

評価調査結果要約表（英文）

I. Outline of the Project		
Country: The Democratic Republic of Timor-Leste		Project title: Project for Community-Based Sustainable Natural Resource Management
Issue/Sector: Nature Conservation-Sustainable Use of Natural Resources		Cooperation scheme: Technical Cooperation
Division in charge: Forestry and Nature Conservation Group, Global Environment Department		Total cost: 482,620 Thousand JPY
Period of Cooperation	(R/D) August 23, 2010	Partner Country's Implementing Organization: Ministry of Agriculture and Fisheries (MAF)/Directorate of Forestry [Directorate of Forestry and Watershed Management (NDFWM) at the time of the terminal evaluation]
	December 20, 2010 to October 31, 2015	
Supporting Organization in Japan: Nippon Koei Co., Ltd.		
Related Cooperation: Community-based integrated watershed management in Laclo and Comoro river basins (2005 - 2010), Program Grant Aid for Environment and Climate Change "The Forest Preservation Programme"		
I. Background of the Project		
<p>The latest assessment revealed that, in The Democratic Republic of Timor-Leste, about 13,000 ha of forests had disappeared between 2003 and 2012, and about 171,000 ha of dense forests had been degraded to sparse forests for the same period. The same assessment indicates that the total forest coverage became about 59 % of the whole country (about 869,000 ha) in 2012. Deforestation has further caused soil erosion, land slide and flash floods, which eventually affected the lives of people residing within river basins. But ironically, it has been reported that deforestation has been mainly caused by human activities, such as i) forest fires, ii) shifting cultivation, and iii) uncontrolled illegal logging. Furthermore, what made this problem difficult to solve was that the said activities were mainly undertaken by poor upland farmers who subsist on forest and farm products collected/produced by such activities.</p> <p>In order to promote sustainable forest management in the country, the Government of Timor-Leste (GoTL) developed the Forest Sector Policy in 2008, which aimed at achieving sustainable management of forest resources and watersheds in the country. On the other hand, Government agencies, such as Ministry of Agriculture and Fisheries (MAF) and National Directorate for Forestry (NDF) [National Directorate for Forestry and Watershed Management (NDFWM) at the time of the terminal evaluation], faced shortages of human resources quantitatively and qualitatively. There also existed institutional issues such as undeveloped basic legal systems on forest management and unclear land ownership resulted from insufficient land classification and registration systems.</p> <p>Meanwhile, as the fiscal situation of the country improved thanks to the continuous revenues from the crude oil and other natural resources, GoTL was ready to undertake the Project with its own budgets. The country faced an increased need for developing the implementing plan and establishing a framework for forest management in the country, so as to promote sustainable forest management in the country.</p> <p>Under such circumstances, the Japan International Cooperation Agency (JICA) conducted a Development Study named "The Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins" (2005 – 2010). As a result of the study, a community-based integrated watershed management plan was developed. At the pilot sites (four villages), activities (sub-programs) such as tree planting, home garden cultivation, coffee plantation rehabilitation, sustainable upland farming were carried out. Through the implementation of the pilot activities, the effectiveness of participatory land use planning and utilization of traditional collective working system was confirmed in order to address the issues.</p> <p>Based on the results of the afore-mentioned Development Study, the Project was started from December 2010 and is scheduled to be completed in October 2015. The Project aims to develop a</p>		

mechanism to ensure dissemination of the activities at a village level, establish an implementation mechanism and increase capabilities of the MAF/NDF and other relevant Government agencies, which are expected to play a major role in the dissemination activities. In particular, the Project has been implemented in the watersheds of Laolo river (the watershed area is 1,386 km², covering 55 villages with about 15,000 households and about 75,000 persons) and Comoro river (the watershed area is 212 km², covering 24 villages with about 6,000 households and about 32,000 persons) in Timor-Leste. It aims to develop an operational mechanism of community-based sustainable natural resource management (CB-NRM) at *suco*⁴ level through agreement and implementation of land use plans and *suco* regulations relevant to natural resource management at target *sucos* in the watersheds, training of the staff of the Implementing agency and relevant stakeholders to support CB-NRM, and identification of effective processes with roles of stakeholders to support CB-NRM.

2. Project Overview

(1) Super Goal:

Watershed management is introduced in the major river systems in Timor-Leste.

(2) Overall Goal:

Community-based sustainable natural resource management (CB-NRM) is practiced in the Target Area.

(3) Project Purpose

An operational mechanism*¹ of CB-NRM at *suco* level is developed.

Note:*1 Operational mechanism is embodied in the endorsed and practiced manual on the processes with roles of stakeholders to support CB-NRM, technical manuals on CB-NRM, and the policy recommendations. Capacity of the staff of NDF and District MAF to support and promote CB-NRM is integral part of the mechanism.

(4) Outputs

Output 1: Land use plans are agreed upon and implemented by local residents in accordance with relevant *suco* regulations.

Output 2: The staff of the Implementing agency and relevant stakeholders*² are trained to support CB-NRM.

Output 3: Effective processes with roles of stakeholders to support CB-NRM are identified.

Note:*2 Personnel of the relevant national directorate of MAF, district office of MAF in the target area and other facilitating agencies, such as NGOs working in the target area.

(5) Inputs (at the time of the terminal evaluation study)

Japanese side:

Short-term Experts: 6 persons in 5 fields Equipment: 7.3 Million Yen

Local cost: 167.6 Million Yen (general expenses only)

Trainees received: 10 persons

Total Cost 482.6 Million JPY

Timorese Side :

Counterpart: 20 persons

Equipment: NA

Land and Facilities: Office space

Local Cost: 17,717 US\$

(6) Beneficiaries

Direct beneficiaries: Relevant personnel of NDF and District Directorates of MAF in the target area, and the local residents in the Project sites

⁴ village

II. Evaluation Team		
Members of Evaluation Team	<p>Team Leader: Kazuhiro Goseki Executive Technical Advisor to the Director General, Global Environment Department, JICA</p> <p>Evaluation Planning: Satomi Tanaka Technical Advisor, Nature Conservation Team 1, Forestry and Nature Conservation Group, Global Environment Department, JICA</p> <p>Evaluation and Analysis: Tomoo Mochida Managing Director, OPMAC Corporation</p>	
Period of Evaluation	June 28, 2015 - July 25, 2015	Type of Evaluation: Terminal evaluation
III. Results of Evaluation		
<p>3-1 Confirmation of Results</p> <p>The Inputs have been placed more or less as planned by both Japanese and Timor-Leste sides, except the local costs supposed to be born by Timore-Leste side.</p> <p>1) Achievement of Outputs</p> <p><u>Output 1: It is expected to be achieved by the end of the Project cooperation period.</u></p> <p>By September 2012, in all the target <i>sucos</i> (6 <i>sucos</i>), participatory land use planning (PLUP) with the <i>suco</i> regulations were developed and the implementation and enforcement of the <i>suco</i> regulations were announced through the traditional ceremonies (<i>Tara Bandu</i>) (Indicator 1a). According to the observation of the respective <i>suco</i> regulation committees, the number of forest fires, illegal cutting and damages on agricultural products by free animal grazing has been reduced. However, the data reported at the <i>suco</i> regulation committees show that the number of forest fires and damages on agricultural products by free animal grazing was increased in 2014 if compared with that in 2013. It is necessary to confirm the number at the end of the Project cooperation period (Indicator 1b). In lieu of the registered beneficiaries' perceptions on livelihood improvement, the analysis was made on the number of beneficiary farmers who had applied the techniques to their individual farms/plots in the first or second rotation of the training. The percentage of a cumulative total number of farmers who applied the techniques at their individual farms/plots against the initial number of the registered beneficiaries from 2012 to 2014 is calculated at 100.4% (the percentage exceeds 100% due to the fact that those who did not register at the outset decided to participate in the Project later). The application of the techniques to the individual farms/plots should be also confirmed at the time of the Project completion (Indicator 1c).</p> <p><u>Output 2: It is expected to be achieved by the end of the Project cooperation period.</u></p> <p>Except for Indicator 2e, all the indicators have been fulfilled. With regard to Indicator 2e, a workshop is scheduled to be held in July 2015, inviting key officials working at the relevant technical national directorates of MAF in order to obtain their opinions and suggestions on the draft technical manuals and finalize them.</p> <p><u>Output 3: It is expected to be achieved by the end of the Project cooperation period.</u></p> <p>The operational manual (Indicator 3a) and the policy recommendations (Indicator 3b) are scheduled to be finalized in July 2015.</p> <p>Based on the above observations, all the Outputs are expected to be achieved by the end of the Project cooperation period.</p> <p>2) Prospect for achieving the Project Purpose</p> <p>At the time of the terminal evaluation, three indicators out of the four, which correspond to the Project Purpose, were yet to be fulfilled. An operational mechanism of CB-NRM for the Target Area (Indicator a), technical manuals on CB-NRM micro program related techniques (Indicator b), and the draft policy recommendations (Indicator c) are scheduled to be approved or endorsed by Director General (DG) of MAF. The Project Purpose is expected to be achieved by the end of the Project cooperation period.</p>		

3) Prospect for achieving the Overall Goal

Some factors are expected to contribute to realization of positive impacts of the Project. Among them are reduction of illegal activities within villages by the villagers, improvement of productivities through implementation of micro programs and establishment of Noru watershed management council, which serves as a platform for the CB-NRM at a sub-watershed level. The Overall Goal is expected to be achieved.

4) Prospect for achieving the Super Goal

Two NGOs whose capacity had been enhanced under the Project provided guidance to other NGOs in a watershed outside the Project areas. Some donors show their interests in utilizing PLUP applied under the Project. Together with the realization of policies recommended by the Project, these actions and movements could indicate possible ways to reach the Overall Goal.

3-2 Summary of Evaluation Results

(1) Relevance

Relevance is evaluated high with the following reasons:

- The Project is consistent with the Strategic Development Plan of Timor-Leste (2011-2030), the Forestry Sector Policy (2008) as well as the Official Development Assistance (ODA) policies of Japan.
- The Project meets the organizational needs of the NDF/MAF, the needs of the relevant personnel of NDF and District Directorates of MAF in the Target Areas, and the needs of the local people in the Target Area.
- Introduction of the CB-NRM mechanism is also proposed in the Forest Conservation Plan prepared under Japan's Grant Aid Project named "Forest Preservation Programme" (2011-2013). Japanese technical advantage has been confirmed as JICA jointly with MAF carried out the Development Study on Community-Based Integrated Watershed Management in the Target Area of the current Project, with implementation of pilot projects focusing on PLUP, tree planting, agricultural extension, and livelihood development, from 2005 to 2010.
- The areas in and around Comoro and Laclo watersheds were identified as the areas where forest degradation progressed despite the fact that Comoro watershed has a source of the domestic water for Dili City in its area while Lacro watershed is the catchment of one of the largest irrigation systems in the country. Therefore, selection of the target areas and *sucos* was appropriate. The Project approach and the Project design were also considered appropriate with a view to transferring techniques to individual farmers and institutionalizing village regulations at a village level.

(2) Effectiveness

Judging from the achievement level of the Outputs, progress has been made in achieving the Project Purpose. The prospect for achieving the Project Purpose is high by the end of the Project cooperation period as an operational manual of CB-NRM, technical manuals on CB-NRM micro-program related techniques, and policy recommendations are scheduled to be approved or endorsed by DG of MAF before the end of the Project cooperation period. Outputs 1 to 3 are expected to contribute to development of an operational mechanism of CB-NRM at *suco* level. Logical relation between Outputs and the Project Purpose is found adequate.

(3) Efficiency

Judging from the achievement level of the Indicators as well as the progress of the activities, progress has been made in achieving the Outputs. In general, the Inputs have been appropriate in producing the Outputs in terms of timing, quality and quantity. However, efficiency is considered moderate due to the facts that involvement of the Project personnel (or counterparts) at the Project sites was not as high as expected, Japanese side borne most of the expenses required for regular project activities, and so forth.

(4) Impact

Some factors as mentioned in 3-1 3) above are expected to contribute to realization of positive impacts and then, achievement of the Overall Goal. Positive impacts observed at the time of the terminal evaluation are as follows:

- One of the women's groups assisted with income generating/livelihood development activities

has established a saving and credit system in a group by making use of part of the benefits from sales of their products. The group saving and credit system is able to help the members improve their access to financial resources.

- Two NGOs have gone through all the processes of and procedures for implementation of CB-NRM at the *suco* level under the sub-contractual arrangement of the Project. They provided guidance to other NGOs that conducted PLUP in the watershed other than the Project area. PLUP is the main step in the process of establishing the CB-NRM mechanism, No negative impacts have been observed.

(5) Sustainability

Sustainability is yet to be ensured sufficiently. However, sustainability on some aspects is expected.

Policy and Institutional aspects:

CB-NRM mechanism has been developed and promoted by the Project in line with the strategies of the Forestry Sector Policy. It is considered that the policy relevant to the community participation in the forestry development is likely to remain unchanged. Meanwhile, there has been no legal basis for NDFWM to promote CB-NRM. On the other hand, as micro programs have generated some tangible benefits, villagers are willing to continue the micro programs. Hence, villagers are likely to observe *suco* regulations. These are expected to contribute to realization of the land use plans prepared under the Project. Furthermore, village leaders of the target *sucos* have been empowered to govern their *sucos* through utilization of *suco* regulations. This is considered as a factor that is likely to enhance sustainability of the institution at a village level.

Organizational aspects:

Organizational strategy for continuous implementation and expansion of the CB-NRM after completion of the Project is not clear at the time of the terminal evaluation.

Financial aspects:

A budget constraint is a major concern for the sustainability of the Project. So far, costs for the Timorese Project personnel for field visits and the meetings outside their respective District have been born by the Japanese side upon request by the Timorese side. On the other hand, one of the two NGOs, which had been engaged in the Project, supported *sucos* with funds from other sources. There are donor agencies that show their interests in applying CB-NRM to their projects as well. Collaboration with other donors and NGOs may lead to improvement of the financial sustainability of the Project by making use of financial resources from the organizations other than the government agencies.

Technical aspects:

Technical capacity of the Timorese Project personnel has been enhanced. However, it is considered that they are yet to take over the roles of NGOs because they have not accumulated their practical field experiences. It is not certain either if they are able to maintain sufficient skills, knowledge and experiences after completion of the Project. On the other hand, it is considered that the agricultural and forestry techniques introduced/transferred through the Project continue to be adequate in light of the local needs and technical levels.

3-3 Factors that promoted realization of effects

(1) Factors concerning to Planning

- Technology transfer by the two step approach: establishment of demonstration plots at a sub-*suco* (*aldeia*) level and sub-demonstration plots at a sub-group level, with organization of FFSs
- Use of traditional customs and practices such as *Tara Bandu* (a traditional ceremony concerning ritual prohibitions and sanctions) and *Halosan* (traditional collective working system)
- Capacity development of Project personnel through weekly meetings, seminars, trainings and interactions with NGOs
- Application of *suco* regulations and organization of regular meetings
- Regulation on illegal activities being matched with needs of farmers Introduction of relatively simple but effective agricultural techniques
- Clear instructions and guidance to NGOs in accordance with the framework of the Project

(2) Factors concerning to the Implementation Process

- Assignment of NGO staff at respective *sucos*
- Employment of a NGO whose financial capacity is relatively high
- Support of the Project to shoulder expenses for operation of the regular activities

3-4 Factors that impeded realization of effects

(1) Factors concerning to Planning

- Insufficient policy supports, insufficient legislative framework and organizational set-up, and shortage of budgets

(2) Factors concerning to the Implementation Process

- Implementation of other projects by GoTL and other donors, and organization of events at the villages
- Poor access to some of the Project areas due to road conditions and remoteness of the locations
- Organizational and personnel changes/transfer in the main Implementing agency.

3-5. Conclusion

As described in the above evaluation results, steady progress has been made so far towards achievement of the indicators of Outputs and the Project Purpose, although some of the achievement levels of the indicators are yet to be fulfilled at the time of the terminal evaluation. However, they are likely to be achieved by the end of the Project cooperation period. Sustainability is yet to be ensured sufficiently but sustainability on some aspects is expected.

3-6 Recommendations

[Recommendations to the Project]

- (1) Preparing user friendly manuals
- (2) Development of public relations materials
- (3) Development of a manual on establishment and operation of watershed management council

[Recommendations to MAF]

- (1) Realization of policy recommendations
- (2) Monitoring of CB-NRM practices in the target *sucos*
- (3) Monitoring of the watershed management council of the Noru sub-watershed
- (4) Utilization of Japan's Grant Aid Project "Forest Preservation Programme"
- (5) Improvement of the CB-NRM mechanism
- (6) Support of the Noru sub-watershed management council
- (7) Awareness raising of local residents in the Target Area

3-7 Lessons and Learned

- (1) Utilization of NGOs for disseminating impacts of the Project
- (2) Utilization of NGOs in countries under developing capacity of government institution
- (3) Importance of preliminary studies
- (4) Selection of NGOs that have financial capacity
- (5) Establishment of a platform for watershed management including non-target villages of a project
- (6) Enhancement of efficiency of the Project activities by making use of traditional customs and practices
- (7) Effectiveness of utilization of local material
- (8) Existence of staff members of facilitating agencies in remote target villages