

添付資料

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添付 1-1 PDM バージョン 0

Appendix 1 Draft Project Design Matrix (PDM)

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

Project Duration: October 2006 - September 2011 (tentative)

Version Number: Version 0 (draft)

Target Area: Four reserved forests (Kyakankwinpauk, Pyinalan, Kadonkani, Pyindaye) in the Ayeyawady Delta

Date: 22 December 2005

Target Group:

- 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
<p>Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta.</p>	<p>1. Mangrove forest coverage increases from XX acres in 2006 to YY acres in 2016 in the project target area. 2. Income levels of communities in the Ayeyawady Delta improve than that of 2004.</p>	<p>1. Forests resource assessment by FD (remote sensing) 2. Agricultural Census report</p>	
<p>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.</p>	<p>1. Mangrove forest coverage increases from XX acres in 2006 to YY acres in 2011 in the selected areas where project activities were implemented. 2. In more than 80% of the CF villages, 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. 3. Among the CF participants supported by the Project, more than 80% consider CF useful.</p>	<p>1. Project reports 2. Results from the CF Impact survey 3. Results from the CF Impact survey</p>	<p>-Favourable markets exist for CF products. -FD's policy on the management of the four reserved forests does not change significantly. -Sufficient financial and other resources are allocated for the sustainable management of mangrove forests.</p>
<p>Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).</p>	<p>1-1 More than XX acres of mangrove forests are rehabilitated and managed through CF by the end of the Project. 1-2 More than XX% of all new CF user groups gain profit from CF activities by the end of the Project.</p>	<p>1-1 CF management plans, monitoring reports 1-2 Project reports</p>	<p>- No drastic increase in the population within the four reserved forests. - External pressure to convert the mangrove forests to other land uses does not increase. - Prices for CF products do not change significantly.</p>
<p>2. The management and the support system of the Forest Department (FD) for CF is effective.</p>	<p>2-1 More than 80% of all registered user groups are active in CF. 2-2 New communities continue to express interest in forming CF user groups each year.</p>	<p>2-1 Project reports 2-2 Project reports</p>	
<p>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.</p>	<p>3-1 Technical reports/ draft guidelines are prepared based on action research findings.</p>	<p>3-1 Project reports</p>	
<p>4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.</p>	<p>4-1 Interdisciplinary committee is officialized. 4-2 Specific recommendations are made and/or actions are taken by the committee.</p>	<p>4-1 Authorities' letter of announcement 4-2 Meeting records</p>	

<p>Activities:</p> <p>1-1 Select villages to introduce CF from the ones that express interest.</p> <p>1-2 Conduct baseline survey on the basic socio-economic conditions of the selected communities.</p> <p>1-3 Mobilize the selected communities for user group formation and conduct introductory meetings on CF.</p> <p>1-4 Introduce participatory planning processes for the user groups on CF to facilitate preparation of proposals for CF certificates and formulation of management plans.</p> <p>1-5 Facilitate implementation of the management plans formulated by the user groups.</p> <p>1-6 Organize meetings to assess various socio-economic needs of the selected communities and design programmes to strengthen their income generating capacities.</p> <p>1-7 Implement various programmes to enhance the income levels of the user groups in the selected villages in partnership with cooperating agencies such as Department of Fisheries, Myanma Agriculture Service, and other institutions.</p> <p>1-8 Establish monitoring and evaluation systems for the management plans formulated by the user groups.</p> <p>1-9 Conduct impact survey regarding the effects of CF on the livelihoods of the selected communities.</p>	<p>Inputs (Myanmar side)</p> <p>Personnel</p> <ol style="list-style-type: none"> 1. Project Director 2. Project Manager 3. Project Coordinator 4. Field Project Manager 5. CF Task Force members 6. Other personnel mutually agreed upon as necessary <p>Land, Building and Facilities</p> <ol style="list-style-type: none"> 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 <p>Local Operational Costs</p> <p>Minimum of US\$100,000 equivalent in 5 years</p>	<p>Inputs (Japanese side)</p> <p>Personnel</p> <ol style="list-style-type: none"> 1. Chief Advisor 2. Participatory community development 3. Mangrove forestry 4. Coordinator 5. Other experts in specific fields (e.g. Extension, GIS, Agro-forestry, Fish culture, Forestry Value-added Production, Marketing and Distribution) upon mutual agreement <p>Machinery and Equipment</p> <ol style="list-style-type: none"> 1. Boat(s) 2. Vehicle(s) 3. Other equipment would be provided if necessary upon mutual agreement. <p>Training in Japan</p>	<p>-No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases).</p> <p>-Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests.</p>
<p>2-1 Review the contents of the Integrated Mangrove Management Plan (IMMP) among all CF Task Force members and break down necessary activities for the first phase, by each reserved forest.</p> <p>2-2 Confirm the various roles and responsibilities of the CF Task Force at each level to implement the IMMP.</p> <p>2-3 Assess the needs of the CF Task Force members (e.g. financial, logistics and human resource development).</p> <p>2-4 Develop training materials on the standard operational procedures for CF for the mangrove forests.</p> <p>2-5 Train field level staff on CF extension services and support.</p> <p>2-6 Facilitate FD to carry out public information campaigns regarding CF and the conservation of mangrove forests.</p> <p>2-7 Draft detailed standard operational procedures for CF for the mangrove forests</p>			

<p>3-1 Conduct surveys for identification of silvicultural models for both community and non-community forestry with respect to the eco-geographical / management zones in the Ayeyawady Delta.</p> <p>3-2 Prepare the specific action research test designs with respect to each silvicultural model (e.g. seedling production, planting designs and methods, thinning, pruning, forest management).</p> <p>3-3 Plan execution of the tests.</p> <p>3-4 Prepare the facilities (e.g. nurseries).</p> <p>3-5 Prepare plots and test materials (e.g. seeds, seedlings) and execute the test plots.</p> <p>3-6 Conduct patrols and periodic technical monitoring /preliminary assessment.</p> <p>3-7 Prepare draft technical guidelines of some action research items (e.g. species identification, nursery, seed collection and management, planting techniques).</p>		
<p>4-1 Formulate an inter-disciplinary 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.</p> <p>4-2 Update the most recent land use information on periodic basis, including overall forest resource assessment of the region and mangrove forest conversion.</p> <p>4-3 Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of appropriate land use policies.</p> <p>4-4 Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta.</p>		<p>Preconditions:</p> <ul style="list-style-type: none"> -Local communities accept CF Instructions. -No significant changes occur in the Government's policy on CF.

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添付 1-2 PDM バージョン 1

Attachment 1.2 PDM version 1

Draft Project Design Matrix

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

Target Group: -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

Version Number: 1 (draft)

Date: 28 January 2009

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	1. Mangrove forest coverage increases from 110,000 acres (45000ha) in 2007 to 136,000 acres (55200 ha) of the total project area in 2018 note1) in the project target area. 2. Income levels of communities in the Ayeyawady Delta improve than that of 2004	1. Forests resource assessment by FD (remote sensing) 2. 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.	1. Mangrove forest coverage increases from 110,000 acres (45000ha) in 2007 to 116,200 acre (47000 ha) note2) in 2013 in the selected areas where project activities were implemented. 2. In more than 80% of the CF villages, 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. 3. Among the CF participants supported by the Project, more than 80% consider CF useful.	1. Project reports 2. Results from the CF Impact survey 3. Results from the CF Impact survey	-Favourable markets exist for CF products. -FD's policy on the management of the four reserved forests does not change significantly. -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).	1-1 More than 4200 acres (1800 ha) note3) of mangrove forests are rehabilitated and managed through CF by the end of the Project. 1-2 All new active CF user groups launched during fy2009 – fy2011 under the Project gain profit from CF activities by the end of the Project.	1-1 CF management plans, monitoring reports 1-2 Project reports	-No drastic increase in the population within the four reserved forests. -External pressure to convert the mangrove forests to other land uses does not increase.
2. The management and the support system of the Forest Department (FD) for CF is effective.	2-1 More than 80% of all registered CF user groups members are active among CF user groups activated during FY2009 – FY2011 under the Project. 2-2 New communities continue to express interest in forming CF user groups each year.	2-1 Project reports 2-2 Project reports	-Prices for CF products do not change significantly
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.	3-1 Technical reports/ draft guidelines are prepared based on action research findings. 3-2 Foundations for propelling IMMP is prepared including recovery from the damages of cyclone.	3-1 Project reports	
4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.	4-1 Interdisciplinary committee is officialized. 4-2 Specific recommendations are made and/or actions are taken by the committee.	4-1 Authorities' letter of announcement 4-2 Meeting records	

Activities:	Inputs (Myanmar side)	Inputs (Japanese side)	
<p>1-1 Select villages to introduce CF from the ones that express interest.</p> <p>1-2 Conduct recovery survey and village profile survey based on needs and conduct baseline survey on the basic socio-economic conditions of the selected communities.</p> <p>1-3 Mobilize the selected communities for user group formation and conduct introductory meetings on CF.</p> <p>1-4 Introduce participatory planning processes and land use rule for applying CFI 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 the land use</p> <p>1-5 Issue CF certificate based on the proposal</p> <p>1-6 Facilitate implementations of the CF management plans of the user groups for protection related CF activities (CF river bank / coastal woodlot, CF WLS, CF paddy, etc)</p> <p>1-7 Implement various Mangrove CF programs to enhance the income levels of the user group in the selected villages in partnership with cooperating agencies such as Department of Fisheries, Myanma Agriculture Service, and other institutions.</p> <p>1-8 Establish monitoring and evaluation systems for the management plans formulated by the user groups.</p> <p>1-9 Conduct impact survey regarding the effects of CF on the livelihoods of the selected communities.</p>	<p>Personnel</p> <p>1. Project Director 2. Project Manager 3. Project Coordinator 4. Field Project Manager 5. CF Task Force members 6. Other personnel mutually agreed upon as necessary</p> <p>Land, Building and Facilities</p> <p>1. Office building and facilities necessary for the implementation of the Project 2. Office space and necessary facilities for 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</p> <p>Local Operational Costs</p> <p>Minimum of US\$100,000 equivalent in 5 years</p>	<p>Personnel</p> <p>1. Chief Advisor 2. Participatory community development 3. Mangrove forestry 4. Coordinator 5. Other experts in specific fields (e.g. Extension, GIS, Agro-forestry, Fish culture, Forestry Value-added Production, Marketing and Distribution) upon mutual agreement</p> <p>Machinery and Equipment</p> <p>1. Boat(s) 2. Vehicle(s) 3. Other equipment would be provided if necessary upon mutual agreement.</p> <p>Training in Japan</p>	<p>- No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases).</p> <p>- Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests.</p>
<p>2-1 Review the contents of the Integrated Mangrove Management Plan (IMMP) among all CF Task Force members and break down necessary activities for the first phase, by each reserved forest.</p> <p>2-2 Confirm the various roles and responsibilities of the CF Task Force at each level to implement the IMMP.</p> <p>2-3 Assess the needs of the organization related to the integrated mangrove management (e.g. financial, logistics and human resource development).</p> <p>2-4 Review the institutional system related to the integrated mangrove management and support development of the system (new organization, mandate, budget, etc)</p> <p>2-5 Develop training materials on the standard operational procedures for CF for the mangrove forests.</p> <p>2-6 Train FD staff on CF and integrated mangrove management including technology exchange program at third countries through collaboration with multi or bilateral donors.</p> <p>2-7 Train CF user group related to the integrated mangrove management and CF activities</p> <p>2-8 Draft detailed standard operational procedures for CF for the mangrove forests.</p>			
<p>3-1 Conduct surveys for identification of silvicultural models for both community and non-community forestry with respect to the eco-geographical / management zones in the Ayeyawady Delta including recovery condition of mangrove vegetation from damage of cyclone Nargis.</p> <p>3-2 Prepare the specific action research test designs with respect to each silvicultural model (e.g. seedling production, planning designs and methods, thinning, pruning, forest management).</p> <p>3-3 Prepare the facilities (e.g. nurseries) for integrated mangrove management and for attaining support recovery from damage of the cyclone Nargis.</p> <p>3-4 Prepare plots and test materials (e.g. seeds, seedlings) and execute the AR.</p> <p>3-5 Conduct periodic technical monitoring / preliminary assessment.</p> <p>3-6 Prepare draft technical guidelines based on progress of the action research activities (e.g. species identification, nursery, seed collection and management, planting techniques).</p> <p>3-7 Support recovery of Implementation Body, material supply for recovery work of damaged mangrove or development of river bank / Coastal woodlot</p>			<p>Preconditions:</p> <p>- Local communities accept CF Instructions.</p> <p>- No significant changes occur in the Government's policy on CF.</p>
<p>4-1 Formulate and inter-disciplinary 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.</p> <p>4-2 Update the most recent land use information on periodic basis, including overall forest resource assessment of the region and mangrove forest conversion.</p> <p>4-3 Prepare hazard map based on analysis of damage of the cyclone Nargis</p> <p>4-4 Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of appropriate land use policies.</p> <p>4-5 Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta.</p> <p>4-6 Prepare material for public information</p> <p>4-7 Arrange necessary coordination among donors in the integrated mangrove management.</p> <p>4-8 Conduct public information for support integrated mangrove management including disaster prevention and patrol</p>			

Note 1: Estimated to be achieved IMMP phase I target of 26,000 acre-mangrove plantation at 2018 after five years of the Project completion. Will be reviewed based on result of mid-term evaluation during FY2009/2010.

Note 2: Estimated to be increased 6000 acre (4000 acre-plantation through CFI and 2000 acre-plantation through action research) of mangrove forest cover when the Project completion (fy2012). Will be reviewed based on result of mid-term evaluation during FY2009/2010.

Note 3: Estimated to be rehabilitated 200 acre of mangrove forest by each CFUSG and will be activated 22 CFUSGs under the Project

添付 1-3 PDM バージョン 2

Attachment 1-3 PDM ver 2

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

PDM version: 2

Date of approval: 14 July, 2011

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Overall Goal: The mangrove forests are sustainably managed and poverty is alleviated among the communities in the Ayeyawady Delta</p>	<p>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</p>	<p>a. Forests resource assessment by FD (remote sensing) b. Agricultural Census report</p>	
<p>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.</p>	<p>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 CF user groups (CFUSGs) reselected in 2011 more than 80% consider CF useful</p>	<p>a. Project reports b. Results from the CF Impact survey</p>	<p>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 mangrove forests.</p>
<p>Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF).</p>	<p>1a By September 2011, all the CF Management Plans of the CFUSGs, reselected in March 2011, are developed/updated 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 1c The certified CF Management Plans (i.e. CF plantation and NFIO) of all the target CGUSGs reselected in 2011 are implemented according their annual plans 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 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.</p>	<p>1a: CF Management Plans, 1b-1e: Monitoring report, project report</p>	<p>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.</p>
<p>2. The management and the support system of the Forest Department (FD) for CF is effective.</p>	<p>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 on average 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. 2c 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) 2d 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)</p>	<p>2a-2d: Project reports</p>	
<p>3. Some silvicultural techniques for the rehabilitation and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.</p>	<p>3a By the Project end, a technical report on Action Research (AR) for mangrove are prepared (in English and Myanmar) 3b By the Project end, technical guidelines for field-level FD staff on rehabilitation and management of mangrove forests, which are developed based on AR findings, are published (in English and Myanmar)</p>	<p>3a-3b: Project reports</p>	
<p>4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.</p>	<p>4a By December 2011, an inter-agency coordination meeting is organized by the FD 4b Land use information of the Target Area is updated based on the satellite images of 2007, 2009 and 2012. 4c The updated land use information is shared at the inter-agency coordination meetings for discussion. 4d Seminars to promote synergy among the relevant sectors are organized annually 4e A donor/NGO coordination meeting for the Target Area organized by the FD once a year</p>	<p>4a: Meeting records 4b: Land use maps 4c: Meeting records 4d: Project reports 4e: Meeting records</p>	
<p>X (Additional Output after the Cyclone Nargis in May 2008) Recovery from damage of Cyclone Nargis is promoted.</p>	<p>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 March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated. 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 December 2011, a report on recovery condition of mangrove vegetation (2008-2010) is prepared</p>	<p>Xa: Hazard map, Xb-e: project reports</p>	

<p>Activities:</p> <p>1-1 Select villages to introduce CF from the ones that express interest.</p> <p>1-2 Conduct baseline survey on the basic socio-economic conditions of the selected villages.</p> <p>1-3 Organize/reorganize CFUSGs in the selected villages</p> <p>1-4 Assist the CFUSGs in preparing/updating their CF Management Plans and proposals for CF certificates through participatory planning process</p> <p>1-5 Issue CF certificates to the CFUSGs based on the proposals as per the CF Instruction (CFI)</p> <p>1-6 Assist the CFUSGs in implementing the certified CF Management Plans</p> <p>1-7 Implement various capacity strengthening programs to enhance the income levels of the CFUSGs in partnership with Cooperating Agencies such as Department of Fisheries (DOF), Myanmar Agriculture Service (MAS), and other institutions.</p> <p>1-8 Monitor and evaluate the implementation of the certified CF Management Plans</p> <p>1-9 Conduct impact survey regarding the effects of CF on the livelihoods of the members of the CFUSGs.</p> <hr/> <p>2-1 Identify necessary activities for CF management (*4) and CF extension & support(*5) by each Reserve Forest (RF) based on review of the CF contents of the Integrated Mangrove Management Plan (IMMP).</p> <p>2-2 Confirm the roles and responsibilities of the technical members of CF Task Force (technical MCFTF)(*6) for the identified activities</p> <p>2-3 Assess the needs of the technical MCFTF (e.g. financial, logistics and human resource development needs) to implement the identified activities</p> <p>2-4 Develop training plan & materials based on the assessment of the human resource development needs conducted in 2.3.</p> <p>2-5 Train the technical MCFTF according to the plan</p> <p>2-6 Construct/renovate the CF Extension Center & Nursery in each RF</p> <p>2-7 Provide extension services and support to the CFUSGs in each RF</p> <p>2-8 Carry out public awareness campaigns regarding CF and the conservation of mangrove forests</p> <p>2-9 Draft detailed SOP for CF for the mangrove forests based on the existing SOP of the FD (i.e. Departmental Instructions) and feedback from the Project activities</p> <hr/> <p>3-1 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</p> <p>3-2 Prepare the specific Action Research (AR) test designs for each of the identified silvicultural technique (e.g. seedling production, planning designs and methods, thinning, pruning, forest management).</p> <p>3-3 Execute the AR in each RF</p> <p>3-4 Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP)</p> <p>3-5 Prepare a technical report on action research (AR) for mangrove in English and Myanmar</p> <hr/> <p>3-6 Develop technical guidelines for rehabilitation and management of mangrove forests based on the findings of the AR</p> <hr/> <p>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.</p> <p>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.</p> <p>4-3 Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta.</p> <p>4-4 Organize a coordination meeting with donors/NGOs active in the Target Area at District Level</p> <hr/> <p>X-1 Prepare a hazard map based on analysis of damage of the cyclone Nargis</p> <p>X-2 Conduct quick damage & recovery survey in the Target Area</p> <p>X-3 Conduct village profile survey in the Target Area</p> <p>X-4 Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area.</p> <p>X-5 Rehabilitate the CF Extension Center and Nursery in each RF including facility with cyclone-proof structure</p> <p>X-6 Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through material supply</p> <p>X-7 Conduct public awareness activities on disaster prevention in the Target Area</p> <p>X-8 Arrange necessary coordination among donors in the integrated mangrove management</p>	<p style="text-align: center;">Inputs</p> <p><Myanmar Side> Personnel (Members of CF Task Force: MCFTF) 1. Project Director 2. Project Manager 3. Project Coordinator 4. Field Project Manager 5. Other MCFTF 6. Other personnel mutually agreed upon as necessary</p> <p>Land, Building and Facilities 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</p> <p>Local Operational Costs Minimum of US\$100,000 equivalent in 5 years</p> <p><Japanese Side> Personnel 1. Chief Advisor 2. Participatory community development 3. Mangrove forestry 4. Coordinator 5. Other experts in specific fields (e.g. Extension, GIS, Agro-forestry, Fish culture, Forestry Value-added Production, Marketing and Distribution) upon mutual agreement</p> <p>Machinery and Equipment 1. Boat(s) 2. Vehicle(s) 3. Other equipment would be provided if necessary upon mutual agreement.</p> <p>Training in Japan</p> <p>Local Costs</p>	<p>1 No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases).</p> <p>2 Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests</p> <p style="text-align: center;">Pre-Conditions</p> <p>1 No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases).</p> <p>2 Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests</p>
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(*)As-yet unspecified planned value such as X, Y, Z, will be specified by March 2012. (*1): The figure would be further reviewed and finalized in developing the post-project strategy. (*2): The planned value will be determined, 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, 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 CFUSG

添付 1-4 PDM バージョン 3

Attachment 1-4 PDM ver 3

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

PDM version: 3
Date of approval: 3 May, 2012

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 10,000 acres (4,050ha) (*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 3,550 acres (1,438 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 CF user groups (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 mangrove forests.
Outputs: 1. The selected communities practice environmentally and economically sustainable community forestry (CF). 2. The management and the support system of the Forest Department (FD) for CF is effective. 3. Some silvicultural techniques for the rehabilitation and the management of the mangrove and its associated forests for the Ayeyawady Delta are established. 4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta. X (Additional Output after the Cyclone Nargis in May 2008) Recovery from damage of Cyclone Nargis is promoted.	1a By September 2011, all the CF Management Plans of the CFUSGs, reselected in March 2011, are developed/updated 1b By the end of the Project, organizational capacity of the Management Committee of all target CFUSGs reaches the 3rd level (meaning that they achieve more than half of the fill fulfillment) of the evaluation rating composing of five achievement levels set by the Project. 1c The certified CF Management Plans (i.e. CF plantation and NFIO) of all the target CGUSGs reselected in 2011 are implemented according their annual plans 1d By the Project end, more than 1,460 acres (591ha) (*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 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. 2a By the end of the Project, capacity of 80% of technical members of CF Task Force engaged in the Project more than two years reaches the 4th level (meaning that they achieve more than 75% of full fulfillment) of the evaluation rating composing of five achievement levels set by the Project. 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. 2c 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) 2d 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 CFJ) for confirmation by the DG for further action (in English & Myanmar) 3a By the Project end, a technical report on Action Research (AR) for mangrove are prepared (in English and Myanmar) 3b By the Project end, technical guidelines for field-level FD staff on rehabilitation and management of mangrove forests, which are developed based on AR findings, are published (in English and Myanmar) 4a By December 2011, an inter-agency coordination meeting is organized by the FD 4b Land use information of the Target Area is updated based on the satellite images of 2007, 2009 and 2012. 4c The updated land use information is shared at the inter-agency coordination meetings for discussion. 4d Seminars to promote synergy among the relevant sectors are organized annually 4e A donor/NGO coordination meeting for the Target Area organized by the FD once a year 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 March 2010, Centre for CF Extension & Nursery in each RF is rehabilitated. 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 December 2011, a report on recovery condition of mangrove vegetation (2008-2010) is prepared	1a: CF Management Plans, 1b-1e: Monitoring report, project report 2a-2d: Project reports 3a-3b: Project reports 4a: Meeting records 4b: Land use maps 4c: Meeting records 4d: Project reports 4e: Meeting records Xa: Hazard map, Xb-e: project reports	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.

Activities:	Inputs	
1-1 Select villages to introduce CF from the ones that express interest. 1-2 Conduct baseline survey on the basic socio-economic conditions of the selected villages. 1-3 Organize/reorganize CFUSGs in the selected villages 1-4 Assist the CFUSGs in preparing/updating their CF 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) 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 Cooperating Agencies such as Department of Fisheries (DOF), Myanma 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.	<Myanmar Side> Personnel (Members of CF Task Force: MCFTF) 1. Project Director 2. Project Manager 3. Project Coordinator 4. Field Project Manager 5. Other MCFTF 6. Other personnel mutually agreed upon as necessary Land, Building and Facilities 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 Local Operational Costs Minimum of US\$100,000 equivalent in 5 years <Japanese Side> Personnel 1. Chief Advisor 2. Participatory community development 3. Mangrove forestry 4. Coordinator 5. Other experts in specific fields (e.g. Extension, GIS, Agro-forestry, Fish culture, Forestry Value-added Production, Marketing and Distribution) upon mutual agreement Machinery and Equipment 1. Boat(s) 2. Vehicle(s) 3. Other equipment would be provided if necessary upon mutual agreement. Training in Japan Local Costs	1 No significant natural hazards occur that will impact the rehabilitation of mangrove forests (e.g. cyclones, tsunami, floods, pests, diseases). 2 Relevant authorities and stakeholders are supportive to promote sustainable management of mangrove forests Pre-Conditions 1 Local communities accept CF instructions 2 No significant changes occur in the Government's policy on CF
2-1 Identify necessary activities for CF management (*4) and CF extension & support(*5) by each Reserve Forest (RF) based on review of the CF contents of the Integrated Mangrove Management Plan (IMMP). 2-2 Confirm the roles and responsibilities of the technical members of CF Task Force (technical MCFTF)(*6) for the identified activities 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 conducted in 2.3. 2-5 Train the technical MCFTF according to the plan 2-6 Construct/renovate the CF Extension Center & Nursery in each RF 2-7 Provide extension services and support to the CFUSGs in each RF 2-8 Carry out public awareness campaigns regarding CF and the conservation of mangrove forests 2-9 Draft detailed SOP for CF for the mangrove forests based on the existing SOP of the FD (i.e. Departmental Instructions) and feedback from the Project activities		
3-1 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 (AR) test designs for each of the identified silvicultural technique (e.g. seedling production, planning designs and methods, thinning, pruning, forest management). 3-3 Execute the AR in each RF 3-4 Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP) 3-5 Prepare a technical report on action research (AR) for mangrove in English and Myanmar 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 coordination meeting members, 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 ecosystem in the Ayeyawady Delta. 4-4 Organize a coordination meeting with donors/NGOs active in the Target Area at District Level		
X-1 Prepare a hazard map based on analysis of damage of the cyclone Nargis X-2 Conduct quick damage & recovery survey in the Target Area X-3 Conduct village profile survey in the Target Area X-4 Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area. X-5 Rehabilitate the CF Extension Center and Nursery in each RF including facility with cyclone-proof structure X-6 Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through material supply X-7 Conduct public awareness activities on disaster prevention in the Target Area X-8 Arrange necessary coordination among donors in the integrated mangrove management		

(*1)Based on Laputta and Pyar Pon District Management Plans (2011/12-2020/21). (*2):The area reflecting the CF area delineated in the CF Management Plans of the CFUSGs reselected in 2011 and outer boundary areas of Action Research Plantation Plots as well as the area rehabilitated during 2009-2010 by the CFUSGs which were not reselected. (*3): The CF areas 1,460 acres (as of April 2012) including plantation areas and natural forest area in the six 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 CFUSG

添付 2 PO、DPO

添付 2-1	PO バージョン 0
添付 2-2	PO バージョン 1
添付 2-3	PO バージョン 2
添付 2-4	DPO

添付 2-1 PO バージョン 0

添付 2-1 PO バージョン 0

Appendix 2 Draft Plan of Operation (PO)
Project Title : Integrated Mangrove Rehabilitation and Management Project through Community Participation in the Ayeyawady Delta
Duration : October 2006-September 2011 (tentative)
 22 December 2005

	FY 2006			FY 2007			FY 2008			FY 2009			FY 2010			FY 2011		
	4	1	5	4	1	5	4	1	5	4	1	5	4	1	5	4	1	5
1. The selected communities practice environmentally and economically sustainable community forestry (CF).																		
1-1 Select villages to introduce CF from the ones that express interest.																		
1-2 Conduct baseline survey on the basic socio-economic conditions of the selected communities.																		
1-3 Mobilize the selected communities for user group formation and conduct introductory meetings on CF.																		
1-4 Introduce participatory planning processes for the user groups on CF to facilitate preparation of proposals for CF certificates and formulation of management plans.																		
1-5 Facilitate implementation of the management plans formulated by the user groups.																		
1-6 Organize meetings to assess various socio-economic needs of the selected communities and design programmes to strengthen their income generating capacities.																		
1-7 Implement various programmes to enhance the income levels of the user groups in the selected villages in partnership with cooperating agencies such as Department of Fisheries, Myanma Agriculture Service, and other institutions.																		
1-8 Establish monitoring and evaluation systems for the management plans formulated by the user groups.																		
1-9 Conduct impact survey regarding the effects of CF on the livelihoods of the selected communities.																		
2. The management and the support system of the Forest Department for CF is effective.																		
2-1 Review the contents of the Integrated Mangrove Management Plan (IMMP) among all CF Task Force members and break down necessary activities for the first phase, by each reserved forest.																		
2-2 Confirm the various roles and responsibilities of the CF Task Force at each level to implement the IMMP.																		
2-3 Assess the needs of the CF Task Force members (e.g. financial, logistics and human resource development).																		
2-4 Develop training materials on standard operational procedures for CF for the mangrove forests.																		
2-5 Train field level staff on CF extension services and support.																		

	FY 2006			FY 2007			FY 2008			FY 2009			FY 2010			FY 2011		
	4	5	6	4	5	6	4	5	6	4	5	6	4	5	6	4	5	6
Facilitate the Forest Department to carry out public information campaigns regarding CF and the conservation of mangrove forests.																		
Draft detailed standard operational procedures for CF for the mangrove forests.																		
3. Some silvicultural techniques for the rehabilitation of the degraded and the management of the mangrove and its associated forests for the Ayeeyawady Delta are established.																		
Conduct surveys for identification of silvicultural models for both community and non-community forestry with respect to the eco-geographical / management zones in the Ayeeyawady Delta.																		
Prepare the specific action research test designs with respect to each silvicultural model (e.g. seedling production, planting designs and methods, thinning, pruning, forest management).																		
Plan execution of the tests.																		
Prepare the facilities (e.g. nurseries).																		
Prepare plots and test materials (e.g. seeds, seedlings) and execute the test plots.																		
Conduct patrols and periodic technical monitoring /preliminary assessment.																		
Prepare draft technical guidelines of some action research items (e.g. species identification, nursery, seed collection and management, planting techniques).																		
4. A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeeyawady Delta.																		
Formulate an inter-disciplinary 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 Ayeeyawady Delta.																		
Update the most recent land use information on periodic basis, including overall forest resource assessment of the region and mangrove forest conversion.																		
Conduct coordination among the committee members upon demand to coordinate instructions for the implementation of appropriate land use policies.																		
Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeeyawady Delta.																		

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添付 2-2 PO バージョン 1

添付 2-3 PO バージョン 2

Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementers	Other Major Inputs		Remarks
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar	
		Apr	Jul	Apr	Jul	Apr	Jul	Apr	Jul	Apr	Jul	Apr	Jul					
Output 1: The selected communities practice environmentally and economically sustainable community forestry (CF).																		
Project Manager (PM):																		
JE Chief Advisor (CA)																		
1.1 Select villages to introduce CF from the ones that express interest.	Villages selected for CF by the project (1st of selected villages)																	
1.1.1 Confirm interest and willingness of villages and select villages for the Project	Villagers' consent (memo of meeting)																	
1.1.2 Reconfirm interest and willingness of selected villages	Result of reconfirmation at 12 villages, villagers' consent at 6 villages (memo of meeting)																	
1.1.3 Re-select villages to be covered in the Project	6 villages re-selected for the project																	
1.2 Conduct baseline survey on the basic socio-economic conditions of the selected villages	Results of survey to contribute to monitoring progress/impact of Project (Compiled result of survey)																	
1.2.1 Conduct baseline survey on the basic socio-economic conditions of the selected villages	Compiled result of survey																	
1.2.2 Review basic socio-economic conditions of re-selected villages	Reviewed socio-economic conditions of 6 villages re-selected. (prepared records / reports)																	
1.2.3 Reconduct survey for CF usefulness and household income of re-selected villages (based on necessity)	Compiled result of survey																	
1.3 Organize/reorganize CFUSGs in the selected villages	Functional CFUSGs organized/ reorganized (Existence of CFUSG/ MC member lists and bylaws)																	
1.3.1 Elect Management Committee (MC)	6 MCs elected																	
1.3.2 Register members	Members of 6 CFUSGs registered																	
1.3.3 Develop by-laws	By-laws developed by 6 CFUSGs																	
1.3.4 Reconfirm status of CFUSGs in re-selected villages and reorganize CFUSGs	MC elected, members registered and by-laws developed in 6 CFUSGs																	
1.4 Assist the CFUSGs in preparing/updating their CF Management Plans and proposals for CF certificates through participatory planning process	CFMPs which enable sustainable CF activities to be prepared in selected villages																	
1.4.1 Review the Management Plan (MP) developed by the Project and make necessary updates	4 CFMPs reviewed and updated																	
1.4.2 Update the pre-existing MP	2 CFMP updated																	
1.5 Issue CF certificates to the CFUSGs based on the proposals as per the CF Instruction (CFI)	6 CFUSGs issued/ re-issued CF certificates																	
1.6 Assist the CFUSGs in implementing the certified CF Management Plans	CF activities implemented as per CFMP (annual report)																	
1.6.1 Prepare assisting plan for implementation of CF activities by CFUSG	prepared plan																	
1.6.2 Assist the CFUSGs Batch I	CF activities implemented as per CFMP (annual report)																	
1.6.3 Assist the CFUSGs Batch II	CF activities implemented as per CFMP (annual report)																	
1.7 Implement various capacity strengthening programs to enhance the income levels of the CFUSGs in partnership with Cooperating Agencies such as Department of Fisheries (DOF), Myanmar Agriculture Service (MAS), and other institutions.	Income/profit gained to CFUSG from implementation of capacity strengthening programs																	
1.7.1 Design the programs based on needs	Prepared implementation programs																	
1.7.2 Review and update the programs	Revised programs																	
1.7.3 Assist the CFUSGs I	Income/profit gained from implemented programs (implementation records)																	
1.7.4 Assist the CFUSGs II	Income/profit gained from implemented programs (implementation records)																	
1.7.5 Assist non-CF target villages already with Project intervention (2 in total)	Income/profit gained from implemented programs (implementation records)																	

14 July, 2011

PO2

3/4

Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementers	Other Major Inputs		Remarks			
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar				
		Apr	Jul	Oct	Dec	Apr	Jul	Oct	Dec	Apr	Jul	Oct	Dec						Apr	Jul	Oct
2.9	Draft detailed SOP for CF for the mangrove forests based on the existing SOP of the FD (i.e. Departmental Instructions) and feedback from the Project activities																	PC	FPM, SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, TE, PC, MF, AF, FC LC: preparation cost for SOP	
2.9.1	Develop an initial draft																	ditto	ditto	ditto	
2.9.2	Finalize the draft																	ditto	ditto	ditto	
	a) Based on comments and feedbacks, finalize draft SOP																	ditto	ditto	ditto	
	b) Get approval of finalized SOP by FD-DO																	ditto	ditto	ditto	
Output 3: Some silvicultural techniques for the rehabilitation and the management of the mangrove and its associated forests for the Ayeyawady Delta are established.														Overall: PC							
3.1	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																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF LC	In the FY2007 conduct surveys to determine over all test designs for ARP.
3.2	Prepare the specific Action Research (AR) test designs for each of the identified silvicultural technique (e.g. seedling production, planning designs and methods, thinning, pruning, forest management)																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF	
3.2.1	Prepare the specific design																	ditto	ditto	ditto	
3.2.2	Prepare an annual execution plan																	ditto	ditto	ditto	
3.3	Execute the AR in each EF																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF LC: material and operation cost for AR activities	
3.3.1	Implement activities in accordance with annual execution plan																	ditto	ditto	ditto	
3.3.2	Prepare and install ARP signboards																	ditto	ditto	ditto	
3.4	Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP)																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF LC: labour cost for monitoring	Major monitoring activities are limited only when presence of JE
3.5	Prepare a technical report on a dition research (AR) for mangrove in English and Myanmar																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF LC: preparation cost for technical reports	
3.5.1	Develop an initial draft																	ditto	ditto	ditto	
3.5.2	Finalize the draft																	ditto	ditto	ditto	
3.6	Develop technical guidelines for rehabilitation and management of mangrove forests based on the findings of the AR																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF LC: preparation cost for technical guideline	
3.6.1	Develop a preliminary draft																	ditto	ditto	ditto	
3.6.2	Develop an initial draft																	ditto	ditto	ditto	
3.6.3	Finalize the draft																	ditto	ditto	ditto	
Output 4: A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.														Overall: PM							
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.																	AYW Director	PC, FPM	JE, CA, C LC: meeting organizing cost	Aimed to be held concurrently with mangrove seminar as much as possible.
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 or oral forest resource assessment of the region and mangrove forest conversion.																	PC	SO + ROs (GIS Section), FPM	JE, GIS	
4.3	Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta.																	PM, PC	FPM, SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, CA, C(PCD, MF, TE, GIS, FC) LC: Seminar organizing	
4.4	Organize a coordination meeting with donors/NGOs active in the Target Area at District Level																	FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP) DRO, Forester	JE, CA, C LC: meeting organizing cost	

Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementers	Other Major Inputs		Remarks			
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar				
		MF	VF	MF	VF	MF	VF	MF	VF	MF	VF	MF	VF								
Output X: Recovery from Cyclone Nargis is promoted (Additional Output after Cyclone Nargis in May 2008)																					
X.1	Prepare a hazard map based on analysis of damage of the cyclone Nargis																	PD, PM	GIS section	JE GIS Eq: ALOS AVNIR-2(2008)	
X.2	Conduct quick damage & recovery survey in the Target Area																	FPM, SOs	ROs	JE PCD	
X.3	Conduct village profile survey in the Target Area																	FPM, SO	ROs	JE PCD, project staff	
X.4	Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area																	SOs (LFT, BGL, PYP)	ROs (LFT, BGL, PYP) DRO, Forester	MF LC: Labour cost for survey.	Report can be used in District Management Plan
X.4.1	Set plots for survey																	ditto	ditto	ditto	
X.4.2	Continue monitoring of plots																	ditto	ditto	ditto	
X.4.3	Analyze results of survey and compile data/information into draft technical report/ guideline																	ditto	ditto	ditto	Plan Report prepared by Sep. 2011
X.5	Rehabilitate the CF Extension Centre and Nursery in each RF including facility with cyclone proof structure																	FPM, SOs	SO, RO	JE GIS, TE LC	SO, RO, DRO, FR
X.6	Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through material supply																	FPM	SOs + ROs	JE PCD, MF Eq: Pagu boat x 3, FRP boat x 2, coconut seedlings	
X.7	Conduct public awareness activities on disaster prevention in the Target Area																	FPM	SOs + ROs	JE TE, CA, C	Activities to be integrated in Activity 2.8 after FY2011
X.8	Arrange necessary coordination among donors in the integrated mangrove management.																	FPM	SO, RO, DRO	JE CA, C	The Project participated in relief and recovery coordination meetings organized by UN
0. Activity related to project management and public relations																					
0.1	Organize JCC at least once a year																	PD	PM, PC, FPM	JE CA, C	
0.2	Develop a DPO based on PO for approval by JCC																	PD	PM, PC, FPM	JE CA, C	
0.3	Develop an annual PO (APO) based on the DPO for approval by JCC																	PD	PM, PC, FPM	JE CA, C	
0.4	Develop an annual report for review by JCC																	PC	FPM, SOs (LFT, BGL, PYP)	JE CA, C	
0.5	Organize internal project meeting regularly																	PC	FPM, SOs (LFT, BGL, PYP)	JE CA, C	
0.5.1	Organize Township level meeting monthly (SO+RO+JET)																	SOs (LFT, BGL, PYP)	ROs under township	JE Team members on site	
0.5.2	Organize District level meeting quarterly (FPM+SO+(RO)+(PC)+JET)																	FPM	SOs (LFT, BGL, PYP), (RO), (PC)	ditto	
0.5.3	Organize Project Management meeting quarterly (PM+PC+FPM+JET)																	PM	PC, FPM,	ditto	
0.6	Monitor the achievement of the Indicators periodically																	PC	FPM, SOs (LFT, BGL, PYP)	JE CA, C	
0.7	Prepare for joint evaluation																	PC	FPM	JE CA	
0.8	Follow up the recommendations of the review/evaluation																	PC	FPM	JE CA	
0.9	Conduct public relations for the Project																	PC	FPM, SOs (LFT, BGL, PYP)	JE TE, CA	

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Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementors	Other Major Inputs		Remarks					
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar						
		Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan						Apr	Jul	Oct	Jan	
a District FD office to submit updated CF proposals received from township offices to regional FD office	Submission letters																		ditto	ditto	JE, CA, C		
b District FD office to receive CF certificates from Regional FD office	Issued CF certificates																		ditto	ditto	JE, CA, C		
c Conduct CF certification ceremony cum CF/Mangrove public awareness activity at CF target villages	Ceremony records																		FPM	SOs (LPT, BGL, PYP), ROs (LPT, EGL, PYP), DRO, Forester (KDK, KKK, FND, PNL)	JE, C, CA		
1.6 Assist the CFUSGs in implementing the certified CF Management Plans	CF activities implemented as per CFMP (annual report)																		FPM	SOs (LPT, BGL, PYP), ROs, DROs, Foresters (KDK, KKK, FND, PNL)	JE, PCD, MF, MA (marketing)		
1.6.1 Prepare assisting plan for implementation of CF activities by CFUSG	Prepared plan																		ditto	ditto	JE, PCD, MF, MA, CA		
1.6.2 Assist the CFUSGs Batch I	CF activities implemented as per CFMP (annual report)																		ditto	ditto	JE, PCD, MF, MA,		Same activities as 1.6.3
1.6.3 Assist the CFUSGs Batch II	CF activities implemented as per CFMP (annual report)																		ditto	ditto	ditto		
a Provide necessary amount and type of seedlings to CFUSG as per CFMP	Seedling distributed as per request in CFMP (seedling distribution records)																		ditto	ditto	ditto		
b Provide necessary technical guidance to CFUSG for implementation of CF activities	Prepared records																		ditto	ditto	ditto		
c Provide necessary support to CFUSG for monitoring of CF activities	Prepared records																		ditto	ditto	ditto		
d Provide necessary information/ support to CFUSG related to production, harvesting and selling of CF products	Knowledge about production, harvesting, selling of CF products increases (prepared records, distributed materials)																		ditto	ditto	ditto		
e Support harvesting and selling of CF products (sales voucher, removal pass, etc.), if applicable	Implementation of harvesting and selling (prepared records, sales/ removal records)																		ditto	ditto	ditto		
1.7 Implement various capacity strengthening programs to enhance the income levels of the CFUSGs in partnership with Cooperating Agencies such as Department of Fisheries (DOF), Myanma Agriculture Service (MAS), and other institutions.	Income/ profit gained to CFUSG from implementation of capacity strengthening programs																		FPM	SOs (LPT, BGL, PYP), ROs, DROs, Foresters (KDK, KKK, FND, PNL)	JE, PCD, MF, FC (fish culture) and MA L.C. material cost/ operation cost for implementation of programs	MAS, DoF, SLRD	
1.7.1 Design the programs based on needs	prepared implementation programs																		ditto	ditto	ditto		
1.7.2 Review and update the programs	Revised programs																		ditto	ditto	JE, PCD, MF, FC, MA, CA		
a Revise implementation plan of capacity strengthening programs by CFUSG	Prepared plan																		ditto	ditto	JE, PCD, MF, FC, MA		
b Prepare assisting plan for implementation of capacity strengthening programs by CFUSG	Prepared plan																		ditto	ditto	ditto		
1.7.3 Assist the CFUSGs I	Income/ profit gained from implemented programs (implementation records)																		ditto	ditto	ditto		Same activities as 1.7.4
1.7.4 Assist the CFUSGs II	ditto																		ditto	ditto	ditto		
a Formulation/ activation of subgroups	Subgroup member list, by-law																		ditto	ditto	ditto		
b Agroforestry	Knowledge/ production/ profit gained																		ditto	ditto	ditto	MAS	
c Fish culture	Knowledge/ production/ profit gained																		ditto	ditto	ditto	DOF	
d Fast growing & value added wood production	Knowledge/ production/ profit gained																		ditto	ditto	ditto		
e Harvesting of products	Knowledge/ production/ profit gained																		ditto	ditto	ditto		
f Trading and selling of products	Knowledge/ production/ profit gained																		ditto	ditto	ditto		
1.7.5 Assist non- CF target villages already with Project intervention (2 in total)	Income/ profit gained from implemented programs (implementation records)																		ditto	ditto	JET, FC		
a Formulation/ activation of subgroups	Subgroup member list, by-law																		ditto	ditto	ditto		
b Fish culture	Knowledge/ production/ profit gained																		ditto	ditto	ditto	DOF	
1.8 Monitor and evaluate the implementation of the certified CF Management Plans	Implementation in accordance with CFMP (Monitoring Records/ reports)																		FPM	SOs (LPT, BGL, PYP), ROs, DROs, Foresters (KDK, KKK, FND, PNL)	JE, PCD, MF		

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Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementors	Other Major Inputs		Remarks								
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar									
		Apr 2007	Jul 2007	Oct 2007	Jan 2008	Apr 2008	Jul 2008	Oct 2008	Jan 2009	Apr 2009	Jul 2009	Oct 2009	Jan 2010						Apr 2010	Jul 2010	Oct 2010	Jan 2011	Apr 2011	Jul 2011	Oct 2011	Jan 2012
3.4	Conduct periodic technical monitoring / preliminary assessment on the AR plantation (ARP)	Monitoring results to be reflected to succeeding years' ARP and technical report/guidelines (monitoring reports, technical report)																				FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF	LC: labour cost for monitoring	Major monitoring activities are limited only when presence of JE
3.4.1	Prepare a monitoring and assessment plan	Monitoring plan																				ditto	ditto			
3.4.2	Implement monitoring and assessment based on the plan	Monitoring Records/ reports																				ditto	SO, RO, DRO, F			
	a Prepare/ update plot allocation tables, plot records, nursery activity records	Prepared tables and records																					ditto	ditto		
	b Prepare/ update monitoring records	Monitoring records																				ditto	ditto	ditto		
3.4.3	Prepare monitoring and assessment reports	Monitoring Records/ reports																				ditto	SO, RO			
3.4.4	Prepare a technical report, compiling the above results (activity 3.5)	Monitoring reports, technical report																				ditto	ditto			
3.5	Prepare a technical report on action research (AR) for mangrove in English and Myanmar	Final technical reports (English and Myanmar) to be approved and referred by FD																				FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF	LC: preparation cost for technical reports	
3.5.1	Develop an initial draft	Draft technical report (English and Myanmar)																				ditto	ditto	ditto		
	a Organize workshop(s) to confirm/ share progress, achievement, issues in relation to ARP (activity 3.6)	Records/reports of workshops																				ditto	ditto	ditto		
	b Based on results of workshop, prepare initial draft of technical report	Draft technical report (English and Myanmar)																				ditto	ditto	ditto		
3.5.2	Finalize the draft	Approved technical report (English and Myanmar)																				ditto	ditto	ditto		
	a Share and review prepared draft among MCTF and other relevant FD offices	Review comments/ feedbacks																				ditto	ditto	ditto		
	b Based on comments and feedbacks, finalize technical report	Final technical report (English)																				ditto	ditto	ditto		
	c Translate finalized technical report in Myanmar	Final technical report (Myanmar)																				ditto	ditto	ditto		
	d Get approval of finalized technical report by FD-DG	Approval letter, approved technical report (English and Myanmar)																				ditto	ditto	ditto		
3.6	Develop technical guidelines for rehabilitation and management of mangrove forests based on the findings of the AR	Technical guideline (English and Myanmar) to be approved and utilized by FD																				FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE, MF	LC: preparation cost for technical guideline	
3.6.1	Develop a preliminary draft	English draft technical guideline																				ditto	ditto	ditto		
3.6.2	Develop an initial draft	Draft technical guideline (English and Myanmar)																				ditto	ditto	ditto		
	a Based on preliminary draft, organize workshop(s) to confirm/ share progress, achievement, issues in relation to ARP (activity 3.5)	Records/reports of workshops																				ditto	ditto	ditto		
	b Based on results of workshop, prepare initial draft of technical guideline	Initial draft technical guideline (English)																				ditto	ditto	ditto		
3.6.3	Finalize the draft	Approved technical guideline (English and Myanmar)																				ditto	ditto	ditto		
	a Share and review prepared draft among MCTF and other relevant FD offices	Review comments/ feedbacks																				ditto	ditto	ditto		
	b Based on comments and feedbacks, finalize technical	Final technical guideline (English)																				ditto	ditto	ditto		
	c Translate finalized technical guideline in Myanmar	Final technical guideline (Myanmar)																				ditto	ditto	ditto		
	d Get approval of finalized technical guideline by FD-DG	Approval letter, approved technical guideline (English and Myanmar)																				ditto	ditto	ditto		
Output 4: A coordination mechanism is established among key sectors to address the underlying causes of mangrove deforestation in the Ayeyawady Delta.																						Overall: PM				
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.	Issues related to Project and Mangrove Management to be shared/ discussed among relevant authorities (Prepared meeting records/ minutes)																				AYW Director	FC, FPM	JE, CA, C	LC: meeting organizing cost	Aimed to be held concurrently with mangrove seminar as much as possible.
4.1.1	Pre-inform about coordination meeting to relevant authorities	Prepared letters																				ditto	ditto	ditto		
4.1.2	Hold coordination meeting at regional level	Prepared meeting records/ minutes																				ditto	ditto	ditto		

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Activity as per PDM2	Expected Results During Project Period	Schedule												Person in charge	Implementors	Other Major Inputs		Remarks		
		2007		2008		2009		2010		2011		2012				Japanese	Myanmar			
		MFY/FY2007	FY2007	FY2008	FY2008	FY2009	FY2009	FY2010	FY2010	FY2011	FY2011	FY2012	FY2012							
4.1.3	Consolidate and share meeting records among participants/ project stakeholders															ditto	ditto	ditto		
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.															PC	SO + ROs (GIS Section), FPM	JE GIS		
4.2.1	Procure the satellite images															ditto	ditto	ditto		
4.2.2	Develop/update the land use map based on analysis of the images															ditto	ditto	ditto		
4.2.3	Confirm CE/ ARP area boundaries and integrate in land use map															FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP), DRO, Forester	JE GIS, MF, CA		
4.3	Organize seminars to promote synergies among the relevant sectors for the sustainable management of the mangrove ecosystem in the Ayeyawady Delta.															PM, PC	FPM, SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP)	JE CA, C(PCD, MF, TE, GIS, FO) LC Seminar organizing cost		
4.3.1	Prepare annual implementation plan(s)															ditto	FPM	ditto		
4.3.2	Organize seminars annually															ditto	FPM, SO	ditto		
4.3.3	Organize project final seminar															PM	PC, FPM, SO	ditto		
4.4	Organize a coordination meeting with donors/NGOs active in the Target Area at District Level															FPM	SOs (LPT, BGL, PYP), ROs (LPT, BGL, PYP) DRO, Forester	JE CA, C LC meeting organizing cost		
4.4.1	Prepare list of donors/NGOs active in the target area															ditto	SO, RO	ditto		
4.4.2	Hold coordination meeting at district level															ditto	SO, RO, DRO	ditto		
4.4.3	Consolidate and share meeting records among participants/ project stakeholders															ditto	SO, RO	ditto		
Output X: Recovery from Cyclone Nargis is promoted (Additional Output after Cyclone Nargis in May 2008)																				
X1	Prepare a hazard map based on analysis of damage of the cyclone Nargis															PD, PM	GIS section	JE GIS Eq: ALOS AVNIR-2(2008)		
X2	Conduct quick damage & recovery survey in the Target Area															FPM, SOs	ROs	JE PCD		
X3	Conduct village profile survey in the Target Area															FPM, SO	ROs	JE PCD, project staff		
X4	Conduct survey for recovery condition of mangrove vegetation from damage of Cyclone Nargis in the Target Area															SOs (LPT, BGL, PYP)	ROs (LPT, BGL, PYP) DRO, Forester	MF LC Labour cost for survey.	Report can be used in District Management Plan	
X4.1	Set plots for survey															ditto	ditto	ditto		
X4.2	Continue monitoring of plots															ditto	ditto	ditto		
X4.3	Analyze results of survey and compile data/ information into draft technical report/ guideline															ditto	ditto	ditto		
X5	Rehabilitate the CF Extension Centre and Nursery in each RF including facility with cyclone proof structure															FPM, SOs	SO, RO	JE GIS, TE LC	SO, RO, DRO, FR	
X6	Support recovery or disaster prevention work of Implementation and Cooperative Organizations in the Target Area through material supply															FPM	SOs + ROs	JE PCD, MF Eq: Pagu boat x 3, FRP boat x 2, coconut seedlings		
X7	Conduct public awareness activities on disaster prevention in the Target Area															FPM	SOs + ROs	JE TE, CA, C	Activities to be integrated in Activity 2.8 after FY2011	
X8	Arrange necessary coordination among donors in the integrated mangrove management															FPM	SO, RO, DRO	JE CA, C	The Project participated in relief and recovery coordination meetings organized by UN	
0. Activity related to project management and public relations																PM				

