

附属資料

1. 協議議事録（ミニッツ）
2. PDM 改訂案（英文、和文）
3. 討議議事録（R/D）改訂に係る覚書

THE MINUTES OF MEETING
BETWEEN THE JAPANESE PROJECT CONSULTATION TEAM AND
AUTHORITIES CONCERNED OF
THE GOVERNMENT OF THE REPUBLIC OF INDONESIA
ON THE TECHNICAL COOPERATION
FOR THE MANGROVE INFORMATION CENTER PROJET
IN THE REPUBLIC OF INDONESIA

The Japanese Project Consultation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Hideki MIYAKAWA, visited the Republic of Indonesia for the purpose of making "Monitoring and Evaluation Plan" on the Mangrove Information Center Project (hereinafter referred to as "the Project").

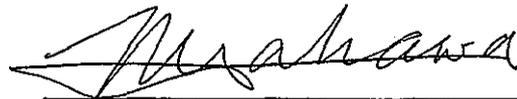
During its stay in the Republic of Indonesia, the Team held a series of discussion and exchanged views with the authorities concerned of the Government of the Republic of Indonesia and conducted a field survey of the Project sites.

As a result of the discussions and the field survey, the Team and Ministry of Forestry reached a mutual understanding which is recorded in the document attached hereto.

Jakarta, October 11, 2001



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Monitoring and Evaluation Plan

October 11, 2001

Name of the project	The Mangrove Information Center
Project period	May 15, 2001 to May 14, 2004
Implementing Organization	Directorate General of Land Rehabilitation and Social Forestry, Ministry of Forestry
Project Director	Director General, Directorate General of Land Rehabilitation and Social Forestry, Ministry of Forestry

I. Project Design

1. **Project Design Matrix (PDM – Attachment 1)**
Based on Record of Discussions (R/D) and Tentative Schedule of Implementation (TSI) signed on March 19, 2001, PDM was formulated by the Project in consultation with the Project Consultation Team.
2. **Plan of Operations (PO – Attachment 2)**
Based on R/D and TSI, PO was formulated also by the Project in consultation with the Project Consultation Team.

II. Organization for Monitoring and Evaluation

1. **Monitoring**
Organization for monitoring shall be composed by the member of the Project, since the main purpose of monitoring is to feedback the results of monitoring into project in order to improve the operation and management of the on-going project. The members of the organization are as follows:

Indonesian Side;
(1) Responsible person in general : Project Manager
(2) Counterparts of the Project
Japanese Side;
(1) Responsible person in general : Chief Advisor
(2) Experts dispatched
2. **Evaluation**
Final evaluation will be carried out by joint evaluation team, consisting of the Indonesian evaluation team and Japanese evaluation team. Japanese evaluation team will be dispatched by JICA. The members of the Indonesian evaluation team will be Project Director and persons assigned by Project Director.



III. Monitoring and Evaluation Schedule

Date	Activities	Person/organization in charge	Reporting method
March 2001	R/D agreement		
May 2001	Start of the cooperation		
October 2001	Formulation of PDM, PO and Monitoring and Evaluation Plan	Project Team and Project Consultation Team	Minutes of Meeting
December 2001	1st Monitoring	Project Team	Monitoring Report
June 2002	2nd Monitoring	Project Team	Monitoring Report
December 2002	3rd Monitoring	Project Team	Monitoring Report
June 2003	4th Monitoring	Project Team	Monitoring Report
October 2003	Final Evaluation	Joint Evaluation Team	Minutes of Meeting
December 2003	5th Monitoring	Project Team	Monitoring Report
March 2004	End of the Project		

* Monitoring is carried out in every six (6) months by the Project Team.

IV. Monitoring and Evaluation Items

1. Monitoring Items

- (1) Monitoring Report; Monitoring Report will be prepared to examine the progress of each activity, constraints and countermeasures, changes in conditions and achievement of outputs by the time of the monitoring.
- (2) Project Achievement Chart; To examine the achievement of each activity in the PO, the Project Achievement Chart will be also compiled at the time of monitoring with the format of "Monitoring Report" (**Attachment 3**).

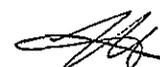
2. Evaluation Items

The outline of the evaluation criteria and its check-points are shown in **Attachment 4**

RECOMMENDATIONS

The following considerations and measures are essential in order to produce project outcomes through smooth implementation of the Project Activities, and to achieve the Project Purpose successfully.

1. More numbers of qualified counterpart personnel should be recruited and/or assigned to the Mangrove Information Center from Ministry of Forestry and other organizations, so as to cope with increasing amount of project responsibility and assignment.
2. Chief Advisor covers the field of "Extension Strategy" as double-assignment. As it is expected that the responsibility and assignment of this field will expand as the Project Activities proceed, an additional Japanese Long-term Expert of the field should be assigned as soon as possible.
3. The project administrative personnel in headquarters of Ministry of Forestry should make best efforts to improve communication between the Ministry and the Project in order to proceed smoothly the official letters and documents concerned with the Project.
4. Enough amount of budgets necessary for the smooth implementation of the Project Activities should be allocated from Indonesian as well as Japanese side for covering expenses of measures to be taken by both governments as mentioned in R/D.
5. Security measures inside the Mangrove Information Center should be strengthened in order to avoid possible cases of theft and destruction of facilities and equipment.



6. In order to alleviate rubbish problems inside the Project site, the Project should take actions including cleaning of rivers, holding workshops with local communities and other socialization related activities for enhancing people's awareness.

7. The Project site is located in Mangrove area which has been designated as the People's Forest Park (Taman Hutan Raya) and is now managed by the provincial authority (DINAS Kehutanan). As the Project plans to implement income generation through eco-tourism activities in the Mangrove area, the Project should take smooth coordination with the provincial authority.

8. Indonesian government should make effort to ensure the sustainability of the Mangrove Information Center after the termination of the technical cooperation.

Project Design Matrix

Project Name: Mangrove Information Center Project
 Target Group: Personnel, Trainers, and Participants, etc. of the Mangrove Information Center

Date: October 10, 2001
 Duration: May 15, 2001 – May 14, 2004

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>OVERALL GOAL Extension on sustainable mangrove management is implemented nationwide.</p>	<ul style="list-style-type: none"> - By 2014, extension workers who have completed the training courses are engaged in extension activities in their local areas. - By 2014, training courses are offered at sub-centers in conformity with the Training Program of the Center. 	<ul style="list-style-type: none"> - Record of extension worker assignment - Record of national extension activities 	<p>* Political importance of the Center in Indonesia is not reduced.</p>
<p>PROJECT PURPOSE The Mangrove Information Center is institutionally strengthened in terms of ability to conduct training on sustainable mangrove management.</p>	<p>By May 2004, the Center acquires an institutional capacity as indicated by the following conditions.</p> <ul style="list-style-type: none"> - The Center becomes capable of offering over 3 types of training course (systematized with teaching guides); - At least 20 trainers from outside the Center are made available to teach the courses; - Management capacities of the Center staffs are strengthened, and - Technical capacities of the Center staffs are strengthened. 	<ul style="list-style-type: none"> - Teaching guide for each training course - Training execution report - List of trainers - Manual on management of training courses - Report on the project activities - Monitoring and evaluation report 	<ul style="list-style-type: none"> * Political reforms do not adversely affect the Project. * The trained extension workers continue to work. * Sub-centers necessary for the national extension activities are established. * The Center becomes a permanent institution under the Ministry of Forestry.
<p>OUTPUTS</p> <ol style="list-style-type: none"> 1 Training courses on sustainable mangrove management are implemented. 2 A training program and an extension strategy for sustainable mangrove management are formulated. 	<p>By May 2004,</p> <ol style="list-style-type: none"> 1-1 Training courses are carried out at least 14 times in total. 1-2 180 training participants complete Course A, 80 complete Course B, and 20 complete Course C. 2 The Training Program and the Extension Strategy are approved at the Joint Coordinating Committee. 	<ol style="list-style-type: none"> 1-1 Training execution report 1-2 List of course graduates 2 Minutes of meeting of the Joint Coordinating Committee 	<p>* The Center staffs continue to work.</p>

ACTIVITIES	INPUTS	
1-1 Formulate curricula and prepare materials for training courses.	Indonesian Side Staff (Ministry proper, Jakarta) Project Director Project Manager Staff (BRILKT-Unit, Bali) Field Manager	Japanese Side Long-term Expert Chief Advisor/Extension Strategy Coordinator Training Program Short-term Expert
1-2 Prepare the system for implementing the training courses.	Staff (Mangrove Information Center, Bali) C/P	36MM 36MM 36MM
1-3 Conduct the training courses.	Coordinator	5M/M
1-4 Monitor and evaluate the effects of the training.	Training Program	5M/M
2-1 Conduct surveys on socioeconomic conditions in mangrove areas.	Extension Strategy	Several
2-2 Conduct surveys on the institutional framework of the extension services.	Others	Materials & equipment: approx. 20 million yen per year
2-3 Identify extension and training targets.	Secretaries	Facilities: maintenance and expansion of the facilities
2-4 Conduct case studies on appropriate field-level practices.	Administrative staffs	CP training: 3 persons/year for 3 months
2-5 Analyze the results of the training evaluation and reflect them in the Training Program.	Drivers	Budget:
2-6 Improve the environment for training and extension at the Mangrove Information Center.	Workers	1) Local business expense 2) Expense on local application activities 3) Technological exchange expense 4) Expense on seminars for special measures 5) Intermediate engineer training expense 6) Others
	Facilities: maintenance and expansion of the existing facilities 1) Forest for study 2) Training buildings Budget: Center operation expense	

* Trainer candidates have sufficient technical skills for teaching the training courses.

PRE-CONDITIONS

*The structure, electricity, and water of the Center are available for use.

8.

Monitoring Report (No.)

Name of Project: .

Project Period:

<p><u>Comment; Project Director</u></p> <p>Signature _____ Date: _____</p>
<p><u>Comment; Project Manager</u></p> <p>Signature _____ Date: _____</p>
<p><u>Comment; Chief Advisor</u></p> <p>Signature _____ Date: _____</p>

*JICA replies to above-mentioned comments/requests if necessary.

8.

MONITORING REPORT No. ____
(Issues and Countermeasures)

Date:

Name of the Project:

Issues	Countermeasures
(Description of Issue)	Countermeasures taken by Project (Indonesian-side)
	Countermeasures taken by Project (Japanese-side)
	Request to JICA

K.



MONITORING REPORT No.____
(Achievement of Project Purpose)

Date

*For the effective evaluations, it is strongly recommended to monitor the project purpose level indicator(s) regularly.

Project Purpose	<Achievement>
If there is any advancement/delay compared with the original plan, please clarify the causes and influencing factors in columns below.	
Output Achievement Level	
Changes in Important Assumptions / Pre-conditions	<Outputs→Project Purpose Level>
	<Activities→Outputs Level>
	<Pre-conditions>
Recommended Countermeasures	

MONITORING REPORT No. _____
 (Achievement of Output)

Date: _____
 (Name: _____)

Output <Plan>	<Achievement>
If there is any advancement/delay compared with the original plan, please clarify the causes and influencing factors in columns below.	
Progress of each Activity	
Changes in Important Assumptions / Pre-conditions	<Activities→Outputs Level>
	<Pre-conditions>
Recommended countermeasures	

8

MONITORING REPORT No. _____
 (Progress of Activity)

Date: _____
 (Name: _____)

Activity <Plan>	<Progress Report>
If there is any advancement/delay compared with the original plan, please clarify the causes and influencing factors in columns below.	
Changes in Pre-conditions	
Input Level	
Other factors	
Recommended countermeasures	

8.

Evaluation Items

1 Achievement of the Project

The achievement level of the project activities in terms of Inputs, Activities, Outputs and Project Purpose, as the Achievement of the Project, is assessed in comparison with the original plan such as R/D, PDM and PO.

1-1 Inputs

- (1) Accomplishment of the Inputs from Japanese side in comparison with the plan
- (2) Accomplishment of the Inputs from Indonesian side in comparison with the plan

1-2 Activities

- (1) Progress of the Activities and the results of corresponding targets in PO
- (2) Degree of difference between the plan and actual condition
- (3) Reasons and constraints for the slipping and postponement

1-3 Output

- (1) Achievement level of the Outputs planned on the PDM

1-4 Project Purpose

- (1) Achievement level of the Project Purpose planned on the PDM

2 Evaluation criteria

2-1 Efficiency

Efficiency is an economic term, which means that the Project used the least costly resources to achieve the results. In other words, the Project gained the most results for its economic contributions. It is to evaluate the relationship between Outputs and Inputs in terms of timing, quality and quantity, and to reexamine if alternative strategy would have produced the Outputs more efficiently. The questions to be checked for evaluation are considered as follows.

(1) Timing, quality and quantity of Inputs

- Have the Inputs been delivered on schedule?
- Was the timing of the Inputs appropriate in comparison with the Outputs obtained?

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- Were the quality and quantity of the Inputs appropriate in comparison with the Outputs obtained?

(2) Relationship between Outputs and Inputs

- Have the Outputs been attained on schedule?
- Are there any differences between the original plan and actual Outputs?
- Do counterparts have enough knowledge and experiences developed through the Project?
- What factors can be considered to have caused delay or hampered the realization of the Outputs?

2-2 Effectiveness

Effectiveness is a measure of the extent to which the Project has achieved its objectives, the Outputs and the Project Purpose. It measures the extent to which the Activities achieve its Purpose, or whether this can be expected to happen on the basis of the Outputs at the time of evaluation. The questions to be checked for evaluation are considered as follows.

(1) Project purpose

- To what extent has the project purpose been achieved in comparison with the achievement of the Outputs?
- To what extent have the Outputs contributed to the achievement of the Project Purpose?
- To what factors can be considered to cause delay or hamper the realization of the Project Purpose?
- When will the Project Purpose be attained?

(2) Outputs

- To what extent has the Outputs been achieved?
- To what extent have the Activities been kept on schedule of the initial plan?
- To what extent have the Activities contributed to the achievement of the Outputs?
- Are there any Outputs and Activities that have been changed during the Project?

2-3 Impact

Impact is a term indicating whether the Project has had an effect on its surroundings in terms of technical, economic, socio-cultural, institutional and environmental factors. Evaluation should

consider 1) *Direct effects*: the immediate costs (negative effects) and benefits (positive effects) of both the contribution to and the results of the Project, without taking into consideration of their effects on what are not originally expected in the Project Design; 2) *Indirect effects*: the costs and benefits which are unleashed by the contribution to the Project and by its results. The questions to be checked for evaluation are considered as follows.

- Has the project purpose contributed to the realization of the Overall Goal?
- Are there any impacts on social, economical, institutional and environmental aspects to be expected by the continuation of the Project?
- What are supposed to cause the possible impacts?

2-4 Relevance

Relevance is the extent to which the Project is consistent with the priorities and policies of Indonesia and Japan. The relationship among items in the narrative summary of PDM should be reviewed for the rationale of the Project. The questions to be checked for evaluation are considered as follows:

(1) Overall goal

- Is the Overall Goal consistent with the Government policy, such as National Development Plan?
- Is the Overall Goal consistent with needs of the beneficiaries?

(2) Project purpose

- Does the Project Purpose contribute to the achievement of the Overall Goal?
- Is the Project Purpose consistent with the objectives of the implementing organization?

(3) Relationships between Outputs, Activities and Inputs

- Are relative balance among Outputs, Activities and Inputs appropriate?
- Are the Outputs, Activities and Inputs adequate for achievement of the Project Purpose?

2-5 Sustainability

Sustainability is the extent to which the objectives of the Project will continue after the Project is over; the extent to which the groups affected by the Project want to and can take charge

themselves to continue accomplishing its objectives. Therefore, Sustainability is concerned with measuring whether an activity or an impact is likely to continue after JICA assistance has been terminated. The Project will need to be environmentally as well as financially sustainable. Sustainability of the Project will be assessed from the following two aspects:

- i) Capability of staff of the Mangrove Information Center assisted by the Project in continuing and expanding the activities initiated by the Project, and
- ii) Institutional capacity of the Mangrove Information Center in continuing and expanding activities initiated by the Project.

Capacity of the staff will be assessed through the examination of the organizational maturity, financial sustainability and technical capability. The questions for evaluation will include the followings.

(1) Organizational maturity

- Are the definitions clear on the Mangrove Information Center's purpose, membership and organizational structure?
- Does the Mangrove Information Center have any system to elaborate and modify plans if necessary?
- Does the Mangrove Information Center have any system of decision making and solving internal conflicts?
- Is the membership growing or decreasing?

(2) Financial sustainability

- Does the Mangrove Information Center keep the records of income and expenditure?
- Are there any sources of fund identified by the Mangrove Information Center and these sources consider the Mangrove Information Center eligible?
- Does the Mangrove Information Center have an access to external organizations for getting additional knowledge and skills on financial management?

(3) Technical capability

- Can the Mangrove Information Center maintain knowledge and technical skills introduced

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by the Project on its own?

- Do the staffs of the Mangrove Information Center share their knowledge and experiences?
- Does the Mangrove Information Center have an access to external organizations for getting additional knowledge and technical skills?
- Does the Mangrove Information Center show any improvement in the level of their targeted capacity, and can they maintain this level?

Institutional capacity of the Mangrove Information Center will be assessed through the examination of the administrative and management capacity, financial conditions, technical ability, ownership of the implementing organization, etc. The questions to be checked for evaluation are considered as follows.

(1) Institutional aspect

- Has the implementing organization obtained the ability to continue the activities?
- Is it expected that the Government will continue to support?
- Is it expected that the counterparts will continue to be assigned at the same positions?

(2) Financial aspect

- Has the implementing organization secured financial and human resources necessary for continuing the activities?

(3) Technical aspect

- Will the Inputs / Outputs of the Project, such as facilities, equipment, transferred techniques, etc. be fully utilized after the Project?
- Has the Project developed the techniques that are appropriate for beneficiaries in terms of their technical levels?
- Have counterparts fully acquired the developed techniques and knowledge?

3 Others

- Linkage with other cooperation schemes

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PROJECT DESIGN MATRIX (Draft Revision)

Project Title : Mangrove Information Centre Project

Target Group :

(of management/technical capacities for the Centre management): C/P, Staff

(of trial training courses): Trainees (Central and local governmental staff in charge of extension activities, NGO members, teachers, informal leaders, governmental staff in charge of land use planning)

(of extension activities): *Local people habituated in or around mangrove area in selected sites*

(of information management activities) *Mangrove related agencies, institutions and persons interested*

(of environmental education) *Students, possible teachers of environmental education, and inhabitants in Bali and adjacent province*

(of eco-tourism activities) *Foreign and domestic tourists*

Term : 15 May 2001 – 14 May 2004

Date :

Narrative Summary	Objectively Verifiable Indicators	Measures of Verification	Important Assumptions
<p>OVERALL GOAL Extension on sustainable mangrove forest ecosystem management is implemented nationwide</p>	<ul style="list-style-type: none"> —By 2014, extension agents who have completed the training courses are engaged in extension activities in their local areas. —By 2014, training courses are offered at sub-centres in conformity with the Training Programme of the Centre. 	<ul style="list-style-type: none"> —Record of extension agents assignment —Record of extension activities 	<ul style="list-style-type: none"> * Political importance of the mangrove forest ecosystem management in Indonesia is not reduced.
<p>PROJECT PURPOSE The Mangrove Information Centre is institutionally strengthened in terms of ability to conduct activities which would contribute to the promotion of sustainable mangrove forest ecosystem management</p>	<ul style="list-style-type: none"> By May 2004, the Centre acquires an institutional capacity as indicated by the following conditions. <ul style="list-style-type: none"> —The Centre becomes capable of offering over 3 types of training course (systematized with modules). —At least 20 trainers from outside the Centre are made available to teach in the courses. —Management capacities of the Centre staffs are strengthened; and —Technical capacities of the Centre staffs are strengthened in terms of implementation of information management, environmental 	<ul style="list-style-type: none"> —Modules for each training course —Training implementation report —List of trainers —Management manual of training courses —Monitoring and evaluation report 	<ul style="list-style-type: none"> * Political reforms do not adversely affect the Project. * The trained extension agents continue to work. * Sub-centres necessary for the regional extension activities are established. * The Centre becomes a permanent institution under the Ministry of Forestry.

	education and eco-tourism activities		
<p>OUTPUTS</p> <p>1. Trial training courses on sustainable mangrove forest ecosystem management are implemented and a training programme is formulated.</p> <p>2. An extension strategy for sustainable mangrove forest ecosystem management is formulated.</p> <p>3. Through conducting of surveys relating to mangrove forest ecosystem, mangrove-related databases are established in the Mangrove Information Centre, and mangrove-related information is distributed to the public.</p> <p>4. Trial environmental education activities are implemented and an environmental education programme for the Centre is formulated.</p> <p>5. Eco-tour guide training is conducted and trial eco-tours are implemented and a guide manual and several types of eco-tour plans are designed for the Centre activities.</p>	<p>education and eco-tourism activities</p> <p>By May 2004,</p> <p>1-1At least twice workshops for formulating a training programme and at least 12 times of training courses are carried out.</p> <p>1-2160 training participants complete Course A, 40 complete Course B, and 40 complete Course C.</p> <p>1-3The training programme is endorsed by the Joint Coordinating Committee.</p> <p>2 The extension strategy is endorsed by the Joint Coordinating Committee.</p> <p>3-1Databases on fauna / flora and products at mangrove ecosystem are respectively formatted and data are input for the Project site</p> <p>3-2MIC WEB site is opened and a monthly newsletter is published as measures of information distribution.</p> <p>4-1Mangrove trees are planted in at least 50 ha with the purpose of environmental education.</p> <p>4-2At least 1,500 persons (students, etc.) / year attend environmental education activities organized by the Project</p> <p>4-3The environmental education programme for the Centre is submitted to the Joint Coordination Committee.</p> <p>5-1At least 6 eco-tour guides who have sufficient ability in conducting eco-tours are trained and furnished in the Centre.</p> <p>5-2 The guide manual and several types of eco-tour</p>	<p>1-1Workshop proceedings and training implementation report</p> <p>1-2List of course graduated and evaluation reports</p> <p>1-3Minutes of meeting of the Joint Coordinating Committee.</p> <p>2 Minutes of meeting of the Joint Coordinating Committee.</p> <p>3-1Survey reports</p> <p>3-2Database on fauna in MIC, database on flora in MIC, database on mangrove resources in MIC, database on mangrove-related articles</p> <p>3-3MIC WEB page and the Project newsletter</p> <p>4-1Implementation report of participatory planting</p> <p>4-2Implementation report of environmental education</p> <p>4-3Minutes of meeting of the Joint Coordinating Committee</p> <p>5-1Guide Training Implementation report and its evaluation report</p> <p>5-2 Minutes of meeting of the Joint Coordinating Committee</p> <p>5-3Guest register book of the Centre</p>	<p>* The Centre staffs continue to work.</p>

	<p>course plans that are designed and organized by the Centre are submitted to the Joint Coordinating Committee.</p> <p>5-34t least 1,000 persons / year attend eco-tour courses implemented by the Centre.</p>		
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ACTIVITIES	INPUTS	* Trainer candidates have sufficient technical skills for teaching in the training courses.
1-1 Through workshops for formulating a training programme, identify target group of trial training courses	<p><u>Indonesian Side</u> Staff (Ministry proper, Jakarta)</p> <p>Project Director 1 person Project Manager 1 person Training Programme 1 person Extension Strategy 1 person</p> <p>Staff (BPDAS, Bali)</p> <p>Field Manager 1 person Staff (MIC, Bali)</p> <p>C/P</p> <p>Coordinator 1 person Training Programme 1 person Extension Strategy 1 person Assistant C/P (Combined with the Centre staff)</p> <p>General 1 person Training Programme 1 person Extension Strategy 1 person</p> <p>Centre staff (some staff could work for more than two sections, total number of the Centre staff is 17)</p> <p>Secretaries 4 persons Administrative staffs 3 persons Staffs in charge of environmental education 2 persons Staffs in charge of information management 2 persons Staffs in charge of eco-tourism</p>	<p><u>Japanese Side</u> Long-term Expert 36MM Chief Advisor 36MM Coordinator 36MM Training Programme 24MM Extension Strategy</p> <p>Short-term Expert</p> <p>Centre Management MP 11MM Socio-economic Survey 14MM Others several Materials & equipment : approx. 40 million yen in total Facilities : approx. 80 million yen (MIC facilities, eco-tourism facilities) C/P Training : 2 persons / year for a month Budget : 1) Local business expense 2) Expense on local application activities</p>
1-2 Formulate curricula and prepare materials for trial training courses		
1-3 Prepare the environment and the system necessary for implementing the training courses.		
1-4 Conduct the trial training courses.		
1-5 Monitor and evaluate the effects of the trial training courses.		
1-6 Analyze the results of the evaluation of the trial training course and formulate them into the training programme		
2-1 Conduct surveys on socio-economic conditions in mangrove areas including candidate areas for sub-centres.		
2-2 Conduct surveys on the institutional framework of the extension services		
2-3 Identify targets of the extension activities		
2-4 Conduct case studies on appropriate field-level practices		
2-5 Analyze the results of the above surveys and case-studies and formulate them into the extension strategy		
3-1 Improve the environment and facilities necessary for the implementation of information management activities		

<p>3-2 Conduct surveys on fauna / flora and mangrove resources for the Project site</p> <p>3-3 Conduct internal training courses on database management and establish database on fauna / flora and mangrove resources for the Project site</p> <p>3-4 Distribute mangrove-related information to the public</p> <p>4-1 Improve the environment and facilities including seed nursery necessary for the environmental education activities</p> <p>4-2 Conduct trial environmental education activities</p> <p>4-3 Formulate an environmental education programme for the Centre</p> <p>5-1 Improve the environment and facilities necessary for the implementation of eco-tour activities</p> <p>5-2 Conduct internal eco-tour guide training courses</p> <p>5-3 Plan and organize trial eco-tours</p> <p>5-4 Compile a guide manual and design eco-tour plans for the Centre</p>	<p>Drivers 6 persons</p> <p>Security guard 2 persons</p> <p>Land : for Project activities and MIC facilities 3 persons</p> <p>Facilities : maintenance and expansion of the existing facilities</p> <p>1) MIC</p> <p>2) Eco-tourism facilities (Wooden trails, etc.)</p> <p>Budget : Centre operation expenses</p> <p>Running cost</p> <p>Training Expenses</p> <p>Nursery Management Expenses</p>	<p>PRE-CONDITIONS</p> <p>* The structure, electricity and water of the Centre are available for use.</p>
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プロジェクト・デザイン・マトリックス (改定案)

プロジェクト名：マングローブ情報センタープロジェクト
 ターゲット・グループ：

(マングローブ情報センターの事業実施に係る技術能力強化の対象)：C/P、マングローブ情報センターの職員、

(形式的研修の対象)：研修生 (中央政府の地方機関及び地方自治体においてマングローブに関連した普及事業に携わる職員、マングローブの普及事業等に関わっている NGO メンバー、地域リーダー、

教師等、マングローブ管理に係る土地利用計画策定等に携わる者)

(環境教育事業の対象)：インドネシア在住者一般

実施期間：2001年5月15日～2004年5月14日

プロジェクトの要約	指標	指標データ入手手段	外部条件
<p>[上位目標]</p> <p>持続可能なマングローブ林管理にかかる普及活動が全国的に実施される。</p>	<p>指標</p> <p>—2014年までにセンターにおいて研修を受けた普及員が地方で普及活動に従事する。</p> <p>—2014年までにセンターの研修プログラムに沿って、サブセンターで研修が実施される。</p>	<p>指標データ入手手段</p> <p>—普及員配置記録</p> <p>—全国普及活動記録</p>	<p>*インドネシアにおけるマングローブ保全の政策的重要性が低下しない。</p>
<p>[プロジェクト目標]</p> <p>持続可能なマングローブ林管理の推進に貢献する事業実施能力に関し、マングローブ情報センターが組織・制度面で強化される。</p>	<p>2004年5月までに、センターが以下に示す組織能力を得る。</p> <p>—研修コースが3種類以上開講可能な体制(指針として体系化)になる。</p> <p>—20名以上の外部講師を確保できる体制になる。</p> <p>—センター職員の研修事業マネージメント能力が強化される。</p> <p>—センター職員の情報管理、環境教育、エコリズムの各事業実施に係る技術能力が増強される。</p>	<p>—コース別研修教授指針</p> <p>—研修実施報告書</p> <p>—講師名簿</p> <p>—研修事業マネージメントマニュアル</p> <p>—M&E報告書</p>	<p>*行政組織の変更等がプロジェクトへ影響しない。</p> <p>*研修を受けた普及員が勤務を続ける。</p> <p>*全国の普及活動に必要なサブセンターが設置される。</p> <p>*センターが林業省の恒久機関となる。</p>
<p>[成果]</p> <p>1. 持続可能なマングローブ林管理にかかる試行的研修コースが実施され、研修プログラムが策定される。</p> <p>2. 持続可能なマングローブ林管理のための普及戦略が策定される。</p>	<p>2004年5月までに、</p> <p>1-1 研修プログラム策定のためのワークショップが少なくとも2回、研修コースが少なくとも12回実施される。</p> <p>4-2 コースAの研修修了者を160人、コースBを40人、コースCを40人輩出する。^M</p>	<p>1-1 ワークショップ及び研修実施報告書</p> <p>1-2 研修コース修了者名簿及び評価報告書</p> <p>1-3 合同調整委員会議事録</p> <p>2 合同調整委員会議事録</p> <p>3-1 調査報告書</p>	<p>*センター職員が勤務を続ける。</p>

<p>3. マングローブ情報センターを核として、マングローブに関する調査を通じ、データベースの構築、情報の発信が行われる。^v</p> <p>4. 試行的環境教育事業が実施され、センターで行う環境教育プログラムが策定される。</p> <p>5. プロジェクト・サイトにおいてエコツアー・ガイド研修及び試行的エコツアーが実施され、ガイド・マニュアル及びコース・プランが策定される。</p>	<p>1-3 研修プログラムが合同調整委員会において承認される。</p> <p>2 普及戦略が合同調整委員会において承認される。</p> <p>3-1 プロジェクト・サイト内のファイナ、フロア及び森林資源等に関するデータベースがそれぞれ構築される。</p> <p>3-2 センターの事業に関する情報発信の手段としてWEB ページが開設され、ニューズレターが発行される。</p> <p>4-1 環境教育を目的としたマングローブ林が、総計50ha以上造成される。^w</p> <p>4-2 学生等を対象とした環境教育事業が年間1,000人程度に対して実施される。</p> <p>4-3 センターにおける環境教育プログラムが合同調整委員会に提出される。</p> <p>5-1 センターにエコツアーの実施に必要な能力を備えた少なくとも6人のガイドが養成される。</p> <p>5-2 センターが複数のエコツアー・コースを企画・実施し、ガイド・マニュアルとコース・プランが合同調整委員会に提出される。</p> <p>5-3 センターの実施するエコツアー・コースに年間1,000人以上が参加する。</p>	<p>3-2 ファイナ・データベース、フロア・データベース、資源データベース</p> <p>3-3 WEB ページ及びビジュアルレター</p> <p>4-1 一般参加型植林実施報告書</p> <p>4-2 環境教育事業実施報告書</p> <p>4-3 合同調整委員会議事録</p> <p>5-1 ガイド研修実施報告書及び研修者評価報告書</p> <p>5-2 合同調整委員会議事録</p> <p>5-3 センター来客者名簿</p>	
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[活動]	[投入]	[投入]
<p>1-1 研修プログラム策定のワークショップを開催し、試行的研修の対象を特定する。</p> <p>1-2 試行的研修コースのカリキュラムを策定し、教材を準備する。</p> <p>1-3 研修コース実施に必要な環境、体制を整える。</p> <p>1-4 試行的研修コースを実施する。</p> <p>1-5 試行的研修コースをモニターし、評価する。</p> <p>1-6 試行的研修コースの評価結果を分析し、研修プログラムへ反映させる。</p> <p>2-1 マンダラ地域域の社会経済条件について調査を行う。</p> <p>2-2 普及組織・制度について調査を行う。</p> <p>2-3 普及対象を特定する。</p> <p>2-4 適切な現場活動事例のケース・スタディを行う。</p> <p>2-5 上記調査、ケース・スタディの結果を分析し、普及戦略へ反映させる。</p> <p>3-1 情報発信、環境教育、エコツアーを行う上で必要な施設の整備を行う。</p> <p>3-2 プロジェクト・サイトにおいてファウナ、フロラ、資源状況等に関する調査を実施する。</p> <p>3-3 データベース構築に関する内部研修を実施し、ファウナ、フロラ、資源状況等に関するデータベースを構築する。</p> <p>3-4 情報発信事業を実施する。</p> <p>4-1 環境教育事業を実施する。</p> <p>4-2 環境教育プログラムを策定する。</p> <p>4-3 環境教育事業実施に必要な苗圃を運営する。</p> <p>5-1 エコツアー・ガイド養成のための内部研修を実施する。</p> <p>5-2 試行的エコツアーを企画、実施する。</p> <p>5-3 ガイド・マネージャ及びエコツアーコースプラン策を作成する。</p>	<p>インドネシア側</p> <p>職員(本省/ジャカルタ)</p> <p>プロジェクトダイレクター 1名</p> <p>プロジェクトマネジャー 1名</p> <p>研修プログラム 1名</p> <p>普及戦略 1名</p> <p>職員(BPD/バリ)</p> <p>フィールドマネジャー 1名</p> <p>職員(MIC/バリ)</p> <p>CIP</p> <p>コーディネータ 1名</p> <p>研修プログラム 1名</p> <p>普及戦略 1名</p> <p>アシスタントCIP(常勤スタッフの兼務) 1名</p> <p>総括 1名</p> <p>研修プログラム 1名</p> <p>普及戦略 1名</p> <p>常勤スタッフ(各担当は兼務を可とし、総勢で17人とす)</p> <p>秘書 4名</p> <p>事務職員 3名</p> <p>環境教育事業担当 2名</p> <p>情報発信事業担当 2名</p> <p>エコツアーリズム事業担当 6名</p> <p>運転手 2名</p> <p>警備スタッフ 3名</p> <p>土地: プロジェクト事業用地及び施設用地</p> <p>施設: 既存施設の整備・拡充</p> <p>1) パーク施設拡充・整備</p> <p>2) MIC施設拡充・整備</p> <p>予算: センター運営費</p> <p>研修事業費</p> <p>苗圃運営費</p>	<p>日本側</p> <p>長期専門家</p> <p>チーフアドバイザー 36MM</p> <p>調整員 36MM</p> <p>研修プログラム 36MM</p> <p>普及戦略 24MM</p> <p>短期専門家</p> <p>センター経営MPP 11MM</p> <p>社会経済調査 5MM</p> <p>経営手法調査 4MM</p> <p>教名</p> <p>その他</p> <p>機材: 4千万円程度</p> <p>施設: 8千万円程度</p> <p>(研修・環境教育施設建設)</p> <p>CIP 研修: 年平均2名1か月程度</p> <p>予算:</p> <p>1) 一般現地活動費</p> <p>2) 現地適用化事業費</p>

* 外部講師候補は研修実施に必要な技術を十分持っている

[前提条件]

* センターの建物、電気、水道等が使用可能な状態にある。

SUPPLEMENTARY NOTE OF THE RECORD OF DISCUSSIONS
ON JAPANESE TECHNICAL COOPERATION
FOR THE MANGROVE INFORMATION CENTER PROJECT

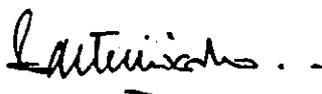
The Japan International Cooperation Agency (hereinafter referred to as "JICA") had a series of discussions, through the Resident Representative of JICA in the Republic of Indonesia, with the Indonesian authorities concerned on the development of Master Plan and Project Design Matrix (hereinafter referred to as "PDM") concerning the Mangrove Information Center Project. (hereinafter referred to as "the Project.")

As a result of the discussions, both sides agreed to renew the project design and to forward to their respective governments the revised Master Plan and PDM, which are described in the document attached hereto. The revised Master Plan and PDM are expected to be effective from now onward.

Jakarta, October 22, 2003



Keiichi Kato
Resident Representative,
JICA Indonesia Office,
Japan International Cooperation Agency,
Japan



Ir. Soetino Wibowo
Director General,
Directorate General of Land Rehabilitation and
Social Forestry,
Ministry of Forestry,
The Republic of Indonesia

MASTER PLAN

1. Overall Goal

Extension on sustainable mangrove forest ecosystem management is implemented nationwide.

2. Project Purpose

The Mangrove Information Center is institutionally strengthened in terms of ability to conduct activities, which would contribute to the promotion of sustainable mangrove forest ecosystem management.

3. Outputs of the Project

- (1) Trial training courses on sustainable mangrove forest ecosystem management are implemented and a training program is formulated.
- (2) An extension strategy for sustainable mangrove forest ecosystem management is formulated.
- (3) Through conducting of surveys relating to mangrove forest ecosystem, mangrove-related databases are established in the Mangrove Information Center, and mangrove-related information is distributed to the public.
- (4) Trial environmental education activities are implemented and an environmental education program for the Center is formulated.
- (5) Eco-tour guide training is conducted and trial eco-tours are implemented and a guide manual and several types of eco-tour plans are designed for the Center activities.

4. Activities of the Project

- 1-1 Through workshops for formulating a training program, identify target group of trial training courses.
- 1-2 Formulate curricula and prepare materials for trial training courses.
- 1-3 Prepare the environment and the system necessary for implementing the training courses.
- 1-4 Conduct the trial training courses.
- 1-5 Monitor and evaluate the effects of the trial training courses.
- 1-6 Analyze the results of the evaluation of the trial training course and formulate them into the training program.
- 2-1 Conduct surveys on socio-economic conditions in mangrove areas including candidate areas for sub-centers.
- 2-2 Conduct surveys on the institutional framework of the extension services.
- 2-3 Identify targets of the extension activities.
- 2-4 Conduct case studies on appropriate field-level practices.
- 2-5 Analyze the results of the above surveys and case-studies and formulate them into the extension strategy.
- 3-1 Improve the environment and facilities necessary for the implementation of information

- management activities.
- 3-2 Conduct surveys on fauna / flora and mangrove resources for the Project site.
 - 3-3 Conduct internal training courses on database management and establish database on fauna / flora and mangrove resources for the Project site.
 - 3-4 Distribute mangrove-related information to the public.
 - 4-1 Improve the environment and facilities including seed nursery necessary for the environmental education activities.
 - 4-2 Conduct trial environmental education activities.
 - 4-3 Formulate an environmental education program for the Center.
 - 5-1 Improve the environment and facilities necessary for the implementation of eco-tour activities.
 - 5-2 Conduct internal eco-tour guide training courses.
 - 5-3 Plan and organize trial eco-tours.
 - 5-4 Compile a guide manual and design eco-tour plans for the Center.

In case in which the Master Plan should be changed due to the situation of the Project, both Governments will agree to and confirm the changes by exchanging Minutes of Meeting.

PROJECT DESIGN MATRIX

Project Title : Mangrove Information Center Project

Date :

Target Group :

(of management/technical capacities for the Center management); CP, Staff

(of trial training courses): Trainees (Central and local governmental staff in charge of extension activities; NGO members, teachers, informal leaders, governmental staff in charge of land use planning)

(of extension activities): Local people habituated in or around mangrove area in selected sites

(of information management activities) Mangrove related agencies, institutions and persons interested

(of environmental education) Students, possible teachers of environmental education, and inhabitants in Bali and adjacent province

(of eco-tourism activities) Foreign and domestic tourists

Term : 15 May 2001 – 14 May 2004

Narrative Summary	Objectively Verifiable Indicators	Measures of Verification	Important Assumptions
OVERALL GOAL Extension on sustainable mangrove forest ecosystem management is implemented nationwide.	—By 2014, extension agents who have completed the training courses are engaged in extension activities in their local areas. By May 2004, the Center acquires an institutional capacity as indicated by the following conditions. —The Center becomes capable of offering over 3 types of training course (systematized with modules). —At least 20 trainers from outside the Center are made available to teach in the courses. —Management capacities of the Center staffs are strengthened; and — Technical capacities of the Center staffs are strengthened in terms of implementation of information management, environmental education and eco-tourism activities	—Record of extension agents assignment —Record of extension activities —Modules for each training course —Training implementation report —List of trainers —Management manual of training courses —Monitoring and evaluation report	* Political importance of the mangrove forest ecosystem management in Indonesia is not reduced. * Political reforms do not adversely affect the Project. * The trained extension agents continue to work. * The Center becomes a permanent institution under the Ministry of Forestry.
PROJECT PURPOSE The Mangrove Information Center is institutionally strengthened in terms of ability to conduct activities which would contribute to the promotion of sustainable mangrove forest ecosystem management.	By May 2004, the Center acquires an institutional capacity as indicated by the following conditions. —The Center becomes capable of offering over 3 types of training course (systematized with modules). —At least 20 trainers from outside the Center are made available to teach in the courses. —Management capacities of the Center staffs are strengthened; and — Technical capacities of the Center staffs are strengthened in terms of implementation of information management, environmental education and eco-tourism activities	—Record of extension agents assignment —Record of extension activities —Modules for each training course —Training implementation report —List of trainers —Management manual of training courses —Monitoring and evaluation report	* Political importance of the mangrove forest ecosystem management in Indonesia is not reduced. * Political reforms do not adversely affect the Project. * The trained extension agents continue to work. * The Center becomes a permanent institution under the Ministry of Forestry.
OUTPUTS 1. Trial training courses on sustainable mangrove forest ecosystem management are implemented and a training program is formulated.	By May 2004, I-1 At least twice workshops for formulating a training program and at least 12 times of training courses are carried out. I-2 160 training participants complete Course A, 40 complete Course B, and 40 complete Course C.	I-1 Workshop proceedings and training implementation report I-2 List of course graduated and evaluation reports I-3 Minutes of meeting of the Joint Coordinating Committee.	* The Center staffs continue to work.

<p>2. An extension strategy for sustainable mangrove forest ecosystem management is formulated.</p> <p>3. Through conducting of surveys relating to mangrove forest ecosystem, mangrove-related databases are established in the Mangrove Information Center, and mangrove-related information is distributed to the public.</p> <p>4. Trial environmental education activities are implemented and an environmental education program for the Center is formulated.</p> <p>5. Eco-tour guide training is conducted and trial eco-tours are implemented and a guide manual and several types of eco-tour plans are designed for the Center activities.</p>	<p>1-3 The training program is endorsed by the Joint Coordinating Committee.</p> <p>2 The extension strategy is endorsed by the Joint Coordinating Committee.</p> <p>3-1 Databases on fauna / flora and products at mangrove ecosystem are respectively formatted and data are input. for the Project site</p> <p>3-2 MIC WEB site is opened and a monthly newsletter is published as measures of information distribution.</p> <p>4-1 Mangrove trees are planted in at least 50 ha with the purpose of environmental education..</p> <p>4-2 At least 1,500 persons (students, etc.) / year attend environmental education activities organized by the Project.</p> <p>4-3 The environmental education program for the Center is submitted to the Joint Coordination Committee.</p> <p>5-1 At least 6 eco-tour guides who have sufficient ability in conducting eco-tours are trained and furnished in the Center.</p> <p>5-2 The guide manual and several types of eco-tour course plans that are designed and organized by the Center are submitted to the Joint Coordinating Committee.</p> <p>5-3 At least 1,000 persons / year attend eco-tour courses implemented by the Center.</p>	<p>2 Minutes of meeting of the Joint Coordinating Committee.</p> <p>3-1 Survey reports</p> <p>3-2 Database on fauna in MIC, database on flora in MIC, database on mangrove resources in MIC, database on mangrove-related articles</p> <p>3-3 MIC WEB page and the Project newsletter</p> <p>4-1 Implementation report of participatory planting</p> <p>4-2 Implementation report of environmental education</p> <p>4-3 Minutes of meeting of the Joint Coordinating Committee</p> <p>5-1 Guide Training Implementation report and its evaluation report</p> <p>5-2 Minutes of meeting of the Joint Coordinating Committee</p> <p>5-3 Guest register book of the Center</p>	
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ACTIVITIES	INPUTS	Japanese Side	* Trainer candidates have sufficient technical skills for teaching in the training courses.
1-1 Through workshops for formulating a training program, identify target group of trial training courses	Indonesian Side Staff (Ministry proper, Jakarta) Project Director	Long-term Expert Chief Advisor	36M/M
1-2 Formulate curricula and prepare materials for trial training courses	Project Manager	Coordinator	36M/M
1-3 Prepare the environment and the system necessary for implementing the training courses.	Training Program	Training Program	36M/M
1-4 Conduct the trial training courses.	Extension Strategy	Extension Strategy	24M/M
1-5 Monitor and evaluate the effects of the trial training courses.	Staff (BPDAS, Bali)	Short-term Expert	
1-6 Analyze the results of the evaluation of the trial training course and formulate them into the training program	Field Manager	Center Management M/P	11M/M
2-1 Conduct surveys on socio-economic conditions in mangrove areas including candidate areas for sub-centers.	Staff (MIC, Bali) C/P	Socio-economic Survey Others	14M/M several
2-2 Conduct surveys on the institutional framework of the extension services	Coordinator	Materials & equipment	: approx. 40 million yen in total
2-3 Identify targets of the extension activities	Training Program	Facilities	: approx. 80 million yen (MIC facilities, eco-tourism facilities)
2-4 Conduct case studies on appropriate field-level practices	Extension Strategy	Assistant C/P (Combined with the Center staff)	
2-5 Analyze the results of the above surveys and case-studies and formulate them into the extension strategy	General	C/P Training	: 2 persons / year for a month
3-1 Improve the environment and facilities necessary for the implementation of information management activities	Training Program	Budget	
3-2 Conduct surveys on fauna / flora and mangrove	Extension Strategy	1) Local business expense	
	Center staff (some staff could work for more than two sections, total number of the Center staff is 17)	2) Expense on local application activities	
	Secretaries		4 persons
	Administrative staffs		3 persons
	Staffs in charge of environmental education		2 persons
	Staffs in charge of information management		2 persons
	Staffs in charge of eco-tourism		6 persons
	Drivers		2 persons
	Security guard		3 persons

<p>resources for the Project site</p> <p>3-3 Conduct internal training courses on database management and establish database on fauna / flora and mangrove resources for the Project site</p> <p>3-4 Distribute mangrove-related information to the public</p> <p>4-1 Improve the environment and facilities including seed nursery necessary for the environmental education activities</p> <p>4-2 Conduct trial environmental education activities</p> <p>4-3 Formulate an environmental education program for the Center</p> <p>5-1 Improve the environment and facilities necessary for the implementation of eco-tour activities</p> <p>5-2 Conduct internal eco-tour guide training courses</p> <p>5-3 Plan and organize trial eco-tours</p> <p>5-4 Compile a guide manual and design eco-tour plans for the Center</p>	<p>Land : for Project activities and MIC facilities</p> <p>Facilities : maintenance and expansion of the existing facilities</p> <p>1) MIC</p> <p>2) Eco-tourism facilities (Wooden trails, etc.)</p> <p>Budget : Center operation expenses</p> <p>Running cost</p> <p>Training Expenses</p> <p>Nursery Management Expenses</p>	<p>PRE-CONDITIONS</p> <p>*The structure, electricity and water of the Center are available for use.</p>
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JICA