the CF Management Plans, making the facilities of the CF Extension and Nursery available to the CFUSGs for their activities, etc.. (*6): "Technical MCFTF" in Output 2 include the Field Project Manager and field staff (Staff Officers(SOs), Range Officers(ROs), Deputy ROs(DROs), & Foresters) relevant to the Target Area

ANNEX 6-2 Modifications made in the draft PDM 2 (Addition to the PDME is shown as underlined; deletion as struck through)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta	 a. Mangrove forest coverage increases by 42,000 X acres (Y ha) (*1) in the Target Area of the current Project. (i.e. 4 RFs) within three years after the completion of the Project b. Income levels of communities in the Target Area is improved than that of 2004 	a. Forests resource assessment by FD (remote sensing) b.Agricultural Census report	
Project Purpose: The communities and the mangrove forests co-exist in a sustainable manner in the selected areas where project activities were implemented within the Ayeyawady Delta.	a. By the Project end, mangrove forest coverage is increased by-6,200 X acres (Y ha) (*2) in the selected areas where project were implemented(i.e. CF plantation, CF-Natural Forest Improvement Operation (NFIO), and ARP sites) from the base year 2009. b. At the end of the Project, in more than 80% of the villages, where the CF-user-groups (CFUSGs) were organized, reorganized during 2009-2011, the percentage of households earning less than the average income of 100,000 kyats equivalent per year (base year 2002) decrease from the base-year of CF organization/reorganization. c, At the end of the Project, among the registered members of all the target CFUSGs reselected in 2011 persentized during 2009-2014, more than 80% consider CF useful	a. Project reports b. Results-from the CF-Impact-survey D. Results from the CF Impact survey	1 Favourable markets exist for CF products. 2 FD's policy on the management of the four reserved forests does not change significantly. 3 Sufficient financial and other resources are allocated for the sustainable management of management of management of
Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).	1a By July 2011, all the CF Management Plans of the CFUSGs, reselected in March 2011, are developed/Lipdated 1b By the end of the Project, organizational capacity of the Management Committees (MCs) of all the target CFUSGs, reselected in 2011, reaches the Xth level of the Y evaluation rating set by the Project or Decertified CF Management Plans (i.e. CF plantation and NFIO) of all the target CGUSGs reselected in 2011are implemented according their annual plans. 1d By the Project end, more than 4,000-X acres (4,600Y ha) (*3) of mangrove forests are rehabilitated and managed by the CFUSGs reselected in 2011 organized/reorganized during -2009-2014 based on the certified CF Management Plans, including CF plantation and NFIO when applicable on the certified cend, all-active the CFUSGs reselected in 2011 organized/reorganized during 2009-2014 start to gain profit from CF activities determined in the certified CF Management Plans and/or	1a: CF Management Plans, 1b~1e: Monitoring report, project report	1 No drastic increase in the population within the four reserved forests. 2 External pressure to convert the mangrove forests to other land uses does not
2.The management and the support system of the Forest Department (FD) for CF is effective.		2a~2d: Project reports	בר ממס מס מס מס
3. Some silvicultural techniques for the rehabilitation of the degraded and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.		3a~3b: Project reports	
A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.	nber 2011, an inter-agency coordination meeting is formulated by the FD committee—is 1-by the Ayeyawady-regional-government. Information of the Target Area is updated based on the satellite images of 2007, 2009 and ted land use information is shared at the inter-agency coordination committee meetings for incommendations are made and/or actions are taken by the committee. It is promote synergy among the relevant sectors are organized annually	4aMeeting records 4b:Land use maps 4c: Meeting records 4d: Project reports 4e: Meeting records	



are supportive stakeholders

authorities and

2. Vehicle(s)
3. Other equipment would be provided if necessary

Machinery and Equipment

Update the land use information on periodic basis based on the up-to-date satellite images for discussion by the

deforestation in the Ayeyawady Delta.

4-2

Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of coordination meeting committee members, including overall forest resource assessment of the region and mangrove forest

Boat(s)

upon mutual agreement.

diseases). 2 Relevant pests,

					_			
deletion as struck through)		zard map,	Xb-f:project reports					
ANNEX 6-2 Modifications made in the draft PDM 2 (Addition to the PDME is shown as underlined; deletion as struck through)	4e. A donor/NGO coordination meeting for the Target Area organized by the FD once a year	tellite images	(2009) for distribution to the local communities	Xb By March 2010, a report on damage & recovery survey on the communities in the Target Area is	prepared	Xc By June 2011, a report on village profile survey in the Target Area is prepared	Xd By March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated.	Xe in 2009 & 2010 imaterials necessary for disaster recovery or provided and the residual to t
ANNEX 6-2 Modific		(Additional Output after the	Cyclone Nargis in May 2008)	Recovery from damage of Cyclone	Narigis is promoted.			

 \times

Cyclone Nargis in May 2008) Recovery from damage of Cyclone Xb	(2009) for distribution to the local communities Xb By March 2010, a report on damage & recovery survey on the communities in the Target Area	Xb-f.project reports in the Target Area is	
******	prepared Xc By June 2011, a report on village profile survey in the Target Area is prepared Xd By March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated. Xe In 2009 & 2010, materials necessary for disaster recovery or prevention work are provided to the FD and the Cooperating Agencies based on the needs	are provided to the FD	•
₹	Ai by Decembel 2011, a report on recovery condition of mangrove vegetation (2008-2010) is prepared	2010) is prepared	
<u>Nities:</u> Select villanes to introduce CE from the conditions interest	And that access is the contract of the contrac	Innute	1 No significant
Conduct baseline survey on the basic social	Conduct baseline survey on the basic socio-economic conditions of the selected villages	<myanmar side=""></myanmar>	E I
Organize/reorganize CFUSGs in the selected villages	cted villages	Personnel (Members of CF Task Force: MCFTF)	occur that will
Assist the CFUSGs in preparing/updating participatory planning process.	Assist the CFUSGs in preparing/updating their CF Management Plans and proposals for CF certificates through participatory planning process.	1. Project Director 2. Project Manager	impact the
Issue CF certificates to the CFUSGs based	Issue CF certificates to the CFUSGs based on the proposals as per the CF Instruction (CFI)		mangrove
Assist the ChUSGs in implementing the certified CF Management Plans implement various capacity strangthering acceptant to the contract of the	-	4. Fleid Project Manager Cather McTTE	forests (e.g.
Cooperating Agencies such as Department	Cooperating Agencies such as Department of Fisheries (DOF), Myanmar Agriculture Service (MAS), and other institutions.	6. Other personnel mutually agreed upon as	cyclones,
Monitor and evaluate the implementation of the certified CF Management Plans Conduct impact survey regarding the effects of CF on the livelihoods of the mem	of the certified CF Management Plans ets of CF on the livelihoods of the members of the CEUSO.	necessary	pests,
Identify necessary activities for CF manage	Identify necessary activities for CF management (*4)and CF extension & support(*5)t by each Reserve Forest (RF) based	Land Duileins and Countilities	
on review of the CF contents of the Integrated Mangrove Management Plan (IMMP). Confirm the s roles and responsibilities of the technical members of CF Task Force (on review of the CF contents of the Integrated Mangrove Management Plan (IMMP). Confirm the 8 roles and responsibilities of the technical members of CF Task Force (fechnical MCETEV*6) for the identified	1. Office building and facilities necessary for the	2 Relevant authorities and
activities		Implementation of the Project 2. Office snace and necessary facilities for the	Ξ.
Assess the needs of the technical MCFTF the identified activities	Assess the needs of the technical MCFTF (e.g. financial, logistics and human resource development needs) to implement the identified activities	Japanese experts and related staff members	ร
Develop training plan & materials based on	Develop training plan & materials based on the assessment of the human resource development needs conducted in 2.3.	3. Land for the action research 4. Jetty and space percessory for storage of boots	to promote
Train the technical MCFTF according to the plan	le plan		manadement of
Construct/renovate the CF Extension Center & Nursery in each RF	ter & Nursery in each RF	5. Other facilities mutually agreed upon as	mangrove
Carry out public awareness campaigns reg	revise extension services and support to the ChOSOS in each KF Carry out public awareness campaigns reparding CF and the conservation of managova forests	necessary	forests
Draft detailed SOP for CF for the mangrov	Draft detailed SOP for CF for the mangrove forests based on the existing SOP of the FD (i.e. Departmental Instructions)	Local Operational Costs	
—Develop post project strategy for CF manac	agement and CF extension&support	Minimum of US\$100,000 equivalent in 5 years	히
Conduct surveys for identification of silvicul	Conduct surveys for identification of silvicultural techniques for both community and non-community forestry with respect to	<japanese side=""></japanese>	1 No significant
The eco-geographical / management zones in the Ayeyawady Delta	s in the Ayeyawady Delta	Personnel	natural Hazards
production, planning designs and methods, thinning principle forest management)	Production, planning designs and methods thinning production for each of the identitied silvicultural technique (e.g. seedling production, planning designs and methods thinning production.	Chief Advisor Deficioates, community devalues at	impact the
Execute the AR in each RF		3. Mangrove forestry	itation
Conduct periodic technical monitoring / pre-	Conduct periodic technical monitoring / pretiminary assessment on the AR plantation (ARP)	4. Coordinator	mangrove
Prepare a technical report on action resear	Prepare a technical report on action research (AR) for mangrove are prepared in English and Myanmer	5. Other experts in specific fields (e.g. Extension,	forests (e.g.
Eormulate Organize an inter-agency coord	Develop technical guidelines for renabilitation and management of mangrove forests based on the findings of the AR Formulate Organize an inter-agency coordination most	GIS, Agro-forestry, Fish culture, Forestry Value-	cyclones,
fisheries, settlement and land records) at	fisheries, settlement and land records) at the <u>District</u> Regional level to examine the undertying content and land records) at the <u>District</u> Regional level to examine the undertying content and land records.	added Production, Marketing and Distribution)	tsunami, floods,
deforestation in the Avevawark Delta	ייי בייי ביייי ביייי ולאים וה יייים וייים מו ויי	באסוו וומניפה באוכים וומים	pests,

appropriate-land use policies.

conversion

2-2 2-3

<u>4</u> 4 4 4

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2 2 8

Activities:

3.4

3-2

22-5 22-5 22-8 2-8

Modifications made in the draft PDM 2 (Addition to the PDME is shown as underlined; deletion as struck through) ANNEX 6-2

ŞI	4-3 Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove		to promote
		Training in Japan	stietainable
4	Organize a coordination meeting with donors/NGOs active in the Target Area at District Level		Sustainable monorphismost of
Ψ.		-ocal Costs	management or
ņ	1		mangrove
ო	Conduct village profile survey in the Target Area		torests
က္	Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area.		
* 4	Rehabilitate the CF Extension Center and Nursery in each RF with cyclone-proof structure		
ι'n	Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through		
	material supply		
٠.	X-7 Conduct public awareness activities on disaster prevention in the Target Area		
ထု	X-8 Arrange necessary-coordination among-donors in the integrated mangrove management		

(*1): The planned value will be determined by March 2012. The figure would be reviewed and finalized in developing the post-project strategy

The planned value will be determined by March 2012, reflecting the actual plans delineated in the CF Management Plans of the CFUSGs reselected in 2011 and Action Research as well as the area rehabilitated during 2009-2010 by the CFUSGs which were not reselected

(*3): The planned value will be determined by March 2012, reflecting the actual plans delineated in the CF Management Plans of the CFUSGs reselected in 2011.

(*4): "CF management" by FD is defined as planning, supervision, monitoring and evaluation, and data organization and analysis of the activities related to CF. "CF support" consists of extension service and extension support to CF

(*5): "CF extension services" may include organization of the CFUSGs, strengthening of the organizational/management capacity of CFUSGs, provision of technical support for preparation and implementation of the CF Management Plans and income generation activities of CFUSGs, etc. "CF extension support" is defined as material support to CFUSGs, which include provision of seedlings for CF plantation delineated in the CF Management Plans, making the facilities of the CF Extension and Nursery available to the CFUSGs for their activities, etc.

"6): "Technical MCFTF" in Output 2 include the Field Project Manager and field staff (Staff Officers(SOs), Range Officers(ROs), Deputy ROs(DROs), & Foresters) relevant to the Target Area



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Les Car

Record of Myanmar Inputs

A-1. List of Myanmar Personnel (Current personnel: 26 in total)

A-1-1 Management Personnel

(1) Current (9 in total)

		Name	ne vygove	Position in the Organization		F/P	Assignment Period
<u>q</u>	Project Director	U Aye Myint Maung	The state of the s	Director General, Forest Department (FD)		Ъ	February 2010 to date
D ₀	Deputy Project Director	Dr. Nyi Nyi Kyaw		Deputy Director General, FD		d	February 2010 to date
٦	Project Manager	U Zaw Win (4)	B. Sc (Forestry)	Director, FD Planning and Statistic Division		Д	April 2010 to date
ď.	Project Coordinator	U Bo Ni	B.Sc (Forestry)	Deputry Director, FD Planning and Statistic Division (NPT)	52	Ь	
iř	Field Project Manager	U Khin Maung Lwin	B.Sc (Forestry),	Assistant Director, FD Myaung Mya District (MYM)	55	Ф	October 2007 to date (Former Staff Officer, Bogalay: (January 2005) May 2007~ Sentember 2007)
နီပ	Assistant Project Coordinator 1	U Tual Cin Khai	B.Sc (Forestry), Received Training in Japan (2010)	Staff Officer, FD Planning and Statistic Division (NPT)	37	<u>С</u>	December 2007 to date
క్ట్ ర	Assistant Project Coordinator 2	U Htay Aung	B. Sc (Forestry)	Range Officer, FD Planning and Statistic Division (NPT)	25	٦	February 2010 to date
	Director of Ayeyawady Division	U Win Naing	B. Sc (Forestry)	Director, FD Ayeyawady Division (Pathein) Will be transferred to (East) Bago Division (According to 2nd February instruction)	58	۵.	June 2008 to date
ξÄ	Assistant Field Project Manager	U Hla Myo Aung	B.Sc (Forestry) M.Sc(Natural Resource Management)	Staff Officer, Myaung Mya District (MYM)	45	С.	December 2010 to date

(2). Former (6 in total)

-							
	Position in the Project	Name	Academic backgound	Position in the Organization		F/P	Assignment Period
-	1 Project Director	U Aye Myint Maung		Director General, Forest Department (FD)		Д.	December 2004 to January 2010
2.	2. Deputy Project Director Dr. Nyi Nyi Kyaw	Dr. Nyi Nyi Kyaw	Andreas de la Company de la Co	Deputy Director General, FD		a	Ephrison 2010 to date
က်	Director of Ayeyawady Division	U Win Myint	B.Sc (Forestry)	Director, FD Ayeyawady Division	57	. 🗅	(May 2004) May 2007 ~ June 2008
4.	4. Field Project Manager	U Win Maung	B.Sc (Forestry),	Assistant Director, FD Myaung	57	Д	(November 2004) May 2007 to October 2007
rç.	Assistant Field Project Manager	U Min Maw	B.Sc (Forestry),	Staff Officer, Myaung Mya District	49	Д.	Sep 2009 to Dec 2010
				(141 141)			(From Dec 2010, Assistant Director, FD NPT



RM-A

Record of Myanmar Inputs

2007~ June 2		
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33		
Planning and Statistic Division	(LIN)	
B.Sc (Forestry)		
U Aung Myat San		
Assistant Project	Coordinator 2	
œ,		

A-1-2 Technical Personnel (Technical Members of Community Forestry Task Force) (X in total)

(1) Current (17 in total)

a. Lapputa (10 in total)

	Position in the Project	Name	Academic Background	Position in the Organization	Age	F/P	Project Assignment Period
_	Field Project Leader, Laputta	U Aung Gyi	B.Sc (Forestry)	Staff Officer, Laputta Township	47	Д	December 2010 to date
~		U Than Min Aye	B.Sc (Forestry)	Range Officer, Laputta Township 24	24	۵	Ap.: 2010 to date
m	Field Project Chief, Kyakankwinpauk	U Hla Shwe	Grade 10 (Highschool)	10 (Highschool) Range Officer, Laputta Township	52	ᇟ	August 2009 to date
	Reserved Forest (RF)				•		
₩.	Field Project Chief,	U Zaw Min	B.A. (Distance)	Range Officer, Laputta Township	54	<u>a</u>	January 2010 to date
	Pyinalan RF						

Other Field staff (6 in total):

Kyakankwinpauk RF : Deputy Range Officer (2), Forester (1) Pyinalan RF: DRO (1), Forester (2)

b. BogalyTownship (8 in total)

	Position in the Project	Name	Academic	Position in the Organization	Age F/P	F/P	Project Assignment
	White the second		Dacky Carra				reriod
~	Field Project Leader,	U Kan Htun	B.Sc (Forestry),	Staff Officer, Bogalay Township	43	۵	October 2007 to date
	Bogalay						
	Field Project Chief,	U Myo Min Htun	B.Sc (Forestry),	Range Officer, Bogalay Township	30	4	November 2009 to date (Former Field
	Kadonkani RF				1	i	Project Chief, Pyindaye RF North:
1							November 2007 to October 2009)
n	Field Project Chief,	U. Kyaw Kyaw Myo	B.Sc (Forestry),	Range Officer, Bogalay Township	27	۵.	October 2009 to date
	Pyindaye RF North						

Other Field staff: (5 in total)

Kadonkani RF: DRO (U Sai Thein Soe , U Aung Myint), Forester (U Aung Aung, U Than Min Htike) Pyinalan RF: DRO (U Kyaw Kyaw Min), Forester (U Lin Lin Htike, U Win Hlaing)

c. Pyarpon Township (9 in total)

	Position in the Project	Name	Academic	Doction of the Contraction	Age L'n	נ	Project Assignment
		Ba	Background	rosition in the Organization	1	L L	Period
-	Field Project Leader,	U Kyi Lin	B.Sc (Forestry),	Staff Officer, Pyar Pon Township 47	47	Ω	P January 2010 to date
	Pyar Pon				•		
2	Field Project Chief,	U Zaw Min Htun	B.Sc (Forestry)	Range Officer, Pyarpon Township 35	35	۵	January 2010 to date (Former Field Project



RM (2)

Record of Myanmar Inputs RM-A

Po	Position in the Project	Name	Academic Background	Position in the Organization	Age	F/P	Project Assignment	
<u>o</u>	Pyindaye RF South						Chief, Kadonkani RF: (January 2006) May	
풀립	Field Project Chief, Pyindaye RF South	U Win Maung Aye	B.Sc (Forestry),	Range Officer, Pyarpon Township	29	ட	November 2009 to date (*)	

(*)Former Field Project Chief, Pyinalan: (February 2007) May 2007 –November 2007), RF Will leave position to study in Germany in July 2011)

Other Field Staff (4 in total) Pyindaye ED (South): DRO (U Zaw Nay Linn , U Win Min Thein), Forester (U Han Myo Linn, U Myo Min Lat)

(2) Former Project Staff

a. Laputta Township

Position in the Name	the	N Carola	Academic		Age		Project Assignment	_
Project Name	Name		Background	Position in the Organization	2	F/P	Project Assignment Period	
Field Project Leader, U Win Naing Laputta	U Win	Vaing	B.Sc (Forestry),	Staff Officer, Laputta Township 44	44	ட	(2006) May 2007 - December 2006	
Field Project Chief, U Naing Win Kyakankwinpauk Reserved Forest	U Naing	l Win	B.Sc (Forestry),	Range Officer, Laputta Township (Birth Year: 1980)	1	Œ.	(2007~2008) Deceased by Cyclone Nargis in May 2008.	ì
Field Project Chief, U Min Maung Pyinalan RF Maung	U Min Ma	gung	B.Sc (Forestry)	Range Officer, Laputta Townshin	27	۵	Jan 2008~ Dec 2009	

b Pyarpon Township

signment	July 2007 to Dec 2009
Project Assignment Period	July 2007 t
Age F/P	G.
Age	44
Position in the Organization	Staff Officer, Pyar Pon Township
Academic Background	B.Sc (Forestry)
Name	U Nay Myo Htun
Responsible Activities of PDM	Field Project Leader, Pyar Pon
	2



RM-A Record of Myanmar Inputs

A-2. Allocation of Local Budget for the Project (as of January 2011)

Unit=MMK

No.	Major Budget Item	FY2007-08	FY2008-09	FY2009-10	FY2010-11	Total
1	Office Space and Facilities	14,936,058	1,640,300	1,813,200	-	18,389,558
2	Land for Action Research Plantation	-	(212) Acre	(900) Acre	(400) Acre	(1512) Acre
3	Action Research Plantation	-	1,749,000	9,123,800	9,278,000	20,150,800
4	Seedlins for CF Plantation	3,932,500	3,388,000	4,077,700	4,513,300	15,911,500
5	Transportation	-	-	-	-	-
6	Mangrove Seminar, JCC	32,000	57,000	65,000	55,000	209,000
7	Tax, Labour & Maintenance	19,009,550	-	2,169,300	8,079,000	29,257,850
	n Local Currentcy (MMK) ling Salary for Local Staff	37,910,108	6,834,300	17,249,000	21,925,300	83,918,708
Total i	n US\$	43,827	7,901	19,941	25,347	97,016

No.	Major Budget Item	FY2007-08	FY2008-09	FY2009-10	FY2010-11	Total
1	Local Staff	23,532,000	23,532,000	23,532,000	32,412,000	103,008,000
	n Local Currentcy (MMK) ling Salary for Local Staff	61,442,108	30,366,300	40,781,000	54,337,300	186,926,708
Total i	n US\$	71,031	35,106	47,146	62,818	216,100

1US\$≒865MMK (March 2010)

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B-1-1. Assignment of Japanese Experts I (10 Persons in Total as of September 2010: 91.94m/m)

· · · · · · · · · · · · · · · · · · ·	Field	Name	Assignment Period	M/M (excluding M/M covered by NK)	Responsible Outputs and/or Activities of PDM (Planned)	Responsible Outputs and/or Activities of PDM (Actual)
1. 2. 3. 4. 5. 6. 7. 8. 9.	Chief Advisor	Shiro ARAI	2007/5/17 ~ 2007/10/19 2007/12/13 ~ 2008/3/14 2008/5/14 ~ 2008/7/7 2008/10/2 ~ 2008/10/28 2009/1/13 ~ 2009/4/10 2009/6/23 ~ 2009/8/20 2009/9/7 ~ 2009/12/16 2010/1/19 ~ 2010/5/20 (4/12-17 Covered by NK) 2010/5/31~2010/6/30 (Covered by NK) 2010/7/1 ~ 2010/9/15 (8/26~8/30 Assigned as Participatory Community Development Expert)	25.73	Manage Overall Activities	Managed Overall Activities
11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22.	Participatory Community Development / Coordinator	Tetsuya SAITO	2007/5/17 ~ 2007/8/4 2008/1/3 ~ 2008/3/14 2008/5/19 ~ 2008/7/8 2008/7/27 ~ 2008/8/30 (8/2 ~ 8/3 Out of Country) 2008/10/2 ~ 2008/10/28 2009/1/20 ~ 2009/3/31 2009/4/9 ~ 2009/7/31 2009/11/12 ~ 2010/1/6 2010/1/7 ~ 2010/3/7 2010/3/8 ~ 2010/3/28 (3/29-4/8 Covered by NK) 2010/4/30 ~ 2010/5/25 2010/6/1 ~ 2010/6/30 (Covered by NK) 2010/7/1 ~ 2010/8/5	19.57	1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-9, 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 3-7, 4-1, 4-2, 4-4-, 4-5, 4-6, 4-7, 4-8	1-1, 1-2, 1-3, 1-4, 1-6, (1-8), 2-1, 2-2, 2-3, 2-6, 2-7, 3-1, 3-3, 3-7, 4-4, 4-5, 4-6, 4-7, 4-8
24.25.26.27.28.29.30.	Mangrove Forestry I	Naohiro MATSUI	2007/5/27 ~ 2007/8/9 2008/1/10 ~ 2008/2/23 2009/9/20 ~ 2009/10/14 2009/11/4 ~ 2009/11/28 2010/2/4 ~ 2010/3/2 2010/4/25 ~ 2010/5/20 2010/7/11 ~ 2010/8/6	8.33	1-1, 1-2, 1-3, 1-4, 1-6, 1-9, 2-3, 2-5, 2-6, 2-7, 2-8, 3-1, 3-2, 3-4, 3-5, 3-6, 3-7	1-6, 2-3, (2-6), 3-1, 3-2, 3-4, 3-5, 3-6, 3-7
31. 32. 33. 34. 35.	Mangrove Forestry II / Agroforestry	Dexter CABAHUG	2007/6/28 ~ 2007/9/10 (Agroforestry: 2.50M/M) 2008/10/7 ~ 2008/10/26 (Mangrove: 0.67M/M) 2009/3/6 ~ 2009/4/10 (Mangrove: 1.20 M/M) 2009/7/28 ~ 2009/8/19 (Mangrove: 0.77 M/M) 2010/3/6 ~ 2010/3/27 (Agroforestry: 0.73 M/M)	5.87 (AF: 3.23M/M) (MF: 2.64 M/M	1-1, 1-2, 1-3, 1-4, 1-6, 1-7, 1-9, 2-3, 2-5, 2-6, 2-7, 2-8, 3-1, 3-2, 3-4, 3-5, 3-6, 3-7	1-7, 2-3, 2-5, (2-6), 2-7, 3-1, 3-4, 3-5
36.	GIS 1	Akihito SAKURAI	2007/7/2 ~ 2007/10/19 (8/5 ~ 8/8 Out of Country)	8.3	1-4, 3-3, 4-2, 4-3	1-4, (2-6), 3-3, 4-2, 4-3, 4-6

RM (5)



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or tree or the state of the sta	Field	Name	Assignment Period	M/M (excluding M/M covered by NK)	Responsible Outputs and/or Activities of PDM (Planned)	Responsible Outputs and/or Activities of PDM (Actual)
37.			2008/1/10 ~2008/1/27			(basically 70-80% of all
38.			2008/10/2 ~ 2008/10/28			inputs were for
39.	*		2009/2/16 ~ 2009/3/26			CFECN rehabilitation
40.			2009/3/27 ~ 2009/4/10 (Covered by NK)			work)
41.			2009/7/12 ~ 2009/8/9			
42.			2010/4/22 ~ 2010/5/21	-		
43.			2010/5/22 ~ 2010/6/17 (Covered by NK)			
44.	GIS 2	Itaru MORITA	2008/7/27 ~ 2008/8/30	1.17	4-2, 4-3	(2-6), 4-3
45.			2009/1/19 ~ 2009/2/12		2-5, 2-6, 2-7, 2-8, 3-3, 4-6	(2-6), 3-3 (basically all
46.			2009/3/17 ~ 2009/4/10]	2-0, 5-5, 4-0	inputs were for CFECN
47.			2009/5/18 ~ 2009/6/30		:	rehabilitation work)
48.	Training/Eytanaian	Tomohiro	2009/8/25 ~ 2009/9/30	0.07		WOLK)
49.	Training/Extension	SHIBAYAMA	2009/11/6 ~ 2009/11/28	8.97		
50.			2010/3/1 ~ 2010/4/12			
51.		}	2010/5/12 ~ 2010/6/28 (covered by NK)			
52.			2010/7/6~2010/9/15]		
53.			2007/5/17 ~ 2007/8/6		1-1, 1-3, 1-4, 1-7, 1-9, 2-3,	1-3, 1-7, 1-8, 1-9, 2-3, 2-5,
54.			2008/1/10 ~ 2008/2/8		2-5, 2-6, 2-7,	1-9, 2-3, 2-3, (2-6), 2-7, 4-6
55.	Fish Culture	Tsuneo IWAO	2009/1/13 ~ 2009/4/1	10.33	2-8	
56.			2009/11/28 ~ 2010/1/24			
57.			2010/7/11 ~ 2010/9/9			
58.	Marketing	Akeshi MORI	2007/6/17 ~ 2007/8/20	3.67	1-2, 1-7, 1-8, 1-9	1-2, 1-7, 1-8,
59.	mainethy	VICENII MOL	2010/1/8 ~ 2010/2/21	3.07	1-9	1-9, (2-6)
60.	Coordinator	Kouiku OGAWA	2007/5/17 ~ 2007/6/15 (6/16 ~ 10/19 Covered by NK) 2007/12/13 ~ 2008/1/11	8.40*	4-5, 4-6	4-5, 4-6
61.			(1/11 ~ 3/17 Covered by NK)			
Tota	I M/M (excluding M/M covered by	NK)		91.94		

^{*} Actual Month of Input (Coordinator).

Note: "(1-7)", "(2-6)" means relevant OJT were conducted but not fully in accordance with the activity (Activity 2-6 indicated in parenthesis under "Responsible Outputs and/or activities of PDM (Actual)"

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B-1-2. Assignment of Japanese Experts II (December 2010 to March 2011 as of February 09, 2011)

	Field	Name	Assignment Period	M/M {excluding M/M covered by NK}	Responsible Outputs and/or Activities of PDM (Planned)	Responsible Outputs and/or Activities of PDM (Actual)
1.	Chief Advisor/	01: 404	2010/12/15 ~ 2010/12/29		Manage	Manage
2.	Agroforestry	Shiro ARAI	2011/02/18 ~ 2011/03/05 (2/18 Covered by NK)	1.00	Overall Activities	Overall Activities
3.	Deputy Chief Advisor/ Community Forestry 1 (Participatory Community Development 1)	Tomohiro SHIBAYAMA	2010/12/12 ~ 2011/03/11	3.00	Manage Overall Activities	Manage Overall Activities
4.	Community Forestry 2 (Participatory Community Development 2)	Hiromi YASU	2010/12/16 ~ 2011/1/25 (1/25 Covered by NK)	1.00	1-2, 1-4, 1-8, 1-9, 2-8,	1-2, (checking/ recompilation of 1-2)
5.	Mangrove Forestry I	Naohiro MATSUI	2010/12/19 ~ 2011/02/01	1.50	3-1, 3-2, 3-4, 3-5, 3-6, 3-7	3-1, 3-2, 3-4, 3-5, 3-6,
6.	GIS 1	Akihito SAKURAI	2011/01/16 ~ 2011/02/27 (2/15-2/27 Covered by NK)	1.00	3-3, 4-2, 4-3	3-3, 4-2,
7.	Training/Extension/ Marketing/	Mana TANAKA	2010/12/12 ~ 2011/02/09 (Coordinator)	2.00*	2-5, 2-6, 2-7, 2-8, 4-6,	4-6, (other coordination
8.	Coordinator		2011/02/10 ~ 2011/03/11	1.00		work)
9.	Fish Culture	Tsuneo IWAO	2010/12/19 ~ 2011/01/29	1.40	1-7, 2-6, 2-7, 2-8	1-7, 2-6, 2-7
	M/M (excluding M/M covered b			9.90		

 ^{*} Actual Month of Input (Coordinator).

B- 2. List of Myanmar Personnel Trained in Japan (8 person in total)

GRT: Group Training Course C/P: Counterpart Training Course

		·		On . Counterp	art fraining Course
	Name	Position/Organization at the time of training	Training Period	Title of Training Course	Remarks (Position/organization at the time of evaluation)
1.	U Naing Win	Range Officer	2007/5/29~ 2007/8/18	Conversation and Sustainable Management of Mangrove Ecosystem (GRT)	Deceased during Cyclone Nargis in May 2008.
2,	U Win Maung	Assistant Director, Myanmya District, Ayeyarwaddy Division	2007/10/21~ 2007/11/11	Seminar on Forest Management Policy- Sustainable Forest Management with Collaboration of Local Government and Community (C/P)	Director, Dry Zone Greening Department, Magway Division
3.	U Win Maung Aye	Range Officer, Pyarpon Township	2008/5/27~ 2008/8/16	Conversation and Sustainable Management of Mangrove Ecosystem (GRT)	Same
4.	U Sein Htun	Director, Planning and Statistic Division	2008/10/5~ 2008/10/26	Seminar on Forest Management Policy- Sustainable Forest Management with Collaboration of Local Government and Community (C/P)	Same
5.	U Zaw Min Htun	Range Officer, Pyarpon Township	2009/5/26~ 2009/8/15	Conversation and Sustainable Management of Mangrove Ecosystem (GRT)	Same
6.	U Myo Min Tun	Range Officer, Bogalay Township	2009/9/23~ 2009/11/7	Environmental Education For Sustainable Development-Conservation of Coastal Ecosystems for Lives of Local	Same

RM (7)





	Name	Position/Organization at the time of training	Training Period	Title of Training Course	Remarks (Position/organization at the time of evaluation)
				Communities (GRT)	
7.	U Toi Chin Khai	Staff Officer, Planning and Statistics Division	2010/5/25~ 2010/8/14	Conservation and Sustainable Management of Mangrove Ecosystems (GRT)	Same
8.	U Win Maw	Staff Officer, Planning and Statistics Division	2010/5/25~ 2010/8/14	Conservation and Sustainable Management of Mangrove Ecosystems (GRT)	Assistant Director, Planning and Statistic Division, NPT

For reference: List of Myanmar Personnel participated in technical exchange program

(Cost for technical program is included in local activity cost under training)

(1) List of Myanmar Personnel Trained in Vietnam (5 person in total)

	Name	Position/Organization at the time of training	Period	Title of Training Course	Remarks (Position/ organization at the time of evaluation)
1	U Khin Maung Lwin	Field Project Manager, MCFTF, Assistant Director, FD Myaung Mya District	6 Days (2009/03/23 ~28)	Technology Exchange Program 2008 "Melaleuca Plantation Technologies"	Same
2	U Kan Htun	Staff Officer, FD Bogalay Township, MCFTF	6 Days (2009/03/23 ~28)	Technology Exchange Program 2008 "Melaleuca Plantation Technologies"	Same
3	U Win Maung Aye	Range Officer, FD Pyar Pon Township, MCFTF	6 Days (2009/03/23 ~28)	Technology Exchange Program 2008 "Melaleuca Plantation Technologies"	Same
4	U Myo Min Htun	Range Officer, FD Bogalay Township, MCFTF	6 Days (2009/03/23 ~28)	Technology Exchange Program 2008 "Melaleuca Plantation Technologies"	Same
5	U Min Maung Maung	Range Officer, FD Laputta Township, MCFTF	6 Days (2009/03/23 ~28)	Technology Exchange Program 2008 "Melaleuca Plantation Technologies"	Transferred to Mandalay Division Thaung Tha Township (RO)

(2) List of Myanmar Personnel Trained in Thailand (5 person in total)

	Name	Position/Organization at the time of training	Period	Title of Training Course	Remarks (Position/ organization at the time of evaluation)
1.	U Kyi Lin	Staff Officer, FD Pyar Pon, MCFTF	7 Days (2010/02/28 ~3/6)	Technology Exchange Program 2009 "CF Activities and Aquaculture in Delta Area"	Same
2.	U Kyaw Kyaw Myo	Range Officer, FD Bogalay, CDFTF	7 Days (2010/02/28 ~3/6)	Technology Exchange Program 2009 "CF Activities and Aquaculture in Delta Area"	Same
3.	U Tun Win Aung	Deputy Fishery Officer, Department of Fishery (DOF)* Pyin Salu Sub Township	7 Days (2010/02/28 ~3/6)	Technology Exchange Program 2009 "CF Activities and Aquaculture in Delta Area"	-
4.	U Naing Win Thein	Deputy Fishery Officer, DFO Mye Bone Township	7 Days (2010/02/28 ~3/6)	Technology Exchange Program 2009 "CF Activities and Aquaculture in Delta Area"	
5.	U Kyaw Min	DFO, Chaung Tar Research Center, Pathein	7 Days (2010/02/28 ~3/6)	Technology Exchange Program 2009 "CF Activities and Aquaculture in Delta Area"	-

^{*} DFO: Supporting Agency of this Project (Ex. Oyster Culture, Aqua-Agroforestry)





RM (8)

B-3 List of Equipment Provided by Japanese Side

(1) Equipment already handed over to the Myanmar side

Person	75 9 75	4				<u>\$</u>		Τ			3 ID	2	Ţ	T	T	Т	T :	<u> </u>	=	$\overline{}$
Responsion		Out put 1-	1-2	4-2	1-2	0 utput1-4	4-2	4-2	4-2	4-2	0utout1-4 (Output1-4 (1-2	4-3	1-2	3-5	4-3	1-2.4-2	utput1-4 (1-2, 4-2
Cacaton Date of Da		2	ø	0	9	-	-	-	-	-	٥		-	65	-	2		60		2
Cocation Person Date of Date of Delivery Use Date of Delivery Derson Delivery Description Date of Delivery Delivery Decreon Delivery Decreon Decreon Date of Delivery Decreon Decreon Date of Delivery Decreon		-	8	-	2	2	0	0	0	0	5	٥	٠	0	0	0	0	0	-	
Location bie Date of Date of Date of Delivery berson by Die Organizat Durchase Date of Delivery Was U See Win FD 2005 11/24 Aug 2007 1/24 Section Hang FD 2007/9/4 Aug 2007 1/24 Section Hang FD 2007/9/1 2/2/3/an/2008 EGL, PVP, U See Win FD 2007/9/4 Aug 2007 1/24 Section Hang FD 2008/1/22 2008/1/24 Section Hang FD 2008/1/24 2008/1/24 Section Hang FD 2008/1/25 2008/1/24 2008/1/24 Section Hang FD 2008/1/24 2008/1/24 Section Hang FD 2008/1/25 2008/1/24 2008/1/24 Section Hang FD 2008/1/25 2008/1/24 2008		8	8	١.	<u> </u>	۵	8	8	В	8	۵	8		<	*	V	~	<	-	4
Cocaton Persons Persons Persons Person		<	∢	<	∢	<	<	-	~	~		٧		∢	¥	-	-«	-	-<	Ą
Locaton Personsi Responsi ble besonsi ble besonsi ble beson ble beson don ble beson hang bection Hang FD . LPT, PYP, U Soe Win FD BGL, PYP, PYP, U Soe Win FD BGL, Whin PYP, BGL, Whin BYP, BGL, Whin BW	Date of Delivery	2007/ 4/29	Aug 2007	N/A	A/N	MART LT 1/1. [15/Jan/2008, 18/M B GL): 22/Jan/2008, TYK QPT): Begining of Fcb	2008/1/24	2008/1/24	2008/1/24	2008/1/24	2008/2/1	2008/3/28	(confirming)	2008/7/29	2008/9/1	N/A	2009/3/3	2009/7/3	N/A	2009/7/29
Responsi Locaton Person Person Van U See Wn Reprosi Haing BGL, PYP, U Soe Win Section Haing BGL, PYP, U Soe Win Section Haing NPT GIS U Soe Win Profis U Soe Win U Soe		2006 11/24	.307/6/4	2007/9/4	2007/6/16	2008/1/12	2008/1/22	2008/1/22	2008/1/22	2008/1/24	2008/1/25	2008/2/14	2008/5/30	2008/7/18	2003/9/3	2009/2/22	2009/2/25	2009/4/6	71/1/17	2009/7/28
VGN BGGL, PVP. Section GIS Section GIS Section GIS Section GIS Section NPT GIS Section LPT (Confirmin g) NPT GIS Section LPT (Confirmin g) NPT GIS Section NPT GIS Section NPT GIS Section NPT GIS NPT						in CFECN, FD .	in FD	in FD	n FD	in FD	in CFECN, FD	in CFE CN, FD	n D#	GF.	5	. 0.4	6.	SLRD	æ	SLRD
Lacaton Lacaton Lacaton Lacaton Caston		U Soe W				U Soe W Hlaing	U Soe W	U Soe W	U Soe W	U Soe W Hlaing		U Soe W Hlaing	U Soe W Hlaing	U Soe Wi Hiaing	U Khin Maung Lyán	U W in Nang	U Aye Myint Maung	U Saw H bing	U Aye Myint Manno	U Saw H h ing
	Lacation	Æ	BGL, PYP NPT GIS Section	GIS Section	BGL, PYP NPT GIS Section	LPT, PYP. BGL	NPT GIS Section		l.,		LPT, PYP, BGL	Τď	(Confirmin	VPT GIS Section	PT, BGL,	PT.	(S B)			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Total Price	USD 65,377	USD 1,545	USD 350	USD 84	USD 10,500		USD 2,655	•	USD 7,800	USD 3,116	180 1,695	JPY 93,240	JPY 1,065,400	USD 45	USD 1,196	US0 7,500 h	USD 5,440 Y	US0 7.200	USD 14,460 Y
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	· ē	2	60		ю	ю	-		-	-	s	-	ч		-	2	-	89	2	2
International or focal pro curement continued to continue to conti	international or local procurement	Thailend	Local	Local	Local	Local	Local	Local	Local	Locai	Local	Local	Japan	Japan	Local	Locai	Local	Local	Local	Local
Unit Price USD 22, 689 USD 350 USD 3500 USD 2,139 USD 48 USD 488 USD 488 USD 7,800 USD 685 USD 45 USD 685 USD 45 USD 598 USD 7,800 USD 598 USD 7,800 USD 7,800	Unit Price	ගොන, සෘ	USD 51£	056 QSN	USD 28	USD 3,500	USD 2,139	USD 48	USD 468	USD 7,800	USD 623	USD 1,695	JPY 23,310	JPY 1,065,400	USD 45	869 OSN	USD 7,500	USO 680	009'E QSN	USB 7,230
ification x 4X4 Doubl e X 4X4 Doubl e X 1 GPS ath:133 / Row:49 Battery Charger Tower System, V V V V V V Tower System, V V Tower System, V No 678 Model Rogine Fole Brand) for water Brand) for water in p 7.4 USB 0 11 Y 2)	Specification	a New Hilux 4X4 Doubl	Magella Explorist XL GPS	(1CD)	Panasonic Quick Battery Charger K-KJP59TM	Fiber Glass Boat	Dell Optiplex 755 Tower System, Office 2007	Power Tree 650 W	Epson Stylus Photo 1390 (A3 Size)	TNTmips ver.2007.7.3	SENNO 9999, SENNO 678 Model Accessaries	7.5 KVA, 13HP Engine	SK Poligrass Pole		Measuring Tape / Pole	175 Engine (3 Ring Brand) for water pump	GIS Software IN Im p 7.4 USB License Key	Gam in Colorad 300	Fber Glass Boat QTY 2)	Horizon HTS 582 RX
Item Spec Wehi cles Toyota New H Iu GPS Chargers Cabin GPS Chargers Cabin Boat for Reserved Forest Fiber Glass Boat CREATER FOR THE 650V A3 Size Printer Epson Stylus Phr GIS Software TNT mips ver. 200 Radio—Phone SENNO 9999, SEN Radio—Phone SEN Poligrass Pole Survey Materials SK Poligrass Pole Survey Materials SK Poligrass Pole Forestry T75 Engine GR Rig Engine Pump Wan GIS Software T75 Engine GR Rig Engine Pump GIS Software TN T GIS Software GIS Garm in Colorad 30 GIS Software T STRM, Sabert (Febre Glass Boat (Febr Glass Febr Glass Boat (Febr Glass Boat (Febr Glass Boat (Febr Glass Febr Glass Boat (Febr Glass Febr Glass Boat (Febr Glass Febr Glass Febr Glass Boat (Febr Glass Febr Glas	item	Vehi cles	GPS	Sate lite in ages	GPS Chargers	Boat for Reserved Forest		UPS	A3 Size Printer	GIS Software	Radio-Phone	G enerator	Survey Materials	Satellite in ages	Survey Materials for Forestry			GPS Unit	Boat	
N	Š	-	7	n	4	2	6	~	8	6	9	=	12	13	4	15	16	1	18	0



RM (9)



Responsi Responsi Date of ble Organizati Purchase ion	Total Price	5	International or total procurement	<u>주</u> 화	Unit Price
PYP.LPY. Wyint FD 2009/8/12 BGL Maung	USD 29,400 BG	3	Locat	008'8 GSN	_
NPT 6 IS) Myint FD 2009/8/27 Maung	JPY 510 702 NF	9	Japan	JPY 85,117	dr
KKKL, U Aye CFECN, 2010/2/20 BYM, myint FD TYK, TGT Maung	XF USD 1,920 BY TT	В	Local	USD 240	Sn
NPT (GIS) Myint FD 2010/3/25 Maung	USD 2,136 NI	2	Local	USD 1,068	Dell P4 Pentium System, XP, Office USD 2003, Antivirus
KKKL, U Aye CFECN, 2010/5/7 BYM, Myint FD TYK, TGT Maung FD	K4 USD 3,828 BN	4	Local	57	USD 957
TYK, U Aye CFECN, 2010/5/13 KKKL Myint FD 2010/5/13	USD 3,654 K	2	Local	,827	USD 1,827
TGT U Aye CFECN, 2010/5/18 Maung FD	USD 1,880 TC	4~	Local	,880	USD 1,880
BYM U Aye CFECN, 2010/5/24 Maung FD 2010/5/24	USD 1,685 BY	1	Local	589'	USD 1,685
KKKL. U Aye CFECN. 2010/7/1 BYM, Myint FD 2010/7/1	K4 USD 572 B) (T	4	Local	143	USD 143
KKKL, U Aye CFECN. 2010/9/10 BY M, Myint FD TYK, TGT Maung	K4 USD 2,632 B)	4	Local	358	USD 658
KKKL, U Aye CFECN. 2010/9/10 BY M, Myint FD TYK, TGT Maung	USD 392 B)	4	Local	œ.	86 OSN

*1 Use: A-Frequently (almost ever day), B-Sometines (1-3 a week), C-Use concentrated on particular period, D-Rarely (1-3 times a year), E- No use due to particular reasons
*2 Mgt. A: Aways possible to use with sufficient maintenance, B-Almost no problem in use, C-Possible to use if repaired, D-Difficult to use

NA: data is not available

Black&Underling: Procurement from JICA Office



RM (10)



(2)Equipment yet to be handed over to the Myanmar side Project Equipment List @USD = 90 Yen)

1,0	SU = 9U Ten)		1 1- tit 1			r
		Spec ification	Int'i or Local Procurem ent	QTY (Project Use)	Purchased Date	# of disposed eqpt
	Life Jacket (10)	Espada FW 2 (QTY 10)	Japan	8	N/A	8
	PGPS	Magella Explorist XL GPS	Local	3	2007/6/4	2
	Desktop PC (1)	Dell Dimension 3100 Desktop	Local	1	2007/6/19	0
	os	Microsoft Office SB 2003 SP OEM Pack (QTY2)	Local	2	2007/7/20	0
	Desktop&UPS	Dell Dimension E529 Desktop & UPS 1000W 8 VC	Local	1	2007/7/11	0
6	GPS Charger (8)	Panasonic Quick Battery Charger K- KJP59TM	Local	3	2007/6/16	2
	A3 Printer	IX 4000 Printer (A3)	Local	1	2007/6/13	0
	Photocopy Machine (1)	IR-2020 Copier	Local	1	2007/6/13	0
5	Laser Printer (1)	Canon Laser Shot LBP2900	Local	1	2007/6/13	0
	Phone & Fax Machine	8-155	Local	1	2007/6/13	0
11	UPS MYM (1)	UPS 600VA 8VC	Local	1	2007/6/29	0
	Dram	Duplix Unit A1 (for Photocopy)	Local	1	2007/7/25	0
13	Portable Generator (1)	YAMAHA EF 1000B	Local	1	2007/7/26	0
14	Generator MYM (1)	30 KVA Olympian Model GE133-1	Local	1	2007/10/11	0
	Desital Video Camera	Panasonic HDC SD 5, Camera Stand, Vattery VW-VBG260 K, SDHC Cade (4G8)	Japan	1	2007/12/10	0
	GIS A3 Scanner	Epson GT15000 Scanner (A3)	Local	1	2008/2/13	0
	Air Conditioner (MYM)	2 H.P Daikin Split Type Airconditioner	Local	2	2008/2/27	0
	Speaker & Audio	BEHRINGER A.M.P	Local	1	2008/3/4	0
	Stabilizer (MYM)	30 KVA	Local	1	2008/3/10	0
	Radio (2)	Rad S711 N	Japan	2	2008/5/15	0
	Portable Generator (1)	Yamaha EF 1000 Generator	Local	1	2008/5/16	0
	Air Conditioner	Mitsubishi 2.0 HP	Local	2	2008/10/18	0
	Desktop PC (1)	Dell Power Edge T105 Tower System & XP OS, MS Office & UPS	Local	1	2008/10/21	0
	A4 Printer (1)	Canon LBP 3050 Lasejet (A4)	Local	1	2008/10/21	0
	Safety Boat (1)	Pharku Boat (50' x 14' x 4.5')	Local	1	2008/10/25	0
	CDMA Phone (1)	Hisense D 186 (mobile phone)	Local	1	2009/1/29	1
	CDMA Phone & SIM Card (2)	CDMA Costal RUIM Card (MYM Base)	Local	2	2009/2/3	0
	LifeRaft Boat (2)	Life Raft (6 people)	Local	2	2009/2/6	0
	CDMA Phone	Hisence D 186 Handset (QTY 1)	Local	1	2009/2/11	0
_	CDMA Phone (1)	ZTE Model WP520	Local	1	2009/7/8	0
	CDMA Phone & SIM (1)	Coastal CDMA Phone SIM & ZTE 52	Local	1	N/A	0
	Handpush Carrier		Local	4	2010/7/1	0
	TV Set	SONY BRAVIA EX4/32	Local	1	2010/9/10	0
34	DVD	LG DVD497	Local	1	2010/9/10	0

RM (11)



Summary of Total Expense for Project Equipments (JPY)

FY TOTAL (JPY)	128,000	3,520,000	3,875,000	3,767,000	7,383,000	2,604,000	21,277,000
	JFY2006	JFY2007	JFY2007	JFY2008	JFY2008~10	JFY2008~10	Total
		June 2007~ Oct2007	Dec 2007~ March2008	May 2008 <i>∼</i> Oct2008	Jan 2009∼Aug 2009	Sep 2009∼Sep 2010	

Some Expert Equipments were handed over to FD counterparts, so the summary of actual input is as follows.

te

RM (12)

Disbursement of Local Activity Cost (as of September 2010) B-4

Disbursement of Local Activity Cost (as of September 2010)

		1000	1000				1	
		O-URO	June 200/~Octzou/	June 2007 Cetzoo Dec 2007 March2008 May 2008 Cet2008 Jan 2009 Aug 2009 Sep 2009 - Sep 2010	May 2008~Oct2008	Jan 2009~Aug 2009	Sep 2009~Sep 2010	:
		JFY2006	JFY2007	JFY2007	JFY2008	JFY2008-10	JFY2008-10	igiol
1 Loc	ocal Staff		15.221	9 571	21 882	24 215	56 546	497 ASE
2 Tra	ดน่าเกา	2-0-10-10-10-00-00-00-00-00-00-00-00-00-0	2000			21-10-1	040,00	004,121
	Smill		3,022	10,686	12,070	24,606	81,432	131,816
3 ARP	d.		986	5,584	2,018	58.824	52.098	119 510
4 CFI	CFECN Renovation & Construction	The state of the s	0	87.360	0	C	22.62	010,011
5	Cyclone Monitoring Suntey	100年の一次の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の					,	200, 10
,	Carlo manual and and				6,132	0	0	6.132
e CF	CFECN Rehabilitation				0	12615	852.617	000 330
7	Others					2125	110,200	262,550
	2121		35,994	42,188	28,998	31,040	51.063	189 283
8 1C	ICA Myanmar Office (Site Visit Cost)	7,980						
Total in USD	USD	7,980	55.222	155 389	71 100	154 200	4 000 150	1111
10V T	10 \ Total (41100 = 0010)			200100	201.1	000(15)	1,033,736	1.534,747
200	s (1000 = 300F1)	(18,195	4,970,000	13,985,000	6,399,000	13,617,000	98,438,000	138.127.195
				**************************************				2011

j					
	JFY2008~10	106 038	865 232	110 922	90 YEN
		Training	Construction	ARP	1 USD
	JICA Expensa (USD)	1,701	1.739		
	Office Expenso (FY2006)	1,701 USD	782,400 MMK	408,625 JPY	(1USD = 450 MMK)
	JICA Office E	Site vieit	(2007/1/9–1/13)	(5) (1) (1)	

1 Local Staff is the salary for local staff in JET office including boat drivers and drivers.

2 Training includes output 1, output 2, output 3, output 4 including C/P allowance (output2).

3 ARP: Action Research Plantation cost is mainly for labor cost of ARP plantation and monitoring.

4 Construction cost includes renovation / construction of CFECN in four sites.

5 Gyclono Monitoring Survoy is a newly added activity after Cyclone Nargis 6 CFEON Rohabilitation is a cost of renovating/re-constructing CF centars also serve as cyclone shelters after Cyclone Nargis 7 Othors includes domestic domestic travel cost, maintenance, consumables, printing etc.



RM (13)





RM C Data related to some Indicators

C-1 Data for Indicator 1a for Output 1

		· .	_		<u>, </u>	,		,	_		_	_					
d area so	0	Total area rehabiliate d/managed so far		215	370	513	740	50	50	100		765	50	50	35		2,938
(4)Rehabiliaed/managed area so far	ď	Total area of NFIO munaged		45	260	488	715	0	0	0		740	0	0	0		2,248
(4)Rehablit	o	Total area rehabilitate d so far h+ii		170	110	25	25	S	20	100		25	50	50	35		069
P	c	Total area to be rehabilitated/ managed by the Project end		379	709	n/a	n/a	50	909	100		n/a	50	50	35		n/a
e Project er	٤	Total area of NFIO eccording to the MP		45	260	488	715	0	0	0		740	0	0	0		2,248
(3) Area to be rehabilitaed and managed by the Project end	-	Total Area to be rehabitated by the Project end Prij+k		334	449	n/a	n/a	20	50	100		п/а	50	50	35		е/и
ed and mar	×	Area of CF rehabilitated by CFUSG (2012)		82	83	n/a	n/a	0	Q	0		n/a	0	0	0		e/u
e rehabilita	,	Area of CF rehabilitated by CFUSG (2011)		82	256	n/a	n/a	0	0	0		n/a	0	0	0		п/а
Area to b		Area of CF rahabilisted by CFUSG (2010)	- Darkip (() () () () ()	70	10	25	25	0	0	0		25	50	50	35		290
(6)	ч	Area of CF rehabilitaed by CFUSG		100	100	0	0	20	50	100							400
pement Plan	ß	Cerlified Cerlified		0	0	288	1100.15	0	0	0		780	0	0	0		2.168
(2) Area of rehabilization/management according to the Management Plan	F.	Total CF erea according to the MP		463	780	637.5	1295.18	20	50	100		780	50	99	35		4,291
s of rehabili Jing to the	a	Total area of NFIO according to the NP		45	260	488	715	0	0	0		740	Q	0	0		2,248
(2) Ares	q	Total area of of Plantation according to the MP	NAME OF TAXABLE PARTY O	417.56	520	150	580	50	20	100		40	20	20	35	-	2,043
	υ	Monthy Year of approval by FD		Not yet	Not yet	(20 unr)	(1998)& (Jun 03)	Not yet	Not yet	Not yet		(Dec 95)	Not yet	Not yet	Not yet		
(1) CF Management Development	Q	Year in which latest MP developed A=Developed brough the current Project B=Developed before the Project (drough) the pilot projects assisted by JICA) C=Developed before the Project (arough)	A COLUMN TO THE	Sep 2009 (A)	Sep 2009 (A)	Jun 2003 (B)	Jun 2003 (B)	May 2009 (A)	May 2009 (A)	Jun 2009 (A)		1998 (C) or Feb 2002 (C)	Jul 2010 (A)	Aug 2010 (A)	Dec 2010 (A)		
(1) CF Managem	n	Year in which MP are devloped/updated af Nargis Ar-Devkoped aff Nargis B=Lipdated aff Nargis C=Not devioped/updated yet		Sep 2009 (A)	Sep 2009 (A)	ပ	၁	May 2009 (A)	May 2009 (A)	Jun 2009 (A)		ပ	Jul 2010 (A)	Aug 2010 (A)	Dec 2010 (A)		
		Reserve Forest	2009	Kyakankwi npauk	Pyinalan	Pyinalan	Pyinalan	Kadonkani	Pyindaye (North)	Pyindaye (South)	2010	Pyinalan	Kadonkani	Pyindaye (North)	Pyindaye (South)		
		P. P	ized in						198 198	dyq (nized in			BG.	dyq 1		
	ľ		s organ	s = =	a Pin	a Pin	. 1			/i Tan	s organ	1					
		Village	1. CGUSGs organized in 2009	1 Kwa Kwa Ka 1 Lay	2 Kanbala Ta Pin LPT	3 Nyaung Ta Pin LPT	4 Thar Yar Kone	5 Gaw	Shwe Pyi Thar	7 Haung Gyi Tan	II. CFUSGs organized in 2010	8 Peine Kone	9 Gway Chaung Gyi	10 Daming Daung	11 Gaw Du		Total/Average
													-	4-			Ĕ





RM (14)

RM (15)

RM C Data related to some Indicators

C-2 Data for Indicator 1b for Output 1

	s Remarks		Group leader is CFUSG chairman. Trial suspended	There were 2 group before but only one	6 groups but 5 is active		1	For house consumption						5 groups (under formulation)				
	No. official No. official CFUSG members (max) (min)		36	31	63			126	26					100		720	126	382
JI 10	No, official CFUSG members (max)		162	44	63		27	126	26		a service and the service and		Tarres and a company of the company	100	1.00	385	126	524
Data for Indicator 15	Inclusion of the activities in the latestCF Manaagement Plan		`	,	×			×	×					×				4
	Expected tiirring of the first harvest		Jun-Sep 2011	Jun-Sep 2011	Jun-Sep 2011			Mar-10	Jun-Sep 2011					Jun-Sep 2012				
	No. of sub- group members		9	7	19			9	25			1		32	08	ŝ	9	95
	Type of Income Generation Suppot as of Feb 2010		Oyster	Oyster	Oyster	No support	No support	Aqua- agroforestory	Oyster		No support	No support	No support	Oyster				
	Year in which MP are dewoped/updated a/l Nargis A=Developed a/l Nargis B=Updated a/l Nargis C≈Not updated yet		Sep 2009 (A)	Sep 2009 (A)	O	ပ	May 2009 (A)	May 2009 (A)	Jun 2009 (A)		O	Jul 2010 (A)	Aug 2010 (A)	Dec 2010 (A)	100	our total/Average for Cyster cultue trial	Sub-otal/Average for aqua-agroforestory	age
	Reserved	900	Kyakankwi npauk	Pyinalan	Pyinalan	Pyinalan	Kadonkani	Pyindaye (North)	Pyindaye (South)	10	Pyinalan	(adonkani	Pyindaye (North)	yindaye South)	100	ini afipis	rage for ac	Total/Average
	Township	nized in 20	1		Laputta		Bogalay	Bogalay (Pyarpon Pyindaye (South)	ized in 20	Laputta	Bogalay	Bogalay Pyindaye (North)	Pyarpon Pyindaye (South)	th total/A	VT/Ioidi/Pi	ib-otal/Ave	
	Village	I. CFUSGs organized in 2009	Kwa Kwa Ka Lay Laputta			4 Thar Yar Kone	5 Ahpyin Pade Gaw Bogalay	Shwe Pyi Thar	7 Htaung Gyi Tan	Il CFUSGs organized in 2010	Peine Kone	9 Gway Chaung Gyi Bogalay Kadonkani	10 Daming Daung	11 Gaw Du	Ü	ים וי	S	



C-3 Data for Indicator 4e of Output 4

List of seminars to promote synergy among the relevant sector on Integrated Mangrove Management

	Year	Mth	Title of Seminar	# of participants	Organization of participants
1.	2008	Jan	Mangrove Seminar 1: Introduction and sharing of the Project and importance of mangrove (Myaung Mya District)	Approx. 30	 District Peace and Development Council (PDC), Laputta Township Peace and Development Council MCFTF (FD) Myaung Mya District, Laputta Township) District Myanma Agriculture Service (MAS) District Department of the Fishery (DoF) District Settlement and Land Record Department (SLRD) Pathein Univ, Faculty of Fishery Woman's Association, NGOs (MSN, ADRA, World Vision and METTA) Myaung Mya Agriculture School Myaung Mya Trader Association
2.	2008	Jan	Mangrove Seminar 2: Introduction and sharing of the Project and importance of Mangrove (Pyar Pon District)	Approx. 30	 District PDC, Pyar Pon/ Bogalay Townships PDCs MCFTF (FD) Myaung Mya District, Pyar Pon/ Bogalay Townships) District MAS District DoF District SLRD Woman's Association, NGOs (MSN, ADRA, World Vision and METTA)
3.	2009	Oct	Mangrove Seminar 3: Effects of Coastal Woodlots (Bogalay Township)	34	 MCFTF (FD) Myaung Mya District, Pyar Pon/ Bogalay Townships) Township MAS Township DoF Township SLRD NGOs
4.	2009	Nov	Mangrove Seminar 4: Potential Use of Melaleuca in the Ayeyawady Delta as fuel woods and poles. (LPT Township)	42	 Laputta District PDC, Laputta Township PDC MCFTF (FD) Myaung Mya District, Laputta Township) District MAS District DoF District SLRD NGOs
5.	2011	Jan	Mangrove Seminar 5: Hazard Map and Land Cover / Use Changes (Nay Pi Taw)	21	Planning and Statistics Division, FD Watershed Management Division FD MCFTF, FPM
6.	2011	Feb	Mangrove Seminar 6: Hazard Map and Land Cover / Use Changes (KKKL CFECN: Part of Inauguration Ceremony)	Approx. 40	 MCFTF(Ayawady Region, MYM district, Laputta Township) District/ Township/ Village Tract PDC MAS SLRD DoF NGOs JICA

to.

RM (16)

RM C Data related to some Indicators

C-4 Data for Indicator a for the Project Purpose

	() A	rea to be re	shabilitaed b	(1) Area to be rehabilitaed by the Project end through CF	it end throug	n cF		(2) An	ea to be pig	(2) Area to be planted through Action Research	n Action Re	search	- Continue of the Continue of	Total	al
. The state of the	В	q	O	P	a	+	6	ч	į		'	_	٤	<u></u>	0
Reserve Forest	Area of CF / rehabilitaed rehabilitaed reference so far (2009)	Area of CF ehabilitated by CFUSG (2010)	Area of CF rehabilitated by CFUSG (2011)	Area of CF Area of CF I rehabilitated by CFUSG by CFUSG (2011)	Total Area to be rehabitated by the Project end	Total area rehabiliate d so far	2008	2008	2010	2011	2012	Total area to be planted by the Project end	Total area to planted so far	Total area to be planted by the Project end	Total area planted so far
	(actual)	(actual)	(plan)	(ue(d)	a+b+c+f	a+b	(actual)	(actual)	(actual)	(plan) (Indicative)	(bgu)	g+ħ+i+j+k	g+h+i	1	£
1 Kyakankwinpau	100	70	n/a	п/а	n/a	170	0	250	120	0	0	370	370	n/a	540
2 Pyinatan	100	85	n/a	n/a	n/a	185	0	250	120	0	0	370	370	n/a	555
3 Kadonkani	50	20	0	0	100	100	212	200	80	21	0	513	280	613	380
4 Pyindaye	150	85	0	0	235	235	0	26	80	24	0	130	106	365	341
Total	400	290	0	0	E/u	069	212	726	400	45	0	1,363	1,126	n/a	1,816
										-	_		-		







RM D List of the Project Deliverables

List of Project Deliverables as of September 2010

Overall

Project Progress Report (March 2009, September 2009)

Annual Completion Report (2007-1, 2007-2, 2008-1, 2009-2010)

Rapid Field Survey Report (June 2008)

Project Operation Manual (FY2010 Version 1)

Output 3

Community Forestry Extension Centre Nursery Kwa Kwa Ka Lay Community Forestry Extension Centre Nursery Byone Hmwe Community Forestry Extension Centre Nursery Thar Yar Kone Community Forestry Extension Centre Nursery Htaung Gyi Tan

Output 4

Project Calendars 2008, 2009, 2010
Mini-Newsletter (No.1 ~ No.3)
Poster (No.1 RECOFTC, No.2 Oyster Culture, No.3 Hazard Map)
Project T-Shuts
Project Signboard, FD Bogalay Township
Japanese Newsletter "Mangrove Dayori" (No. 1 ~ No. 28)

to

(1)

PDM ベージョン:2 (仮訳・直訳)

承認日: ****

合同中間レビュー報告書 別添6のPDM2 案誤記訂正版 1. プロジェクト・タイトル:「エーヤーワディ・デルタ住民参加型マングローブ総合管理計画プロジェクト」

2. プロジェクト期間:2007 年 4 月~2013 年 3 月: 3. 対象地域:エーヤーワディ・デルタ内の 4ヶ所の保全林区(RF)(チャカクインパク、ピナラン、カドンカニ、ピンダイエ) 4. 受益者:4ヶ所の RF においてコミュニティ林業(GF)を実践するコミュニティ及びミャンマー国林業省森林局の GF タスクフォース(GFTF)メンバーとその他の関連職員

プロジェクトの要約	客観的に検証可能な指標	指標入手手段	外部条件
上位目標: エーヤーワディ・デルタ内のマングローブ林 が持続的に管理され、コミュニティの貧困が 緩和される	a. プロジェクト終了から3年以内に、本プロジェクト対象地域において、マングローブ林の被覆面積が X acres (Y ha) (*1) 増加する b. 対象地域のコミュニティの所得水準が2004年に比べて上がる。	a 森林局による森林 資源アセスメント(リ モート・センシング) b.農業センサス報告書	
プロジェクト目標: エーヤーワディ・デルタ内のプロジェクト活動 が実施される地域において、コミュニティとマ ングローブ林が持続的に共生する	a. プロジェクト終了までに、プロジェクト活動が実施された地域(CF植林地、CF一天然林改善施業(NFIO)対象地、及びアクション・リサーチ用植林地)において、マングローブ林の被覆面積が、基準年(2009年)に比べて、Xエーカー(Yha)(*2)増加するPロジェクト終了時に、2011年に再選定された全ての対象CFユーザー・グループ(CFUSG)の登録メンバーの8割以上が、CFを有用だとみなす	a. プロジェクト報告 書 b. CF インパクト調 査の結果	1 CF生産物に有利な市場が存在する する 2 RF4 ヶ所の管理に関する森林局 の方針が大幅に変わらない 3 マングローブ林の持続的管理の ために、十分な財政的その他の 音源が耐みされる
アウトプット: 1. 選定されたコミュニティが環境的にも、経済的にも持続的なコミュニティ林業(CF) を実践する	1a 2011年7月までに、2011年3月に再選定された CFUSG の全てのCF管理計画が作成/更新される 1b プロジェクト終了までに、2011年に再選定された全ての対象 CFUSG の運営委員会(MC)の組織能力が、プロジェクトの設定するX段階評価のY以上の水準に達する 1c 2011年に再選定されたすべての CFUSG の承認されたCF管理計画(CF 植林・NFIOを含む)が、年間計画に基づき、実行される 1d プロジェクト終了までに、Xエーカー(Yha)(注3)以上のマングローブ林が、2011年に再選定された CFUSG によって、承認されたCF管理計画に基づき、復旧・管理される(CF 植林、NFIOを含む) 1e プロジェクト終了までに、2011年に再選定されたすべての活発な CFUSGが、承認された CF 管理計画に記された CF に活動及びプロジェクトの支援する所得創出活動によって、利益を得る	1a: CF 管理計画 1b ⁷ 1e: モニタリング 報告書、プロジェ クト報告書	1 対象RF4 箇所において、急 激な人口増加がない 2 マングローブ林を他の土地 利用に転換する外部圧力 が増加しない
2. 森林局のCF管理・支援体制が効果的である	2a プロジェクト終了までに、プロジェクトに2年以上従事しているCFタスクフォース技術メンバーのX%が、CF管理及び普及・支援について、平均して、プロジェクトが職位別に設定したY段階評価のZ以上の水準に達する2b 2001年に再選定されたCFUSGの登録メンバーの8割以上が、自身の受けたCF普及サービスの「理解度」「適用度」「満足度」について、平均で3段階の中以上の評価を与える。2c プロジェクト終了までに、森林局局長による確認とさらなる措置のために、マングローブ林のCFのための研修プログラム(研修資料を含む)が、既存のものをもとに開発される(英語・ミャンマー語)2d プロジェクト終了までに、森林局局長による確認とさらなる措置のために、マングローブ林のCFのための標準は「コジェクト終了までに、森林局局長による確認とさらなる措置のために、マングローブ林のCFのための標準をオージェクト終了までに、森林局の既存のSOP(局令やCF令)をもとに作成される(英語・ミャンマー語)	2a´2d: プロジェクト 報告書	
3. エーヤーワディ・デルタのマングローブ林 及び関連林の復旧と管理に関するいくつ かの造林技術が確立される	3a プロジェクト終了までに、アクション・リサーチ(AR)に関する技術報告書が作成される(英語・ミャンマー語) 3b プロジェケト終了までに、AR の結果に基づいて作成された、エーヤーワディ・デルタのマングローブ林・関連林 の復旧・管理に関する、現場職員向けの造林技術ガイドラインが発行される(英語・ミャンマー語)	3a~3b:プロジェクト報 告書	
4. エーヤーワディ・デルタのマングローブ林減少の根本原因に対処するために、主要セクター間の調整メカニズムが構築される	4a 2011年12月までに、森林局によって、関連省庁間調整会合が開かれる 4b 対象地域の土地利用情報が2007年、2009年、2012年の衛星画像を基に更新される 4c 関連省庁間調整会合において、上記土地利用情報が協議のために共有される。 4d 関連セクターのシナジーを促進するためのセミナーが毎年開催される 4e 対象地域のドナー/NGO調整会合が森林局によって、年1回開かれる	4a 会合の記録 4b:土地利用図 4c:会合の記録 4d:プロジェクト報告 書 4e:会合の記録	
X(2008 年5月のサイクロン・ナルギス後の追加的アウトプット) サイクロン・ナルギスの被害からの復興が促進される	xa. 2009 年 3 月までに、対象地域のハザード・マップが、衛星画像(2009 年)に基づいて作成されるxb 2010 年 3 月までに、対象地域のコミュニティーの被災・復興調査結果がまとめられるxc 2010 年 3 月までに、対象地域のコミュニティーの被災・復興調査結果がまとめられるxc 2009~2010 年に、森林局及び協力機関の災害復旧・防災事業に必要な資材が、ニーズに応じて提供されるxe 2009~2010 年に、森林局及び協力機関の災害復旧・防災事業に必要な資材が、ニーズに応じて提供されるxe 2011 年 12 月までに、マングローブの植生復旧状況に関するデータがまとめられる	xa.ハザード・マップ xb-e.プロジェクトの 報告書	

(仮訳・直訳) 別添6のPDM2 案製記訂正版 合同中間レビュー報告書

GET	
でに「関かるすけ常の中からの子を引いる方角を進定する。 選定した特殊において、CHOSのを制御性の 和機能性の 再機能はできたいる ないるのでは、の子を関する。 でしては、APA では、APA を選定する。 ないるのでは、APA により、APA のよりからの子を対して、CF 配置を発行する。 ないるのでは、APA により、CF 型は を表して、CF 型を発行する。 ないるのでは、APA により、CF 型は を表して、CF 型を発行する。 ないるのでは、APA により、CF 型を発して、APA によりを影響をする。 CF USGに対し、再型コルナーサルによる。を、CF USGに対して、CF 正確を発行する。 CF USGに対し、APA によりによる。実施をモニタリンを影響値する。 CF USGに対し、APA によりによりの様々な能力強化プログラムを、水産局(DOP)、ミャンマー農業サービス(MAS)といった協力機関等 5 と選携して、実施する。 CF USGに対し、APA に対しているの様々な能力強化プログラムを、水産局(DOP)、ミャンマー農業サービス(MAS)といった協力機関等 5 と選携して、実施する。 PF は USGに対し、APA に対して対して、APA に対して、APA によって、APA によりでは、APA によりで「APA におりて、APA によりで「APA に対して、APA を指しまする。 特定された活動に対する。CF TF 技術メンバーに事権を行うする。 APA において、CF 置か、直接センターを建設、C体する。 を発によいて、CF 置か、直接センターを建設、C体する。 を発によいて、CF 置か、直接センターを建設、C体する。 を発によいてのと関係を実施する。CF TF 技術メンバーに事権を行う をR によいて、CF 関係を実施する。CF TF 技術メンバーに事権を行う。 をR においてのと関係を実施する。CF TF 技術・APA に関するを表して、APA に対してのいるでは、表体管理)によってクリローブ体機をと関する。 を発してはいてのと関係を実施する を発しておいてのと関係を実施する。MA に対して、APA はでのでからの連体技術がイドラインを作成する。 を発しておいてのと関係を表施する。 を発してはないてのと関係を表施するを表して、CF 及び非のでのとの関係を表して、APA に関係を表に、定期的に実がする。 を持てたいて、APA の R に関する技術ルードを作成する R (リーンニンレベルで、エーヤーフィ・アルタのマンケローブ体のでを含めではでする。 のの簡単に対するをを表して、APA に関係をを表して、F ルク地域の総合的解析を関係を表し、で期的に更新する。 H イグロン・サルネンバーの監備に対するをを表して、ことがは、APA に対して表が表をを表して、イルタの企業を表し、こま物のに要がの簡単で表が相によるをできます。 H イグストリントルで、対象地域の下重要を表し、デールのでは、Man を表を表し、 サイクロン・サルネンバーの監備に関するを表がに、 要がの簡単を表し、定期のに要する。 H イグストリントルで、対象地域の下離をが表がによって、アルイン・デルタのでは、APA に関係を表し、デルタのでは、APA に関係を表し、デルタのではでする。 H イグストリントルで、対象は、APA によりがないでする。 H イグストリントルで、対象は域で活動する。 H イグストリントルで、対象は域で活動を含されていて、APA にはながある。 H APA に対していて、APA をはなできまがある。 H APA に対していて、APA をはながあるがある。 H APA に対していて、APA をはないまする。 H APA に対していて、APA をはないで、デルタのでは対象がではながある。 H APA を表していて、APA をはないできまがある。 H APA をはながあるに対しているがあるがある。 APA をはながあるといに、APA に対しているがあるがある。 APA をはながあるといているがあるがあるがある。 APA をはながあるがあるがあるがあるがある。 APA をはながあるがあるがあるがあるがあるがあるがあるがあるがある。 APA をはながあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがある。 APA をはながあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるが	
選定した 対象の基本的社会経済状況のベースライン調査を行う 適定した 対象の基本的社会経済状況のベースライン調査を行う 適定した 対象の基本的社会経済状況のベースライン調査を行う ないているに対し、で管理計画及びら配差のプロイナール体成、更新を発行する のでいるに対し、の管理計画及びら配差のプロイナールを のいるの活がした。で管理計画及がら配差のでいるのは対しているに対して、 を開発した。で管理計画及びら配差のプロイナールを のいるの所称人は のいるの所称人は のいるの所称人は のいるの所称人は のいるのがあれたとで管理計画変化を支援する のいるの所称人は のいるの所称人は のいるのがあれたとで管理計画を のいるのがあれたとで管理計画を のいるのがあれたとで管理計画を のいるのがあれたとで管理計画を のいるのがあれたとで管理計画のでいるのは を持ていているのがあれているのは を持ていているが、 のいるのがあれているのは を持ていているのがあれているので のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたと のいるのがまれたが、 のいるのがまれたが、 のいるのは のいるのがまれたが、 のいるのは のいるのは のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのがまれたが、 のいるのは のいる のいる	
選定した村落において、CPUSGを組織化・再組織化する 「ロンSGに対して、CPE 2017年 2017日 イングルールので自選権のである。 「ロンSGに対し、承認されたCP管理計画及CPE雇のプロボーザルに成りている。 「ロンSGに対し、承認されたCP管理計画を必らを正確のでは、必要的では、必要がでする。 「CPUSGに対し、承認されたCP管理計画を表現する。 「CPUSGに対し、承認されたCPE 2017日 イングルで、必要的です。 「CPUSGに対し、承認されたCPE 2017日 イングルで、かを同(DOF)、ミャンマー農業サービス(MAS)といった協力機関等 ちょう (TPUSGとメンバーの生料におけるので効果にフリングを評価する。 「CPUSGに対し、実施された。 「会社がよる。 「CPUSGに対して、実施する。 「CPUSGに対している。 「CPUSGに対しているのでででがないに対している。 「CPUSGに対しているがでいる。 「CPUSGに対しているがでいるがでいるがでいるがでいるがでいるがでいるがでいるがでいるがでいるがで	るような甚大な自
GFUSGIC対し、CF管理計画及びCF証書のプロボーザル作成/更新を参加型計画プロセスを通して支援する GFUSGIC対し、CF管理計画及びCF証書のプロボーザル作成/更新を参加型計画プロセスを通して支援する GFUSGIC対し、不認されたで作管理計画を支援する、CFUSGIC対して、CF証書を発行する GFUSGIC対し、不認されたCF管理計画のでBMでは表力をプログラムを、水産局(DOF)、ミャンマー農業サービス(MAS)といった協力機関等 GFUSGIC対し、不認されたCF管理計画のCFUSGICよる業施をモニタリングを評価する FEATH (AFR)のCFUSGICよる業施をモニタリングを評価する GFUSGICがし、アルン・のを対して、CFTF)技術を入が、「※のの役割と責任を確認する 株定された活動に対するCFスグフォース(CFTF)技術を入が、「※のの役割と責任を確認する 株定された活動に対するCFスグフィース(CFTF)技術を入が、「※のの役割と責任を確認する FEATH (AFR)のCFUSGICよる業施をモニタリングを指します。CFF管理(※4)及CFF関本を行う FEATH (AFR)を対し対するCFAが表別を行う AFRにおいて、CFTF、Tが研し、スプスを提供する FEATH (AFR)を対して、CFTF、対策が大のイーのニーズ(例)資金、ロジスイックス、人材開発ニーズ)を評価する FEATH (AFR)を対して、CFTF、対策が大のイーのニーズ(例)資金、ロジスイックス、人材開発ニーズ)を評価する FEATH (AFR)で、CFTF、対策が大の「AFR)を対して、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、CFTF、AFRに対して、AFRに対して、AFRに対して、CFTF、AFRに対して、AFRに対して、AFRに対し、AFR	
ないるにおいているに対しているのでは、大きないが、大きないでは、大きないが、大きない	
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CPUSGの所得水準の上のたり指出自実施を支援する と連携して、実施する と連携して、実施する と連携して、実施する と連携して、実施する を	1
CFUSGON情格米準向上のための様々な能力強化プログラムを、水産局(DOF)、ミャンマー農業サービス(MAS)といった協力機関等 5 と連携して、実施する (AMAS)といった協力機関等 5 と連携して、実施する (AMAS)といった協力機関等 5 は認されたの管理があるといってインパイント間面を行う (CFUSGAシパープ管理プログラム(IMMP)のOF関連圏所のレビューに基づき、CF管理(44)及びGF普及・支援 (45)に必要な活動をR 1 にているスメパープ管理プログラム(IMMP)のOF関連圏所のレビューに基づき、CF管理(44)及びGF普及・支援 (45)に必要な活動をR 1 によいたなアグリーブ管理プログラム(IMMP)のOF関連圏所のレビューに基づき、CF管理(44)及びGF普及・支援 (45)に必要な活動をR 1 においた 1 に対し	- Z
と連携して、落価する	者がマングローブ
本認されたで管理計画のCFUSGによる実施をモニタリングを評価する CFUSGSンバーの生用におけるCFOの効果についてインパンに関連を行う 総合マングローブ管理プログラム(IMMID)のCF関連電所のレビューに基づき、CF管理(44)及びCF普及・支援(*6)に必要な活動をR 1 F ことに特定する 特定された活動を実施するCFOSTの関連電所のレビューに基づき、CF管理(44)及びCF普及・支援(*6)に必要な活動をR 1 F ことに特定する 特定された活動を実施するCFOSTの関連電所のレビューに基づき、CF管理(44)及びCF音及・支援(*6)に必要な活動をR 1 F ことに特定する 特定された活動を実施するCFOSTのTE技術とンパー *8)の役割と責任を確認する 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	「て万」いこ合音した人員
CFUSGメンバーの生制におけるCFOの効果についてインバクト制電を行う を発えているエンドーの生制におけるCFOの効果についてインバクト 物面を行う を表すていることに関連を表する 特定された活動に対するCFOタスクフォース (CFTF) 技術メンバー **の の役割と責任を確認する 特定された活動にあるを発生していることでTFT 技術メンバー **の の役割と責任を確認する 特定された活動を実施するためCFTF技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術メンバーに一般を行う をRFにおいて、CF音及・TFT技術なンが一に一般を行う をRFにおいて、CF音及・TFT技術をファーンが展生に関する基準があるの一般を表しまします。 をRFにおいて、CF音及・TFT技術をファーンとに、CF及び非CFのための遺体技術を特定する調査を実施する エーヤー アングローが体をの REに関う 技術 ルートを作成する ARの通体地においてARJに接を実施する ARの方インディングローブ体のの目の音を発展する ARの方インディングに基づき、マングローブ体域の総合的森林資源評価を発信であり、 は、エル記録)の調整会合を開く 開催・エキエ記録)の調整会を管照く 無がのに重がない。デルクローブ体がはの総合的森林資源評価を発信であり、関連をクターのシェディを促進するセミーを開く 解(リージョン)レベルで、エーヤーフディ・デルタのマングローブ体域の総合的森林資源評価を発信では、デルタのマングローブ生態系の持続的管理のため、関連をクターが、一が表地域の高速値をを基に、定期的に関するドナー/NOのの調整会をを開く 無がの確定値をを基に、定期的に要がする エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連をクターのシェディーを促進するセミーを開く サイクロン・ナルギスの可なディーを指して、デルド・マップを作成する ファイ・デルタのマングローブ生態系の持続的管理のであり、関連をクを開く 無がの簡易被変調音を発信である。ディー・アングローブはをのではできがに高からの復旧状況調査を行う 対象地域の所第がフロファイル調査を行う 対象地域の所第プロファイル調査を行う をBELには、アーボール、対象地域の所第プロファイル調査を行う をBELには、アーボール、アーボール、アー・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	アンゴン にしゆのにくら 単を支持する
総合マンプローブ管理プログラム(IMMNP)のCF関連箇所のレビューに基づき、CF管理(44)及びCF普及・支援 (46)に必要な活動をR 1 FCLに特定する 特定された活動となるCP アクフィース(CFT) 技術グンパー *40 の役割と責任を確認する 特定された活動を実施するためCFTF技術シンパーのムーズ(例:資金、ロジスティックス、人材開発ニーズ)を評価する L 記研修計画・数材を作成する L 記研修計画・数材を作成する A A A R R R R R R R R R R R R R R R R	
年ごとに特定する 特定された当面に基づきるためCFTF 技術メンパー **(*) の役割と責任を確認する 特定された当面に基づきなためCFTF技術メンパー **(*) の役割と責任を確認する 特定された活動に対するCFタスクフォース (CFTF) 技術 メンパー **(*) の役割と責任を確認する 上記の人材開発ニース評価に基づき、CFTF技術メンパーに研修を行う 上記の人材開発ニース評価に基づき、CFTF技術メンパーに研修を行う 各RFにおいて、CFUSGへの普及 サービス・支援を提供する 各RFにおいて、CFUSGへの普及 サービス・支援を提供する をRFにおいて、CFUSGへの普及 サービス・支援を提供する をRFにおいてAR試験を全施する をRFにおいてAR試験を実施する ARの有当の成構地においてAR試験を実施する イデルタの生態・地理的ソーン・管理ゾンビとに、CR 及び非CFのための造林技術を特定する調査を実施する イデルタの生態・地理的グランビに、CR 及び非CFのための造林技術を特定する調査を実施する マングローブ林のAR に関する技術レポーを作成する ARのファインディングに基づきの対け技術モニタリング及び切場評価を実施する イングローブ林のAR に関する技術レポーを作成する ARのファインディングに基づきのマングローブ林が多い様本原因を検討するために、関連省庁 (例: 農業、水産、定 所の商権地に含まった。ファインディングに参加を発展がある エーヤーフディ・デルタのマングローブ林が変が自体表別で変換するとのに、デルタがマングローブ林のものが表は変調整金合を開バ 展帯の商産画像を基に、定期的に更新する エーヤーフディ・デルタのマングローブ株ののの調整会合を開く サイクロン・カルギスの被害分析に基づき、パザード・マップを作成する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セグターのシナジーを促進するセミナーを開く サイクロン・カルギスの被害分析に基づき、パザード・マップを作成する 対象地域の簡易被災割番を行う 対象地域の簡易被災割番を行う 対象地域の簡易被災割番を行う 対象地域の簡易被災割番を行う 対象地域の前層を検び回答を行う 対象地域の前層が表プロファイル調査を行う 対象地域の前層を指して、ボールギスのからの後旧状況調査を行う 対象地域の前層が表プロファイルに増生を使きた。エード・マップを作成する をDFT にいて ボールイの ボール・ボール・ボール・ボール・ボール・ボール・ボール・ボール・ボール・ボール・	
特定された活動に対するCFタスクフォース (CFTF) 技術メンパー **() の役割と責任を確認する 特定された活動に対するCFタスクフォース (CFTF) 技術メンパーのニーズ (例:資金、ロジスティックス、人材開発ニーズ)を評価する 上記の人材開発ニーズ評価に基づき、研修用の 上記の人材開発ニーズ評価に基づき、研修用の とおいて、CF型な、由位センターを建設・70歳でする とおいて、CFUSGへの普及サービス・支援を提供する 合RFにおいて、CFUSGへの普及サービス・支援を提供する 合RFにおいて、CFUSGへの普及サービス・支援を提供する 合RFにおいて、CFUSGへの普及サービス・支援を提供する イ・デルタの生態・地理的ソーン・管理ソーンことに、CF及び非CFのための造林技術を特定する調査を実施する 存在された造林技術 (例: 届本生産、植え付け設計・方法、伐、枝打ち、森林管理) ことにアクション・リサーチ (AR) 試験を設計する イ・デルタの生態・地理的ソーン・管理ソーンことに、CF及び非CFのための造林技術を特定する調査を実施する イ・デルタの生態・地理的ソーン・管理ソーンことに、CF及び非CFのための造林技術を特定する調査を実施する イ・デルタの生態・地理的ソーン・管理ソーンにとに、CF及び非CFのための造林技術を特定する調査を主施する イ・デルタの主態・地理的ソーン・管理ソーンに、CF及び非CFのための造業的する イ・デルタの有数で表した。イ・デルタのマングローブ株の後旧・管理に関する技術ガイドラインを作成する ARのプインディンがに基づき、マングローブ林の後旧・管理に関する技術ガイドラインを作成する 展新の衛星画像を基に、定期的に更新する エーヤーフラ・デルタのマングローブ生態系の特続的管理のため、関連セクターのシナジーを促進するセミナーを開く 環にブスドリグトルベルで、エーヤーフーを提系の体機的管理のため、関連セクターのシナジーを促進するセミナーを開く 環にディスドリグトルベルで、は乗りに重がする エーヤーフラ・デルタのマングローブ生態系の特殊的管理のため、関連セクターのシナジーを促進するセミナーを開く 果に対するとの意味を通りの調整を合き開く は、イスドリグトルベルで、対象地域で活動するドイ・ディンがそ作成する 展示ないアルクロン・ボールギスの接着が指導を行う 対象地域の簡易被災調査を行う 対象地域の簡易被災調査を行う 対象地域の指落プロフィルに調査を行う をPUFに対して、アルコーブ角生のサイクロン・ナルギスからの復旧状況調査を行う をPUFに対して、アーカーがローン・基準を振うれた。単本・イルに対象を発音された。第44年第47日	•
特定された活動を実施するためCFTF技術メンバーのニーズ(例:資金、ロジスティックス、人材開発ニーズ)を評価する 1	
上記の人材開発ニーズ評価に基づき、研修計画・数材を作成する 上記研修計画に基づき、CFIT技術とが、「CFMを行う をRFIにおいて、CF型と、TAMAとが、「CFMを行う 各RFIにおいて、CF型と、TAMAとが、「CFMを行う 各RFIにおいて、CF型と、TAMAとの書をサービス・支援を提供する 各RFIにおいて、CFUSGへの普及サービス・支援を提供する 名RFIにおいて、CFUSGへの普及サービス・支援を提供する をRFIにおいて、CFUSGへの普及サービス・支援を提供する 森林局の既存SOP、(局介等)及びプロジェクト活動からのフィードバッグをもビ、マングローブ林のCFIに関する辞報が5のアイーディンとして、CF及びキングローブ林のを構造を実施する 特定された造林技術(例:苗木生産、植え付け設計・方法、伐、枝打ち、森林管理)ことにアクション・リサーチ (AR)試験を設計する 4RFIにおいてAR試験を実施する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復日・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林域の総合的森林資源評価及びマングローブ林の建筑では関連を合を開く 調整会合メンバーの協議に資するために、デルタ地域の総合的森林資源評価及びマングローブ林の電間を発起に、定期的に重新する 最新の衛星画像を基に、定期的に重新する 最新の衛星画像を基に、定期的に重新する 展新の衛星画像を基に、定期的に重新する 展新の衛星画像を基に、定期的に重新する 展新の衛星画像を基に、定期的に重新する 現象地域の商易被災調査・復興調査を行う 対象地域の商易被災調査・復興調査を行う 対象地域の村落グロファイル調査を行う 対象地域の村落プロファイル調査を行う 対象地域の村落プロファイル調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う AR のロニーをは、アールサイカロン・サルギスからの復旧状況調査を行う AR のロニーをは、アールサイカロン・オルデスからの復旧状況調査を行う AR のロニーをは、アールサイカロン・オルドスからの復旧状況調査を行う AR のロニーをは、アールサイカロン・オルイスからの復旧状況調査を行う AR のロニーをは、アールサイカロン・オルイスからの復日状況調査を行う AR のロニーをは、アールサイカロン・オルイスの・2012 のローン植生のサイクロン・オルテスからの復日状況調査を行う AR のロニーをは、アールサイカロン・オルイスからの復日状況調査を行う AR のロニーをは、アールサイカロン・オルイスからの復日状況調査を行う AR のロニーをは、アールサイカロン・オルイスからの復日状況調査を行う AR のロニーをは、アールドルイスのが増加するがあります。 AR のは、アールドスの被害が対に基づきを行う。 AR のは、アールドスの被害があるがあります。 AR のは、アールドスの被害があるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるがあるが	
上記研修計画に基づき、CFTF技術メンバーに研修を行う 各RFにおいて、CF世及・苗畑センターを建設・改修する 各RFにおいて、CF世Sへの普及サービス・支援を提供する 各RFにおいて、CFUSGへの普及サービス・支援を提供する をRFによいて、CFUSGへの普及サービス・支援を提供する でF及びマングローブ林保全に関する広報活動を行う 森林局の既存SOP(局令等)及びコロジェケト活動からのフィードバックをもどに、マングローブ林のCFに関する詳細なSOPを作成する 森林局の既存SOP(局令等)及びコロジェケト活動からのフィードバックをもどに、マングローブ林のCFに関する詳細なSOPを作成する 本のは本地によいてAPRI競を実施する ARの指本地によいてAPRI競を実施する ARの指本地によいてAPRI競を実施する ARのファインディングに基づき、マングローブ体の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ体の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ体の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ体の復旧・管理に関する技術がイドラインを作成する ARのファインディングに基づき、マングローブ体の復旧・管理に関する技術がイドラインを作成する ARのファインディングに基づき、マングローブ体が復旧・管理に関する技術がイドラインを作成する ARのファインディングに基づき、マングローブ体が復旧・管理に関する技術がガイドラインを作成する は・土地記録)の調整会合を開く は・土地記録)の調整会合を開く 最新の衛星画像を基に、定期的に更新する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く 原・ディストリクトルベルで、対象地域で活動するドナー/NGO の調整会合を開く エーヤーフディ・デルタのマングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域の簡易被災調査・復興調査を行う 対象地域の簡易被災調査・復興調査を行う 対象地域の簡易被災調査・復興調査を行う 対象地域の簡易被災調査・復興調査を行う 対象地域の簡易被災調査・後用に基のサイクロン・ナルギスからの復旧状況調査を行う 対象地域の簡多被災却を使われてい、本生をル・若和イクロン・ナルギスからの後旧状況調査を行う 対象地域のイングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のイングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のイングローブ権生のサイクロン・ナルボスからの復旧状況調査を行う 対象地域のイングローブ権生のサイクロン・ナルボスからの後日が洗透りであるによい、高イトのロン・オールが、本生を使うするではする	c
各RFにおいて、CF普及・苗畑センターを建設/改修する 各RFにおいて、CFUSGへの普及サービス・支援を提供する CF及がマングローブ林保全に関する広報活動を行う。54 森林局の既存SOP(局令等)及びプロジェクト活動からのフィードバックをもとに、マングローブ林のCFに関する詳細なSOPを作成する。54 エーヤー イデルタの生態・地理的ソーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する 特定された遺林技術(例: 苗木生産、植え付け設計・方法、伐、枝打ち、森林管理)ごとにアクション・リサーチ (AR)試験を設計する 4ARの権林地において、定期的な技術モニタリング及び初期評価を実施する ARの海林地において、定期的な技術モニタリング及び初期評価を実施する ARのファインティングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインティングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインティングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインティングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインティングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインティンがに、工・サーワディ・デルタのマングローブ林減少の根本原因を検討するために、デルタのマングローブ体験のでコングローブ体験の関連を会を開く 調整会合メンバーの協議に選するために、デルタ地域の総合的森林資源評価及びマングローブ林の転用情報をを 電手の協議に選するために、デルタが埋むが高からが関連を有別、 サイクロン・ナルギスの被害分析に基づき、ハザード・マップを作成する 対象地域の簡易被災調査・復興調査を行う 対象地域の同場被災調査・復興調査を行う ASを地域のイズフローブ権生のサイクロン・ナルギスからの復旧状況調査を行う ASを地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う ASを地域のマングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う AS AD T エ	元の一つの一つの一つの一つの一つの一つでは、一つで、一つで、一つで、一つで、一つで、一つで、一つで、一つで、一つで、一つで
各RFICおいて、CFUSGへの普及サービス・支援を提供する CF及びマングローブ林保全に関する広報活動を行う 森林局の既存SOP(局令等)及びプロジェクト活動からのフィードバックをもとに、マングローブ林のCFに関する詳細なSOPを作成する 54 イ・デルタの生態-地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する イ・デルタの生態-地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する ARの連携を実施する ARの道林地において、定期的な技術モニタリング及び初期評価を実施する ARの道林地において、定期的な技術モニタリング及び初期評価を実施する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の後間・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の後回・管理に関する技術ガイドラインを作成する ARのファインディンがに、定期的に更新する 調整会合メンバーの協議に資するために、デルタ地域の総合的森林資源評価及びマングローブ林の転用情報を会立と関係 調整会合メンバーの協議に資するために、デルタ地域の総合的森林資源評価及びマングローブ林の転用情報を、現間を会合メンバーの協議に資するために、デルタのマングローブ生態系の持続的管理を含まし、定期的に更新する。エーヤーフティ・デルタのマングローブ生態系の持続的管理を表し、定期的に基づき、バザード・マップを作成する コーヤーフィ・デルタのマングローブ生態系の行きがに基づき、バザード・マップを作成する 対象地域の情易被災調査・復興調査を行う 対象地域の対落プロファイル調査を行う 対象地域の対落プロファイル間をを行う 対象地域の対落プロファイルがは生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のオオブロン・オーメイロン・様生を体ライトに単か・カール・大スからの復旧状況調査を行う 対象地域のオオブローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のオオブローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマグローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のオオブローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のオオブローブ植生のサイクロン・ナルギスがもであります。	
CF及びマングローブ林保全に関する広報活動を行う 森林局の既存SOP(局会等)及びプロジェクト活動からのフィードバックをもとに、マングローブ林のCFに関する詳細なSOPを作成する。5年 エーヤー イ・デルタの生態ー地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する 特定された造林技術(例: 苗木生産、植え付け設計・方法、伐、核打ち、森林管理)ごとにアクション・リサーチ (AR)試験を設計する ARの指験を実施する ARの着株技術を持定する ARの方マインマインストスに関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファインディングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く 最新の衛星画像を基に、定期的に更新する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く 展でイストリクト)レベルで、対象地域で活動するドナー/NGOの調整会合を開く サイクロン・ナルギスの被害分析に基づき、パザード・マップを作成する 対象地域のイルグローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のイルグローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のイングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況がで、新せんがに、雑なをはまった。単れ、オーカー、、は、新した。サースに乗れ、オーカーが、は、ボールが、オーカーが、は、ボールが、オールが、オールが、オールが、オールが、オールが、オールが、オールが、オ	
森林局の既存SOP (局令等)及びプロジェクト活動からのフィードバックをもとに、マングローブ林のCFに関する詳細なSOPを作成する。54 エーヤーイ・デルタの生態-地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する AE 特定された造林技術 (例: 苗木生産、植え付け設計・方法、伐、枝打ち、森林管理)ごとにアクション・リサーチ (AR)試験を設計する AR の植林地においてAR試験を実施する ARの植林地においてAR試験を実施する ARの植林地においてAR試験を実施する ARの植林地においてAR試験を実施する ARの一がイングローブ林の復旧・管理に関する技術レイドライルでする ARのファイングにようき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファイングにようき、マングローブ林の復旧・管理に関する技術がイドラインを作成する ARのファイン インディ・デルタのマングローブ オの復日・管理に関する技術がイドラインを作成する ARのファイン インディ・デルタのマングローブ オの復日・管理に関する技術がイドラインを作成する ARのファイン イン 1 に乗りまる ARのファイン ディングローブ 大の復日・管理に関する技術が 関連セクターのシナジーを促進する セミナーを開く 調整会合を開く 調整会合を開く 関連を含まれて 1 によれ 2 の 1 によれ 2 の 2 に 2 を 2 に 2 を 3 に 4 イクロン・ナルギスの被害分析に まづき、ハザード・マップを作成する A タ地域の A 2 を 3 に 4 イクロン・ナルギスの被害分析に まづき、ハザード・マップを作成する A 2 を 4 地域の A 2 を 4 を 4 で 5 を 4 で 5 を 4 で 5 を 4 で 5 を 4 で 5 を 4 で 5 を 4 で 5 を 5 で 5 を 5 を 5 を 5 を 5 を 5 を 5 を 5	+=:134
エーヤーイデルタの生態・地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する (日本デルタの生態・地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する AをRにされて造林技術 (例: 苗木生産、植え付け設計・方法、伐、枝打ち、森林管理) ごとにアクション・リサーチ (AR) 試験を設計する ARの植林地において、定期的な技術レポートを作成する ARの植林地において、定期的な技術レポートを作成する ARのファインディングに基づき、マングローブ林の AR に関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の AR に関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の AR に関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の AR に関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術がイドラインを作成する M(リージョン)レベルで、エーヤーワディ・デルタのマングローブ Apを地域で活動するドナー/NGO の調整会合を開く 調整会合 スシパーの協議に資するために、デルタ地域の総合 Aが同様的管理のため、関連セクターのシナジーを促進するセミナーを開く 展示の検書が作に基づき、ハザード・マップを作成する スターウン・ナルギスの被害が作に基づき、ハザード・マップを作成する 対象地域の簡易 被災調査を行う 対象地域の簡易 被災調査・復興調査を行う 対象地域の日海 をと行う 対象地域の日海 をと行う 対象地域の日本に基づき、ル・ボール・スル・アルギスのは 基をを持つ スシグローブ権生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う ASを地域のマングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う ASを地域のマングローブ権生のサイクロン・ナルギスからの復旧状況調査を行う ASを地域のマングローブ権生のサイクロン・ナルギスからの復旧状況間でを行う ASを地域のマングローブ Aををを振った CE 地の・カーボール ADIL 、 AL ADIL	ノバゴスド
4・デルタの生態-地理的ゾーン・管理ゾーンごとに、CF及び非CFのための造林技術を特定する調査を実施する 特定された造林技術(例: 苗木生産、植え付け設計・方法、伐、枝打ち、森林管理) ごとにアクション・リサーチ (AR) 試験を設計する ARの植林地においてAR試験を実施する ARの植林地において、定期的な技術モニタリング及び初期評価を実施する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する M(リージョン)レベルで、エーヤーワディ・デルタのマングローブ林減少の根本原因を検討するために、関連省庁(例: 農業、水産、定 調整会合メンバーの協議に資するために、デルタ地域の総合的森林資源評価及びマングローブ林の転用情報を含む土地利用情報を、 最新の衛星画像を基に、定期的に更新する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く 県 (ディストリクト)レベルで、対象地域で活動するドナー/NGO の調整会合を開く 県 (ディストリクト)レベルで、対象地域で活動するドナー/NGO の調整会合を開く 東 (ディストリクト)レベルで、対象地域で活動するドナー/NGO の調整会合を開く 期後地域のアプロファイル調査を行う 対象地域のの村落プロファイル調査を行う 対象地域のファイル調査を行う 対象地域の対落プロファイル調査を行う なりを関して、ボールの、オークロン・ナルギスからの復旧状況調査を行う なりを地域の対落プロファイル調査を行う	
特定された造林技術(例: 苗木生産、植え付け設計・方法、伐、枝打ち、森林管理)ごとにアクション・リサーチ (AR) 試験を設計する AR ARD は TAR ARD ARD は TAR ARD ARD は TAR ARD ARD は TAR ARD な TAR ARD ARD ARD ARD ARD ARD ARD ARD ARD A	
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ARの植林地において、この間の技術をエラリング及び初期評価を実施する マングローブ林の AR に関する技術レポートを作成する マングローブ林の AR に関する技術レポートを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する ARのファインディングに基づき、マングローブ林の復旧・管理に関する技術ガイドラインを作成する M(リージョン)レベルで、エーヤーワディ・デルタのマングローブ林減少の根本原因を検討するために、関連省庁(例:農業、水産、定 5 住・土地記録)の調整会合を開く 調整会合メンバーの協議に資するために、デルタ地域の総合的森林資源評価及びマングローブ林の転用情報を含む土地利用情報を、 最新の衛星画像を基に、定期的に更新する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く 最がカーケロン・ナルギスの被害分析に基づき、ハザード・マップを作成する エーヤーフディ・デルタのマングローブ生態系の持続的管理のため、関連セクターのシナジーを促進するセミナーを開く リイクロン・ナルギスの被害分析に基づき、ハザード・マップを作成する エーヤーフェール・ボスの被害分析に基づき、ハザード・マップを作成する コーオイクロン・ナルギスの被害分析に基づき、ハザード・マップを作成する 対象地域の簡易被災調査・復興調査を行う 対象地域の簡易被災調査・復興調査を行う 対象地域の音を行う 対象地域の一が進生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ植生のサイクロン・ナルギスからの復旧状況調査を行う 対象地域のマングローブ権生のサイクロン・排法を確まった。中で、中で、中に対して、カルボルコ、特殊を確まった。中に対して、カルボルコ、特殊を確まった。中に対して、カルコーブ権生のサイクロン・増売を行う	
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ロントののでは、ことには、またのでは、ことには、これのでは、ことには、ことには、ことには、ことには、ことには、ことには、ことには、ことに	
対象地域における実施機関・協力機関の災害復旧・防災事業に対し、資材供給を通して支援する	
X-8 総合マンクローフ管理に関し、ドナー間の必要な調整を行う	

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理」は、CF関連活動の計画、監督、モニタリング&評価、データ整理・分析を含むと定義される。(*5)。「CF 普及サービス」には、CFUSGの組織化、CFUSGの組織・運営能力強化、CF管理計画の作成・実施やCFUSGの 所得創出活動に対する技術的サポート等が含まれうる。一方、「CF普及支援」は、CF管理計画に基づく植林への苗木提供、CF活動へのCF普及・苗畑センターの施設提供などの物質的支援と定義される。(*6):アウトプット2における"CFFで 技術メンバー"は、フィールド・プロジェクト・マネージャー及び対象地域に関連する現場職員(スタッフ・オフィサー、レンジ・オフィサー、デピュティ・レンジ・オフィサー、フォレスター)を指す 及びARの面積、さらに再選定からもれたCFUSGが 2009~2010 年に復旧した面積が反映される。(*3):計画値には、2011 年に再選定されたCFUSGのCF管理計画の実際の計画が反映される。(*4):森林局による「CF管

PDMEから PDM2 案への主な修正箇所及びその理由・内容は以下に示す通り。

表 1. PDM2 案のプロジェクトの要約部分の修正箇所

#	修正箇所	理由、内容
1		ポスト・プロジェクト戦略作成は、CFに限定されるものではないので、アウトプット2ではなく、アウトプット0に移動することになった。(なお、PO2 案は、作成中であるため、合同レビュー報告書には掲載していない)
2	 修正前> 活動 4-1: Formulate an inter-agency coordination committee, consisting of relevant authorities (e.g. agriculture, fisheries, settlement and land records) at the Regional level to examine the underlying causes for mangrove deforestation in the Ayeyawady Delta. 活動 4-2:Update the land use information on periodic basis based on the up-to-date satellite images for discussion by the coordination committee members, including overall forest resource assessment of the region and mangrove forest conversion. 修正後> 活動 4-1:Organize an inter-agency coordination meeting, consisting of relevant authorities (e.g. agriculture, fisheries, settlement and land records) at the Regional level to examine the underlying causes for mangrove deforestation in the Ayeyawady Delta. 活動 4-2:Update the land use information on periodic basis based on the up-to-date satellite images for discussion by the coordination meeting members, including overall forest resource assessment of the region and mangrove forest conversion. 	常設の省庁間調整委員会の公式な設置は、行政手続き上困難であるという評価結果から、より実現可能な、省庁間調整会合の開催に修正した。
3		地方レベルの省庁間調整会合において、行政命令を調整することは現実的ではないという意見があり、PDMの活動から削除された。
4	<追加)> ■ 活動 4-4: Organize a coordination meeting with donors/NGOs active.in the Target Area at District Level	対象地域で活動をしている NGO/ドナーと会合をもつべきとの中間レビューの提言により、追加

表 2. PDM2 案のプロジェクト目標の指標の修正箇所

	衣 2. PDM2 来のフロジェット日保の指標の修	> 上 回 / /
#	修正箇所	理由、内容
1	● 指標 a: By the Project end, mangrove forest coverage is increased by 6,200 acres (*2) in the selected areas where project were implemented (i.e. CF plantation, CF-Natural Forest Improvement Operation (NFIO), and ARP sites) from the base year 2009. (*2): "6,000 acres" is a tentative target, which was set based on the following assumptions: (i) 20 CFUSGs are organized or reorganized during FY2009-FY2011; (ii) 200 acres is rehabilitated/ managed by each of the 20 CFUSGs (200 acres X 20=4,000 acres): and (iii) a total of 2,000 acres is planted through AR. The figure will be reviewed & finalized based on the results of the Joint Mid-term Review	中間レビューにより、2009 年 1 月時点の仮定に基づいて算出された暫定計画値(6,200 acres)は、実際の計画に基づき、より現実的なものに改訂する必要があることが明らかになった。(「プロジェクト目標の実績」参照) しかし、レビューの時点で、情報不足(一部CF管理計画の未更新・未承認)より、指標の計画値を検討することが不可能であったため、Xエーカー(Yヘクタール)とした。 注釈についても、プロジェクト側との協議に基づき、修正した。
	• 指標 a: By the Project end, mangrove forest coverage is increased by	
	X acres (Y ha) (*2) in the selected areas where project were	

PDME から PDM2 案への修正箇所

implemented(i.e. CF plantation, CF-Natural Forest Improvement Operation (NFIO), and ARP sites) from the base year 2009. (*2): The planned value will be determined by March 2012, reflecting the actual plans delineated in the CF Management Plans of the CFUSGs reselected in 2011 and Action Research as well as the area rehabilitated during 2009-2010 by the CFUSGs which were not reselected <修正前> 中間レビューにより、指標 b は、プロジ ェクト目標を測る指標として不適切だと 指標 b.At the end of the Project, in more than 80% of the villages, 判断された。非CFUSGメンバーを含 where the CF user groups (CFUSGs) were organized/ reorganized む村落住民全体の世帯別平均所得 during 2009-2011, the percentage of households earning less than the は、プロジェクト外の様々な要因に影 average income of 100,000 kyats equivalent per year (base year 2002) 響されるからである。 decrease from the base year of CF organization/reorganization. <修正後> 削除 <修正前> 3 中間レビューでは、対象 CFUSG を、 2009 年~2011 年に組織化/再組織化 指標 c:At the end of the Project, among the registered members of されたものから、さらに絞りこむことを CFUSGs organized/reorganized during 2009-2011, more than 80% 提言しているため、これにあわせて表 consider CF useful 現を「2011 年に再選定されたCFUS G」に訂正した。 <修正後> 指標 b:At the end of the Project, among the registered members of all the target CFUSGs reselected in 2011, more than 80% consider CF

表 3. PDM2 案のアウトプットの指標の修正箇所

useful

#	修正箇所	理由、内容
1	 追加> 指標 1a:By July 2011, all the CF Management Plans of the CFUSGs, reselected in March 2011, are developed/updated 指標 1b:By the end of the Project, organizational capacity of the Management Committees (MCs) of all the target CFUSGs, reselected in 2011, reaches the Xth level of the Y evaluation rating set by the Project 指標 1c:The certified CF Management Plans (i.e. CF plantation and NFIO) of all the target CGUSGs reselected in 2011are implemented according their annual plans 	アウトプット1の達成状況をより的確に把握できるように、指標を追加した。なお、指標 1b 中のX, Yは、2012年3月までに決定される予定である。
2	● 指標 1a:By the Project end, more than 4,000 acres (1,600ha) (*3) of mangrove forests are rehabilitated and managed by the CFUSGs organized/reorganized during 2009—2011 based on the certified CF Management Plans (*3): "4,000 acres" is a tentative target, which was set based on the following assumptions: (i) 20 CFUSGs are organized or reorganized during 2009—2011; and (ii) 200 acres is rehabilitated/managed by each of the 20 CFUSGs. The figure will be reviewed & finalized based on the results of the Joint Mid─term Review (廖正後) • 指標 1d:By the Project end, more than X acres (Y ha) (*3) of mangrove forests are rehabilitated and managed by the CFUSGs reselected in 2011 based on the certified CF Management Plans, including CF plantation and NFIO when applicable (*3): The planned value will be determined by March 2012, reflecting the actual plans delineated in the CF Management Plans of the CFUSGs reselected in 2011.	中間レビューにより、2009年1月時点の仮定に基づいて算出された暫定計画値(4,200 acres)は、実際の計画に基づき、より現実的なものに改訂する必要があることが明らかになった。(「アウトプット1の実績」参照)。しかし、レビューの時点で、情報不足(一部CF管理計画の未更新・未承認)より、指標の計画値を検討することが不可能であったため、Xエーカー(Yヘクタール)とした。 注釈についても、プロジェクト側との協議に基づき、修正した。 中間レビューでは、対象CFUSGを、2009年~2011年に組織化/再組織化されたものから、さらに絞りこむとを提言しているため、「2011年に再選定されたCFUSG」に修正した。

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#	修正箇所	理由、内容
3	◆ 修正前> 指標 1b:By the Project end, all active the CFUSGs organized/reorganized during 2009—2011 start to gain profit from CF activities determined in the certified CF Management Plans and/or income generation activities supported by the Project. 修正後> 指標 1e:By the Project end, all the CFUSGs reselected in 2011 start to gain profit from CF activities determined in the certified CF Management Plans and/or income generation activities supported by the Project. 	中間レビューでは、対象CFUSGを、 2009 年~2011 年に組織化/再組織化 されたものから、さらに絞りこむことを 提言しているため、「2011 年に再選定 されたCFUSG」に修正した。
4	<追加> 指標 2a:By the end of the Project, capacity of X % of technical members of CF Task Force, engaged in the Project more than two years reaches the Yth level of the Z evaluation rating set by the Project for each level on CF management and extension/support	アウトブット2の達成度をより的確に 把握できるように、指標を追加した。 なお、指標 1b 中のX, Yは、プロジェク ト内で検討を経て、2012年3月までに 決定される予定である
5	◆修正前> 指標 2a: More than 80% of all registered members of the CFUSGs organized/reorganized during 2009-2011 are active 〈修正後〉 指標 2b:On average, more than 80% of all registered members of the CFUSGs reselected in 2011 give the highest or medium rate on three-level rating about "degree of understanding", "degree of applicability", and "degree of satisfaction" of the CF extension they received. 	アウトプット 2 の達成度をより的確に 把握できるように、指標を修正した。
7	 修正前> 指標 2b: Each year, new communities continue to express interest in organizing CFUSGs. 《修正後> 削除 《修正前> 指標 4a: By December 2011, an inter-agency coordination committee 	中間レビューにより、指標 2b は、アウトプット2の達成度を測る指標として不適切であると判断された。新たなコミュニティがCFUSGの組織化に関心を示すかどうかは、FDによるCF管理・支援以外の諸要因にも影響されるからである。 表1の#2に記したように、常設の省庁間調整委員会の公式な設置は、行
	is officialized < <u>修正後</u> > 指標 4a: By December 2011, an inter-agency coordination meeting is formulated by the FD	政手続き上困難であるという評価結果から、より実現可能な、省庁間調整 会合の設置に修正した。
8	 <<u>追加</u>> <u>指標 4e: A donor/NGO coordination meeting for the Target Area organized by the FD once a year</u> 	表1#4に記した活動追加に伴い、指標を追加 標を追加