

Republic of the Philippines

Ex-Post Evaluation of Japanese Technical Cooperation Project
Project for Enhancement of the Community-Based Forest Management Program (CBFMP)

External Evaluator: Miyoko Taniguchi, IC Net Limited

0. Summary

The project purpose of the Enhancement of the Community-Based Forest Management Program (E-CBFMP) was that conservation, rehabilitation, and sustainable utilization of forest and land resources within CBFM areas are done by the capacitated people's organizations (POs) on their own initiatives with support from the capacitated Department of Environment and Natural Resources (DENR), local government units (LGUs) and other relevant institutions. The Project is aimed at promoting a national strategy for forest management in the Philippines; thus its consistency with the national policy, the needs of the relevant sector in the Philippines and with Japan's ODA policy is high. However, despite the high consistency of the Project Purpose, there were issues with the appropriateness of the initial project design. For example, the linkage among Outputs was low, and the Outputs did not logically link with the Project Purpose. This had an adverse effect on management of the project and achievement of Outputs. Therefore, relevance of the project is regarded as fair. The Outputs and the Project Purpose, which were revised during the project, have been achieved mostly as planned, and some parts of the overall goal are expected to be achieved through utilization of technologies developed by the Project. However, some issues remain with continuity of the project effects. Therefore, effectiveness and impact of the project are also regarded as fair. The project stayed within the initially planned bounds for both the implementation period and the project cost. Therefore, the efficiency of the project is regarded as high. A few slight problems have been observed in the institutional and structural aspects of the implementing agency. Therefore, sustainability of the project is regarded as fair.

In light of the above, this project is evaluated to be partially satisfactory although having produced certain effects.

1. Project Description



Project Location



Area Targeted for Agroforestry in Bataan Province

1.1 Background¹

In the Philippines, it was estimated that, in 1990, about 8.7 million people, or roughly 13 percent of its population, lived in public forestland covering 14.63 million hectares, or 50 percent of its total land area (1990). In these mountain villages, the number of poor families was increasing because of low farm productivity and poor accessibility to market. Moreover, over-logging, forest fires and the inappropriate conversion of forestland for use as farmland had contributed to the denudation of forests in the Philippines, resulting in contributed to the frequent occurrence of natural disasters and hampering social and economic development.

In response, in 1995, the Philippine Government, via Executive Order No. 263, set forth the Community-Based Forest Management (CBFM)² Program as a national strategy for conserving afforested areas and existing forests and for improving the livelihoods of upland communities, in a way that consolidated the previous participatory management programs for statutory forestland. In 1997, the Strategic Action Plan for CBFM (DENR Department Memorandum: No. 97-13) was promulgated, setting a target of placing nine million hectares under CBFM agreements by 2008. However, administrative bodies, such as the DENR and LGUs, failed to provide communities with adequate guidance on CBFM because of a lack of funding and technical capability, and carefully planned forest management and livelihood improvement activities had not been undertaken in most areas under CBFM agreements because of a lack of funds and capacity on the part of local communities. Under such circumstances, the Philippine Government made a request to the Japanese Government for technical cooperation for promoting the CBFM Program.

¹ JICA official document (Preliminary Survey Report, Mid-term and Terminal Evaluation Report,

² The basic principles of CBFM are: (1) Sustainable management of forest resources, (2) Social justice and improved social and economic conditions for local communities, and (3) Strong partnership between the DENR and local communities. Under the program, POs conclude a CBFM Agreement with the DENR to manage public forestland for 25 years, enabling them to manage and use forests, and to use the land such as for agriculture, based on a Community Resources Management Framework (CRMF) and a Five-Year Work Plan prepared by each PO. Source: DENR website (<http://forestry.denr.gov.ph/primer.htm>)

1.2 Project Outline

The overview of the evaluated project is as follows.

Overall Goal	Conservation, rehabilitation and sustainable utilization of forest and land resources within Community-Based Forest Management (CBFM) areas are promoted to contribute to the overall sustainable forest management of the Government of the Philippines.	
Project Purpose	Conservation, rehabilitation and sustainable utilization of forest and land resources within CBFM areas are done by capacitated POs on their own initiatives with support from capacitated Department of Environment and Natural Resources (DENR), local government units (LGUs) and other relevant institutions.	
Outputs	Output 1	<Policy component> Policy recommendations for the improvement of CBFM program are submitted to the proper authorities.
	Output 2	<Field operations component> (Pilot Site Unit) CBFM planning and implementation in the pilot sites in Region 3 ³ are developed/improved through the enhancement of the implementation scheme and collaboration model.
	Output 3	(Training unit) The knowledge, skills and attitude of people's organizations (POs), DENR employees, LGUs and other relevant institutions involved in CBFM implementation in Region 3 are improved through training.
	Output 4	(Information unit) Existing practical information on CBFM reached and appropriated by the POs in Region 3.
Inputs	<p>[Japanese Side]</p> <p>Dispatch of experts: 8 for long-term, 4 for short-term Acceptance of trainees: 32 (counterpart training in Japan) Equipment: 42 million yen Cost of the operation in the Philippines borne by the Japanese side: 92 million yen</p> <p>[Philippine Side]</p> <p>Counterparts: 55 in total Land and facilities: Project office, utilities Cost of the operation in the Philippines borne by the Philippine side: Counterpart salaries of approximately 62 million yen</p>	
Total Cost	571 million yen	
Period of Cooperation	June 2004 - June 2009	
Partner Country's Related Organization	Department of Environment and Natural Resources (DENR)	
Supporting Organization in Japan	Forestry Agency	
Related Cooperation	Japanese ODA loan: Forestry Sector Program (LA: 1988) Japanese ODA loan: Forestry Sector Project (LA 1993) Japanese ODA loan: Forestland Management Project (LA 2012)	

³ The Philippines are divided into three administrative levels: Regions, Provinces and Municipalities. DENR local offices are comprised of Regional Offices (RENRO: Regional Environment and Natural Resource Office), Provincial Offices (PENRO: Provincial Environment and Natural Resource office) and Community Offices (CENRO: Community Environment and Natural Resource office). Region 3 is comprised of the five provinces of Bulacan, Nueva Ecija, Pampanga, Tarlac and Zambales.

1.3 Outline of the Terminal Evaluation

1.3.1 Achievement of Overall Goal

At the time of the terminal evaluation, it was assessed that the project had not attained a significant impact. Some positive impacts were observed in policy and institutional aspects in the areas targeted by the pilot activities, specifically as follows. During the project, recommendations were submitted to the project's Joint Coordinating Committee (JCC) for: (1) lifting of the ban on logging; (2) dispute resolution for land-use rights; and (3) improvement of the CBFM Implementation Framework. With respect to (1), a memorandum was issued in the name of the Secretary on June 12, 2007 for a moratorium on the ban on logging and transportation in afforested areas with land-use rights attached. With respect to (2), this led to issuance of Joint Administrative Order No. 2008-01 between the DENR and the National Commission on Indigenous Peoples (NCIP) (*Guidelines and Procedures for the Recognition, Documentation, Registration and Confirmation of all Sustainable Traditional and Indigenous Forest Resources Management Systems and Practices (STIFRMSP) of Indigenous Cultural Communities or Indigenous Peoples in Ancestral Domain/Land*). With respect to (3), this was being prepared as at the time of the terminal evaluation. Following the terminal evaluation, it had not resulted in institutional improvements to the CBFM Implementation Framework by the time of the ex-post evaluation.

1.3.2 Achievement of Project Purpose

At the time of the terminal evaluation, it was determined that the Project Purpose had been achieved because the two indicators based on the final project design matrix (PDM) had been attained (see table below). The achievement of the Project Purpose is as follows.

Indicators	At terminal evaluation
By June, 2009, all the E-CBFM (the Enhancement of Community Based Forest Management) pilot sites and at least 30% of other POs in Region 3 have adopted and implemented appropriate technologies leading to the conservation, rehabilitation and sustainable utilization of forest and land resources.	The results of an impact survey commissioned by the project to an external consultancy to be conducted during the implementation period are as follows. There are 128 POs within the jurisdiction of the Region 3 Office. There are 123 POs outside the pilot sites, and of these, 42 POs (or 34%) had adopted and put into practice appropriate technology acquired through the project.
By June 2009, at least 50% of members of each PO, staff of DENR, LGUs and other relevant institutions involved in the CBFM program in Region 3 have improved their awareness and capacities to plan and implement the CBFM strategy.	<p>The results of the above impact survey are as follows.</p> <ul style="list-style-type: none"> • Of the 60 POs that participated in this project, 82% (49 POs) raised their awareness for the CBFM Program, and 72% (42 POs) recognized an improvement in the participation of their members. <p>The results of the survey conducted after the training are as follows.</p> <ul style="list-style-type: none"> • Of the 11 LGUs that participated in this project, a change for the better in awareness and attitude was observed for staff in nine LGUs. • Of the 28 DENR Provincial/Municipal Office staff, a change in approach to CBFM operations and an improvement in awareness and knowledge about CBFM were observed for 92% (26).

Source: Terminal Evaluation Report

1.3.3 Recommendations

The following six recommendations were made at the time of the terminal evaluation. The responses for each recommendation at the time of the ex-post evaluation are also described.

Recommendations at the time of the terminal evaluation	Response (at the time of the ex-post evaluation)
It is important to verify the effectiveness of the various techniques introduced through the project, and to incorporate them into the CBFM Implementation Framework.	With respect to the effectiveness of techniques introduced through the project, the effectiveness of the alternative plan to the Community Resources Management Framework (CRMF) has been verified at a CBFM site, but the effectiveness of practical “agroforestry” learning and training techniques for farmers, the document on information collection and dissemination strategies, and techniques for building private enterprise partnerships with CBFM has not been verified. The effectiveness of the Training Guide had been confirmed during the implementation period. The various techniques introduced through the project have not been incorporated into the CBFM Implementation Framework.
The DENR should build collaborative partnerships with research institutions, universities and other similar organizations.	The DENR has built collaborative relationships aimed at improving CBFM policies.
For the purpose of ensuring sustainability, the project should create various Outputs by the completion of this project, and hold briefing sessions for officials involved in policy making.	At the time of completion, the project had created various Outputs, ⁴ and had distributed some of them to policy decision-makers. However, the DENR has not held briefing sessions after a project presentation of project outputs was conducted in a Forestry Sector Meeting attended by the Regional Technical Directors for Forestry just before completing the project.
The DENR Regional Office needs to document past activities of the pilot sites so that DENR can utilize the experiences and lessons learned in other sites the future.	The project documented the experiences of the pilot sites in the “Case Study Report” and used as reference materials.
During the course of policies for streamlining the government and administrative bodies, the number of CBFM coordinators should be maintained or increased.	The DENR has not agreed on a policy for organizational rationalization. Therefore, it has not started restructuring, including personnel, and there has been no change in the number of CBFM coordinators. ⁵ However, in addition to their usual business operations, CBFM coordinators are also performing many duties as a consequence of special government programs, and there is a shortage of personnel, especially in local offices, though CBFM coordinators are supported by contractual employees assigned under special projects.
Information and materials collected and accumulated through the project should be made public.	The DENR has not published this information and materials.

⁴ (1) Training Guide; (2) Field Guide of Discovery-based Exercises on FFS for Agroforestry; (3) Project document on information collection and dissemination strategies; (4) Alternative plan to the CRMF; and (5) Private enterprise partnerships (PEPs) with CBFM.

⁵ The Philippine Government has issued directives since the mid-2000s for all government agencies to formulate a plan for organizational rationalization. Since the DENR has not yet reached agreement with the Department of Budget and Management for a rationalization plan, there has been no recruitment or promotion of staff since the mid-2000s. The workforce has grown older, with the average age of regular staff rising to 55. Agreement on a rationalization proposal is expected in fiscal 2013, but the details of such a proposal have not yet been revealed (interview with DENR officials).

2. Outline of the Evaluation Study

2.1 External Evaluator

Miyoko Taniguchi (IC Net Limited)

2.2 Duration of Evaluation Study

In conducting this ex-post evaluation, the External Evaluator performed an evaluation study as follows:

Duration of the study: June 2012 - June 2013

Duration of the field study: January 19 - February 1, 2013 and April 3–11, 2013

2.3 Constraints during the Evaluation Study

The areas targeted directly in the project are the five pilot sites and 12 follow-up training sites located in five provinces of Region 3. However, because of time constraints, it was not possible to visit all the project sites. Therefore, considering the high standard of public safety and the ease of mobility, it was decided to limit the sites visited to three pilot sites and four follow-up training sites in Tarlac Province, Zambales Province and Bataan Province. Given the limitation of the evaluation schedule, the visited sites were selected in discussion with the DENR in a way that the most diverse activities could be covered. At each site visited, the evaluator conducted interviews with officials, group discussions and beneficiary surveys.⁶ With respect to the sites that could not be visited, information was collected by means of document studies, questionnaires sent to each Provincial Office and interviews with officials in Region 3. Questionnaires were also sent to all counterparts. In view of the fact that the project involves a diverse range of stakeholders, efforts were made to ascertain the project effects from multiple information sources wherever possible, thereby raising the accuracy of the study.

3. Results of the Evaluation (Overall Rating: C⁷)

3.1 Relevance (Rating: ②⁸)

3.1.1 Relevance with the Development Plan and Policy of the Philippines

The sustainable management of natural resources was positioned as a priority area for development in the “Medium-Term Philippine Development Plan (MTPDP) 1999–2004,” which was the Philippine Government’s development policy current at the start of the project, and in the subsequent “MTPDP 2004–2010.” In the “Master Plan for Forestry Development 2003–2013,” which was revised in 2003, CBFM is regarded as a cross-cutting strategy for the entire forestry sector for

⁶ A total of 143 beneficiaries were surveyed. The number of people surveyed at each site was as follows: (Pilot sites) Maniniog Barangay in Tarlac Province: 30, Poonbato Barangay in Zambales Province: 31, Bangkal Barangay in Bataan Province: 10; (Follow-up training sites) Nambalan Barangay in Tarlac Province: 20, Papaac Barangay in Tarlac Province: 20, Libaba Barangay in Zambales Province: 20, and Duale Barangay in Bataan Province: 12. Activities at pilot sites form one of the Outputs; since they require a large number of inputs and have a long implementation period of five years, the sample distribution for pilot sites was greater than for follow-up training sites. However, because of time constraints, the sample size at some sites was smaller than planned. The surveyed beneficiaries were randomly sampled from a list of PO members.

⁷ A: Highly satisfactory; B: Satisfactory; C: Partially satisfactory; D: Unsatisfactory

⁸ ③: High; ②: Fair; ①: Low

forest protection and conservation and for forest development activities. “Conservation, protection and rehabilitation of the environment and natural resources” has also been positioned as a priority area for development in the “Philippine Development Plan 2011–2016,”⁹ which was current at the time of the ex-post evaluation. The plan specifies increasing the participation of people in the community-based management of forests and other resources as a cross-cutting strategy, as an effective environmental management strategy. In this way, the objectives and activities of this project to facilitate the community-based conservation, rehabilitation and sustainable utilization of forest and land resources were consistent with the development policy of the Philippines.

The measures for the CBFM Program are as follows. From 2005 to 2006, a change in the CBFM policy was observed, attributable to the then Secretary of the DENR. In August 2005, the Secretary issued a directive to suspend the receipt of applications for all forest management agreements in order to review the forest tenure system including CBFM agreement on a nationwide scale¹⁰. Next, a number of Department Orders were issued, including cancellation of 233 CBFM agreements nationwide which had received a low evaluation for CBFM implementation/ non-compliance to certain CBFM agreement. This was done because some people’s organizations (POs) were felling forests in breach of their CBFM agreements, and the quality of CBFM agreements needed to be improved. However, in March 2006, a new Secretary was appointed, confirming that CBFM was national policy, and most CBFM agreements were reconsidered. Despite the confusion surrounding the CBFM policy direction during the implementation period for this project, around the time of the ex-post evaluation, expansion of areas under CBFM agreements had become a policy goal (discussed in detail below), and the various programs¹¹ centered around government-led reforestation work were also consistent with CBFM.

3.1.2 Relevance with the Development Needs of the Philippines

The results of the three preparatory studies—the project formulation study (June 2002), the first ex-ante evaluation study (August 2003) and the second ex-ante evaluation study (January 2004)—showed that, without carefully planned forest management and livelihood improvement activities being undertaken, a point of sustainable land use had not yet been reached in areas under CBFM agreements. Furthermore, administrative bodies such as the DENR and LGUs were faced with insufficient financial resources and technical capacity to support residents. Therefore, this project aimed at improving the capacity of the DENR, LGUs and POs, is consistent with development needs.

3.1.3 Relevance with Japan’s ODA Policy

Two priority issues under Japan’s country assistance program for the Philippines at the start of the project were alleviation of poverty and conservation of the environment. Furthermore, one of the key development issues in the country assistance program revised in 2008 was “empowerment of the poor

⁹ Development plan by the current administration, equivalent to the MTPDP

¹⁰ Report on the mid-term evaluation of E-CBFM

¹¹ Upland Development Program, National Greening Program

and improvement of the living conditions of the poor,” and as part of this, support for appropriate forest management, including reforestation, was cited for “protecting lives from natural disasters.” In light of the above, it is fair to say that the project is consistent with Japan’s ODA policy.

3.1.4 Appropriateness of the Project Design

The project was designed after completing the preparatory studies mentioned above. Initially, consideration was given to a project targeting Region 2 and developing a model CBFM *barangay* (village) into a base for extension to the entire region. However, because of an emphasis on policy impact, it was decided to target Region 3 for the pilot activities as it was close to Manila and would enable DENR personnel to conduct monitoring activities, and to gear the training and policy components to the whole country.

However, given that the target area of the project is the whole of the Philippines, and that the ultimate purpose was for POs in all CBFM target areas (there were 1,781 organizations nationwide as of 2005) to put into practice the conservation, rehabilitation and sustainable utilization of forest and land resources, as far as five-year technical cooperation projects go, this project covered a wide area and its feasibility was low. Consequently, the appropriateness of the plan was not high. The indicators for the Project Purpose were also not measurable indicators like in the final Project Design Matrix (PDM). Furthermore, up until the final PDM, the connection between the project’s Outputs as well as between Outputs and purpose was low, and the implementation scenario was not well defined. There was no component for taking the forest management experiences and technology gained at the pilot sites and extending them to other regions, and there was a structural failure in that, even if the Outputs were achieved, the Project Purpose could not be fully achieved. In this way, because the plan lacked specificity, the project implementers both at the DENR and JICA needed much time to make adjustments, and for the three years and eight months from the outset until February 2008 when the final PDM was formulated, the implementers were unable to share a common understanding of the project design and policy.¹²

The changes leading up to the final PDM are as follows. From the beginning of the project in 2004, the JICA headquarters was concerned that specific Outputs had not been expressed, and in June 2005, dispatched a project consultation team. The team narrowed down activities to DENR Region 3, pointed out the importance of ties between each of the Outputs, and proposed that the base for experts in the fields of training and information be moved to Region 3. However, agreement with the DENR could not be reached. The reason for this was that the DENR had had expectations for the project to lead to the national expansion of the CBFM Program, and it was strongly opposed to limiting the target area for all activities to only Region 3 (interview with former JICA expert). Even at the time of the mid-term evaluation study (October 2006), the Evaluation Team dispatched by JICA had proposed that the activities base for training-related Outputs be transferred from the headquarters to DENR Region 3, but again, agreement with DENR could not be reached.

¹² During this period, the PDM was revised three times on the following dates: June 23, 2005; January 9, 2007; and February 28, 2008.

The following is an account of what brought about a change to this situation. First, the mid-term evaluation study conducted in 2006, presented a very harsh assessment regarding the progress on Outputs, and gave a view that achieving the Project Purpose would be tough. Consequently, a sense of impending crisis emerged between the DENR and JICA experts (interview with the DENR). Next was the advice and proposal by a consultant from the Food and Agriculture Organization of the United Nations (FAO) at the invitation of the project. After much discussion with the project stakeholders, the consultant sorted out the points at issue with the PDM, and set achievable and measurable indicators from February 2008 to June 2009 (materials provided by JICA, interviews with the DENR and JICA). The proposal put forward by the consultant was ultimately accepted by the project implementers, and led to a fundamental review of the PDM.¹³

In this way, a lack of feasibility and capacity to manage the project resulted in the project stakeholders spending much time and effort on revising the plan. Consequently, during the first half of the project, Outputs could not be sufficiently produced and activities stagnated. Thus the inappropriateness of the project design had a serious impact on operations.

In light of the above, the project was consistent with the development policy and development needs of the Philippines and with Japan's ODA policy, but it was determined that there were problems with the appropriateness of the project design. Therefore its relevance is fair.

3.2 Effectiveness and Impact¹⁴ (Rating:②)

3.2.1 Effectiveness

3.2.1.1 Project Outputs

The achievement of Outputs at the time of project completion based on the final PDM, and the continuation of activities at the time of the ex-post evaluation are as follows.¹⁵

(1) Output 1 was "Policy recommendations for the improvement of CBFMP are submitted to the proper authorities." Output 1 was achieved because all of the set indicators were met.

Indicator 1-1 was "Based on the experiences of the field component, at least one proposal is prepared and submitted for the following five items: (1) lifting of the ban on logging; (2) land tenure conflicts; (3) conflict resolution for natural resources; (4) renewal of Certificate of Stewardship; and (5) modification of the CBFM Implementation Framework based on experiences of the field component." The counterpart at the DENR Forest Management Bureau, collected and analyzed pilot site activity reports and related materials, and submitted a policy recommendation on

¹³ The main changes were as follows: (1) Quantification of the indicators for the Project Purpose; (2) Addition of specific details to the indicators for Output 1 (policy recommendations); (3) Changes to the indicators for Output 2 (pilot sites: name changed from "model sites") (previously had been up to construction of the collaboration model, but now includes up to implementation of PO activities; the result of this would lead to recommendation for improvements to the CBFM Implementation Framework (Output: policy recommendations)); (4) Quantification of the indicators for Output 3 (training); (5) Change to dissemination activities in Region 3 for Output 4 (information).

¹⁴ This rating has been assessed by taking impact into account when determining the effectiveness.

¹⁵ Activities that are expected to continue after completion of the project are included in this section as well.

all the mentioned items to the project's Joint Coordinating Committee (JCC).

Indicator 1-2 was "One study paper including recommendations on CBFM policy feedback mechanisms linking the policy formulation offices and key stakeholders in the field is prepared and submitted." A report comprised of an analysis of the present situation and recommendations was submitted to the project's Joint Coordinating Committee (JCC).

(2) Output 2 was "CBFM planning and implementation in the pilot sites in Region 3 are developed/improved through the enhancement of the implementation scheme and collaboration model." Output 2 was achieved because all of the set indicators were met. The achievement of each indicator at the time of completion and the continuation of activities at the time of the ex-post evaluation are as follows.

Indicator 2-1 was "All POs of the pilot sites¹⁶ with the support of Technical Working Groups (TWGs) prepare and/or update CRMF or CRMP as well as five year work plans through participatory planning processes."

At the time of the ex-post evaluation, no Community Resources Management Framework (CRMF) and the Five-Year Work Plan had been formulated anew or revised within the jurisdiction of DENR Region 3, and the counterparts had not had an opportunity to utilize their capacity for formulating the plans, which they had acquired through the project. Furthermore, the alternate process proposed by the project, which simplified the preparation of the CRMF for the purpose of promoting implementation of CBFM, had been put into practice on a trial basis at some sites after completion of the project, but this had not resulted in the process being institutionalized. Apparently, it had not been put into practice at the DENR Region 3 Office because there had not been any operational instruction from the DENR. On the other hand, at the central office level, CRMF was reviewed and refined from this project that has led to an important input in the current consultation process related to the policy formulation related to CBFM.

Indicator 2-2 was "Collaboration partnerships between DENR, LGUs and other relevant institutions at the five pilot sites are verified and lessons of making the partnerships are compiled in a case study." TWGs which coordinate the support and cooperation of POs were formed at all pilot sites. Members of the TWG varied from site to site, either DENR personnel (CBFM coordinators, Provincial/Municipal Office staff) or LGU personnel (Agriculture and Planning Bureau), and the different activities through the TWGs were summarized into a report of case studies.¹⁷

However, the results of the field study conducted at the time of the ex-post evaluation confirmed that new TWGs had not been established when conducting the CBFM Program, and adequate

¹⁶ Of the eight sites that had been selected up to July 2006, it became clear that four of them faced land-related issues, such as duplication of land subject to other land registration systems. Therefore, the four sites were cancelled in April 2007, and one site was added in June 2007.

¹⁷ The recommendations included that the role of TWGs should be clearly stated in the CBFM activities agreement between the DENR and LGUs, and that TWGs should be established at the municipal level rather than at the provincial level.

monitoring was not being performed in the target areas. According to interviews with LGUs, this was due to the low priority given to development for implementation of the CBFM Program and the inability to allocate personnel and budgets to the program.

Indicator 2-3 was “10% of the total land area of each pilot site is managed sustainably by capacity-strengthened PO members through agroforestry, conservation of existing natural forest, and protection/maintenance of the plantations, including biodiversity concerns based on their approved CRMF/CRMPs.” In all the pilot sites, forest conservation activities, such as tree-planting and forest fire prevention, were conducted in excess of 10% of the areas under CBFM agreements.

The survival rate of trees planted in the three barangays targeted in the field study at the time of the ex-post evaluation was 10–80% (discussed in detail below).

Indicator 2-4 was “At least one prioritized activity stated in the five year work plans is carried out at each pilot site and a monitoring report is compiled at each site through process documentations.” All of the POs in the five sites conducted activities for afforestation, which is a high-priority activity in the plan. These activities included the canals of water harvesting structure, paddy straw mushroom cultivation, watershed forest conservation, agro-pastoral farms and PO enhancement. These activities were monitored by the TWGs, and summarized by the TWG members into a process report.

According to the questionnaire survey to the DENR, at the time of the ex-post evaluation, all water harvestings structure¹⁸ had maintenance problems and were not functioning well, and paddy straw mushroom cultivation had not continued operations because of problems on cultivation techniques and marketing (discussed in detail below).

Indicator 2-5 was “Four stages identified in the CBFM Implementation Framework are verified and a case study compiling lessons of field activities are prepared.” The effectiveness of the CBFM Implementation Framework was confirmed through activities at the pilot sites, and in order to compile the lessons learned taking into account experiences of failure, case studies of the nine sites, including the four sites¹⁹ cancelled because of land issues, were summarized into a report. In order to examine the draft improvements for the CBFM Implementation Framework, meetings were held on September 24 and October 30, 2008. The lessons learned from the case studies were put into order, and the reform measures were examined.

At the time of the ex-post evaluation, it was confirmed that these reform measures had not led to revision of the CBFM Implementation Framework.

(3) Output 3 was “The knowledge, skills and attitude of people’s organizations (POs), DENR

¹⁸ It includes the structures that do not function due to damage in pipe and that became dysfunctional after a few days from the day of formal turn-over.

¹⁹ Four sites: Sapangbato, Sumandig 1 and 2, Alas-asin

employees, LGUs and other relevant institutions involved in CBFM implementation in Region 3 are improved through training.” Output 3 was achieved because all of the set indicators were met. The achievement of each indicator at the time of completion and the continuation of activities at the time of the ex-post evaluation are as follows.

Indicator 3-1 was “At least 80% of all training participants from POs, DENR and other relevant institutions in Region 3 show a significant increase in knowledge in the Post Test.” Of the 24 training workshops conducted by the DENR Region 3 Office during the project period, apart from rapid rural appraisal (RRA) and training needs assessment, an overall improvement in knowledge was confirmed for 98% of trainees in the 17 training workshops²⁰ for which testing was conducted before and after the training.²¹

At the time of the ex-post evaluation, although counterparts had not put into practice all of the techniques they had acquired during the training,²² facilitation skills and the concept of participatory techniques, which had been acquired through activities conducted during the project implementation period, had been utilized within CBFM operations.

Indicator 3-2 was “At least 50% of training participants from POs, DENR and other relevant organizations in Region 3 carry out their individual Action Plans, which are prepared at the end of skills related training programs.” According to the results of a survey commissioned by the project to an external organization conducted before the completion of the project (the “impact survey”),²³ each group had achieved higher than the target 50%: 93% for POs (399 people), 77% for the DENR (105 people) and 76% for LGUs (10 people).

Indicator 3-3 was “90% of the implementers of the Follow-Up Scheme Activities (FUSA)²⁴ implement their action plans.” The project invited POs that had participated in training to submit action plans, and of the 12 POs that were provided assistance having been judged to have a strong capacity for implementing plans, all of them (100%) implemented action plans.²⁵ A record of these

²⁰ Including; orientation, training needs analysis, CBFM for instructors, participatory rapid appraisal techniques, para-legal, forest fire management, agroforestry, process documents, and practical goat raising.

²¹ Training had been targeted at the whole of the Philippines during the first half of the project, but this was changed to Region 3 during the second half. 1,176 people participated in all training conducted during the project period. Of this, 462 participated in training on the national level, and 714 within the jurisdiction of the Region 3 Office. The total number of participants for each target group was: 486 from POs, 178 from LGUs, 73 from NGOs, 168 from DENR Provincial Offices, 146 from DENR Municipal Offices, and 125 from the Regional Office.

²² During the first half of the project, training on simplified rural assessment through participatory development techniques, community mapping and forest management planning, etc. had also been provided at pilot sites within the CBFM Implementation Framework.

²³ Official name: Information Impact Survey and Trainee Follow-up Survey

²⁴ A feature of this support is that each participant draws up an action plan based on the content of the training, and then puts that plan into practice after the training (with necessary inputs being provided by the project based on the results of an appraisal).

²⁵ The activities included: agroforestry, forest fire prevention, construction of small-scale water supply and water storage systems and development of nurseries, coastal resources management through mangrove planting, forest management, stock farming, para-legal, and goat raising.

activities was summarized in a report.

According to the results of the questionnaire sent to the DENR, at the time of the ex-post evaluation, the relevant POs had maintained the activities supported by the project.²⁶

Indicator 3-4 was “One draft training curriculum is prepared based on the experiences of field activities within the jurisdiction of the Region 3 Office.” In collaboration with the Human Resource Development Service (HRDS) at the DENR, the Region 3 Office organized a committee comprised of DENR personnel and outside experts to prepare a *Training Guide*²⁷ for the nationwide extension of CBFM based on the experiences within the region. The final version was distributed to the DENR Regional Offices for adoption.

(4) Output 4 was “Existing practical information on CBFM reached and appropriated by the POs in Region 3.” Output 4 was achieved because all of the set indicators were met. The achievement of each indicator at the time of completion and the continuation of activities at the time of the ex-post evaluation are as follows.

Indicator 4-1 was “Communications surveys have been conducted on at least 12 POs (10% of POs within the jurisdiction of the Region 3 Office), and the information needs of POs are identified.” Members of 12 POs (pilot sites and follow-up training sites) were surveyed between 2005 and 2008, and their information needs were identified based on the responses of 395 people.

Indicator 4-2 was “At least 12 types of practical information materials (booklets, leaflets and comics) on CBFM are prepared.” Twelve²⁸ different information materials were prepared based on the needs identified above, and were distributed to 38 high-priority POs²⁹ (6,560 copies distributed).

Indicator 4-3 was “At least 10% of the 38 high-priority POs in the jurisdiction of the Region 3 Office are to show an interest in practical information disseminated.” The results of the impact survey showed that 421 members (74%) of the 38 POs where agroforestry activities were conducted received leaflets, and of this, 43% were actually interested in their content.

At the time of the ex-post evaluation, it was confirmed that the information materials prepared during project had not been reproduced and distributed after the completion of the project.

²⁶ The results of the field studies for four of the 12 relevant POs are discussed below.

²⁷ The curriculum contained in the *Training Guide* consists of: (1) CBFM Orientation, (2) Para-legal for CBFM, (3) Forestry Management within CBFM, and (4) Agroforestry.

²⁸ The information leaflets covered the following topics: grafting mangoes, cultivating and producing mushrooms, insect-repellant solution using smoke and ash, vermiculture and composting, bagging fruit, reinforcing riverbanks, making charcoal briquettes, making paper, agroforestry development, bamboo work, leafy plants, medicinal herbs and trees.

²⁹ Of the 128 POs within the jurisdiction of the Region 3 Office, those where project activities were conducted at least once.

Indicator 4-4 was “One strategy paper on information gathering and dissemination mechanisms which includes recommendations of the Forest Management Bureau is prepared.” A communications survey was conducted, and printed matter on information dissemination and communication was prepared and distributed. A strategic document was prepared based on monitoring and a trial of the Farmers Information Resources Management Method (FIRM),³⁰ and a workshop was held at the DENR Region 3 Office where the document was shared with CBFM coordinators.

According to a counterpart at the DENR Region 3 Office, at the time of the ex-post evaluation, extension using FIRM had not been implemented after the completion of the project because of the absence of an implementation plan and budgetary allocation from the DENR.

3.2.1.2 Achievement of Project Purpose

The Project Purpose was “Conservation, rehabilitation and sustainable utilization of forest and land resources within CBFM areas are done by capacity-strengthened people’s organizations (POs), with support from the capacity-strengthened Department of Environment and Natural Resources (DENR), LGUs and other relevant institutions.” The Project Purpose was achieved because all of the set indicators were met. The achievement of each indicator is as follows.

(1) Indicator 1 was “By June 2009, all pilot sites in this project and at least 30% of other people’s organizations (POs) in the Region 3 Office are to apply and put into practice appropriate technology for the conservation, rehabilitation and sustainable utilization of forest and land resources.”

The results of the aforementioned impact survey confirmed that, excluding those POs located in pilot sites, 42³¹ of the 123 POs (34%) located within the jurisdiction of the DENR Region 3 Office had adopted and put into practice appropriate technology provided through the project. Therefore, Indicator 1 was achieved.

(2) Indicator 2 was “By June 2009, at least 50% of members of each PO, the DENR, LGUs and other related organizations in the Region 3 Office, which participate in the CBFM Program, are to raise their awareness of CBFM and are to improve their capacity for planning and implementation.”³² The achievement of each indicator is as follows.

³⁰ FIRM is a hands-on training workshop lasting half a day or one day. Features of FIRM include: (1) neighboring residents serve as instructors and use regional resources; (2) it is a community-led workshop for which preparation, etc. is basically performed by POs; (3) it has a low budget because everything can be self-produced and training for instructors is not required; and (4) it allows for large numbers of people to participate because it can be held often. Although it was not included in the PDM, since the project did not have a dissemination component, a decision was made at the sixth meeting of the Joint Coordinating Committee (JCC) (February 2008) to adopt it. The FIRM technique was developed together with short-term experts in order to improve the dissemination effect.

³¹ POs currently engaged in follow-up training support, and residents engaged in agroforestry activities on DENR public land.

³² Reasons given for this included: strengthening the organization through the project, holding regular meetings, and increasing opportunities to learn new techniques from other members.

Table 1: Achievement of Project Purpose

Survey target (number surveyed)	Results of survey
People’s organizations (POs) (60)	82% (49) raised their awareness of the CBFM Program. 72% (42) recognized an improvement in the participation of their members.
LGUs (11)	82% (9) of LGUs observed a change in awareness and attitude and an improvement in performance following the training.
Staff at DENR Provincial/Municipal Offices (28)	92% (26) confirmed a change in approach to CBFM operations after the training and improved their awareness and knowledge about CBFM.

Source: DENR-JICA E-CBFMP (2009) Information Impact Survey and Trainee Follow-up Survey

As described above, all the indicators for the Project Purpose were achieved.

All of the activities based on the final PDM which was designed in the project were carried out, and as shown in section 3.2.1.1, the four Outputs were also achieved as planned. However, since there was no extension component for CBFM in the final PDM, a number of activities were added, including: (1) development and application of the “Agroforestry Farmer Field School (FFS)”³³ extension approach; (2) implementation of private-sector partnerships for the poor, and preparation of a *Facilitator Manual*; and (3) development and application of the “FIRM” extension approach. Achievement of the Project Purpose was brought about by accomplishing these four Outputs and through the additional activities.



Figure 1: Outputs Produced in the Project



Figure 2: Mangrove Reforestation in Zambales Province

³³ Farmer Field Schools (FFS) are an agricultural extension approach developed by the Food and Agriculture Organization of the United Nations (FAO). They are a hands-on training technique, whereby training is conducted in an exhibition field over a long period of time (about four months). In the project, this approach was developed for uplands in cooperation with the LGUs responsible for agricultural extension. In conjunction with the Department of Agriculture, the empirical experiences in areas under CBFM agreements were compiled into the “FFS Field Guide,” and this was distributed to the DENR and the Department of Agriculture.

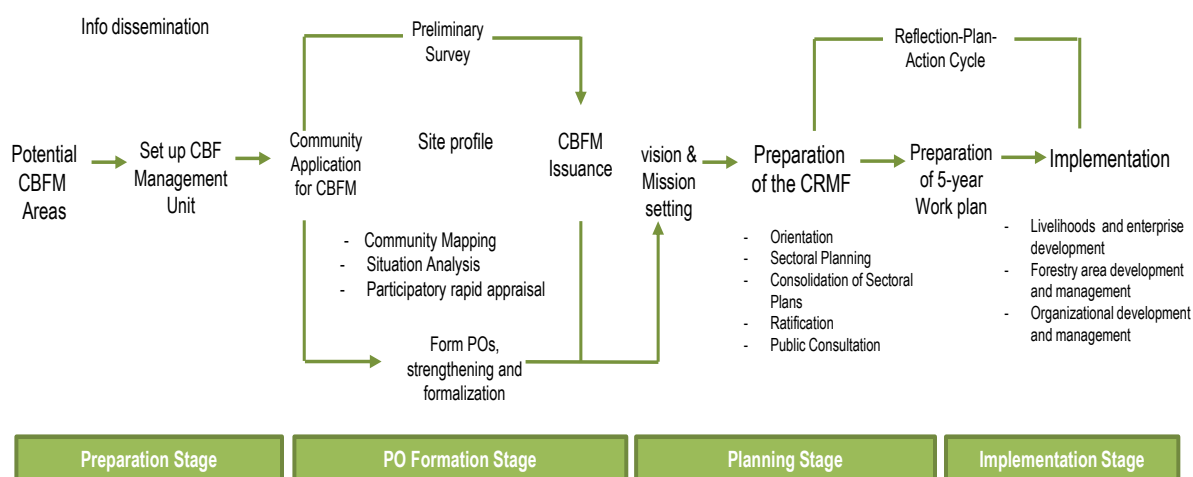
3.2.2 Impact

3.2.2.1 Achievement of Overall Goal

Based on the final PDM, the Overall Goal to be achieved five years after the completion of the project was “Conservation, rehabilitation and sustainable utilization of forest and land resources within Community-Based Forest Management (CBFM) areas are promoted to contribute to the overall sustainable forest management of the Government of Philippine.”

The indicator established for judging whether the Overall Goal had been achieved was “By 5 years after project completion, the project experiences and technologies leading to the conservation, rehabilitation and sustainable utilization of forest and land resources are fully sustained and observed in the E-CBFM pilot sites and eventually shared and utilized by at least 20% of CBFM projects in the Philippines.” However, by all accounts of the stakeholders, by the completion of this project, there had been no discussion or agreement among the people involved in the project, including JICA and the DENR, regarding the method of achieving (implementing) the Overall Goal and the method for measuring³⁴ the Overall Goal once the Project Purpose had been achieved.

Therefore, in this evaluation, it was decided to confirm the degree of achievement at the implementation stage of the four stages of the CBFM Implementation Framework (Figure 3), by dividing achievement between the national level and the Region 3 level. At the time of evaluation, there were 1,790 CBFM sites, and so achievement is estimated on the assumption that the “number of CBFM projects” in the indicator is 1,790.



Source: DENR

Figure 3: CBFM Implementation Framework

Following completion of the project, the manuals and guidelines that were prepared during the project have been used as reference through a number of special government programs, such as the

³⁴ According to the DENR, the plan is to engage a consultant to decide on the survey and measurement techniques.

Upland Development Program, the National Greening Program³⁵ and the Comprehensive Agrarian Reform Program (CARP), and nationally, training is being conducted and practices maintained in such areas as: (1) agroforestry, (2) para-legal, and (3) forest fire management. On the other hand, the application of Agroforestry FFS, FIRM and PEP developed through this project is extremely limited.

The materials provided by the DENR only show the number of participants in the abovementioned training workshops. The agroforestry project conducted under CARP between 2007 and 2012 appears to have targeted a total of 590 POs (actual number unknown), and the number of CBFM projects that used the training manuals and guidelines and the number of targeted POs cannot be confirmed. On the other hand, there are 128 POs within the jurisdiction of the DENR Region 3 Office, and the project Outputs (*Training Guide* and training techniques) have been directly applied to at least 51 (41%) of them by utilizing funds from other programs. Accordingly, it would appear that the Overall Goal is likely to be somewhat achieved.

3.2.2.2 Continuity of the project effects at both pilot sites and follow-up training sites

This section examines the sustainability of project effects at the PO level at the time of the ex-post evaluation, based on interviews with POs during field surveys at both pilot sites and follow-up training sites, as well as on questionnaire-based beneficiary surveys.

As shown in Table 2, of the three pilot sites where field surveys were conducted, the only site where POs were active was in Barangay Bangkal in Bataan Province. Most of the members in the PO in this barangay are faculty members at the local university, and the steering committee is composed of experts in CBFM, forestry and management. Members of the steering committee view CBFM activities as part of their social responsibility. Utilizing the university's public network, they secure funds from other government and non-government organizations for supporting the livelihood improvement of other members. This PO is not a typical example of CBFM. According to the CBFM coordinators, who are in charge of the DENR target area, most POs tend to step up activities when they have funding support from the DENR, but as soon as the support ends, the activities become stagnant. The DENR has also continued to provide support to POs that are under CBFM agreements, such as allocating funds for special government programs. In this sense, the real situation is different from the original objective of having POs with improved capacity to conduct forest management in a self-reliant manner.

³⁵ Although the DENR is the implementing agency for the National Greening Program, it has been implemented in coordination with other relevant government agencies, including the Department of Agriculture, the Department of Agrarian Reform, the Department of Education, the Department of Social Welfare and Development, the Commission on Higher Education, and the Department of Budget and Management. The objectives of the program include: (1) poverty reduction; (2) sustainable management of natural resources; (3) provision of food goods and services, such as timber, fiber, non-timber products and water regulation; (4) improvement of social and environmental awareness for forests and watersheds; (5) improvement of awareness among the youth and other stakeholders for their shared responsibility in the sustainable management of tree plantations and forest resources; (6) harmonization of the greening efforts of the government, civil society and the private sector. Source: DENR Memorandum Circular No.2011-01 "Guidelines and Procedures in the Implementation of the National Greening Program"

Table 2: Continuity of Project Effects at Pilot Sites

Activity description	Continuity of project effects
Maniniog Barangay, Tarlac Province	
PO meeting rooms	Even now, the Cacupangan Tree Farmers Association holds monthly meetings. The implementing agency has continued to provide support after the completion of the project, by utilizing the funds of other special government programs. According to the local CBFM coordinator in charge, it is difficult to invigorate the activities of the PO without the sustained support from the DENR. In 2012, 1.3 million pesos were allocated from the Comprehensive Agrarian Reform Program (CARP) for the purpose of implementing agroforestry and other projects.
Water harvesting structure	Water harvesting structure no longer function fully because of holes in hoses. Since the authority for maintaining the canals was transferred to the PO, usage fees have not been collected. When constructing similar small-scale water harvesting structures needed for releasing water into forests, the implementing agency has not designed the system in a way that secures funding from the collection of usage fees for the PO's required maintenance costs. Therefore, in cases like now when the facilities malfunction, the PO can no longer carry out repairs straight away. For this reason, the PO plans to collect a repair levy from members.
Pastoral farming	On the advice of experts from the Tarlac College of Agriculture, one of the objectives of pastoral farming activities was to strengthen the PO by communally managing goats. However, after the completion of the project, the person in charge of managing the farm abandoned his duties, and being unable to recruit a replacement, it was decided to distribute the goats to individual members. The revolving fund ³⁶ approach was supposed to be applied to those goats, but now the PO is not managing that. Consequently, the situation is now that no one knows how many goats there are.
Poonbato Barangay, Zambales Province	
Water harvesting structure	The Loob Bunga Settlers Association started out as a federation of seven neighboring POs, but now, only four POs are members. The association is currently defunct, in the sense that it does not hold regular meetings or conduct joint activities. "Pinatubo Support for Impoverished Aeta Tribes" is the only PO that is conducting group activities. The area is primarily used for resettling victims of Mount Pinatubo. It is dry, the land is covered in rocks and rock formations, and the soil is oxidized. (It is the so-called "Cogon Grasslands.") For this reason, securing water is necessary when planting trees. However, after the facilities were completed (after they were handed over, immediately before completion of the project), the hoses ruptured within a few days, and the canals could no longer be used. ³⁷ As a result, the survival rate of the forests planted in this area was no more than 10% (water could only be secured for areas close to the water source). Even now, forest fires are an annual occurrence.

³⁶ A "revolving fund" is a series of mechanisms whereby: (1) Goats are distributed to beneficiaries based on the needs of residents; (2) The beneficiaries breed the goats they have received; (3) If a goat has offspring, those kids are given to the next beneficiaries.

³⁷ The water harvesting structures were proposed by the PO, and designed by engineers at the local municipal government (as part of the collaboration with the LGU). Construction was funded by the PO (wages), and supervised by the local DENR office (CENRO: Community Environment and Natural Resources Office). The PO did make a request for support to the DENR and the LGU, but it was only supplied a partial hose from the LGU, and has not yet reached a fundamental solution. The problem is the obscurity as to where responsibility lies. There are no engineers at the DENR, and it cannot perform a technical validation of the design. The LGU claims that there are no problems with the design, and that the problem was in the construction process. In particular, because maintenance following completion of the facility was transferred to the PO, the DENR and the LGU claim to not bear primary responsibility. If the original construction had been outsourced, then there would have been a guarantee period after the completion of the facility, and the contractor would have been responsible for any problems, but in this case, each of the organizations will not, or cannot, assume responsibility.

Activity description	Continuity of project effects
Bangkal Barangay, Bataan Province	
Mushroom cultivation	The Bangkal Upland Farmers Association conducted mushroom cultivation in a three-way agreement with the Bataan Peninsula State University and the Abucay municipal government in the target area. Under the agreement, the PO planned to utilize the facilities of the university, and also planned to receive guidance on cultivation techniques. However, the project was discontinued because: (1) The PO was unable to access the banana peels needed for cultivating mushrooms; (2) The mushroom spawn became infected with various bacteria; and (3) The temperature was too low. Mushroom cultivation was also conducted in the Ayala area, which was targeted by the pilot activities but not subject to the field study on this occasion, but activities were similarly suspended because of technical issues.

Source: Beneficiary surveys

There have also been issues on the condition of facilities and equipment provided by the project. In particular, there have been problems in the design (Zambales Province only) and maintenance of water harvesting structure, which are essential for maintaining forests. Thus their efficacy has not been sustained. Based on interviews with all DENR personnel who manage the sites targeted by this project, there have also been similar problems at all the other sites not covered by these field surveys. The problems can be attributed to a system of maintenance not being in place when the facilities were handed over to the POs. Pursuant to the provisions of the Local Government Code 1991, the obligation for maintenance of a facility is transferred to the PO after completion of the facility. However, at the time of transfer, methods of operation and maintenance, such as the collection of fees necessary for maintenance, had not been decided. For this reason, especially at the arid site in Zambales Province, the survival rate of planted trees was extremely low (10%) because of a lack of water. Again, the case of mushroom cultivation being introduced without a technical validation and marketing survey being performed has brought about a suspension of activities.

Activities at pilot sites have played a central role in the project, having a bearing on all Outputs, such as policy recommendations and the development of various training and extension techniques. In particular, the participatory PO formation, situation analysis and planning in the run-up to implementation takes about four years. On the other hand, continuity of the efficacy of the pilot activities themselves after the completion of the project has not been secured because of inadequate system design for operations and maintenance and to a lack of feasibility studies prior to the activity. From the perspective of the project, even pilot activities represent an enormous opportunity cost for residents participating in the activity. The residents have high hopes, and the success or failure of the activity is also linked to the motivation for residents to participate in forest management. Given this, constructing facilities requires system design that gives consideration to the continuity of effects after the conclusion of the project, and the introduction of livelihood activities necessitates verification of feasibility which also takes a marketing perspective into consideration.

On the other hand, continuity of efficacy in follow-up training sites is higher than in pilot sites. The reason for this lies in the capacity of the PO and the support selection process. In these activities,

the representative of the PO conducted issue-specific training, and based on the results of that training, participants formulated actions plans. From those action plans, the people involved in the project decided on the support, bearing in mind the relevance of the plan and the feasibility of the project. In other words, the project effects have continued because support was provided to a PO that possesses a strong capacity for drawing up and implementing plans. Given this, it can be confirmed that improving the organizational capacity of residents is also important for producing and sustaining the effects of external support.

Table 3: Continuity of Project Effects at Follow-up Training Sites

Activity description	Continuity of project effects
Nambalan Barangay, Tarlac Province	
Extension of CBFM areas, stock farming	The Nambalan Farmers Association currently holds regular meetings once every quarter. The head of the association is an agricultural extension worker at the LGU. Therefore, other members are able to receive technical support from him. By using a revolving fund, the support is extending to all members who want it. As a consequence, the initial 22 head of goats provided by the project have increased to 50, acting as supplementary revenue. With regard to forest management, given many residents in this target area earn a living by making furniture, the forests are in good condition.
Papaac Barangay, Tarlac Province	
Forest fire management	The Papaac Upland Farmers Association holds regular meetings once every quarter. Steering committee meetings are held as required. Only steering committee members received training from the project, and necessary equipment was provided. Some of the equipment provided from the project has malfunctioned, but has not been repaired. In response to this, the head of the PO states that the main roles of the organization are to: (1) establish fire control lines (clear tracts in forests at regular intervals to prevent fires spreading); (2) monitor inside the CBFM area; (3) deploy mainly indigenous people living in the forest (Aeta) as security guards; and (4) collect fines for illegal acts. As a result of daily monitoring activities, the frequency of forest fires has decreased. (These used to occur every year, but now it is once every few years.) Between 1970 and 1980, approximately 80% of the forested area was destroyed by fire.
Libaba Barangay, Zambales Province	
Project for the autonomous management of coastal resources through mangrove planting	The Mangingisda Multipurpose Farmers Association holds monthly meetings. Using the surplus funds from the production of seedlings commissioned by DENR-CARP, the PO has purchased fishing vessels, and lends them out to its members. The monitoring of mangroves is performed by members that fish in the area. However, with dynamite fishing continuing unabated in coastal waters, fish catches are on a downward trend. The merits of mangrove planting include: (1) harvesting of shellfish, etc.; (2) protection of dwellings from wind and waves; and (3) the sale of mangrove seedlings.
Duale Barangay, Bataan Province	
Prevention of forest fires	The Limay Bataan Farmers Association was formed by LGUs in 2002 (also includes indigenous Aeta). It holds regular monthly meetings, and it has also secured external financing from the DENR and the Department of Agriculture. All of the equipment provided by the project for the prevention of forest fires has been properly managed under the supervision of an administrator, and monitoring has been conducted for the prevention of forest fires. There have been no fires since 1997. The effects from combining support for tree-planting, etc. from the DENR and others include: (1) land use and development from planting trees; (2) increase in forest density; (3) no forest fires; and (4) vegetable gardens.

Source: Beneficiary surveys

Based on the above, while issues have been observed in the continuity of some activities, it is expected that the Project Purpose was achieved, and the Overall Goal will also be somewhat achieved,

such as application of agroforestry and other technologies developed through the project. Therefore, the effectiveness and impact of the project are fair.

3.3 Efficiency (Rating:③)

3.3.1 Inputs

Table 4 shows the planned inputs and the actual inputs at the completion of the project.

Table 4: List of Inputs

Inputs	Planned	Actual (at completion)
1. Japanese Side		
(1) Dispatch of experts	<ul style="list-style-type: none"> • 5 for Long-term • 2-3 per year for Short-term: 	<ul style="list-style-type: none"> • 5 for Long-term (total of 10) • 4 for Short-term
(2) Acceptance of trainees	2-3 per year (forest management)	36 (forest management)
(3) Equipment	Necessary equipment for preparing seedling plots, processing information, training, etc.	Equipment used on site, such as vehicles, communications gear, mowers, etc., and office equipment
(4) Local operation costs	Approximately 270 million yen	92 million yen
Total cost	Approximately 720 million yen	571 million yen
2. Philippine Side		
Counterparts	Not mentioned	55
Offices for experts	1 room	1 room
Budget allocation	Approximately 50 million yen	Approximately 62 million yen (31.53 million pesos)
3. Implementation Period		
	5 years	June 15, 2004 - June 14, 2009 (5 years)

3.3.1.1 Elements of Inputs

Inputs from the Japanese side were provided as planned, except for some inputs as described below. Funds for operational costs and personnel allocations from the Philippine side were provided as planned. However, during the first three years and eight months of the project, the PDM was revised three times, and changes were made to the target areas and scope. Consequently, some of the inputs in the first half of the project did not lead to achievement of any Outputs or the Project Purpose. These are described in detail below.

- With respect to the training and information component, the activities base was transferred from the central office to Region 3 in January 2007, two years and seven months after the start of the project. Since the counterpart and scope were changed, experts ended up providing technical guidance to a new counterpart based on the new Output indicators. As a consequence, technical guidance provided to that time was not used directly for any Outputs or the Project Purpose. However, since the Overall Goal was for the transfer of technology through the DENR to other regions, this component contributed to achievement of the goal.

- Training during the first half of the project had been conducted on a national level. Under the final PDM, the training component was narrowed down to Region 3, and its contribution to achievement of the Outputs and Project Purpose became limited. Specifically, of the total 1,176 training participants, 462 received national training, and 714 received Region 3 training. Thus, 39% of all training has not directly contributed to achievement of the Outputs and Project Purpose under the final PDM. However, as described above, the training did contribute somewhat to achievement of the Overall Goal (application of agroforestry and other technologies developed through the project).
- Activities and inputs for the information component during the first half of the project included the following: (1) production of a project newsletter; (2) production of a booklet introducing the project; (3) production of a website for the project; (4) development of a database for the CBFM Program; (5) sharing of information with CBFM-related NGOs, academic societies and other organizations both in the Philippines and abroad; and (6) preparation of information, education and communication (ICE) teaching materials.³⁸
- Apart from item (6), none of the inputs during this period are relevant to achievement of the Outputs and Project Purpose for the information component under the final PDM. However, relative to the overall total value of inputs, they account for a small amount.
- Because of delays in the CBFM preparatory stage and PO formation stage activities at the pilot sites, agroforestry experts, which were originally required for the implementation stage, were not well utilized during the first half of the project. The plan had been for agroforestry experts to be dispatched for a period of five years, but because of JICA's policy at the time of the mid-term evaluation study, it was decided to address these activities using short-term experts rather than long-term ones. However, after that study, no short-term experts in this field were dispatched, and no experts in this field were dispatched during the second half of the project when they were most needed at the pilot sites. Thus, there were issues on the timing of dispatch. Under such circumstances, the team of experts in training, information and extension in rural areas provided guidance on agroforestry activities.

As mentioned above, the failure to connect some of the inputs during the first half of the project with the Outputs and Project Purpose can be traced back to the inappropriateness of the plan. However, during the first half of the project, because training had been conducted on a national level, part of these inputs have contributed—not to the Project Purpose (within the jurisdiction of the Region 3)—but to the Overall Goal (whole parts of the Philippines)³⁹. In this sense, it can be said that the inputs of the first half of the project were used effectively.

As for the equipment provided from the Japanese side, which included vehicles, materials and office equipment needed for carrying out the pilot activities in Region 3, the questionnaire survey to

³⁸ Materials provided by JICA

³⁹ The extension (of agroforestry in particular) to other regions was initiated through government programs during this project's implementation period.

the DENR at the time of the ex-post evaluation and the visual inspection conducted during the field study showed that the operational status of the provided equipment was generally good. This is because necessary equipment was provided for activities based on the needs of the DENR central office, local DENR offices and local residents.

3.3.1.2 Total Cost

In contrast to the planned total cost of approximately 720 million yen, the actual total cost was 21% below schedule at 571 million yen. In terms of the value of inputs, the dispatch of experts, provision of equipment and acceptance of trainees were mostly as planned. As for local operation costs, whereas the planned amount was approximately 270 million yen, actual costs were considerably less at 92 million yen. This is due to the target area being shifted from the whole of the Philippines to Region 3.

3.3.1.3 Period of Cooperation

The planned period of cooperation was 60 months, and the actual period was 100% as planned.

In light of the above, the project had a number of issues due to changes in inputs and Outputs during the implementation period. For instance, as described above, some of the inputs during this period could not be utilized for achieving the Outputs and Project Purpose. However, they have contributed to achieving the Overall Goal, and they make up only a small percentage of the total project cost. Both project cost and period of cooperation were within the plan. Therefore, efficiency of the project is high.

3.4 Sustainability (Rating:②)

3.4.1 Related Policy towards the Project

Policy sustainability is guaranteed, but there are a number of issues with institutional sustainability as discussed below.

Under the “Philippine Development Plan 2011–2016” and the “Revised Master Plan for Forestry Development (MPFD) 2003–2018,” community-based forest resources management is positioned as a cross-cutting strategy for the entire forestry sector. According to the DENR, as stipulated in the CBFM Strategic Plan, even at the time of the ex-post evaluation, the DENR aims to expand the areas under CBFM agreements to nine million hectares. Furthermore, under the current Aquino Administration (2010–2016), based on Executive Order No. 26, implementation of the National Greening Program (2011–2016) in coordination with various agencies for the reduction of poverty, protection and conservation of resources, enhancement of productivity and measures to mitigate climate change has been positioned as a national priority program. The objective of this program is to plant 2.5 billion seedlings in 1.5 million hectares of lands of the public domain, including existing areas under CBFM agreements. Thus, policy sustainability is guaranteed.

From the completion of the project until the time of the ex-post evaluation, a budget for special government programs relating to CBFM had been contributed for the following: (1) Upland

Development Program (2009–2010: 1.5 billion pesos); (2) CBFM-Comprehensive Agrarian Reform Program (CARP) (2009–2012: 570 million pesos); and (3) National Greening Program (2011–2016).⁴⁰ This budget has been mostly allocated to reforestation programs (with agroforestry component) and livelihood improvement (primarily for the establishment of nursery for seedling production). Special government programs are top-priority programs that the newly appointed President comes out with following a change in administration. Although the details of their content and the size of their budget differ under each administration, they are meant to be implemented for each sector. Their budget is incorporated into the regular budget; thus, even though they are called special government programs, they are in fact budgeted for as usual. Since the current Aquino Administration has placed an emphasis on environmental problems, the size of the funding for the National Greening Program underway at the time of the ex-post evaluation was far larger than that for the Upland Development Program implemented under the previous administration.

Meanwhile, there are some issues on the institutional aspects of the sustainability of the CBFM Program, as described below. According to an interview with the DENR, although the DENR's policy is to continue expanding areas under CBFM agreements, it is faced with the following limitations of CBFM agreement expansion. First, as shown in the section on "relevance," for a while in 2005–2006, there was a policy of reviewing the CBFM agreements. Given this, residents in potential CBFM areas have concerns about agreements being reviewed in the future, and cannot be motivated to participate in the program. Next is the point that potential CBFM implementers who own individual certificates of land use will not show interest in jointly owned forests, since they feel that individual rights of ownership cannot be specified. Furthermore, for these reasons, it takes the DENR time, money and personnel to explain and mobilize residents to the point of concluding a CBFM agreement, and there are limits to the current implementation structure of local offices.⁴¹ Finally, pursuant to the Local Government Code, the management has come under the jurisdiction of LGUs, while monitoring and evaluation and also issuance of land tenure instrument remain as functions of DENR. Thus, the cooperation of LGUs is essential. However, it is actually hard to obtain their cooperation in connection with the scope of that authority.

In response to such circumstances, the DENR is internally reviewing how the CBFM Strategy is implemented, such as the possibility of establishing forest management units at the barangay level (the smallest administrative unit) and making CBFM agreements with districts comprised of a number of barangays covering different ecosystems.

3.4.2 Institutional and Operational Aspects of the Implementing Agency

A number of elements lacking sustainability can be observed in the structure of the DENR.

In this project, based on the experiences in Region 3, CBFM-related technologies and techniques have been organized systematically, and many manuals and guidelines have been prepared for extending the technologies and techniques to other regions. DENR Region 3 is organized around a

⁴⁰ The implementing agency was allotted about 1.33 billion pesos in 2011 and about 2.68 billion pesos in 2012.

⁴¹ In particular, labor, time and budgets have been apportioned to reforestation work under the National Greening Program.

number of central counterparts whose capabilities were strengthened during the implementation period. Despite the retirement of a few of these counterparts, even after the completion of the project, there were no significant changes to the personnel structure, and systems were in place to sustain the project effects. However, under the National Greening Program (special government program), currently, in addition to their normal duties, CBFM coordinators at the field level have been assigned the significant duty of achieving imposed target figures for reforestation. Furthermore, as mentioned previously, there are issues regarding the continuity of project effects at pilot sites, and it would appear that the DENR as a whole has not establish implementing system and also monitoring and evaluation mechanism for the CBFM Program.

On the other hand, by implementing national government programs centered in reforestation work, such as the National Greening Program, it is consequently possible to sustain a certain degree of the project's effects at the implementation stage of the CBFM Implementation Framework. In implementing this program, DENR Regional Offices nationwide have utilized each of the training modules contained in the *Training Guide*, particularly the agroforestry module, as reference material for reforestation work.⁴² However, the more practical and effective Agroforestry FFS, which was developed by the project in collaboration with the Department of Agriculture, has thus far only been put into practice within the jurisdiction of the Region 3 Office, not at the national level.

The problem here is that, during the project implementation period, there was no discussion among the project stakeholders, including both DENR and JICA officials, as to the specific plan, implementation structure and division of roles for achieving the Overall Goal.⁴³ To expand the project experiences and technologies to other regions, a systematic implementing structure is needed, with the central DENR office at its core. However, the office does not have a division to coordinate and manage all of these outputs such as manuals, study reports and information leaflets produced by the Project. Nor has a database that keeps all outputs in soft-files been developed.⁴⁴ What happens now is that most outputs are owned personally and partially by the counterpart at the time. Thus, a structure will need to be built so that outputs can be shared and utilized easily among the people involved in implementing CBFM, both inside and outside the DENR.

3.4.3 Technical Aspects of the Implementing Agency

Counterpart technologies have been maintained to a certain level after completion of the project by putting them into practice in the counterpart's normal duties or in special government programs.

The DENR plans to utilize the manuals and other items developed during the project in the Forestland Management Project, the abovementioned Japanese ODA loan project. Skills in such areas as agroforestry, para-legal, and fire management, which were systematically organized during this

⁴² The *Training Guide* has been distributed to all Regional Offices, where it is utilized when conducting training for POs.

⁴³ Based on interviews with the officials, it seems that, during the second half of the project, they focused on catching up on the first-half progress of the project, and had no spare time to formulate a concrete implementation plan for the question of how to sustain the project effects after project completion.

⁴⁴ Both soft and hard copies are stored at the division in charge of CBFM at the DENR Region 3 Office.

project,⁴⁵ are being acquired and put into practice by counterparts, through distributing the manual and conducting training targeted at the whole of the Philippines and Region 3. In contrast, application of new forest management techniques,⁴⁶ such as Agroforestry FFS, FIRM and PEP, which were developed during this project, is limited. The reason is that a manual developing and systematically organizing these techniques has not been distributed nationwide, and after completion of the project, the manager at the central DENR office has not conducted training or orientation for local CBFM coordinators. With respect to the Region 3 Office, the Agroforestry FFS has been implemented utilizing the funds of other special government programs, but apparently FIRM and PEP cannot be put into practice because of a lack of budget allocation from the DENR.⁴⁷

Through discussion with this Evaluation Team, it is planned that during the Japanese ODA loan project mentioned above, the DENR will launch its own initiatives for sustaining the project effects, such as using the counterpart at the DENR Region 3 Office as the training instructor and provide training to CBFM coordinators in the areas targeted by the project, and providing opportunities for local residents in the target areas to visit the activity sites in Region 3 and exchange ideas and opinions.

3.4.4 Financial Aspects of the Implementing Agency

The counterpart has used national government programs to secure the funds necessary for administering the implementation stage of the CBFM Implementation Framework.

The DENR's overall budgetary allocation from the completion of the project until the time of the ex-post evaluation is as shown in Table 5. Reforestation work, including the National Greening Program, is contained in budget item "2. Forest development". Item "4. CBFM" includes the following: (1) preparatory work for CBFM agreements (preparation to shift from other land-use certificates to CBFM agreements, PO formation/strengthening and registration, land surveys and mapping); (2) documentation of successful cases; and (3) monitoring and evaluation.

⁴⁵ Training on these technologies had been conducted prior to the project being implemented, but during this project, improvements were made to the content of the training and modules were created.

⁴⁶ According to questionnaire surveys and interviews of counterparts at the Region 3 Office, the applicability and effectiveness of these techniques in the field is extremely high.

⁴⁷ According to interviews with DENR officials, all activities at local offices are prescribed along with budgets in accordance with an annual action plan that is prepared at the beginning of each financial year, and unless there are specific instructions from the central office, local offices cannot independently implement new activities.

Table 5: DENR Budget (2009–2012)

(Unit: thousand pesos)

	2009				2010			
	Personal Service	Maintenance & Other Operating Expenditures	Capital Outlay	Total	Personal Service	Maintenance & Other Operating Expenditures	Capital Outlay	Total
1. Forest Management Service	768,998	39,132	794	808,924	758,318	56,548	0	814,866
2. Forest Development	95,254	215,723	1,293,347	1,604,324	92,459	50,911	1,115,441	1,258,811
3. Forest Protection	448,599	80,117	8,000	536,716	439,848	278,602	0	718,450
4. CBFM	50,357	48,241	2,379	100,977	50,739	140,874	0	191,613
5. Soil Conservation and Water Management	10,953	322,343	85,083	418,379	10,953	85,782	11,000	107,735
6. Forest Boundary Delineation & Land Use Allocation	118,590	317,805	0	436,395	117,919	291,676	0	409,595
Grand Total	1,492,751	1,023,361	1,389,603	3,905,715	1,470,236	904,393	1,126,441	3,501,070
	2011				2012			
	Personal Service	Maintenance & Other Operating Expenditures	Capital Outlay	Total	Personal Service	Maintenance & Other Operating Expenditures	Capital Outlay	Total
1. Forest Management Service	821,509	46,188	0	867,697	841,350	71,796	0	913,146
2. Forest Development	98,445	157,961	1,173,182	1,429,588	99,876	1,002,456	1,108,371	2,210,703
3. Forest Protection	466,109	208,679	16,570	691,358	464,048	406,511	67,037	937,596
4. CBFM	53,800	46,203	0	100,003	55,456	48,472	2,379	106,307
5. Soil Conservation and Water Management	10,953	102,769	261,000	374,722	10,953	105,936	261,000	377,889
6. Forest Boundary Delineation & Land Use Allocation	128,249	281,355	0	409,604	134,300	236,341	0	370,641
Grand Total	1,579,065	843,155	1,450,752	3,872,972	1,605,983	1,871,512	1,438,787	4,916,282

Source: DENR

At the time of the ex-post evaluation, as a result of implementing the National Greening Program, financial sustainability of the implementation stage of the CBFM Implementation Framework (see Figure 3) has been secured until 2016. In particular, 56% of the overall 2012 DENR budget has been allocated to reforestation work in the CBFM implementation stage. In contrast, the preparatory stage, PO formation stage and forest management planning stage of the CBFM Implementation Framework account for 6% of the overall budget for 2012. Although limited, a stable budget has been allocated, and a certain degree of financial sustainability is expected to be secured.⁴⁸ According to the DENR, the budgets of national government programs can also be allocated to activities in the preparatory stage, PO formation stage, forest management planning stage, and implementation stage particularly for plantation establishment, agroforestry development and seedling production (see Figure 3).

In light of the above, some minor problems have been observed in the institutional and structural aspects of the implementing agency. Therefore, sustainability of the project effects is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

The project purpose of the Enhancement of the Community-Based Forest Management Program (E-CBFMP) was that conservation, rehabilitation, and sustainable utilization of forest and land resources within CBFM areas are done by the capacitated people's organizations (POs) on their own

⁴⁸ Although there have been no new CBFM agreements since completion of the project, at the time of the ex-post evaluation, 63 POs nationwide were at the preparatory stage, and budgets had also been allocated for these activities.

initiatives with support from the capacitated Department of Environment and Natural Resources (DENR), local government units (LGUs) and other relevant institutions. The Project is aimed at promoting a national strategy for forest management in the Philippines; thus its consistency with the national policy, the needs of the relevant sector in the Philippines and with Japan's ODA policy is high. However, despite the high consistency of the Project Purpose, there were issues with the appropriateness of the initial project design. For example, the linkage among Outputs was low, and the Outputs did not logically link with the Project Purpose. This had an adverse effect on management of the project and achievement of Outputs. Therefore, relevance of the project is regarded as fair. The Outputs and the Project Purpose, which were revised during the project, have been achieved mostly as planned, and some parts of the overall goal are expected to be achieved through utilization of technologies developed by the Project. However, some issues remain with continuity of the project effects. Therefore, effectiveness and impact of the project are also regarded as fair. The project stayed within the initially planned bounds for both the implementation period and the project cost. Therefore, the efficiency of the project is regarded as high. A few slight problems have been observed in the institutional and structural aspects of the implementing agency. Therefore, sustainability of the project is regarded as fair.

In light of the above, this project is evaluated to be partially satisfactory although having produced certain effects.

4.2 Recommendations

4.2.1 Recommendations to the Implementing Agency

- (1) Creation of a database on the Outputs produced in the project, and establishment of methods for managing information

In this project, tools were developed for CBFM-related training and information dissemination, and these were compiled into manuals and guidebooks. Through pilot activities and follow-up training support, other reports were also produced, such as case studies and collections of policy recommendations. However, there are no divisions or managers at the central DENR office to coordinate and manage these outputs produced by the Project. For this reason, the experiences and technologies utilized in the project are not systematically shared because of counterparts being transferred. Therefore, the CBFM Division in the DENR's Forest Management Bureau should obtain the project materials and outputs currently stored at the DENR Region 3 Office, make soft copies and put them onto a database, designate an information manager, and establish a system whereby this information can be shared with the Human Resource Development Service, which is in charge of training nationwide, and with other Regional Offices.

- (2) Establishment of an extension system utilizing the Outputs at each stage of the CBFM Implementation Framework

An extension system is needed in order to maximize the project effects. For example, with regard

to the *Training Guide*, which is a practical summary of the content of CBFM training, below are a few options for extension. In collaboration with the Human Resource Development Service and the Forest Management Bureau (CBFM Division) of the central DENR office, the following approaches may be taken: (1) Modules could be revised as needed based on experiences in the field; (2) Training modules could be added according to the needs in the field; and (3) Instruction on the details of the changes could be cascaded to CBFM coordinators, DENR → Regional Offices → Provincial Offices → Community Offices.

During the project implementation period, it was verified that new techniques developed in the project, such as the Agroforestry Farmer Field School (FFS), the Farmers Information Resources Dissemination Model (FIRM), and the Private Enterprise Partnership (PEP), are effective in promoting CBFM. The implementing agency has also recognized that they are effective and highly applicable. In order to translate directly into capacity building for POs, hand-on training which also includes site visits needs to be steadily implemented, targeted at CBFM coordinators nationwide, and using the counterpart at DENR Region 3, who has experience in implementation, as the training instructor.

(3) Formulation of concrete implementation plan and budgetary measures for extending project outputs

A specific action plan and budgetary measures will be needed to enable the above recommendations. Under the current administration, the DENR has been allocated a larger budget than the past few years through special government programs. However, these programs are for reforestation work undertaken by existing POs, and are different to the CBFM Implementation Framework approach which includes the development of self-reliant POs using participatory techniques. In order to address more sustainable forest management, the capacity building of residents using participatory techniques is essential. Accordingly, consideration should be given to reviewing the allocation of ordinary budgets to activities using a new approach, and to utilizing funds from special government programs and from the Forestland Management Project, which is currently underway being financed through a Japanese ODA loan. Moreover, a concrete implementation plan should be formulated and included in the DENR's annual business plan and investment plan.

4.2.2 Recommendations to JICA

At the time of the ex-post evaluation, the DENR was currently implementing the Forestland Management Project (loan agreement (LA) signed in 2012) which is financed through a Japanese ODA loan. Going forward, JICA should give consideration to the recommendations outlined above. Monitoring should be continued so that the lessons learned, recommendations and outputs from this technical cooperation project are used in the Japanese ODA loan project mentioned above, and support should be provided to the DENR's initiatives as the occasion demands.

4.3 Lessons Learned

(1) Highly feasible project design, and timely design changes as needed

This project was commenced without first fully verifying the feasibility of the project design and the implementation scenario. As a consequence, much effort, time and money ended up being spent on making revisions, and this had a serious impact on the progress of the project. Thus, when planning, it is essential that: (1) a feasible scope be set, based on the scale of the implementation period, project cost and inputs; (2) there be relevance among the Outputs and with the Project Purpose; (3) a feasible implementation scenario (an extension plan which also includes setting specific methods and the scale for extending the project from pilot activities to the whole country) and schedule be prepared; (4) the position of Japanese experts in the Outputs and the scope of their work be clarified; (5) measurable quantitative and qualitative indicators be set; (6) items (1) through (5) be confirmed and ownership shared with the implementing agency. To this end, when formulating a project, it would seem that experts in participatory forest management and project management should also be commissioned to undertake detailed preparatory studies, verify feasibility and improve the accuracy of the project design. On the other hand, even if the accuracy of the project design is improved during the study, some situations will still arise that could not be known until the project is actually implemented. In such cases, design changes should be carried out as soon as possible.

(2) Formulation of a post-project continuity plan, and clarification of the implementation structure

During a project, effort tends to be focused on achieving the Project Purpose. However, in order to sustain and expand the project effects, it would be useful to flesh out a post-project continuity plan together with the implementing agency from the planning stage, and to confirm the plan with the implementing agency at the completion of the project. A continuity plan would contain, for example: (1) the Overall Goal and measurable indicators, (2) the implementation period and an implementation schedule, (3) specific activities, (4) connection with policies of the pertinent sector (in the case of this project: the extent to which it contributes to achieving the DENR's CBFM targets), (5) the people in charge of implementation, monitoring and evaluation, and their roles, (6) the implementation (extension) structure, (7) methods and techniques for monitoring/evaluation, and (8) the required budget and budgetary measures. Of greater importance for realizing the plan is for the partner country to formalize the plan by instituting such legal instruments as ministerial ordinances. It is required for JICA to continuously act upon DENR for formalization during project implementation

(3) Introduction of support for people's organizations (POs) based on securing post-project sustainability

In cases where support is provided to POs, it is necessary to plan out the support in view of sustainability after completion of the project. For example, in this project, following provision of water harvesting structures, their operation and maintenance were transferred to POs, but no

implementation structure had been established covering the financial and technical aspects of the facilities. At present, most of the water harvesting structures provided through the project have lost function because of inadequate maintenance, and this is hindering continuity of the project effects. Therefore, before facilities are handed over to POs, systems should be established so that POs can maintain the facilities in a self-reliant manner, and technical support should be provided as necessary. Furthermore, in cases where new livelihood improvement activities are introduced, it is important to consider feasibility from multiple perspectives, based on the technical, distribution and market aspects of the activities, not just the production aspects. The success or otherwise of this kind of external support is also linked to the motivation for residents to participate in forest management. Therefore, consideration needs to be given to the pros and cons of introducing such activities after taking into account their post-project sustainability, and support needs to be provided for capacity building which is necessary for ensuring that sustainability.