

**Pilot Study
for
The Master Plan Study for Watershed Management in Upper Magat and
Cagayan River Basin**

1. Background of the Pilot Study

1.1 Master Plan Study

The Master Plan Study for Watershed Management in Upper Magat and Cagayan River Basin (the M/P Study) is characterized by: i) watershed management plan with Community-Based Forest Management (CBFM) as a main strategy; ii) comprehensive resource management plan; and iii) realistic master plan for implementation. .

(1) Watershed Management Plan with Community-Based Forest Management (CBFM) as a Main Strategy

The draft Master Plan for Watershed Management in Upper Magat and Cagayan River Basin (the draft M/P)¹ proposed forestland management through full participation and involvement of communities as a main strategy for watershed management. In particular, CBFM as a national primary policy is adopted as the focus of the draft M/P.

Other forestland use and tenure instruments currently available are Integrated Forest Management Agreement (IFMA) for cooperative forest plantation development, Socialized Industrial Forest Management Agreement (SIFMA) for small-scale commercial plantation development and Forestland Grazing Management Agreement (FLGMA) for promoting the development, improvement and sustainable use for grazing by individual, association, cooperative or corporation. Differing from these forestland management instruments, CBFM is distinctive in respect of: i) mandating the formation and registration of people's organization (PO) as a precondition for CBFM Agreement (CBFMA) acquisition; ii) vesting the PO to utilize and manage the natural resources in the coverage area of the CBFMA concerned in a sustainable manner; and iii) providing public investment required for effective utilization and management of the resources through the PO concerned.

CBFM program (CBFMP) commenced in 1995, however, there are a variety of issues in its implementation and it is not necessarily pursued as designed. In the M/P Study, it is considered essential to identify the issues hindering smooth implementation of the CBFMP and to formulate the M/P based on concrete countermeasures to the identified issues.

¹ Interim Report The Master Plan Study for Upper Magat and Cagayan River Basin in the Republic of the Philippines, December 2001, Nippon Koei Co., LTD. and Japan Overseas Forestry Consultants Association

(2) Comprehensive Resource Management Plan

As forest occupants/upland dwellers are the ones who will be the key players for forestland utilization and management under CBFMP, comprehensive management approach was sought in the draft M/P. It, therefore, includes not only ecological restoration of degraded forestland but also appropriate land and resource use and management plan. To this end, it is prerequisite for plan formulation to consider current complex forestland use and management practices, currently prevailing community socio-economic activities, and involvement of all the stakeholders and beneficiaries of the Study Area.

(3) M/P Realistic for Implementation

The Forest Sector Project (FSP) with a basic strategy of applying CBFM policy has been implemented since late 1994 with financial assistance from Japan Bank for International Cooperation (JBIC), and is scheduled to finish at the end of 2003. Considering the possibility of FSP to be extended to the FSP Phase 2, the M/P is to be realistic enough for implementation so that the M/P could proceed smoothly to implementation stage as part of incoming FSP Phase 2.

1.2 Necessity and Purpose of the Pilot Study

The proposed draft M/P is so challenging as to change currently prevailing complicated and contradictive use of land and natural resources sustainable, and to improve current marginal socio-economic conditions of local communities through implementing the CBFMP as a main strategy of watershed management. To seek practicability of the M/P in its implementation, conducting the Pilot Study was included in the scope of work for the M/P Study in addition to the regular study on M/P formulation.

The objectives of the Pilot Study were to: a) obtain data/information that would allow the Study Team to formulate more realistic M/P for implementation; and b) partly support the implementation of the CBFM program formulated in the draft M/P.

The scope of the Pilot Study included: i) selection of target communities for the Pilot Project; ii) designing the Pilot Study and Pilot Project; iii) establishment of an institutional setup and operation mechanism for the Pilot Study and Pilot Project; iv) implementation and monitoring of Pilot Project; v) evaluation of Pilot Project; vi) analysis and synthesis of findings and lessons learned; and vii) recommendations for the further refinement of the draft M/P.

In pursuing the Pilot Study, the Study Team focused on examining study subjects pertaining to:

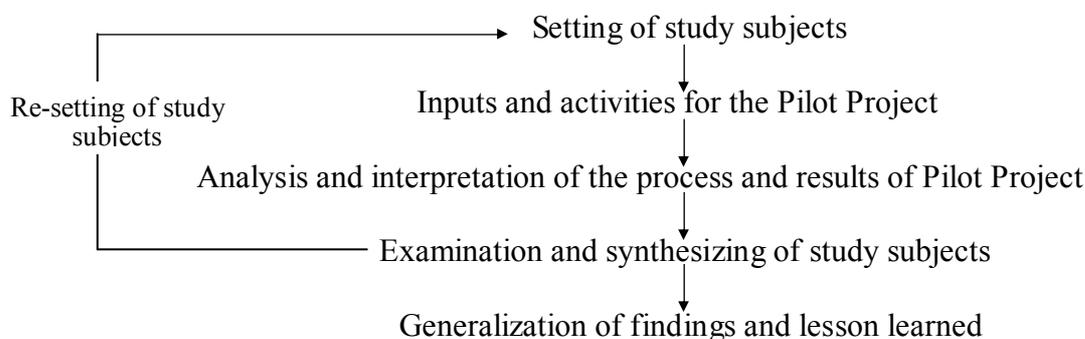
- a) Methodology of setting up of institutional framework required for implementation of the CBFMP;
- b) Methodology of capability building for the executing agencies for the M/P implementation;

- c) Methodology of PO formation;
- d) Methodology of participatory planning of CBFMA area resource use and management;
- e) Methodology of implementation of CBFMA area development and management by the PO under contract basis (technical and managerial aspects);
- f) Roles/impact of demonstration farms in CBFMA area;
- g) Methodology of community-based enterprise development;
- h) Methodology of PO capability building;
- i) Methodology of social preparation of the community concerned with CBFM implementation;
- j) Approach, process, time frame, institution, and input requirement for the M/P

2. Methodologies of the Pilot Study

2.1 Overall Procedure of the Pilot Study

The Pilot Study was executed in accordance with the following procedure.



The analysis of the Pilot Project results and factors affecting the results was completed through regular monitoring and evaluation, and the study subjects were examined based on the results of the analysis. However, not all the study subjects were fully analyzed due to the limitation of scope of work of Pilot Project.

The process of the Pilot Study is shown in the table below.

Flow of Pilot Study

Pilot Project	Pilot Study	Output
1st year implementation	Setting study subjects	Mid-term evaluation of Pilot Project
	Evaluation of the Pilot Project	
	Analyzing and interpreting the performance	
Updating implementation program (I/P) for the Pilot Project		
2nd year implementation	Review and revision, if necessary, of the subjects based on analyzing and interpreting the performance	Terminal evaluation of Pilot Project
	Re-setting study subjects, if necessary	
	Evaluation of the Pilot Project	
	Examination of study subjects and factors	Report on Pilot Study
	Generalization of findings and lesson learned	

Source: JICA Study Team

2.2 Setting and Re-Setting of Study Subjects

The Master Plan Study began in March 2001 with a Study Team consisting of eleven experts and a coordinator. During the initial stage of the Study, basic information collection was executed for 8 months, and data, knowledge and ideas were generated for setting the study subjects of the Pilot Study. The Pilot Project was designed based on the concept and policies of CBFM, and the results of the Pilot Project were expected to provide necessary information, data and findings for interpretation and examination of study subjects.

Out of the study subjects set for the Pilot Study, there were some study subjects that had been touched on through previous researches, and had been neglected. Some study subjects were identified additionally during the Pilot Project, and from this perspective, the Pilot Project was a process not only for examination of study subjects but also identifying study subjects that had not been notified during the initial stage.

2.3 Monitoring and Evaluation of the Pilot Project

The implementation of Pilot Project was monitored and evaluated regularly, and study subjects were examined based on the results of monitoring and evaluation. Monitoring and evaluation were carried out at three levels. The first level of evaluation was conducted daily basis by NGO and the Pilot Project Management Office (PPMO). The second level was the monthly and quarterly monitoring and reporting by the Study Team, NGO and PPMO. The third and final level of monitoring and evaluation was executed by the Study Team with NGO, PPMO and contractor for final evaluation at mid-term and end of Pilot Project evaluation in March 2003.

The physical outputs were monitored and evaluated comparing the planned quantities/qualities with actual outcomes validated through field inspections, and the process, manners and methods of activities were monitored through the review of documentations and field observations using the following template.

Sample Template

Area	Situation before Pilot Project	Activities and inputs	Present status	Factors affected changes		Lessons learned	Recommendation
				Facilitating	Hindering		

Source: JICA Study Team

2.4 Examination of the Study Subjects and General Conclusion

Factors affecting results of the activities and inputs for the Project were identified based on the result of monitoring and evaluation of the Pilot Project, then the study subjects were examined by analyzing these factors.

The Study Team managed the Pilot Project and at the same time conducted supervision of the performance of the NGO and inspection of the PO's activities, and transfer technology to the counterpart personnel. The major role of the Study Team was to evaluate the Pilot

Project through examining, analyzing and generalizing its process and results, and to refine the draft M/P taking into account the results of evaluation.

3. Outline of the Pilot Project

3.1 Target Communities for the Pilot Project

The target communities for the implementation of the Pilot Project were selected based on the following criteria:

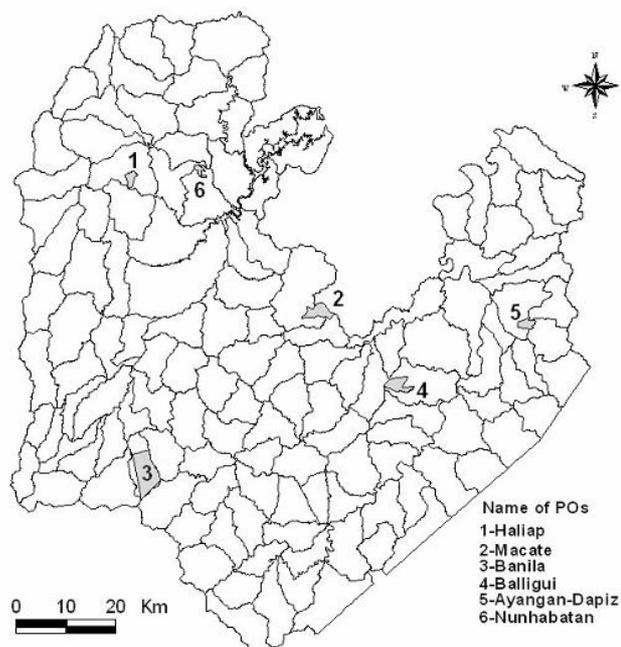
- a) 3~4 CBFM communities and 2~3 non-CBFM communities;
- b) Competency and motivation of POs and working relationship with DENR;
- c) Access and demonstration effect;
- d) Diversity in tribal groups, culture, geography and history;
- e) Risk of soil erosion;
- f) Potential for development (wide open area for reforestation);
- g) Communities without on-going foreign assisted projects; and
- h) Communities without land conflict.

Ten communities were short listed by the Study Team, and the Regional Steering Committee for the Study made final selection of the following communities based on the data provided by the Study Team.

Location	Name of PO
Banila, Dupax del Sur, Nueva Vizcaya	Banila Community-Based Cooperative, Inc.
Balligui, Maddela, Quirino	Balligui Community Forestry & Development Cooperative, Inc
Dapiz, San Augustin, Isabela	Ayangan Dapiz Agro-Forestry Development Association
Sitio Nunhabatan, Hapid, Lamut, Ifugao	Nunhabatan Greeners Livelihood Association
Haliap, Asipulo, Ifugao	Hojap Multipurpose Cooperative, Inc.(MPCI)
Macate, Diffun, Quirino	Macate Watershed Economic & Development MPCI.

Source: JICA Study Team

The first four POs were ones with CBFM Agreement (CBFMA) subject to the area development, and last two POs were non-CBFM ones subject to community organizing and CBFMA acquisition.



3.2 Scope of Work

The main component of the Pilot Project had four stages, namely i) preparatory stage, ii) community organizing and PO formation stage, iii) participatory planning stage, and iv) implementation stage. This main component was accompanied with two supporting components, viz., PO Capability building and Institutional Strengthening.

Implementation Stage of the main component had two sub-components, CBFMA area development and community-based enterprise development.

3.3 Basic Approach of the Pilot Project

The Pilot Project adapted the basic principles, methodologies, implementation structure and methods incorporated in the draft M/P to examine those things. The table below shows the comparison of targets and a set of activities between the draft M/P and Pilot Project.

Major Differences in Approaches: the draft M/P and the Pilot Project

Items	Draft M/P	Pilot Project	Rationale
Management Strategies	Watershed management adopts CBFM and other strategies	CBFMP only	To give focus on study with a limited time and resources
Institutional arrangement	Recruitment of additional PENRO and CENRO staff	Establishment of the PPMO and allocation of DENR staff to PPMO and the Study Team	Adopt similar institutional arrangement of FSP in order to examine the effectiveness such arrangement
Strengthening of DENR	Provision of necessary resources and equipment including operation fund	Provision of a part of necessary resources, equipment and operation fund	To provide minimum necessities for the Pilot Project
Component of activities	Protection of soil erosion and sedimentation, access improvement, etc	Rehabilitation of existing feeder road	Due to the limitation of financial resources
Land use plan	DENR and POs jointly formulate a plan based on scientific data of topography and vegetation	POs identify their needs based on indigenous knowledge and their experiences	Due to the short planning period
Nursery	Production of seedlings by POs	Seedlings were purchased outside the communities	To save time
Labor cost	Based on minimum wage	Community people provided their counterparts (free labor) to augment the limited budget	Based on the decisions of POs
PO Formation	To establish new POs for the CBFMP	Targeted existing CBFM POs and registered non-CBFM POs	In order to see the impact of project within a limited time period
Development of PO business	PO collects resources from members and invest it in PO business	Direct investment by Study Team	In order to see the impact of project within a limited time period
PO capability building	All activities are planned to be completed within three years	Build PO capabilities within 16 months	Due to limited time period

Source: JICA Study Team

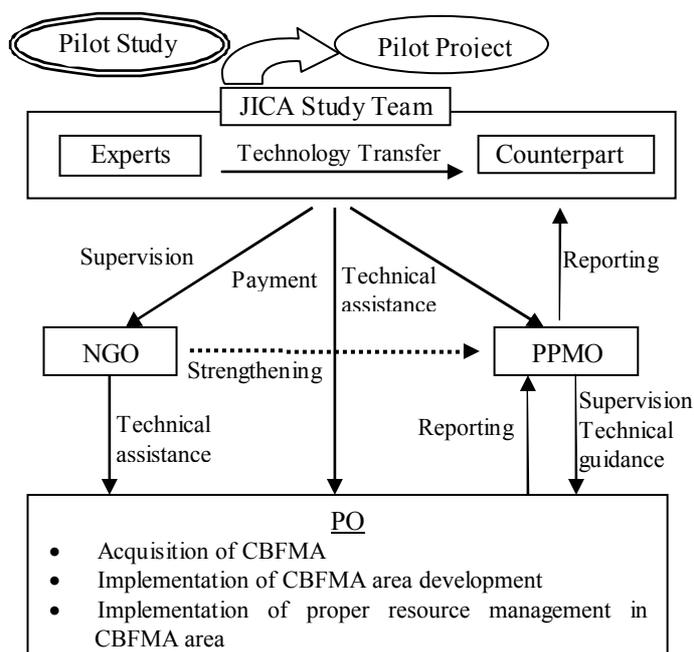
3.4 Implementing Framework of the Pilot Project

(1) Implementing Organization

The Study Team contracted out: i) four packages for CBFMA area development and management to the POs concerned; and ii) the PO capability building and human resource development of the PPMOs to a local NGO.

The role of the POs was to implement the contracted work of the CBFMA area development and management and to manage land and resources of their CBFMA area. The NGO was responsible for carrying out the contracted work concerning the PO capability building and human resource development of the PPMOs.

DENR created four PPMOs within the CENROs concerned and dispatched counterpart personnel of the Study Team. Assuming the implementation frame work of the M/P, the PPMO was expected to act as the representative of the owner of the Pilot Project. Therefore, the four PPMOs were requested by the Study Team to supervise the implementation of CBFMA area development, to provide technical guidance to POs, and to validate progress of the contracted work. The counterpart personnel assisted the Study Team in managing the implementation of the Pilot Project.



The counterpart personnel assisted the Study Team in managing the implementation of the Pilot Project.

The Study Team managed the Pilot Project and at the same time conducted supervision of the performance of the NGO and inspection of the PO's activities, and transfer technology to the counterpart personnel. The major role of the Study Team was to evaluate the Pilot Project through examining, analyzing and generalizing its process and results, and to refine the draft M/P taking into account the results of evaluation.

(2) Financial Arrangement

To implement the Pilot Project and Study, ₱ 13,933,000 were allocated as the financial inputs, not including the consulting services of the Study Team.

3.5 Preparatory Work and Designing of the Pilot Project

The activities listed below shows the results of preparatory work and designing of the Pilot Project.

Preparatory Work and Designing of Pilot Project

Activities	2002						
	Jan.	Feb.	Mar.	April.	May	June.	July
1 Formulation of Annual Work Plan in 4 CBFM Areas							
- Community Action Planning Workshop		■					
- Review of Community Action Plan (CAP)		■					
- Endorsement of CAP by General Assembly		■					
2 Survey for Providing Scientific Data for CAP							
- Forest Resource Inventory for Balligui		■					
- Soil Survey for 4 CBFMA Areas	■	■	■				
- Pre-study on Community Based Small Scale Enterprise Development for the 4 CBFM POs	■	■	■				
- Baseline Survey on the 4 CBFM POs		■	■				
- Land Tenure Survey in the CBFMA Areas for the Pilot Study		■	■	■			
- Review of Existing CRMFs		■	■	■			
3 Preparation of Draft Implementation Program (I/P) for Pilot Project		■	■				
4 Pilot Project Orientation to the 4 CBFM POs					■		
5 Pilot Project Orientation to 4 PPMOs					■		
6 Finalization of the draft I/P					■	■	
7 Procurement of Contractors for the Pilot Project							
- Contracting with the 4 CBFM POs for CBFMA Area Development and Management						■	■
- Contracting with PRRM for Capability building of the POs and PPMOs					■		

Source: JICA Study Team

3.6 Community Re-organizing and PO Formation/Reformation

The two multi purpose cooperatives in Macate and Haliap were re-organized into CBFM POs. In addition, the four CBFM POs in Banila, Balligui, Nunhabatan and Dapiz were revitalized. For this, the following activities were executed.

- a) CBFM campaign and preliminary identification or reconfirmation of CBFM area
- b) Preparation of a master list of CBFMA area occupants and users
- c) Re-vitalization and re-establishment of the POs
- d) Recruitment of members of the POs
- e) Acquisition of CBFMA for the two multipurpose cooperatives

For the CBFM campaign, 566 participants joined the activities organized by the PPMOs and the NGO. During the campaign, the information in respect to CBFM program was disseminated to the LGUs and local people concerned, and preliminary CBFMA areas in Macate and Haliap were identified with the consensus of stakeholders and local people. CBFMA areas of other 4 communities were confirmed.

As a result of master listing, 915 households were identified as the CBFMA area occupants and users, of which 299 were organized into CBFM POs

3.7 Area Development

The following table shows the summary of the CBFMA area development targeted/ accomplished.

Accomplishment of Area Development

Component	Accomplishment of Pilot Project				
	Banila Area	Balligui Area	Dapiz Area	Nunhabatan Area	Total
1 Forest Tree Plantation Establishment	65 ha	25ha	14 ha		104 ha
2 Agroforestry Plantation Establishment	5ha	25 ha	38 ha	31 ha	99 ha
3 Demo Farm Establishment	-	1.0 ha	1.0 ha	1.0 ha	3.0 ha
4 Fire Control					
- Fire line establishment and maintenance	1 km	-	-	1.6 km	2.6 km
- Firebreak establishment and maintenance	1.5 km	-	-	3.0 km	4.5 km
- Lookout tower construction	2m x 2m	-	-	2m x 2m	2 sets
- Patrol	Watchman	-	-	Watchman	2 sets
5 PO Building construction	Expansion of 2 nd floor	6 m x 6m	6m x 6m, 6m x 6m	6m x 6m	5 sets
6 Rehabilitation of Feeder Roads	3.5km	3.5 km			7.0 km
7 Community-Based Enterprise Development	2 net houses for cut flower production	Cattle breeding 11 head	Cattle breeding 15 head	Cattle breeding 13 head	2 net houses, 39 head of cattle

Source: JICA Study Team

A part of maintenance (weeding) and mortality replacement were not completed within the contract period. Road rehabilitation of Balligui was partially incomplete due to the weather condition.

The quality of work completed in comparison with the technical specification was satisfactory in general, except the maintenance of demonstration farms in Balligui and Dapiz areas.

3.8 PO Capability Building

The NGO provided the POs with assistance in the preparatory work (some survey activities, participatory diagnosis and planning), community organizing, PO formation/reformation and organizational strengthening of POs during the area development activities. The NGO

consisted of various specialist and community organizers who regularly visited and stayed the target communities.

The NGO extended assistance to the six target POs in providing technical support and facilitating 140 meetings during the Pilot Project, in which approximately 3,800 community people participated in total. With this assistance, community people executed the surveys, revised/formulated various plans, discussed environmental issues and tackled their organizational problems including PO policies, area conflicts, working group issues, financial reports, business plans, area development plans and monitoring and evaluation of their PO activities.

The NGO also conducted Training Needs Analysis (TNA)² and provided 48 training sessions and three field trips to a total of approximately 1,400 members of the 6 target POs during the Pilot Project.

3.9 Strengthening of DENR/LGU

During the Pilot Project, 43 staff members from DENR and LGUs, who were organized into the PPMOs, had opportunities to have hands-on experiences and on-the-job training with regards to expertise in preparatory work (various surveys and diagnosis of communities), community organizing and PO formation, participatory planning (AWP and CRMF), preparation of technical specifications and work schedule for CBFMA area development, quality control, progress control and reporting. However, only a half of PPMO staff members actively participated in the Pilot Project, and the improvement of their expertise was limited to certain personnel.

During the Pilot Project, the training program emphasized the skills and knowledge on PO capability building and those training were organized by the NGO (the contractor of PO capability building). A list of training provided is shown below:

- a) Training on Public Sector Management Capacity Assessment;
- b) Community Organizing Training;
- c) Participatory Development Training;
- d) Training of Trainers;
- e) Organizational By-laws Formulation Training;
- f) Training on Participatory Rural Appraisal;
- g) Cooperative Management Training;
- h) Entrepreneurship Training; and
- i) Community Action Planning Training.

In addition to the training stated above, the Study Team provided tutorial for computer and GPS (Global Positioning System) operations for the PPMO staff members directly.

² See **Attachment A** "Training Needs Analysis"

3.10 Consultation on the Establishment of a Watershed Management Council

Two Watershed Management Councils (WMCs) were established previously. One was the Lake Lanao Watershed Protection and Development Council created in 1992, and the other one was Bukidnon Watershed Protection and Development Council created in 1995. Both Councils were formed by fiat from the President. The stakeholders were not consulted. There was little, if any, support for the Councils from the majority of the stakeholders. The Councils never took off the ground.

During the Pilot Project, the Study Team initiated consultation with and dialogue among the stakeholders with respect to the establishment of a structure/organization for the management of the Upper Magat and Cagayan River basins. The sentiments expressed thus far in five such consultations were that an organization to manage the watershed should be established. It was not intended that the organization would be established during the life of the Pilot Project. It is expected, however, that during the implementation of the M/P such an organization will be established.

4. Results of the Pilot Study

4.1 Study on Institutional Framework for Implementation of CBFMP

4.1.1 Background

CBFMP is a program of DENR to manage Forestland and Protected Areas jointly with communities. Naturally, its success depends on the institutional framework and policy environment in which the implementation of the CBFMP takes place. For this, DENR developed the organizations, institutional arrangement and policies to implement the CBFMP through a series of Department Administrative Orders (DAOs) and Memorandum Circulars (MCs). The major stipulations with regard to the institutional framework of CBFMP implementation are as follows.

- a) Establishment of CBFM Office (CBFMO) at the Forest Management Bureau (FMB) and CBFM Units at local offices
- b) Assignment of personnel at the CBFMO and the CBFM units
- c) Allocation of fund from the National Account for the CBFMP
- d) Establishment of CBFM Special Account (the source of fund is foreign assistance)
- e) Establishment of Community Forestry Development Fund (the source of fund is the counter fund from PO)
- f) Adoption of multiple stakeholder approach
- g) Integration of Certificate of Stewardship Contracts (CSC) into the CBFMP
- h) Coordination and co-management with the National Commission on Indigenous Peoples (NCIP) for the application of the CBFMP within Certificate of Ancestral Domain Claims/Certificate of Land Claims(CADC/CALC) areas

- i) Coordination with the Protected Areas Management Board (PAMB) for the application of the CBFMP within the multiple use zone and buffer zone of the Protected Areas
- j) Establishment of CBFM Information System (CBFM-IS)

As stipulated, the CBFMP ought to involve multiple players and require extensive arrangement among the stakeholders in order to establish a proper institutional and policy environment. However, this is not an easy task. There are areas that have conflicting uses and as a result, there is an overlap of jurisdiction among responsible agencies. The river basins are the sources of energy and water for populations within and outside the watersheds. The above situation makes it difficult for any agency, including DENR to manage the watersheds in a sustainable manner because of the divergent interests and objectives of various stakeholders. Such management requires a structure that coordinates these varied and often conflicting interests and one that involves most if not all of the stakeholders.

With regard to the financial resources for the CBFMP, the challenge seems to be even larger. Given the decreasing annual appropriations for the implementation of the CBFMP, there is need to generate resources outside of DENR or even outside of government to supplement government resources. According to information from FMB, the Special Account has not been established owing to the regulation that any receipt by government agencies is transmitted to the National Treasury and its use is subject to the approval of the Department of Budget and Management (DBM), which releases the funds. Discussions are being undertaken among DENR, DBM and the Commission on Audit (COA) on how to handle the Special Accounts funds. DENR, POs and other stakeholders, separately or together must seek the fund from other sources for the implementation of the CBFMP.

4.1.2 Subjects of Study

During the Pilot Project, the following questions were set to examine the conditions and assumptions that the above policies ground on to work.

- 1) Does DENR have capability to establish and manage CBFM Unit (at CENRO) as well as allocate personnel for the CBFMP?
- 2) Is DENR allocating its resources fully to support the CBFMP?
- 3) What are the conditions and key points of establishment and management of a mechanism through which all stakeholders for watershed management make decisions and work collectively?
- 4) What are the conditions for the establishment and management of a mechanism (such as a cost sharing mechanism) through which the government generates resources required for CBFM program?

4.1.3 Results of the Pilot Project and Findings

(1) Study on the financial and personnel capability of DENR and other concerned agencies in implementing the CBFMP

Several elements determine this capability. One of these is the presence of competent and dedicated field personnel in sufficient numbers. This is most crucial at the CENRO level since the CENRO is the implementation and operation office of DENR.

Results of a survey conducted in 2001 to assess the capability of staff members of the CENROs concerned with the Study Area of the M/P are shown in **Table 4.1.1**. The number of personnel assigned at the CBFM Unit at the CENRO ranges from two to eleven with an average of five. These personnel manage an average of five CBFM projects covering an average area of about 5,000 ha, an average of two CBFM projects without a Project Management Officer (PMO). Interviews with personnel in the CBFM Units indicated that the perceived ideal number of personnel in the Unit would be six. Given this number, only two (28%) of the seven CBFM Units surveyed have more personnel than the ideal number.

The survey revealed that these CBFM Units do not have sufficient number of well-trained personnel to support the activities needed to formulate and manage CBFM projects. There are CBFM projects without an assigned PMO.

Another indicator of the capability of DENR to implement the CBFMP successfully is the budget for the implementation. **Table 4.1.2** shows the budgets allocated for various forestry related projects of DENR over the last 5-year period including the DBM-recommended budget for 2004. The amount appropriated for the CBFMP shows a downward trend since 1999.

Table 4.1.3 shows the allocation in 2001 of some of the CBFM Units in the Study area for items crucial to field project implementation such as travel allowance, supplies and materials and fuel and oil, etc. Clearly, these are not sufficient.

The mobility of the personnel in the CBFM Units is also a factor in the effectiveness of the Unit in managing CBFM projects. Five of the seven Units surveyed do not have any vehicle at their disposal while the other two have one motorcycle each.

One possible source of supplemental budget for the CBFMP is the special projects. **Table 4.1.4** shows the budgetary allocations for foreign assisted projects of DENR. Only two of the projects have CBFM components, viz., the Forestry Sector Project (FSP) and the Philippine-German Community Forestry Project located in Quirino. However, the latter terminated in 2002 and the former will terminate in December 2003.

(2) Study on the establishment and management of Watershed Management Council (WMC)

All stakeholders who participated in the five consultation meetings are in favor of forming an organization for the management of the watershed in the Study Area. It is not yet clear whether it will be a council or other form of organization. It has also not been agreed whether there will be only one such organization for the entire Upper Magat and Cagayan River basins or it will be on a provincial basis. It has been observed that there is further need to continue dialogues with the stakeholders.

The table below shows the result of consultation meetings.

Result of Consultation Meetings for the Establishment of Watershed Management Council

Province	Date	Pax	Major Participants
Vizcaya	01/23/2003	27	Governor, ENRO, DENR, NIA, NAPOCOR, NGOs, POs
Ifugao	01/24/2003	20	Governor's office, Mayors, ENRO, DENR, OPA, NIA, NGOs
Isabela	03/05/2003	25	P. Administrator, DENR, Water District, NIA, NPC, Isabela State University
Quirino	05/15/2003	17	Mayors, DENR, PAENRO, Water District, NCIP, NGO, Quirino State College
Quirino	07/25/2003	2	Mayor and MPDO of Diffun Municipality

Source: JICA Study Team

During those consultation meetings, the following issues and topic were discussed.

- a) Conflicting policies on watershed management
- b) Coverage and membership of the Council
- c) Continuity of support for the Council
- d) Sharing of cost and benefits in the watershed management
- e) Information dissemination and education on watershed management
- f) Population management
- g) Human resource development
- h) Preserving traditional/local resource management system (i.e., *Muyon* and *Ala-a*)

(3) Study on the establishment and management of a mechanism (such as cost sharing mechanism) through which government generates resources needed for CBFMP

The sustainable management of the watershed entails costs. Stakeholders and beneficiaries within and outside of the watershed should share in the cost of the watershed management. There are several potential sources of major contributors to fund the watershed management. At the consultation meetings stated above, some participants have expressed willingness to share in the cost of watershed management with other stakeholders, which in most instances could be channeled through the establishment and management of the CBFMP. Others such as NAPOCOR have mandates to contribute to watershed management. Such contributions again can be channeled through the development of upland communities.

It was found at the consultation meetings that there are several factors that are favorable for establishing a mechanism for sharing the cost for watershed management. These include the support of present Local Government Unit (LGU) officials to establishment of the

mechanism, and the willingness of water districts to contribute to the cost of watershed management. There are however, factors that constrain the establishment of a cost sharing mechanism such as the replacement of LGU officials with possibly non-supportive ones and the presence of many people in the watershed area who may not understand the need to share in the cost of watershed management or who do not have the capability to share in the cost.

At the level of the CBFMA PO, a DAO creates a Community Forestry Development Fund (CFDF) for the management of the CBFMA area. The source of the CFDF may come from percentage of gross sales from forest products harvested from the CBFMA area, endowments or grants, percentage of income from other livelihood projects and membership fees and other sources. The POs that actually established this Fund, however, could only contribute to the CFDF if they had sources of income such as area development contracts from the government. Contract from the government is possible only if the CBFM project is part of a foreign assisted project. Membership dues are not substantial and cannot be relied upon as source of the CFDF. Percentage from gross sales of forest products are available only if the POs are awarded resource use permit, which is not often provided except if the area has adequate forest resources.

4.1.4 Examination of the Subjects

(1) Does DENR have capability to establish and manage CBFM Unit (at CENRO) as well as allocate personnel for CBFMP?

Presently DENR alone does not have the capability to implement CBFM projects successfully with present personnel allocation and budget. In foreign assisted projects that are better funded than regular CBFM projects, the personnel assigned to specific projects may be complemented as the case of JBIC funded FSP. In the foreseeable future, there is very little possibility of additional funds from general appropriations for the implementation of the CBFMP, therefore, DENR should put in place a mechanism that would augment resources needed for the implementation of the CBFMP so that the resources present in the CBFMA area could be developed and managed in a sustainable manner.

Other possibilities are the establishment of a CBFM Special Account (CBFMSA) from the use of forest products and the generation of investments from the private sector in the development of resources present in the area. Such development should not present undue risk relative to the natural resources in the area.

(2) Is DENR allocating its financial resources fully to support CBFMP?

Among the five major forestry programs of DENR, the CBFMP had the third highest budget since 1999 (**Table 4.1.4**), next to coastal and marine resources management including mangroves development and forest protection. In 2004, the ranking will be

maintained. Four programs out of the five, namely CBFMP, forest protection, watershed management and soil conservation, and plantation establishment and management have in fact the same objectives as forest conservation and development. The main difference is that CBFMP addresses forest conservation and development issue through people within the watersheds. A successful implementation of the CBFMP, therefore, will not only conserve and develop the forestland but also address the economic and social concerns of the upland population. Since it is not expected that additional budget can be sourced from DBM, it may be advantageous to examine the allocation of the resources to determine if it would be beneficial in the end to shift some of the budget from the other three programs to the CBFMP.

The financial capability of the government could be augmented with the resources generated by the beneficiaries of CBFM possibly through development of community-based enterprises especially micro, small and medium enterprises. There are several departments (Department of Trade and Industry and Department of Science and Technology) and private sectors initiating various programs, particularly by the Philippine Chamber of Commerce and Industry (PCCI), to assist in the establishment and development of enterprises. DENR can link the livelihood and enterprise development activities in the upland communities with these existing programs.

(3) What are the conditions and key points of establishment and management of a mechanism through which all stakeholders for watershed management make decisions and work collectively?

WMC for the management of the Upper Magat and Cagayan River basins should have support from most, if not all, of the stakeholders. It should be a forum where the stakeholders can contribute to and benefit from the management of the watersheds. It should be established out of the realization that management of discrete portions of the watershed without conformity with an overall watershed management plan is bound to fail. The stakeholders should also be willing to share in the cost of watershed management. The stakeholders should be able to draw distinct benefits from the management of the watershed, which would not be possible without a concerted/coordinated management of the entire watershed. There should therefore be a protocol for sharing of the benefits agreed upon by all stakeholders.

Great emphasis should be given to support from LGU officials since normally the other stakeholders would support their local government's initiatives. Furthermore, local water districts have expressed full support for the formation of a WMC because keeping the watersheds under forest cover means continual supply of water.

However, there is further need to undertake advocacy activities particularly information and communication campaign to the farmers in the upland so that they adopt soil and water conservation measures, and also the downstream water users so that they will comprehend that water resources depend on condition of watersheds for its sustainability.

(4) What are the conditions for the establishment and management of a mechanism (such as a cost sharing mechanism) through which the government generates resources needed for CBFMP?

Since the CBFMSA has not yet been established to support the CBFMP financially, other channels of support should be explored. These other channels can only yield results if they are vigorously pursued with LGUs and other potential financial sources. The presence of sympathetic LGUs on the plight of upland farmers, who see the necessity of a well-managed watershed, and the expression of financial support by the Water Districts, is indication that such a mechanism can be established within the Study area.

In provinces and municipalities which are richly endowed with natural resources and the LGU officials are sympathetic to the plight of upland farmers, they can be co-opted to assist financially in the implementation of CBFMP within their jurisdiction. Members of Congress (both in the House of Representatives and in the Senate) may be asked to provide funds from their Countrywide Development Funds for the development and management of CBFMA areas. The users of watersheds such as the Water Districts, NAPOCOR and irrigator's associations (National Irrigation Administration) can be tapped to assist the CBFMP.

4.1.5 Recommendations for M/P Formulation

- (1) During the implementation of the M/P, there should be supplementation of the personnel at the CBFM Unit and/or the establishment of a specific implementing organization for special/foreign assisted projects.
- (2) In the M/P, Co-management or devolution of certain areas to committed and dedicated LGUs should be recommended to result in better managed forest, which after all is the objective of DENR. This will in effect generate more resources for the management and development of forest areas.

The M/P should focus more on the establishment of viable enterprises in the community with minimum raw material source from the forest and with linkages to existing government and private sector initiatives on micro, small and medium enterprise development.

- (3) While the chances of the establishment of the WMC are positive based on the initiatives during the Pilot Project, there is still further need for more dialogues and more vigorous information and communication campaign, which should take place during the implementation of the M/P.
- (4) During the implementation of the M/P, strong advocacy should be mounted to get support from all potential sources of assistance in addition to the establishment of the CBFMSA and CFDF. The local media should be co-opted in mounting such a campaign. LGUs, members of Congress and beneficiaries of the watershed should be approached for assistance in the development and management of CBFMA areas during the implementation of the M/P. Even foreign donors should be approached for grants for the implementation of the CBFMP.

4.1.6 Further Issues

After the Pilot Project, the dialogues initiated by the Study Team for the establishment of a watershed management council and cost-sharing mechanism might be brought to a halt before the beginning of the implementation of the M/P without strong leadership. DENR at a moment has no such capability. Once the regular dialogues stop, the momentum and accomplishment of the Pilot Project might be in vain. The dialogue and external initiatives should continue for a while until and during the implementation of the M/P, while waiting for DENR to become fully committed to taking responsibility for initiating the establishment of a council and cost-sharing mechanism.

4.2 Study on Institutional Strengthening

4.2.1 Background

Although the utilization rights and management responsibilities of CBFMA areas will be given to the CBFM POs concerned, the government remains accountable for the well-being of CBFM areas, since the CBFMA areas are the Forestland or Protected Areas that are considered “public goods.” DENR and LGUs should provide technical assistance to the CBFM POs and monitor the conditions of the CBFMA areas regularly. The government is also responsible for the rehabilitation of the CBFMA areas and controlling further degradation when necessary.

However, DENR and LGUs lack the capability to pursue their responsibilities especially at the field level, and this was deemed as one of the major obstacles in achieving the goals of CBFMP. For this, the strengthening of DENR and LGUs was studied during the Pilot Project³.

4.2.2 Subjects of Study

The subject of study pertaining to institutional strengthening of field operations is:

What settings and conditions are required for DENR and other stakeholders to execute field operations of CBFMP properly?

4.2.3 Results of the Pilot Project and Findings

(1) Establishment of PPMOs and Provision of Equipment

At the beginning of the Pilot Study, a PPMO was created at each CENRO in Lamut, Ifugao; Dupax in Nueva Vizcaya; Diffun in Quirino and; San Isidro in Isabela to supervise and provide technical guidance to the Pilot Project. It was expected that the PPMOs report to the Study Team, and that the Study Team manages the Pilot Project based on the reports from

³ See **Attachment B** “Final Evaluation of PPMO” for more details.

the PPMOs. The PPMOs were designed to be independent units exclusively for the implementation of Pilot Project.

The PPMOs are composed of 43 members dispatched from the CENROs and LGUs concerned as shown in the table below, and the PPMO creation and personnel designations were institutionalized by a set of Special Order.

PPMO Personnel

Units	Name of PPMO			
	Dupax	Diffun	S. Isidro	Lamut
PPM Officer	1	1	1	1
Community Organizing & Strengthening Unit (COSU)	0	2	0	2
Implementation Unit (IU)	3	4	3	3
Extension Unit (EU)	3	3	3	1
Administrative Support Unit (ASU)	3	3	3	3
Total	10	13	10	10

Source: JICA Study Team

During the Pilot Project, approximately a half of PPMO staff members were practically involved in the Pilot Project due to reasons that: i) some members were still occupied with previous responsibilities even after the issuance of Special Order; ii) operation fund provided to the PPMOs by DENR were not sufficient to accommodate all members to be involved; iii) some members felt that they would have less opportunity for promotion if they work for a special project; and iv) members from the LGUs could not receive travel expenses or per diem from the PPMO because Memorandum of Agreement was not exchanged between LGU and DENR.

DENR secured ₱ 403,000 for the four PPMOs for their first year operation budget upon the request of the Study Team, but no fund allocated for the second year due to the late submission of budget proposal from the PPMOs to Foreign Assisted Special Project Office (FASPO) through the DENR Regional Offices concerned. The reasons why those PPMOs failed to prepare the proposal on time are uncertain. One reason seems to be that the instruction from the FASPO pertaining to the budget proposal were unclear for some PPMOs. In addition, some PPMOs were passive in implementation of the Pilot Project.

Lack of PPMO operation fund for the second year discouraged some of PPMO staff members from executing their duties responsibly. In some instances, expenses for PPMO activities were shouldered by the PO concerned due to the lack of PPMO operation funds. The amount was marginal, and the intensions of PPMO staff members were to execute their duties under the unfavorable situations. Nonetheless, this kind of practice likely cause the POs to discourage participating in the government’s program and distrust government agencies, and hence should not be iterated.

Upon the Study Team’s request to DENR, all the PPMOs were secured for their office spaces for operation. The Study Team provided each PPMO with a motorcycle, a computer,

a set of survey instruments including a GPS. Though no utilization record was available, the equipment seems to be utilized effectively.

During the Pilot Project a traffic accident happened to the motorcycle provided to one PPMO, entailing total destruction. The motorcycle was being used at that time by non-PPMO member for activities that were not related to the Pilot Project. It was found that the supervisors were not properly monitoring the use of motorcycle of the PPMO.

(2) Training of DENR and LGU Personnel

A series of training sessions were offered to the PPMO staff members, counterpart personnel of Study Team and other DENR and LGU personnel. The list and result of training provided are shown in the table below.

PPMO Training *

Training Title	PPMO Dupax	PPMO Diffun	PPMO Lamut	PPMO S Isidro	Count-erpart	Others	Total
Training on Public Sector Management Capacity Assessment	5	3	2	4	4	0	18
Community Organizing Training	4	6	6	5	4	0	25
Participatory Development Training	5	4	3	3	0	0	15
Training of Trainers	3	4	7	2	0	1	17
Organizational By-laws Formulation Training	7	9	7	5	2	9	39
Training on Participatory Rural Appraisal	3	8	5	0	1	11	28
Cooperative Management Training	6	3	7	3	0	2	21
Entrepreneurship Training	1	3	5	0	0	3	12
Community Action Planning Training	6	7	5	4	0	21	43
TOTAL	40	47	47	26	11	47	218

* Participants who attended only one day of two-day training program were not counted.

Source: JICA Study Team

It seems to be too early to evaluate the impact of training given to those personnel, but overall satisfaction was expressed by the participants according to their narrative evaluation on the training program. The pre- and post-test scores of the training show that 43 PPMO staff members and 17 non-PPMO participants improved their understanding of the training topics, as shown in the table below.

Pre and Posttest Result

Total Score of Pretests	Total Score of Posttests	Score Increased*
473	1,740	701*

* A number of participants took only pre or posttest. Those scores were not included in the calculation of increased score.

Source: JICA Study Team

It was noted by a number of PPMO staff members that they were discouraged to learn because they could not apply new knowledge and skills to their regular work unless they have special projects with sufficient operation fund. In fact, they will return their offices after the Pilot Project, and most of their offices have extremely limited annual budget for project operations.

During the Pilot Project, the training program emphasized the skills and knowledge on PO capability building. Those training were organized by the NGO (the contractor of PO capability building). Some PPMO staff members expressed that they would appreciate more training subjects on survey methods and computer skills (Geographical Information System:GIS)) in addition to what they have attended (training on Sloping Agricultural Land Technology :SALT), silvo-pasture, Global Positioning System (GPS) and basic computer skills in MS Word and Excel).

It was notable that many PPMO members were inexperienced and unaware of micro land use planning and zoning required for Community Resource Management Framework (CRMF) formulation.

(3) Formulation of PPMO Operation Manual and On-The-Job Training

The Study Team formulated an operation manual for the PPMOs as guidelines of supervision and technical assistance to be executed by them. In the manual, expected work and responsibilities of each PPMO staff member were elaborated, and formats of reports, detailed work schedule and technical guidance were attached. In addition to the manual, copies of contract document of the POs, including technical specifications and cost estimate as well as the TOR of the NGO were distributed to the PPMOs as the basis for their supervision and technical assistance. The Study Team explained operation manual, contract documents and TOR to the PPMO staff members during a series of orientations.

The scope of work of the PPMO is categorized into four types: i) technical assistance to POs; ii) quality control of PO's work; iii) progress control of POs' work; and iv) validation of billing request from the POs. In each work, opportunity to improve their expertise was given through practices with the guidance of the Study Team.

The PPMO possessed certain expertise in technical assistance and quality control for plantation establishment upon the start of Pilot Project, and most PPMO members who actively participated in the Pilot project refined their previous skills. However, they failed to describe their activities in their regular reports adequately due mainly to a lack of writing skills. Because of this it was hard for the Study Team to perceive their real improvements (Table 4.2.1). The PPMO staff members still lack expertise in technical assistance pertaining to PO capability building and quality control of the contractor for PO capability building.

As for the progress control, many PPMO staff members showed little intent to keep the work schedule. The PPMOs' progress control was generally dependent on the weekly and monthly reports from the POs, of which submissions tended to be late (Table 4.2.2). The submission of PPMO reports delayed accordingly. Aside from the PO reports, the PPMO had to gather information needed for progress control from other sources, including actual field validation and interviews with work group leaders of the POs, but this was not necessarily fulfilled by all the PPMOs.

The validation of billing request from the POs was time consuming and physically demanding activity since it required field inspections. As described in **Attachment A**, the validation of some PPMOs had major shortfalls, including the delay of field validation after receiving billing request from the POs and discrepancies between the validation report and results of field inspection of Study Team.

(4) Analysis of PPMOs' Needs and Fulfillment through Pilot Project

At the early stage of the Pilot Project, the Study Team conducted a Training Needs Analysis (TNA) of the PPMO staff members to evaluate the gap between their existing expertises and required for the proper implementation of the CBFMP. The data necessary for the TNA was collected through individual interviews with the PPMO staff members.

Towards the end of the Pilot Project, the Study Team again conducted individual interviews with 16 PPMO members out of 22 members who actively participated in the Pilot Project to evaluate the improvement of expertise in those areas identified as weak during the initial TNA. The interview revealed that the expertise of the 16 PPMO members interviewed before the beginning of the Pilot project was inadequate in all 149 items of skills and knowledge⁴, and 15 out of the 16 PPMO members improved their expertise in 73 items out of the 149 as a result of the Pilot Project.

The results of evaluation show the improvement in their expertise, mainly attributed to their hands-on experience during the Pilot Project. However, those who improved their expertise were limited to the PPMO members who actively participated in the Pilot Project. Those members had higher interest in the Pilot Project from its outset, thus they were easier to capacitate. The strengthening of those who have less interest should start with fostering their interest.

⁴ Based on the Operation Manual for the PPMO for the Pilot Project Version I (June 2002) and Version II (August 2002), Nippon Koei Co., LTD. and Japan Overseas Forestry Consultants Association, The Study Teams identified 149 items as the skills/knowledge required for supervising and providing technical assistance for the Pilot Project.

4.2.4 Examination of the Subjects

(1) What settings and conditions are required for DENR and other stakeholders to execute field operations of CBFMP properly?

The organizational structure for the Pilot Project, consisting of the Study Team (acting as a sort of project management office) and a set of PPMOs (a sort of site management office), was tested during the Pilot Project, and following are the elements of organizational settings in which the CBFMP works.

- a) Establishment of a project management office and site management offices is desirable in case the project entails sizable physical work so that those offices can concentrate on the project and have autonomous organizational structure within which the information flow and decision-making are explicit. In order to have effective and efficient implementation of the CBFMP under the project basis, duties and responsibilities of autonomous structure should be exclusive from the other functions of DENR, and human resources and funds should be separated from those for regular organization.
- b) Since the CBFMP adopts a decentralized community-based approach, the organizational structure stated above should have adequate operation fund, office space, equipment and mobility. Particularly, DENR's mobility to visit the communities for the monitoring of rehabilitation work is crucial. Provision of vehicles and adequate funds for vehicle maintenance and travel expenses is an essential condition for effective implementation of the CBFMP. Availability of adequate survey instruments at the field level is crucial for CBFM field operations, which require proper survey for numerous communities. The proper management of facilities, equipment and fund by those who are in the supervisory positions is indispensable
- c) The allocation of adequate quality and quantity of human resources to the above organizational structure is another prerequisite for the effective and efficient implementation of the CBFMP, since supervising, assisting and monitoring the PO activities should be regarded as part of the implementation of the CBFMP. Adequate manpower to execute the duty should be secured. In terms of quality of human resources, DENR personnel should develop their expertise in key areas that were identified weak during the Pilot Project through training and practice. The monitoring of the PO capability building, progress of work, reporting and computer skills to consolidate numerous reports from the POs were found to be particularly weak in DENR and need to be developed.
- d) Field inspection for validation of billing request from the POs should be conducted jointly with the PO concerned so that the payment to the PO could be made correctly. Since most target areas of CBFM are remote and can be reached on foot, field work of the PPMO such as supervision, technical guidance and inspection for validation is physically demanding and time-consuming. Additional incentives for those who execute the field inspection for validation are desirable. Incentives could be in a form of special training opportunities, awards, recognitions, opportunities for promotion, application of special policies for travel allowance/per diem (amendment of "50 km policy" of DENR) and financial compensations (e.g., hardship allowance).

4.2.5 Recommendations for M/P Formulation

- (1) In the draft M/P, the creation of an organizational structure for the implementation of the M/P was not illustrated. As lessons learned from the Pilot Project, autonomous project offices for the M/P implementation should be established to separate the duties and responsibilities from the regular functions of DENR.
- (2) In the draft M/P, allocation of adequate fund, human resources, equipment and facilities were planned. It is recommended that the plan in the draft M/P be reviewed and revised based on the findings from the Pilot Project, especially the budget allocation and number of staff members required for the realization of the Master Plan.
- (3) In the draft M/P, a set of training subjects and topics was identified. Based on the findings and lessons learned from the Pilot Project, the training subjects should be reconsidered. Also, a model for sequence of training sessions should be included.

4.2.6 Further Issues

The PPMO staff members who had improved their expertise were limited to the 15 personnel who were actively involved in the Pilot Project (**Section 4.2.3 (4)**). For the initiatives of the Pilot Project to have substantial effect on the strengthening of the PPMOs and LGU offices, the technical assistance should be extended to other staff members in those offices. As the 15 PPMO staff members still have weak areas in their expertise, the on going assistance should be continued for a while. For the extension of external assistance to the PPMOs and LGUs, the counterpart fund for PPMO operations from DENR should be secured properly not to repeat the shortfalls of the Pilot Project.

4.3 Study on Forming People's Organization (PO)

4.3.1 Background

Under the CBFMP, it is mandated to organize community people into a PO for CBFMA acquisition. Various government agencies and NGOs have been practicing PO formation, and the methods of community organizing and PO formation varied from one case to the other since the methods were developed in accordance with the milieu of community organizing such as the socio-economic/cultural characteristics of target population, natural conditions, capability and characteristics of assisting organization, available resources and time. The PO formation under the CBFMP used to be documented but not compiled, and replicable methodologies have not been established yet. Therefore, the Study Team piloted the PO formation to study the methodologies. For the piloting, the NGO contractor for PO capability building facilitated the PO formation and documented the process, result and findings so that the Study Team would have data and information for analysis and theorizing.

For the formation of the POs, it is necessary to identify the potential PO members who occupy the CBFM area and/or use resources within the CBFMA area. For this, the CBFMA

area should be delineated properly. In the Philippines, standard base maps covering the entire nation are at a 1:50,000 scale produced by the National Mapping and Resource Information Authority (NAMRIA). The maps do not provide accurate information needed for the CBFMP implementation. Also, the land use and vegetation maps available in PENROs /CENROs are not accurate enough to be used for the same because they were prepared through limited data and information available. The quality of those maps varies from one office to another, and the maps are often outdated.

Further, thematic maps showing administrative boundaries of provinces, municipalities and *barangays* are usually in a sketch form and involve boundary conflicts in many cases. In such situation where the necessary geographic information is limited, the proper delineation of CBFMA area faces challenges.

4.3.2 Subjects of Study

Under the circumstances described above, the Pilot Study intended to examine the following questions to generate insights and methodologies for forming CBFM POs.

- 1) What are the conditions under which potential CBFMA areas could be preliminarily identified properly? What conditions facilitate the concerned LGUs and local leaders in building consensus on for participating in the CBFMP?
- 2) What are the conditions needed for the proper delineation of the CBFMA area?
- 3) Under what conditions could the CBFM area users, occupants and claimants (i.e., potential PO members) be identified and listed adequately?
- 4) What conditions facilitate community people in consensus building and final selection of CBFMA area?
- 5) What are the conditions required for the community people to properly establish /re-establish PO ? (organizing originators, formulation of by law and PO policies, establishment of organizational structure, recruitment of members, collection of fees, election of directors and officers, official registration, etc.)
- 6) Under what condition could proper process of CBFMA acquisition take place?

4.3.3 Results of the Pilot Project and Findings

(1) CBFM Campaign for LGUs and Local Leaders, Consensus Building among Them, Search and Preliminary Identification of a Potential CBFM Area

Potential CBFMA areas were preliminarily identified based on the available base map, land classification map, vegetation/present land use map, administrative boundary map, socio-economic data, and political/cultural information.

During the Pilot Project, the PPMOs and the NGO disseminated information about the CBFMP to key personnel of the LGUs and communities concerned and facilitated consensus building over support for the community's participation to the CBFMP. The consensus building activities took place during consultation meetings and other meetings of the LGUs and the communities, such as *barangay* assemblies. Overall, the activities were executed with no major problems, but the contribution of the LGUs was limited to participation in the meetings. The LGUs perceived marginal responsibilities and benefits over the implementation of CBFMP.

(2) Preparation of a Master List of CBFMA Area Occupants and Users

As a result of painstaking investigation by the PPMOs and the NGOs, a master list of occupants and users for each of the CBFMA areas in the Pilot Project was prepared.

However, some CBFM occupants and users were not included in the master lists of Banila, Dapiz, Haliap and Macate due to reasons that: i) the sizes of CBFM area of Banila was large; ii) the CBFMA area of Dapiz involved occupants and users from four *barangays*; iii) CBFM occupants and users were spread to a few *barangays* in Haliap; and iv) the delineation of the CBFM area of Macate was delayed, which left inadequate time for master listing. Also, it was found that the PO leaders who led the master listing often had only limited knowledge about CBFMA area occupants and users in spite of their lengthy residency in the area. It resulted in difficulties and delay in the completion of the master lists.

In addition, the difficulties and delay of the master listing in some areas were attributed to the delay of the delineation of and installing monuments for the CBFMA areas on the ground. In some cases, the community people could not recognize the boundary of their CBFMA area on the ground and could not determine if they are CBFMA area occupants and users or not.

(3) Promotion of CBFMP and Consensus Building at the Community Level

Information dissemination about the CBFMP to community people and consensus building among CBFM area occupants and users over the participation to CBFMP were executed for *Barangay* Macate and Haliap through consultation meetings and house-to-house visit. Many community people got to know and understand about the CBFMP through the painstaking work by the NGO and the PPMOs concerned. The intention of the government was addressed by PPMO representatives in formal meetings using local dialects, and community organizers of the NGO who were semi-permanently residing in the communities disseminated the information extensively and in detail through relaxed informal settings.

The factors that affected the CBFMP promotion and consensus building were found in the community side as well. Community members who felt the benefits from participating in

the CBFMP, tended to participate in the information dissemination and consensus building activities to acquire additional knowledge. Community members who had benefited from previous government projects and/or who had better-off leaders within the community, tended to have interest in it. This implies the importance of the utilization of existing leaders as well as the wider distribution of government services to those who have not earn benefit from the previous government support .

Wider information dissemination was difficult when the communities had no clear strategy on the wider dissemination of benefits. During the Pilot Project, not all CBFM area occupants and users were informed of the CBFMP and agreed on it. The CBFMA areas were finalized without an anonymous consensus. The table below shows the ratio of CBFMA area occupants and users organized as a PO per total CBFM area occupants and users on the master list.

Organizing Ratio of CBFM Area Occupants and users

	Total occupants and users (household)	PO members (household)	Organizing ratio
Banila	430*	58	13.5%
Dapiz	88*	42	47.2%
Nunhabatan	71	51	71.8%
Balligui	59	40	67.8%
Macate	83*	27	32.5%
Haliap	184*	81	44.0%
Total/Average	915*	299	32.7% (49.7% excluding Banila)

Source: JICA Study Team

*Not verified on the ground. More CBFM area occupants and users possibly exist.

(4) Revitalization and re-establishment of PO

For the Pilot Project, the POs registered at Cooperative Development Authority (CDA), Security and Exchange Commission (SEC) or Department of Labor and Employment (DOLE), were selected as targets to reduce the time and activities for the registration since the duration of Pilot Project was limited to 16 months. The revitalization and re-establishment of the target POs included the review and amendment of organizational by-laws and policies, re-establishment of organizational structure, recruitment and registration of PO members, collection of fees and shares, election of new set of officers. The NGO assigned a semi-permanent community organizer to each of the target communities and assisted the activities on a regular basis.

(5) Identification of CBFM Area and Surveying

During the information dissemination, consensus building and identification of the potential CBFMA area among the LGUs and local leaders, the NGO and PPMOs found an overlap of land classifications and administrative boundaries, which hindered the delineation of the CBFM area. For example in Macate, the CBFM areas of neighboring

barangays (Ifugao Village and Baguio Village) penetrated into Macate. This situation was created when the delineation of the two CBFMA areas was completed without conducting a survey on the ground (including marking) or referring to the land classification map and administrative boundary map. Thus, the CBFMA areas included the territory of Macate on the map, which could have been avoided if DENR had conducted the survey on the ground and referred to necessary maps.

The *barangay* officials of the two villages agreed to amend their CBFM areas, but the agreement was made without the presence of the PO representatives concerned. DENR is yet to formalize the amendment of CBFMA.

In Balligui, a similar case occurred, which signifies the accustomed practice of DENR in the delineation of CBFM area without the survey on the ground (including marking) or referring to the necessary maps.

(6) Acquisition of CBFMA

There was a case that a PPMO asked a PO to submit unnecessary documents for CBFMA application, which gave an impression to the Study Team that some DENR personnel were in need of improving the knowledge of the CBFM application. However, this was an isolated case, and the application process and issuance of the CBFMA encountered no major problems.

4.3.4 Examination of the Subjects

(1) What are the conditions under which potential CBFMA areas could be preliminarily identified properly? What conditions facilitate the concerned LGUs and local leaders in building consensus for participating in the CBFMP?

For the preliminary identification of potential CBFMA areas, a set of clear criteria for the identification should be in place, and necessary scientific information should be available. Necessary information includes quantitative and geographical data from a base map, accurate and updated land classification maps, updated land use/vegetation maps, an administrative boundary map and soil map. It also includes information in respect to social, economic, cultural and political situation of the area.

It is also necessary for DENR and assisting organizations to identify all stakeholders and coordinate with them so as to draw their attention and interest by disseminating proper information. Based on what was learned from the Pilot Project, the major points of information dissemination for consensus building among stakeholders are as follows.

- a) The information providers (DENR and the assisting organizations) should possess adequate understanding on the concept of CBFM, pertaining to the philosophy behind the provision of stewardship (not a title) to POs (not individuals).

- b) Information providers should possess adequate understanding on the benefits of communities as well as responsibilities and restrictions to be placed on the communities and rationale behind the restrictions. Information providers should also be able to explain clearly that the community is required to formulate CRMF and AWP, which should be the guides and tools for the enforcement of proper land use, area development, alternative livelihood development and monitoring of those within CBFMA areas.
- c) Information providers should be able to explain the steps (preparatory, diagnostic and PO formation, planning and implementation) and procedures of CBFMP in detail.
- d) Information providers should possess appropriate communication skills to create a safe environment for the audience to comment and express their opinions. Information providers should also be able to articulate clearly and logically in a local dialect

(2) What are the conditions needed for the proper delineation of CBFMA area?

The following are the conditions required for the proper delineation of a potential CBFMA area.

- a) Base and thematic maps should be available, which includes accurate topographic map on a scale of 1:10,000, land classification map, present land use/vegetation map, political boundary map and soil map. DENR and the assisting organizations should have the ability and willingness to refer those maps for the delineation.
- b) Based on above maps, the preliminary location of the potential CBFMA area should be agreed by the LGU and local leaders concerned. At the community level, the preliminary location of the potential CBFMA area should have been clearly explained and discussed among the CBFMA area occupants and users and should have been agreed through the proper consensus building process.
- c) The conflict of administrative boundaries and land classification boundaries, especially with other land tenure rights such as CADC/CALC, Certificate of Land Ownership Award (CLOA), SIFMA, IFMA, FLGMA areas, and other CBFMA areas, should have been settled.
- d) Adequate financial resources, human resources and equipment should have been allocated for delineation, consensus building and surveying.

(3) Under what conditions could the potential CBFMA area users, occupants and claimants (i.e., potential PO members) be identified and listed?

The potential CBFMA area should have been clearly delineated on a map with of coordinates of all the intersecting points of its perimeter. The boundary of the potential CBFMA area should be marked on the ground, and the boundary on the ground and CBFMA map should be consistent each other. Based on the boundary, potential CBFMA area occupants and users can be identified with adequate time allocate for the activities, including key informant interview, house-to-house visit and field validation. The adequate time would vary from two to five months depending on the size, accessibility and other features of the potential CBFMA area. The result of the Pilot Project suggests that the

existence of a semi-permanent community organizer deployed by the NGO helped for the completion of master list of the CBFMA area occupants and users.

(4) What conditions facilitates the consensus building and final selection of CBFM area among community people?

All CBFM area occupants and users should be identified and be listed for consensus building. As in the case of information dissemination and consensus building among the LGUs and local leaders concerned, the information providers (DENR and assisting organizations) should possess adequate understanding on the concept of CBFM.

As the CBFM area occupants and users often have a low level of education or literacy, the information providers should be trained well in communicating with population. The information providers should possess profound understanding of using visual aid, theatrical method, games, story telling and other communication tools.

It is also important for the information providers to distinguish the kind of information to be disseminated to a target group from that required for another target group. The information to be given to the community leaders might be different from the one to the regular CBFM area occupants and users. The communication methods to leaders and regular CBFM area occupants and users should be different as well. The information dissemination has to be strategized in accordance with the kinds of information, target groups and their characteristics. When the information providers and facilitators of consensus building are not trained adequately, the training should be provided to them first.

Especially in indigenous communities in uplands, people tend to have a perception that the CBFMP is the contrariety of CADC/CALC. The people sometimes think that their indigenous rights cannot be protected through the CBFMP. The information providers and facilitators of consensus building among the community members should be able to explain clearly that the indigenous rights could be recognized through the CBFMP since it is a community-led, self-regulating program as the programs of ancestral domains under NCIP.

(5) What are the conditions required for the community people to properly establish/re-establish PO? (organizing originators, formulation of by law and PO policies, establishment of organizational structure, recruitment of members, collection of fees, election of directors and officers, official registration, etc.)

The process of establishment/reestablishment of POs is not too complicated, but technical assistance from DENR and/or the assisting organizations is needed for the effective and efficient completion of work. The assistance providers should have sufficient experience and knowledge in assisting the activities. DENR in the past tended to execute the formulation of by-law and PO registration for POs, and the PO remained unfamiliar about their own by law. The responsibilities of DENR and the assisting organizations in this work are to guide, assist, teach and lead the community people concerned so that they can fully participate in the process of establishing/reestablishing their PO.

(6) Under what condition could proper process of CBFMA acquisition take place?

When the potential CBFMA area is properly delineated on the map and ground as discussed above, the application and issuance of CBFMA would not be difficult. The process is straightforward, and there is a guideline (DAO 96-29). However, PO leaders often have not typewriters, or in some cases are illiterate, and hence DENR should assist the filling out of the application forms.

Since CBFM is a community-led program, it is extremely crucial that upon the application of CBFMA, the potential CBFMA area occupants and users should have reached a consensus. Without consensus, the community would have no leverage to implement the CBFMP.

4.3.5 Recommendations for M/P Formulation

- (1) The Master Plan should include the securing and creation, when necessary, of updated base maps, present land use/vegetation maps, land classification maps, administrative boundary maps and soil maps with accuracy and an appropriate scale (possibly 1:10,000). The reference of those maps should be part of the standard procedure for search, preliminary identification and selection of potential CBFMA areas.
- (2) The assistance in formulation of master lists of the potential CBFMA area occupants and users and information dissemination to and consensus building among them should be programmed in the M/P as part of responsibilities of DENR and assisting organizations, and allocation of appropriate financial and human resources and time in this respect should be planned in the same. It should be also included in the M/P that no community should apply to, nor DENR should enter into the CBFMA with a community unless the majority of potential CBFMA area occupants and users identified in the master list have reached consensus on the CBFMP and signed resolution expressing their willingness to participate in the CBFMP.
- (3) In the M/P, it is recommended to DENR that the finalization of CBFMA area should be based on the consensus made by the area occupants and users of preliminary CBFMA area. DENR should be flexible in making change of preliminary CBFMA areas in the finalization process.
- (4) The settlement of conflict over the land (e.g., land classification and administrative boundary conflicts) is recommended as a pre-condition for the identification of CBFMA area.
- (5) Execution of survey on the ground should be compulsory for the creation of CBFM map in the M/P, and necessary resources (survey equipment, surveyors, operation fund) and time should be programmed in the same.

4.3.6 Further Issues

Among six Pilot Project sites, only Nunhabatan completed the delineation of the CBFMA area with a survey on the ground. Also, placing monuments for and marking of the CBFMA

areas on the ground are incomplete in all six sites. The information dissemination to and consensus building among the CBFMA area occupants and users are still on going in all sites except Balligui. As illustrate in this section, the organizing ratio of CBFM area occupants and users remains inadequate. As a result, the possibility of future problems, such as disagreement among CBFMA area occupants and users over the CBFMP has not been completely eradicated. The assistance to six pilot project sites should continue in order to maintain and develop further the outcomes of pilot project.

4.4 Study on Participatory Planning for CBFM

4.4.1 Background

According to guidelines for the formulation of Community Resource Management Framework (CRMF) and Annual Work Plan (AWP) for CBFM⁵, the PO who acquired CBFMA shall prepare CRMF and AWP for the CBFMA area with assistance from the CENRO concerned. It is also prescribed in the guidelines that in the formulation and implementation of the CRMF and AWP, broad-based community participation and involvement should be promoted, and that the CRMF and AWP should contain the following:

CRMF

- a) A summary of the community socio-economic profile, present land use in the CBFMA area;
- b) The PO's proposed land use for the CBFMA area;
- c) The PO's strategies to protect, rehabilitate, develop and utilize the CBFMA area and resources therein;
- d) Indicative plan on how the community will manage and finance their activities;
- e) How the PO will market the services and/or products from its CBFMA area; and
- f) The PO's own indicators on the impact of their forest management activities, and indicators of progress and well being in their own perspective.

AWP

- a) The PO's activities and targets for implementing the CRMF; and
- b) The activities shall include forest protection, rehabilitation, development and utilization, organization and PO strengthening, and enterprise development

In reality, however, there were cases after acquisition of CBFMA that:

- a) The CRMF and/or AWP have not been prepared due to lack of assistance from the CENRO concerned and/or the assisting organizations designated for the assistance;

⁵ Memorandum Circular No. 97-12 (MC No. 97-12)

- b) The CRMF and/or AWP prepared with the assistance of the CENRO did not fulfill its requirement due to reasons that data and information of existing conditions of the CBFMA area and resources therein were insufficient, inaccurate and not quantitative and that CBFM staff of the CENRO had little knowledge and skill on facilitating the PO to formulate the plan in a participatory manner; and
- c) The CRMF has been prepared based on insufficient existing data and information by the CENRO without involvement of the PO concerned.

4.4.2 Subjects of Study

Under the situation stated above, it was examined to determine what conditions are required to prepare the CRMF and AWP properly. The subjects examined through the Pilot Study were:

- 1) What conditions are required to prepare appropriately and accurately enough the CRMF, AWP and Implementation Program (I/P) of the AWP through participatory plan formulation?
- 2) What conditions are required to apply participatory approach properly in preparation of the CRMF, AWP and I/P?

4.4.3 Results of the Pilot Project and Findings

(1) Participatory Rural Appraisal (PRA)

Aiming to establish the basic information of a community, PO and CBFMA area in respect to present and historical natural resource endowment and management, and to assess the strengths and weaknesses of the same, Participatory Rural Appraisal (PRA) was conducted for two non-CBFM POs in Haliap and Macate through a 2-day PO workshop including transect walk in May 2003. It was organized and facilitated by the NGO. At the outset of the workshop, objectives of the PRA were presented by the NGO and discussed among participants, and the community and PO profile and the result of Local Community System Analysis / Local Social System Analysis (LOCSA/LOSSA) produced previously (**Section 4.10**) were reviewed and validated. At the PRA workshop, information of conflict management, resource management and utilization, decision making on natural resources, leadership structure, wealth distribution, external interventions, seasonal calendar, resource map, current land use map and slope map were worked out. The maps produced at the workshop were validated through transect walk. The result of the PRA was processed and consolidated by the NGO and then it was brought back to the PO meeting for validation and finalization.

Since the NGO had conducted PRA for eight communities during the First Phase of the Study, community appraisal this time was properly and effectively conducted. The concerned PPMOs attended the workshops but did not actively participate in it.

The Study Team provided present land use map overlaid on the contour map and land classification map on a scale of 1:10,000, which were produced through digitally processing NAMRIA topographic map on a 1:50,000 scale and satellite image with GIS.

It was found at these community appraisals that: i) a 2-day workshop was not enough to gather expected information because community appraisal and mapping were very new for the participants, which needed more time than scheduled; ii) the maps provided by the Study Team were very useful to facilitate producing resource map, updated land use map and slope map, all of which are indispensable for further formulation of CRMF/AWP; and iii) the contour map provided by the Study Team showed only outline topographic information, by which it was rather difficult for participants to identify specific location and validate mapped information during the transect walk, since it was magnified from original scale of 1:50,000 to 1:10,000 and hence it did not have an accuracy required for a map with 1:10,000 scale.

(2) CRMF Preparation based on the Result of Strategic Planning Workshop

- 1) After the acquisitions of the CBFMA of POs in Haliap and Macate, each of the concerned PPMOs organized a 2-day CRMF formulation workshop with the assistance of the NGO on June 19 and 20, 2003 in Haliap and July 8 and 9 in Macate.

The CRMF of Haliap and Macate were based on the data gathered and information produced during the PRA. At the outset of the workshop, PPMO members explained basic outline of the CRMF. Then, the participants reviewed the results of the PRA, and classified the CBFMA area by overlaying the present land use map and slope map produced during the PRA. They formulated land use plan with zoning, and discussed strategies and activities to realize the land use plan. A guideline⁶ was used for zoning of the classified areas. The inputs required for the activities and specific target for activities were identified in the workshop.

The PPMO staff members took the maps and plans to their offices and drafted the CRMF. The PPMOs presented the CRMF to the communities and got feedback from them for the finalization of the CRMF.

It was found at the presentation to the PO by the PPMO members that the results of the CRMF formulation workshop were not well incorporated into the draft CRMF. Due to the poor quality of CRMF drafted by the PPMOs, the Study Team recommended that they revise it. Several revisions have been made. Unfortunately, quality of the CRMF still does not meet the standard set by the Study Team, and the CRMF are yet to be finalized at the end of Pilot Project.

The PO at Haliap plans to submit the result of the CRMF formulation workshop to the LGUs concerned and other agencies to seek funding for the implementation of land use plan and enforcement of zoning.

⁶ The Study Team produced a land use diagram as a tool for participatory land use plan of the CBFMA areas. The diagram is based on the land use criteria proposed in the draft M/P.

- 2) The POs in Banila, Nunhabatan, Dapiz and Balligui had already acquired CBFMA before the beginning of Pilot Project, but only the POs in Banila and Nunhabatan had formulated CRMF. The Study Team requested the CENROs to assist the POs in Dapiz and Balligui for CRMF formulation before the beginning of Pilot Project. The PO Banila had to revise its CRMF because the CBFMA area was expanded for the Pilot Project. The Study Team also requested the CENRO Dupax to assist the PO with its amendment.

All CRMFs were prepared or revised before the beginning of Pilot Project. The Study Team reviewed the CRMFs of the four POs and found that none of the CRMFs contained necessary information and guidelines, especially geographical information of the CBFM area including present land use map of CBFM area, slope map and community resource map. Quantitative data and qualitative information associated with the maps were also inadequate in all the CRMFs. Due to the lack of this information and data, the CRMFs failed to present the desired concrete picture of the community in the future, including the land use plan and zoning. The CRMF also failed to show the specific and quantitative target and strategies to meet the target for the development, rehabilitation, protection and conservation of the CBFM area.

In addition, the CRMFs were formulated by the CENROs concerned through minimal consultation with the POs. As a result, the level of understanding of PO members (CBFM area occupants and users) regarding CRMF remained at minimal level. The CRMF in this sense did not serve its purpose as a guideline for CBFM area occupants and users for protection and development of CBFM area.

To improve the existing CRMFs, a two-day strategic planning workshop was organized by the NGO on April 25-26, 2003 in Banila, May 6-7, 2003 in Nunhabatan, May 8-9, 2003 in Balligui and June 26-27, 2003 in Dapiz. In the workshops, the PO members with assistance from the NGO reviewed the existing CRMF and discussed the weaknesses of the CRMF and recognized the needs for improvement.

During the workshop, the POs also executed community resource mapping, formulation of slope maps and transect walk to validate the maps they produced, since this necessary information had not been available. The mappings were made on a transparent sheet based on the 1:50,000 – 1:10,000 scale contour map, and the maps produced were overlaid each other for land use plan formulation. Based on the zoning guidelines, the micro land use plan for the CBFM areas were formulated with the land use map. The size of each zone on the land use map was estimated, and strategies and activities to be executed in the zones for 25 years were discussed. Necessary resources and possible problems in the execution of those activities were identified in the workshops.

The land use plan, zoning, identified activities in each zones and resources required for activities were considered to be the center of the CRMFs, and the CRMFs are to be revised and endorsed by DENR in the future. Some PPMO members participated in this workshop, but their improvement in CRMF

formulation seemed to be limited since they did not facilitate the workshop but just attended.

All POs appreciated the land use plan and zoning because they could vision the development and protection of their community on the map, and their targets and activities became concrete. However, some PO members expressed frustration since the POs have no financial capabilities to implement the land use plan or enforce the zoning. Some PO members were apprehensive about the plan and zoning because their present land use had to be changed. It was pointed out that the land use plan of the POs and Municipal government might not be in accord and should be compared with.

(3) Preparation of AWP

A draft AWP was developed by the PO concerned through preparatory work and a 2-day PO workshop. Community Action Planning (CAP) method, a participatory planning method, was applied for the AWP formulation. The draft AWP was then reviewed and recommended revision by experts of the Study Team. The revised AWP was affirmed by the PO members concerned at their general assembly.

The planning process stated above was facilitated by the NGO that was the contractor for the PO capability building. As the NGO had experience with participatory planning method similar to the CAP, plan formulation was properly conducted. However, the experts who were expected to function as resource persons for technical aspects such as work components, costs, working period, implementation schedule, etc. were not able to properly assist the workshop due to language barriers. Further, the experts tried to review technical and financial feasibility of the schemes proposed in the draft AWP. However, some schemes in it could not be studied properly due to lack of data and information, insufficient time to review and the prematurely of the schemes. The draft AWP involved: i) the schemes that needed technical feasibility study, had no information detailed enough to review their technical feasibility; ii) those at merely idea level; and iii) that failed to prove its necessity. The Study Team recommended that those schemes be discarded, be suspended until sufficient data and information become available, or be revised.

At the outset of the CAP workshop, it was thought that the four target POs had been well organized and functioned already. In reality, however, there was a nominal and literally dormant PO, Ayangan Dapiz Agro-forestry Development Association (PO Ayangan Dapiz), that had no registered members and had no activities. It happened that PO members recruited after the CAP workshop included those who had not participated in the CAP workshop, and that they raised different ideas from the agreed AWP. In such a case, the agreed AWP was flexibly revised to accommodate their requirement through a process of consensus building at PO meetings that were facilitated by the NGO.

(4) Preparation of Implementation Program (I/P) for the Pilot Project

The Study Team prepared the I/P for the Pilot Project by compiling the agreed AWP of the four target POs. At the compilation, the Study Team discarded the schemes that had insufficient information, those that were in need of time consuming data/information collection and those that appeared to be premature. I/P was presented to the four POs and approved for implementation by them.

4.4.4 Examination of the Subjects

(1) What conditions are required to prepare appropriately and accurately enough the CRMF, AWP and I/P of the AWP through participatory plan formulation?

This subject was examined and verified as follows.

- a) It is important that, prior to the commencement of plan formulation, data/information based on indigenous knowledge has been well understood, sorted out properly, and shared with the PO concerned, PPMO and the NGO. Necessary data and information required for proper plan formulation are:
 - Types and location of natural resources within the community (community resource map);
 - Present land use (land use map) and slopes (slope map);
 - History of natural resource endowment and management in the community;
 - Existing decision making mechanisms for natural resource management;
 - Seasonal calendar;
 - Major livelihood activities by socio-economic class; and
 - Gender relations.
- b) A participatory method such as the PRA or similar method is useful to collect and sort the data/information based on indigenous knowledge.
- c) Special attention should be paid at the PRA to the following:
 - The facilitators of the PRA should be conversant with the concept and method of the PRA, and significance and requirement of the CRMF and the AWP as well; and
 - Participation of resource persons who are familiar with technical aspects relevant to the CRMF such as forestry, agriculture, development of cooperative and with natural and socio-economic conditions of the CBFMA concerned is required.
- d) In addition to the data/information collected with the indigenous knowledge, sufficient kind and accurate quantitative data/information should be collected with scientific means. The data/information required include those obtained through latest topographic map, soil and land capability map, vegetation and land use map, administrative boundary map.
- e) Data/information collection would require three to six months depending on the physical and socio-economic conditions.

(2) What conditions are required to apply participatory approach properly in preparation of the CRMF, AWP and I/P?

This subject was examined and verified as follows.

- a) The plans should be formulated by the POs with assistance from DENR and/or assisting organization, but not vice versa. Therefore, it is prerequisite that the PO has been organized prior to plan formulation. In particular, forestland occupants and users in the concerned CBFMA area should be identified and registered as members of the PO so that they are entitled to participate in plan formulation.
- b) It is indispensable for the PO to have assistance of experts/specialists in technical aspects including cost estimate for the schemes in the AWP. Ideas or premature plans raised at the CAP workshop should be examined by the experts/specialists and be transformed into concrete plan with clear features.
- c) The PO concerned should be ready for discussing the concrete plans brought back to them by the experts/specialists.
- d) Resource persons (DENR or assisting organizations) and facilitators should be familiar with the CBFMP, purposes and contents of the CRMF and the AWP.
- e) The resource persons should understand the importance of sufficient and accurate data/information pertaining to the CBFMA area for the plan formulation, including existing land use plans and zoning of DENR and LGU. The resource persons should be familiar with micro land use planning and zoning, which is the most important part of CRMF. The resource persons should also realize the importance of quantitative and geographical data/information (land use/zoning maps) to be included in CRMF and have ability to provide technical assistance in micro land use and zoning.
- f) The land use plan should be formulated with long-term view and gradual changes of present land use to minimize the negative impact to the PO members because their economic activities would be restricted by the implementation of the land use plan. In the plan, the support for such negative impact should be deliberated.
- g) The facilitator should be familiar with the participatory planning methods and have experience and ability to guide and facilitate the PO properly to formulate the CRMF and the AWP.
- h) Three to six months should be allocated for preparation of the CRMF, AWP and I/P.

The existing individual land occupancy within the CBFMA area should be clarified by the PO concerned to enforce CRMF. For this, the PO should conduct lot survey and create parcellial map. Based on the survey, the PO should create a master list of CBFMA area occupants so that the PO could have information necessary for monitoring of the land use within the CBFMA area.

4.4.5 Recommendations for M/P Formulation

- (1) It is recommended for the M/P formulation that sufficient time be allocated for preparatory work prior to plan formulation and that the preparatory work include

collecting or preparing accurate and quality topographic map, land classification map, vegetation and land use map, soil maps and administrative boundary maps.

- (2) It is recommended to propose in the M/P that community appraisal, PRA or similar activities be conducted to expose the indigenous knowledge.
- (3) It is recommended to propose in the M/P that, in the process of CRMF and AWP preparation, sufficient time and technical support be incorporated so that resource persons or other experts/specialists could review and elaborate the draft plan and bring it back to the PO concerned.
- (4) It is recommended to propose in the M/P that training for the resource persons or other experts/specialists who would be involved in preparation of CRMF and AWP be planned concerning the purposes and contents of CRMF and AWP, and participatory plan formulation.

4.4.6 Further Issues

It was revealed at all the Pilot Project communities that: i) the POs and the PPMO staff concerned are in need of continuous enlightenment on how to formulate/revise the CRMF as their conception of the CRMF, micro land use planning and zoning was at an inadequate level; ii) the POs have little skill to prepare the AWP and the PPMO staff concerned have to enhance their ability to support the PO; and therefore, iii) capability building in this aspect should be continued.

4.5 Study on Implementation of CBFM by PO on Contract Basis (Managerial Aspect)

4.5.1 Background

By acquiring a CBFMA, the PO is entitled to occupy, possess, utilize and develop the Forestland and its resources within a designated CBFMA area, while it has to take responsibility, among other things, protecting, rehabilitating and conserving the Forestland and its natural resources in the CBFMA area. To facilitate implementation of these policies, DENR, LGU and other government agencies are allowed to responsible for financing CBFMP implementation.

For implementation of the M/P, the Study Team considered that: i) the POs concerned should be the direct recipient of funds for CBFMP implementation so that the funds available could be utilized effectively and efficiently for the POs concerned to the maximum extent, and ii) that the CBFMA area development and management such as restoration of degraded Forestland, rehabilitation of feeder roads, construction of forest management facilities, etc. should be implemented on contract basis. Generally speaking, however, the POs are not organized as professional contractors, are financially weak, have limited members with expertise, and have considerable percent of illiterate members. Therefore, the JICA Study Team considered that an appropriate management method is

required if the POs act as contractors for the CBFMA area development as proposed in the draft M/P.

4.5.2 Subjects of Study

In order to study the required management system to employ the POs as contractors, the CBFMA area development and management work was contracted out to the POs concerned. The CBFMA area development includes restoration of degraded Forestland, rehabilitation of feeder roads, construction of forest management facilities (lookout tower and PO multi-purpose building), fire control work, and small scale community-based enterprise development, which are the main components of the M/P. In order to clarify necessary conditions to implement the CBFMA policies properly and effectively by the POs on contract basis, study subjects identified in managerial aspect were:

- 1) What conditions are required to appropriately pursue procurement procedures for the CBFMA area development and management with the POs?
- 2) What are the conditions required to manage and supervise the POs so that the POs comply with scope of works and technical specifications in the agreed contract documents if it is impractical for the POs to apply clauses related to penalties for non-observance of the agreement because generally speaking the POs are financially weak and have no marginal capacity to pay?
- 3) What are the required conditions in order that progress of the work could be properly evaluated and verified, and that progress payment could be appropriately pursued based on the verified progress?

4.5.3 Results of the Pilot Project and Findings

(1) Procurement of Contract for CBFMA area Development and Management

The Study Team prepared draft contract documents for the CBFMA area development and management, which consisted of contract agreement, scope of work, technical specifications, project cost estimate based on the agreed I/P (**Section 4.4.3 (4)**). The Study Team and counterpart personnel to the Study Team (the Counterpart) prepared the contract documents in English and presented them in a local dialect (*Ilocano*) to the PO officers (representatives of the contractor) and PPMO members, then negotiated with the PO officers. The contract agreement was signed by and between the Study Team (owner) and the POs concerned 4 - 15 days after the contract negotiation.

Since the available budget for the CBFMA area development and management had been fixed beforehand due to administrative system of JICA, allowable tolerance to change the contents of the contract through negotiation was limited in its extent.

Although the Study Team took a procedure of explaining the revised AWP, draft and final I/P, and the draft contract documents to the PO concerned, there were comments and

requests raised by the PO after signing the contract. The Study Team settled the comments and requests that could be accommodated within the agreed contract amount accordingly, while the Study Team requested its understanding at meetings with the PO concerned for those that could not be accommodated in the contract.

(2) Progress Control of the Contract

The Study Team prepared an Operation Manual for the PPMO for the Pilot Project (PPMO Manual)⁷ to facilitate supervision and technical assistance to the POs that had been entrusted to four PPMOs created in the CENROs concerned with the Pilot Project. The PPMO Manual among others prescribes how to produce a definite work schedule as basis for progress control, how to monitor and control the progress of the contracted work, how to prepare progress report with weekly and monthly formats of accomplishment and narrative report.

Progress monitoring and control of the CBFMA area development and management were conducted by the PPMOs based on the PPMO Manual. Results of the monitoring and control were supposed to be reported to the Study Team through their weekly and monthly accomplishment and narrative reports. Actually, however, weekly reports were submitted for weeks at once and monthly reports were submitted every 2-3 months by a couple of the PPMOs, which implies that the accomplishment reports no longer played their roles as designed but formality (Table 4.2.1). To rectify the situation stated above, the Study Team dispatched the Counterpart for field inspection almost every other day, and the Study Team itself conducted the same almost once a month. At every field inspection, the Study Team and Counterpart requested the PPMOs to join and coached the PPMO staff how to cope with the issues encountered in the field. As a result, all the contracted work except for minor outstanding work was completed within the contract period for the CBFMA area development and management.

(3) Payment for the Accomplished Work

A unit price contract method with monthly payment mode was employed for the CBFMA area development and management so that payment could be made based on physical accomplishment of the contracted work. It was an agreement that payment would be made on a fixed date in each month based on billing request of the contractor (the PO) with validation report from the PPMO concerned. Considering the financial difficulty of the POs, they were allowed to receive advance payment for purchasing planting stocks, fertilizer, construction materials for the PO multi-purpose building and lookout towers, stone, gravel and sand for road rehabilitation and other materials for the CBFMA area development and management. During the implementation, one of the four POs requested advance payment for labor due to the reason that PO members would not be able to participate in the

⁷ *Op cit.* Operation Manual for the PPMO for the Pilot Project

implementation unless daily payment is assured due to their subsistence livelihood level. The Study Team provided advance payment for the labors as well.

In spite of the agreed terms of payment with the fixed date monthly payment, all the contractors submitted billing request irregularly due to reasons that: i) little progress was accomplished in certain months; ii) it was time consuming work for the PO to prepare billing request; and iii) preparation of validation report to the billing request by the PPMO was delayed.

As for one PO, the cost for weeding three times was claimed at the last billing request with validation report of the PPMO concerned. However, there were no record of the first and second weeding. There was no report of the PPMO on this matter. This case signifies the inadequate quality of validation by the PPMO that joint field inspection by the PO and PPMO was not conducted in a proper and timely manner.

4.5.4 Examination of the Subjects

(1) What conditions are required to appropriately pursue procurement procedures for CBFMA area development and management with the POs?

This subject was examined and verified as follows.

- a) It is prerequisite to prepare proper contract documents, which should include at least a contract agreement, scope of work, technical specifications and cost estimate based on the agreed fixed unit costs. The cost estimate should be based on detailed work breakdown structure indicating every work component.
- b) The procedure for procurement should be properly pursued with sufficient time period so that necessary time could be allocated for contract negotiation and feedback to the PO members. A conceivable procedure for the procurement is: i) presentation of the I/P; ii) preparation of the draft contract document by DENR; iii) forwarding the draft contract document to the PO concerned; iv) presentation of the draft contract documents to the PO concerned by DENR and negotiation between DENR and the PO; v) feedback of the result of the negotiation to PO members; vi) further negotiations if necessary; vii) finalize the contract document accordingly; and viii) signing the contract.
- c) It is important for the owner (DENR) that comments on the draft contract documents raised by the PO should be fully respected and discussed to seek an agreement but should not force the PO to obey owner's opinions.
- d) It is also important for DENR to be flexible to amend the contract if occasion arises.

- (2) What are the conditions required to manage and supervise the POs so that the POs comply with scope of works and technical specifications in the agreed contract if it is impractical for the POs to apply clauses related to penalties for non-observance of the agreement because generally speaking the POs are financially weak and have marginal capacity to pay?**

This subject was examined and verified as follows.

- a) It is a fundamental principle required to achieve the captioned subject that good relation have to be developed between the owner and the contractor.
 - b) It is also required that the procurement procedure with the consent of the PO concerned is pursued by DENR and that the PO is satisfied with the procurement procedure and the contract itself.
 - c) It is important to develop an agreed work plan and schedule.
 - d) If the PO has no technical knowledge or skills required to meet the technical specifications, it is hardly possible to expect the PO to observe the technical specifications. If this is the case, the technical knowledge and skills of the PO should be enhanced through adequate methods such as training and field drill as well.
 - e) DENR should carry out close supervision and provide appropriate and timely guidance to the PO.
- (3) What conditions are required in order that progress of the work could be properly evaluated and validated, and that progress payment could be appropriately pursued based on the verified progress?**

This subject was examined and verified as follows.

- a) It is required for the PO to make working record (daily, weekly and monthly) to monitor the physical progress and performance of the PO members participating in the implementation. This working record is also utilized as a basis for the joint inspection to validate the monthly billing request.
- b) A monitoring and evaluation system should be established, and roles and responsibilities of field staff of DENR should be elaborated in detail. It is a basic requirement for DENR that field staff such as PPMO are familiar with contents of the contract documents, how to produce work schedule, how to monitor the progress and how to conduct progress control, and have enthusiasm and accountability to their duties and responsibilities.
- c) Timely joint inspection is important in particular to verify brushing, weeding and fertilizer application because trace of those works are apt to fade out with the lapse of time.
- d) For smooth progress payment, payment system should be established and the DENR field staff in charge and the PO officers should become familiar with the application of the system.
- e) To fulfill the above mentioned conditions, DENR field office need to have transportation equipment and office equipment as well.

4.5.5 Recommendations for M/P Formulation

- (1) It is recommended that expected procurement procedure and required time period be incorporated into the M/P.
- (2) It is recommended to facilitate close supervision, monitoring, joint inspection and providing technical guidance to the POs that establishment of an exclusive implementation organization including field level supervision and technical guidance office such as the PPMO be proposed in the M/P.
- (3) It is recommended that use of technical consultant be proposed to assist DENR in project management and technical guidance.

4.5.6 Further Issues

It was found that the supervision by the PPMO staff was not necessarily conducted periodically and timely as prescribed in the PPMO Manual and that the progress report of the PPMO had been submitted to the Study Team only aiming to fulfill the formality rather than to conduct monitoring periodically. It is further needed for the PPMOs to understand the real meaning of the PPMO Manual and to internalize it.

4.6 Study on Implementation of CBFM by PO on Contract Basis (Technical Aspect)

4.6.1 Background

CBFMA area development and management work in the Pilot Project was contracted out to the POs concerned on the premise that the same implementing framework is proposed in the M/P. As the POs were not organized as professional contractors for either forestry activities or civil construction work, they are generally weak in technical ability. The Study Team considered that it was important to identify an appropriate method that the POs could implement the CBFMA area development and management successfully as contractors

4.6.2 Subjects of Study

In order to clarify the necessary conditions that the POs can implement the CBFMA area development and management as contractor, study subjects identified were:

- 1) What conditions are required to estimate the work period necessary for completing the scope of work agreed in the contract documents?
- 2) What conditions are required to have the POs understand and implement the agreed scope of work and technical specifications?
- 3) What conditions are required for the PO to properly manage the CBFMA area after completing the contracted work?

4.6.3 Results of the Pilot Project and Findings

(1) Contract Period and Scope of Work

The CBFMA area development and management was executed in two separate contracts by each of the four POs. The first contract lasted for nine months from June 2002 to February 2003 for three POs and eight months from July 2002 to February 2003 for the remaining PO, while second contract was implemented by the four POs during four months from the middle of April to the middle of August 2003.

The CBFMA area development and management contracted out consist generally of forest tree/agro-forestry plantation establishment and management, establishment of a demo-farm, construction of forest management facilities, rehabilitation of feeder road (for two POs), fire protection, and community-based enterprise development.

As a whole, the contracted work has been completed substantially and successfully within the respective contract periods. However, the POs encountered the following difficulties during the implementation in relation to discontinued contract periods.

In general, tree plantation establishment and maintenance work requires continuous efforts at least for three years, during which it is expect to: i) conduct site preparation; ii) purchase planting stocks; iii) transport planting stocks to holding sites; iv) plant the planting stocks; v) carry out weeding and fertilizer application; and vi) conduct other protective measures.

Due to discontinuation between the first and second contracts, the respective POs tried to complete plantation establishment with a fixed target area during a single rainy season, timing of which is uncertain and hard to forecast precisely. This situation tended to force the PO to start planting without waiting for commencement of substantial rainy days, or alternately to miss the best planting period. This discontinuation of the two contacts also forced the POs to conduct irregular weeding.

As a result, a PO purchased seedlings much earlier than the actual plating time resulting in a low survival rate, and another PO purchased seedlings in a hurry before the rainy season when seedlings were still too young to plant, resulting in planting underage seedlings.

Construction of forest management facilities such as lookout towers and PO multi-purpose buildings were able to be conducted during the contract period without significant problems. As the dry season best for civil work fell between the two contract periods, available best season for the road rehabilitation was insufficient and hence the POs concerned were forced to rehabilitate the road under unfavorable conditions towards the beginning of rainy season.

(2) Forest Tree / Agro-forestry Plantation Establishment

The three out of the four POs had no experience on tree plantation establishment before Pilot Project. At the orientation on I/P to the POs and the PPMOs and contract negotiation for the CBFMA area development and management with the POs, the Study Team through

the Counterpart explained in detail the technical specifications of forest tree / agro-forestry plantation establishment in local dialect. In addition, the Study Team initiated a series of special PO workshops jointly with the PPMO and community development officer of the NGO to explain and practice the preparation of work schedule using the schedule forms attached to the PPMO Manual. At separate workshops, respective POs worked out their implementation schedule for the forest tree / agro-forestry plantation establishment from procurement of planting stocks through weeding. It was expected that the POs would execute the work in accordance with their work schedules and that the PPMO would supervise the progress of the work with the said work schedule.

Actually, however,: i) under age planting stocks were procured in particular Gmelina and Mahogany because of hasty procurement at early season; ii) there was a time lag more than one month between procurement and planting ; iii) there was a case that bare root Gmelina seedlings were kept at holding site without mad paddling, proper shading or watering during the long time lag; iv) there was a case that the bare root seedlings were adequately kept heeling-in at holding site during the same; and iv) there was a case that suppliers were not able to provide planting stocks as scheduled or as specified due to poor communication between the POs concerned and the suppliers. With regard to site preparation it was found that: i) both spot and strip brushing was generally well conducted; and ii) some planting holes were smaller and shallower than specified.

Survival rate of forest tree and agro-forestry plantation were checked in July-August 2003. The result of the inventory is summarized below.

Survival Rate

Species	No. Planted	No. Survived	Survival rate (%)
Banila			
1. Forest Tree Plantation (40 ha)			
- Gmelina	34,380	32,060	93.3
- Mahogany	8,720	8,020	92.0
Total	43,100	40,080	93.0
2. Agro-forestry Plantation (5 ha)			
- Citrus (Ponkan)	240	240	100.0
- Citrus (Pomelo)	720	480	66.7
- Guyabano	1,440	1,380	95.8
Total	2,400	2,100	87.5
Balligui			
1. Forest Tree Plantation (25 ha)			
- Gmelina	19,533	15,445	79.1
- Mahogany	7,050	5,883	83.4
Total	26,583	21,328	80.2
2. Agro-forestry Plantation			
- Citrus (Ponkan/Mandarin)	1,400	1,276	90.1
- Citrus (Pomelo/Dalanghita)	1,352	1,261	93.3
- Lanzones	1,410	1,124	79.7
- Rambutan	1,339	1,190	88.9
- Mango	462	461	99.8
Total	5,963	5,312	89.1

Species	Planted (nos.)	Survived (nos.)	Survival rate (%)
Dapiz			
1. Forest Tree Plantation (14 ha)			
- Gmelina	6,124	3,044	49.7
- Mahogany	2,071	1,351	65.2
Total	8,195	4,395	53.6
2. Agro-forestry Plantation (38 ha)			
- Mango	331	274	82.8
- Coconuts	1,277	632	49.5
- Other fruit trees	5,567	4,064	73.0
Total	7,175	4,970	69.3
Nunhabatan			
1. Agro-forestry Plantation (38 ha)			
- Gmelina	18,600	15,544	83.6
- Mango	837	814	97.3
Total	19,437	16,358	84.2

Source: Study Team

It was found that supervision and technical guidance to the POs from the PPMOs concerned was different from one Pilot Project site to another site. There were PPMOs that actively supervised and provided technical guidance, whereas there were PPMOs that were inactive in conducting supervision and providing necessary technical guidance. There was a case reported that overage Mahogany seedlings were procured by a PO, ignoring the suggestion of the PPMO not to do so. It brought about almost 100% mortality as a result.

To improve the situation stated above, the Study Team and Counterpart provided ad hoc suggestions to the PPMOs and POs as well taking every opportunity.

(3) Construction of Forest Management Facilities

Simple design drawing of the lookout tower and the PO multi-purpose building were prepared by a PPMO member in collaboration with the Counterpart. The lookout tower with a floor size of 2m x 2m, consisted simply of wooden pillars with concrete foundation, elevated wooden floor and walls and thatched roof. The PO multi-purpose building with a floor area of 6m x 6m, is of concrete floor, brick walls with mortar surfacing and galvanized iron roof. These small buildings were constructed without difficulty by the respective POs using internal human resources such as brick masons, carpenters and common labors. Although the buildings constructed slightly deviated from the technical specifications, those were within a tolerable range. It was found that there were few staff members who had architectural expertise in any of the CENROs/PPMOs concerned.

(4) Rehabilitation of Feeder Roads

Survey, design and cost estimate for rehabilitation of the feeder road for two Pilot Project sites were entrusted to engineers of the respective municipal LGUs concerned because no staff members with civil engineering expertise were available in any of the CENROs/PPMOs concerned. The design drawings prepared for rehabilitation were cross sections and longitudinal profile of the road and standard design of pipe culvert type cross drains. Those

drawings were very simple and seemed to be less accurate. As none of the PPMO staff members were able to make out the drawings, the engineers from the municipal LGU were expected to provide supervision and technical guidance to the PO for the road rehabilitation. But this was not realized due to the reported reason that no field allowance was secured by the PPMO or the Study Team. For the case of one site (the first site), rehabilitation work was conducted by the PO concerned itself without regular supervision or proper technical guidance, while for the other site (the second site), one of the counterparts who had experience with of civil construction work provided close supervision and provided technical guidance to the PO concerned.

Both POs carried out the rehabilitation using internal human resources without outsourcing skilled foremen or masons.

For the rehabilitation, the municipal LGU concerned with the first site and the provincial/municipal LGUs concerned with second site provided heavy equipment such as a bulldozer, a grader, dump trucks, a wheel loader, and/or backhoe free of charge except for wages of operator and cost for fuel/lubricant, for which costs were borne by the Pilot Project.

With regard to the first site rehabilitation, earth work such as widening, cut and fill was properly done. However, installation of the pipe culvert type cross drains at 11 sites was low quality in respect of dimensions of inlet and outlet structures of the culvert and backfilling. Dimensions of the inlet and outlets structures deviated from the designed ones. This is because the design drawing was never referred to during construction. Backfill for the precast concrete pipe and retaining walls was done without compacting, which resulted in settlement and piping at some places.

The work for the second rehabilitation site consisted of a large cut /fill, widening and gravelling of the road, and installation of seven pipe-culvert type cross drains. Widening and cut were properly done in general but fill was carried out without appropriate compacting due to limited equipment available and lack of technical knowledge on compacting soil. The cross drains were installed well except for compacting of backfill. This is because staking was properly set up under guidance of the IU-Supervisor of the PPMO with assistance from the Counterpart in charge.

Due to fund limitation, work designed and conducted under the Pilot Project could not accomplish the complete rehabilitation, and the roads for both sites are still vulnerable to heavy rains.

(5) Fire Control

Aiming to protect established forest tree/fruit tree plantation from uncontrolled fire, two PO conducted fire control activities, which include construction of fire lines and fire break, construction of a lookout tower and watching during the dry season in the contract period.

The fire line and break were well located and well established without problems. Watching was conducted by the fire control group of the respective POs.

(6) Development of Community-Based Enterprise

One of the four POs has chosen anthurium production for a community-based enterprise development aiming at income generation, while the other three POs have selected cattle breeding for the same.

For anthurium production, two units of net houses with a floor a space of 8m x 16m were constructed and some 2,200 anthurium suckers, which had been procured at Baguio, were planted in planting beds made in the net houses. For cattle breeding, each of the three POs selected 11 to 15 caretakers, who further constructed individual forage garden each with size of 2,500 m². The required number of heifers was directly procured at the ranches in Ifugao and Isabela because no open market for cattle was available in the Regions nearby.

The PO selecting anthurium production had technical training prior to commencing its activities and had technical guidance during the development from horticultural experts of Benguet State University (BSU) and Nueva Vizcaya Institute of Science and Technology (NVIST). This PO had an opportunity to see anthurium being produced by a community member.

The care takers of cattle in the three POs had a series of technical assistance from livestock expert of the municipal LGU concerned, Cagayan Valley Hill Land Research Outrage Station (CV-HLROS) in Ifugao, Cagayan Valley Upland Research Outrage Station (CV-UPROS) in Quirino, or livestock extension officer of the municipal LGU concerned. The assistance extended by them were training on feeding and breeding systems, technical guidance how to develop forage garden for stall feeding, and assistance in selecting heifers during procurement of the heifers. External technical support mentioned above for the three POs was crucial for successful enterprise development. It is inconceivable that these enterprise developments would have been properly conducted without their assistance. For further development and running these activities, extension services from the LGUs or other organization/body are indispensable.

4.6.4 Results of Examination of the Subjects

(1) What conditions are required to estimate the work period required for completing scope of work agreed in the contract documents?

- a) It is utmost importance that work schedule for implementation is developed based on realistic data and information that affect scheduling.
- b) The data and information required for scheduling should be available. The required data and information are those of climate (rainy season/dry season), work rate for each work breakdown, work quantities, monthly labor force available for

CBFMA area development and management, accurate size of areas to be developed, distance to the development sites from the residential areas, etc.

- c) It is prerequisite that both the POs and the PPMOs are familiar with the importance of work schedule for implementation and how to prepare the schedule.
- d) It is fundamental requirement that the scope of work is based on the AWP and I/P produced in a participatory manner.
- e) It is also crucial that input requirement are properly estimated and that availability of resources against the input requirement is confirmed. Availability of the resources to be considered with special attention may consist of external human resources with specific expertise such as livestock, horticulture, extension service, etc, construction materials such as planting stocks, sand, gravel, rubble, etc., construction equipment such as heavy equipment and dump truck, and funds.

(2) What conditions are required to have the POs understand and implement the agreed scope of work and technical specifications?

- a) Generally speaking the POs have little technical knowledge or skill on components of the CBFMA area development and management. Therefore, it is indispensable that supporting system has been established prior to the participatory plan formulation. The primary resource person should be PPMOs. If the PPMOs do not have appropriate resource persons, they have to be identified in the relevant government agencies, institutes, academia, etc., and linkage with the POs has to be developed so that the PO can directly contact those resource persons.
- b) It is important for the owner (DENR) to explain the meaning of technical specifications until the POs have internalized the specifications and scope of work as their responsibility.
- c) It is a key factor for DENR to conduct close supervision and provide technical guidance for quality control purpose in the field
- d) At the joint inspection for billing request, DENR should pay attention not only to the progress but also quality of the work, for which reference should be made to the agreed technical specifications.

(3) What conditions are required for the PO to properly manage the CBFMA area after completing the contracted work?

- a) Protecting, rehabilitating and conserving Forestland and its natural resource are continuous efforts for both the POs and DNER. However, substantial work required to do so should be completed during the project implementation period, so that the POs could enter into maintenance stage with minimum expenditures required after the project completion.
- b) At the end of project implementation, the project status should be turned over to maintenance status and should be integrated into the regular activities of the agencies concerned because the project will be implemented under the special implementing organization.
- c) At the end of the project implementation, vegetative and land use condition of the CBFMA area should be inventoried through post evaluation. Based on this, post project management plan should be made available.

- d) The POs should have acquired the technical skill and knowledge necessary for management of the CBFMA area before the project is turned over to maintenance status.
- e) It is essential for the PO members that a system of extension service to CBFMA area (Forestland) be established for intensive and ecologically compatible farming practices, livestock development, floriculture, and other livelihood enhancement activities that DNER has not expertise.

4.6.5 Recommendations for M/P Formulation

- (1) It is recommended that training on simplified project management focusing on progress control, quality control and cost control be included in the training program in PO capability building in the M/P.
- (2) It is recommended that supporting system for the CBFMA area development and management be elaborated with special attention to external resource persons for technical field other than forest.
- (3) It is recommended that institutional framework for the project implantation be clearly delineated in the M/P along with the strategy for phase out/in of the Project.
- (4) It is recommended to conduct a post project evaluation at the end of the project implementation to ensure integration of the Project into the regular activities of the concerned agencies.

4.6.6 Further Issues

The first forest tree / agro-forestry plantation was established between August and December 2002 (partly January 2003) and hence those planted saplings still need weeding for another two years. Both financial and technical assistance are desired for labor consuming weeding, while environmental education should be conducted using maintenance work for the saplings as live materials for the education.

Since the price of the heifer is much higher than the estimated cost in the contract and the number of heifers available for purchase was very limited, the ones purchased were 17 – 20 months old and weighed 175 -200 kg (Nunhabatan). This means that the caretakers have to grow and breed their cattle for 2-2.5 years until reproduction and weaning. Continuous extension services to the caretakers are required because they have had no experience in breeding cattle. Similarly, anthurium production needs technical support until the PO put this business into orbit.

4.7 Study on Roles/Impact of Demonstration Farms in CBFMA Area

4.7.1 Background

Following the development of problem trees of forest degradation and objective tree of improved forest resources at their respective CAP workshops, PO Balligui identified

establishment of a sloping agriculture land technology (SALT) demonstration farm (Demo farm) as an activity, among others, to increase the sustainability of land use for existing Forestland occupants, and PO Ayangan-Dapiz proposed the same to improve quality of life and to become effective Forestland managers (**Section 4.4**). Similarly PO Nuhabatan proposed establishment of demonstration farm for silvo-pasture aiming to achieve the improved management of the degraded land where grassland were overwhelmingly expanding and were customarily burned almost every year.

4.7.2 Subjects of Study

In accordance with the AWP formulated through the CAP workshops, a Demo farm was established by each of three (3) POs stated above. Considering the aims of the Demo farms, the study subjects were identified as follows:

- 1) Did the Demo farm provide expected impact to the PO members?
- 2) What conditions are required to achieve the effect of Demo farm?

4.7.3 Results of the Pilot Project and Findings

(1) SALT Demo Farm for PO Balligui

At the outset of the Pilot Project implementation, it was agreed at a PO meeting that it would be located at a site nearby the center of the community in the CBFMA area. Due to the disagreement of the occupant of the site, however, the Demo farm site was relocated to deep inside of the CBFMA area, where was unsuitable for demonstration purpose. The Demo farm consisted of tree plantation at the top followed downward by fruit tree plantation, and vegetable area compartmentalized by hedgerow plantations.

An Agroforestry Expert of the Study Team participated in a two-day training session on SALT Demo farm as one of resource persons in August 2002, and provided the participants to the training with technical guidance how to develop the Demo farm. In the first year, it was well established and managed. Vegetable raised on the farm had grown satisfactorily. However, bell peppers, one of the high-value cash crops raised, were left unharvested because the PO member who managed the farm was not able to find a market. Hedgerows (*Indigofera anil*, *Desmondium rensonii*, and *Flamengia macrofila*) had grown very well, all of which were, however, left unused despite that those are useful for forage or green manure. In the second year, only tree/fruit tree plantation was maintained but neither vegetable area nor hedgerows were maintained at all.

From the above, it was found that: i) the PO had an interest in the Demo farm at the beginning of the establishment and maintenance because they were stimulated by external interventions such orientation, training, coaching, etc., but such interest has been fading away with the lapse of time; ii) it seems that the PO members did not understand well the purpose of the Demo farm in spite of the training facilitated by the NGO and on site training

conducted by the Study Team; iii) SALT has not been introduced any of upland cultivation areas, where had mostly been developed by traditional slash and burn. As a whole, this Demo farm provided little impact to the PO members residing in the CBFMA area.

(2) SALT Demo Farm for PO Ayangan-Dapiz

The same alignment with the Balligui Demo farm was applied for the PO Ayangan-Dapiz. A two-day technical training on SALT was facilitated by the NGO with resource person from DENR in September 2002

This PO tried to establish two (2) Demo farms of 0.5 ha each for Bautista and Mapalad sub-groups⁸. At the initial stage, the PO created two working groups for the Demo farms, who planted tree/fruit tree seedlings and sowed seeds for hedgerow plantation. However, neither group conducted maintenance work or raising vegetable crops because of lack of interest. Then the PO disorganized both groups and tried to entrust establishment and management of the Demo farm to the occupant of the Demo farm with a benefit sharing policy of sharing the benefit from the Demo farm between the PO and the occupant at 50:50. The management of the Bautista Demo farm was successfully transferred to the land occupant, while that of Mapalad was not transferred to the occupant because he rejected the benefit sharing policy due to the reason of little incentive. As a result, the former has been well maintained by the occupant, while the latter has never been managed at all by the group or occupant.

It was found that: i) the members of Mapalad group has little incentive to the Demo farm despite that they discussed the necessity of the Demo farm and agreed to develop the SALT Demo farm; ii) SALT has not been applied for any of cultivated land in Bautista, where the Demo farm was well maintained.

(3) Silvo-pasture Demo Farm

The Study Team assisted PO Nunhabatan in seeking and obtaining planting materials for the Silvo-pasture Demo farm. For this, the Study Team introduced the PO management to Cagayan Valley Hill Land Research Outreach Station (CV-HLROS) of Department of Agriculture (DA), from which the PO was given advice on selection of forage species and provided with planting materials for forage. A two-day technical training was facilitated by the NGO with a resource person from independent agroforestry expert in late July 2002. During development of the Demo farm, Agroforestry Expert of the Study Team provided advice and hand-on training for PO members.

Due to limited land availability, the Demo farm of 1.0 ha was bisected into 0.5 ha each. The first 0.5 ha was located on convex slope where sheet erosion is prone to occur, and the

⁸ PO Ayangan-Dapiz has two sub-groups (Bautista/Sto.Nino group and Mapalad group) because this PO consists of members from *Barangays* Mapalad, Bautista, Sto. Nino and Bannawag.

second 0.5 ha was located on gently sloped land where sheet erosion seems to be minimal and hence has better soil conditions than the first site.

Forage crops were raised between hedgerows for both sites. The same species were applied for both sites. Both sites were well developed and managed by a working group organized through a PO meeting. Almost one year after the development, the first site was poor in growth of forage crops and hedgerow plantation as well, while the second site shows better growth.

Seeing hedgerow plantation bearing seeds, PO members asked at a PO meeting whether they can collect the seeds for their land. This episode implies that they began to have certain interest in the forage development.

4.7.4 Examination of the Subjects

(1) Did the Demo farm provide expected impact to the PO members?

- a) Very little impact was seen for SALT Demo farm except for very limited number of the PO members concerned due may be to the reasons that
 - The purpose of the Demo farm had not necessarily been understood well by the PO members;
 - The PO members have little interest in SALT itself (environmentally compatible upland agriculture) and are apt to stick to their conventional farming method.
 - The PO members felt less incentive for the Demo farm scheme in the Pilot Project.
 - The caretaker of the Demo farm failed to earn attractive benefits to be derived from farm produces because of little knowledge on market value of the cash crop selected.
 - The Demo farm in one PO was not located at a site suitable for demonstration.
- b) Silvo-pasture Demo farm begun exerting its effect to some extent with positive/negative reasons that:
 - The PO members are interested in cattle breeding/fattening because legal/illegal grazing is prevalent surrounding the CBFMA area and one of the PO members occupies land within the CBFMA area for grazing.
 - The PO officers committed to and hence took strong initiative to develop and manage the Demo farm.

(2) What conditions are required to achieve the effect of the Demo farm?

- a) Through a process of formulating plan for the CBFMA area development and management such as the problem identification, subsequent countermeasures identification, CRMF formulation and AWP formulation, a thorough discussion should be made on necessity of Demo farm among PO members to deepen the perception on the issue of Demo farm.

- b) It is prerequisite that technical issues to be exhibited at a Demo farm be identified in a scientific manner, preferably through field experiment in case necessary data/information is not available. For example, most suitable species and their alignment for the Demo farm area for silvo-pasture should be identified and confirmed through field experience before designing it.

4.7.5 Recommendations for M/P Formulation

In the draft M/P, intensive agriculture is proposed for a considerable area. However, as is the case of Balligui CBFMA area, conventional farming system in *Kaingin* area (slash and burn farming area) is prevailing without environmental conservation measure. It is recommended that introduction of Demo farms for SALT on the existing cultivated land be proposed in the M/P.

4.7.6 Further Issues

SALT demo farms have not provided their expected impact to the PO members. Considering the fact that the slash and burn cultivation are conventionally practiced near forest tree / fruit tree plantation by forest occupants in Balligui CBFMA area, introduction of more productive upland agriculture has to be push through to minimize horizontal expansion of the slash and burn. In this context, the SALT Demo farm established should be maintained and be utilized as live material for further training.

One of the two silvo-pasture demo farms that has shown very slow growth should be maintained further and be monitored its growing status. It would provide good information for the forage gardens that are being established by caretakers of cattle provided in the Pilot Project. The silvo-pasture Demo farm has not been utilized yet. As this Demo farm was designed for tethered feeding, the Demo farm should be demonstrated to utilize tethered feeding.

4.8 Study on Community-Based Enterprise Development

4.8.1 Background

Enforcement of CRMF on CBFMA areas, which is a prerequisite to substantiate sustainable watershed management under CBFMP, would require PO members to modify present unsustainable land and resource use into a more environmentally sustainable one. The modification of land use would entail the restrictions of economic activities of the PO members. To compensate for the restrictions and improve their livelihood, support by the government should be considered because their living standard is often at a subsistence level.

One of the promising ways of realizing the livelihood improvement of community people is the development of community-based enterprises. Since a CBFMA area is governed by the PO concerned, the PO is regarded as the community-based enterprise that is expected to

provide valuable services to its members and bring about the livelihood improvement of the PO members, especially those who are affected by the enforcement of the CRMF. For this, the PO should build up the capital and resources necessary for becoming a viable business enterprise, and generate resources needed for its operations to maintain and expand the organization.

During the Pilot Project, the methodologies of PO business establishment were studied through actual inputs for the establishment of PO business (including direct investment and technical assistance). The study was made on conditions and factors that affect the PO business development at preparatory and establishment stages.

4.8.2 Subjects of Study

The subject examined during the Pilot Study is;

What are the conditions needed for and facilitating/hindering factors affecting the effective and efficient establishment of PO business under the CBFMP?

4.8.3 Results of the Pilot Project and Findings

(1) Research for Formulation of Business Plan

The POs that had had previous business experience, examined the appropriateness of expansion/restoration of existing/previous businesses based on their experience. The POs that had had no business experience, examined the potential business based on the PO members' personal experience in business. These examinations were made at a series of activities for participatory planning through the CAP workshops (**Section 4.5**), and business ideas and plans were discussed and short-listed.

A group of experts of local consultants employed by the Study Team conducted a potential study on prospective community enterprise development for six target communities, while the CAP workshops were being conducted. Results of the study were presented to the POs and the NGO (facilitator of the CAP), and they utilized the result for the elaboration of their business ideas. During the elaboration, some original business ideas were discarded, and new ideas were picked up.

Based on the elaborated ideas, the NGO conducted further research for detailed business planning. A set of business plans were produced per PO with the technical inputs of the NGO, but the quality of business plans were in need of further improvement.

The table below shows the selected businesses for the Pilot Project.

Ideas for PO Business

PO	Business Idea		
Balligui	Cattle breeding	Rice trading	
Banila	Cut flower production and marketing	Consumer store (<i>sari-sari</i> store) & farm inputs retailing	Production of tiger grass (material for broom) Swain fattening
Dapiz	Cattle breeding		
Nunhabatan	Cattle breeding	Purchase and sale of agricultural products	Farm inputs retailing
Haliap	Micro credit		
Macate	Consumer store (<i>sari-sari</i> store)		

Source: JICA Study Team

(2) Capital Build Up

Along with the elaboration of business ideas and planning, the POs carried out the following capital buildup⁹ for further investment to the production and organization.

Issues of Capital Build-Up Identified during the Pilot Project

Source	Issues
Membership fee	Collection of membership fees was facilitated, and payment records were properly restored. The guidelines for the use of fees were established. The continuation of proper management of fees without external assistance is uncertain.
Other fees and dues	The collection of annual/monthly dues and other fees was enforced through wage deduction. The continuation of proper management of fees without external assistance is uncertain.
Capital share	Most cooperative members had made payment for the capital share, which is compulsory for them, in installments. The members, who had not completed payment, were requested to pay the balance by deducting the same amount from their wages earned from the Pilot Project.
Donations (including free labor)	Some PO members who were engaged in the business establishment received compensations, but the bulk of work was executed by free labor. Such in kind donations ought to be part of important resources for business development.
Fund raising activities	Fund raising activities such as sale of raffle tickets or fund raising parties were organized and conducted by volunteers. The sustainability is uncertain.
Existing assets	POs Banila and Haliap utilized existing assets for investment in new business.
Public services (subsidy & technical assistance)	The POs received technical assistance from public institutions including universities (NVIST and BSU) and government agencies (CV-UPROS, CV-HILROS, MAO, etc.). NGO and DENR assisted linking the public services to the POs. There were no subsidies or tax breaks provided to the PO business.
Loan from financial institutions	The registered cooperatives had better access to financial institutions using the shared capital as a bond. Balligui initiated an application for loan from an NGO but withdrew the application because the prospect for repayment was dim.
Direct investment	The Study Team provided the PO with fund for business establishment for the Pilot Study. The investments were made for cut flower production and cattle breeding.
Other contract fees	The major works of the Pilot Project were sub-contracted to the POs, including plantation establishment, establishment of demo farm, road rehabilitation, PO building, and lookout tower construction. The POs made incomes from the contract and invested in business establishment.

Source: JICA Study Team

⁹ “Capital” in this report defers from the strict definition in economics. It simply means the resources in general needed for the establishment and maintenance of an enterprise, including labor and technologies.

Among the capital buildup activities stated above, the direct investment from the Pilot Project and capital share among the cooperative members were the only methods that rose significant amount of financial resources needed for business as shown in the table below.

Result of Capital Build Up

Source	Banila	Balligui	Dapiz	Nunhabatan
Membership Fee	1,400	4,300	3,850	650
Other Fees & Dues	0	0	6,600	875
Capital Share	25,000*	21,474	N/A	N/A
Fund Raising	10,730	0	6,060	2,535
Subsidy	49,124	0	0	0
Income from Pilot Project (year 1)	140,242	12,016	41,293	22,112
Savings from Pilot Project (year 2)	79,351	39,489	25,827	37,649
Direct Investment for PO Business (in kind)	236,544	217,600	287,840	270,176
TOTAL	515,991	294,879	371,470	333,997

Source: JICA Study Team

* The amount is approximate since the PO did not record separately the capital share before and after the Pilot Project.

** The income from the contract of year 2 is still subject to internal auditing.

(3) Technical Assistance for Capital Investment and Operations

The table below shows the businesses taken up in the Pilot Project.

List of Businesses Invested by Pilot Project

PO	Business
Balligui	Cattle Breeding
Banila	Cut Flower Production
Dapiz	Cattle Breeding
Nunhabatan	Cattle Breeding

Source: JICA Study Team

For the cattle breeding, the technical assistance was provided to the PO Nunhabatan in respect of the formulation of feeding plan, forage garden establishment, procurement of heifers, establishment of caretaking system and benefit sharing policy between the PO and caretakers. It was found that the NGO and DENR did not have adequate expertise in feeding planning and forage garden establishment. In addition, the procurement of heifers took more than one month due to short of available heifers in the area, which was attributed to underdeveloped cattle market.

All three POs changed their original cattle fattening plan with cattle breeding because the PO members who attended the training on cattle breeding/fattening had sentiments that: i) cattle breeding seems to be easier than fattening in terms of feeding; ii) the daily feeding cost for fattening seems to be higher than breeding and the Pilot Project would not cover the cost for feeding; and iii) the POs would not be able to afford to maintain their business. Thus they chose breeding instead of fattening.

For benefit sharing of the cattle breeding, there was an indigenous method that the first offspring could be kept by the owner of the cattle (the PO), and second calf has to be given to a caretaker. However, the policy that the all the POs adopted was that the first offspring is to be given to the caretaker and the second one to the PO, since most cattle purchased were 15 - 20 months old and caretaker would have to wait for a long time until the first offspring. However, the second caretakers of the cattle should return the first offspring to the PO since the waiting time for the offspring was relatively short.

As the cattle breeding was not foreign to many PO members, they considered that this business is relatively low risk for them when managed properly. This induced them to actively participate to the breeding business establishment.

A similar case was observed in cut flower production business establishment by PO Banila. In Banila, PO members had been witnessing the visible profit from the existing flower production being run by local leaders. The PO, which had been active in the business establishment, was keen to establish anthurium production business but had no clear plan for re-investment and benefit sharing among the members at the outset of the Pilot Project.

In the future, the capital for business could be derived from tree/agroforestry plantations established during the Pilot Project. POs' experience in business establishment through the Pilot Project could be utilized for expansion, diversification and stabilization of their business. However, the analysis of the Pilot Study was not able to include those subjects since the Study period was as short as 16 months. POs' capabilities for stable operation and growth of their businesses are still uncertain.

(4) Business Skill Development

Business skills of the POs were improved through training and on-the-job coaching during the Pilot Project. Training covered: i) production skills, such as handcraft making and cut flower production; ii) business management and administrations as cooperative management, entrepreneurship, financial management and bookkeeping; and iii) field trip to successful PO businesses.

PO Banila acquired business skills concerning establishment and management of cut flower farm, and the other three POs accumulated their business experiences on formulation of business plans, feeding plan and management of investment for cattle breeding business.

The outcomes of business development during the Pilot Project were mostly attributed from the assistance of the Study Team, the NGO and the PPMOs, thus it is inappropriate to judge the level of their capability based on the outcomes. Based on this observation, their business development capabilities seemed to have reached a certain level as a result of training, coaching and direct investment, but it is inconclusive.

4.8.4 Examination of the Subjects

(1) What are the conditions needed for and facilitating/hindering factors affecting to the effective and efficient establishment of PO business under the CBFMP?

- a) It was found that the search for existing or familiar business for the PO concerned was important for an effective and efficient PO business establishment and for producing profit certainly, especially those POs with less business experience. It is important for a PO to establish a stable business to gain credibility with its members. While managing the initial business, PO leaders could acquire business skills necessary for future business expansion and diversification. PRA and participatory planning methods were found to be useful to explore the existing or familiar business of POs.
- b) It was confirmed that business had to be established based on reliable and scientific quantitative information in order to ensure effective and stable production and service delivery. It was learned that since this information was often unavailable or difficult to retain, business planning including determination of appropriate business scale and marketing strategies tended to be formulated instinctively on the basis of experiential knowledge. This practice not only makes the risks of business failure high but also the monitoring of business operation and growth difficult. Therefore, it is important to use the experts for information gathering, planning and designing of business development and operation.
- c) With regards to the capital build up, the government public investment is required to strengthen PO business development along with the reinforcement of capital share scheme. Other means of government assistance to capital build up are low interest Small and Micro Enterprise (SME) loans, guarantee by endorsement, tax break and deregulation. However, it does not eliminate the potential of other means of capital buildup. Although the amount raised during the Pilot Project was relatively small, collection of fees, donations and various fund raising activities were found to be vital.
- d) In the past many POs experienced business failure, which significantly damaged the well-being of PO members in some cases, and caused PO members strongly distrust the PO leaders, PO as an organization, and external assisting organizations, including DENR and NGOs. The distrust often attributed to arrears or interruptions of PO operations. In such cases, the PO leaders should be replaced, and the transparency of PO operations should be ensured through participatory business planning and development. The disclosure of PO documents, especially the financial documents should be ensured with a set of disciplined leader. To realize such a transparent PO, continuous training, education and raising awareness should be provided to both the leaders and the members, and monitoring systems should be installed with assistance of financial management specialist.

4.8.5 Recommendations for M/P Formulation

- (1) The PO business development component of the M/P should be designed to start with a search for existing/familiar business within the community, and the appraisal and planning should be conducted in a participatory manner. Three to six months should

be allocated for the information gathering and business planning, and qualified human resources and financial resources should be included in the M/P.

- (2) Business development experts should be included in the assisting organizations, and the M/P should include the duration and PO business experts within DENR and LGUs to assist POs. In the M/P, it should be emphasized that the business planning and establishment be based on scientific quantitative information.
- (3) The M/P should include in its cost estimate the public investment needed for the PO business establishment, and describe the other government support to help the PO business under the CBFMP.

4.8.6 Further Issues

The Pilot Project covered the business establishment but not the business development and stabilization due to time and resource constraints. It is still uncertain whether the PO businesses established will prosper and grow after the Pilot Project. The possibility of business survival will dramatically increase if the external assistance continues for a while.

4.9 Study on PO Capability building¹⁰

4.9.1 Background

One of the objectives of CBFM is to build the capability of CBFM POs in managing their CBFMA areas in a sustainable manner. From this perspective, all the activities executed during the Pilot Project were perceived as the process of the PO capability building and the leverage for it. The activities executed were assistance in the identification of CBFM area, community appraisal, participatory planning, reforestation and agroforestry plantation establishment and management, construction of structures and road and business development. The NGO supported the POs to internalize their experience in the execution of the work and establish normalized systems. During the Pilot Project, the NGO provided the following services to build the capabilities of the six targeted POs:

- a) Assistance in search and identification of CBFM areas and CBFM orientations to LGUs and local leaders to build consensus over the participation in the CBFMP;
- b) Assistance in master listing of CBFM area occupants and users;
- c) CBFM campaign at the community level and assistance in consensus building among the community people over the participation in the CBFMP;
- d) Assistance in re-organizing of POs;
- e) Execution of community appraisal and assistance in participatory planning;
- f) Assistance in organizational structure improvement and organizational management strengthening;
- g) Assistance in PO business development and financial capability strengthening; and

¹⁰ See **Attachment C** for more details of analysis on PO Capability building.

- h) Assistance in networking.

The above services were provided to the POs in the form of training, on-the-job coaching, field trips, provision of information through conversations, facilitation of meetings, workshops, provision of accommodations (food, etc) during PO activities, execution of survey, documentation (including stationery), provision of mobility (transportation) and morale support.

4.9.2 Subjects of Study

The Pilot Study looked into the process and results of activities executed by the NGO to examine the following study subjects.

- 1) What are the conditions under which the assisting organizations (e.g., NGO) appropriately provide the services for the capability building of POs under the CBFMP?
- 2) What are the conditions under which the assisting organizations (e.g., NGO) properly assist the achievement of PO capability building under the CBFMP?

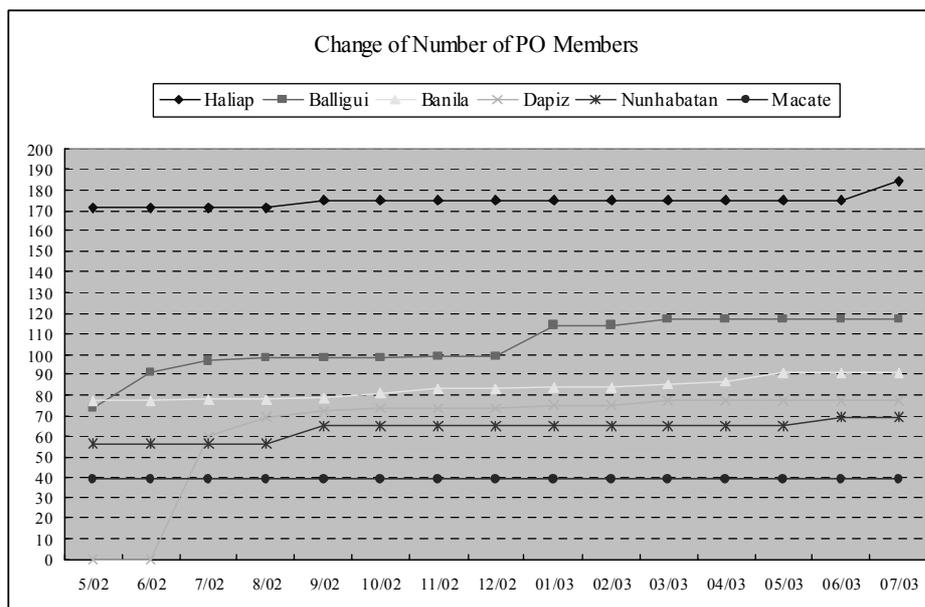
4.9.3 Results of the Pilot Project and Findings¹¹

The following is the summary of results and findings of assistance in PO capability building.

- 1) The NGO assisted the PO in organizing CBFM orientations for the concerned LGU representatives and local leaders. The assistance included making arrangement for a venue for orientation, identification and invitation of participants, making programs, recruitment of resource persons, arrangement and funding of accommodations (food). It was found that the organizing CBFM orientations were straightforward, and the external assistance in financing for the orientations was particularly valuable since DENR often had inadequate financial resources for these kind of activities.
- 2) During the search and identification of the CBFM area, the NGO assisted two POs in conflict resolution. The boundary conflicts arose during the delineation of the CBFMA area among the neighboring *barangays* and CBFMA holders, and the NGO assisted the POs and CENROs to settle the conflict through the facilitation of multi-party consultation meetings and formalization of an agreement.
- 3) The NGO conducted jointly with the PO leaders the information dissemination on the CBFMP to CBFMA area occupants and users. The achievements of CBFM campaign at the community level and consensus building over the CBFMP among the CBFMA area occupants and users varied from one PO to another. In some communities, community's understanding of the CBFM has reached a satisfactory level, signified by the CBFMA area occupants and users signing of resolution or increasing the number

¹¹ See **Table 4.9.1** "List of PO Meeting Assisted by NGO" and **Table 4.9.2** "List of PO Training Given by NGO."

of CBFM area occupants and users who became PO members. Those communities have received relatively intensive support under the CBFMP in the past.



Source: JICA Study Team:

Note: At the beginning of the Pilot Project, PO in Dapiz had no membership list, and no one paid the membership fee. In this sense, the PO existed just on paper, and it is considered that there were no members upon the start of Pilot project, and the PO existed

- 4) In other communities, significant numbers of the CBFM area occupants and users were not aware of or interested in the CBFMP. Those communities had minimum or nominal support from DENR in the past, where the DENR personnel were in need of enhancement of understanding on the CBFMP.
- 5) For leadership development, significant improvement was observed in Nunhabatan. The PO replaced a set of Board of Directors and officers at an early stage of the Pilot Project, and potential leaders who had been identified and encouraged by the NGO assumed the positions through democratic election. At Banila, the PO already had a set of experienced leaders, and they improved their effectiveness during the Pilot Project. However, as they were effective, second line leaders were not given enough opportunities to develop their leadership. In Balligui and Dapiz, growing new leadership was observed. Unlike the former leaders, they, representing the CBFMA area occupants and users strongly, were anticipated to mobilize the CBFMA area occupants and users more effectively. The integration of experienced former leaders and inexperienced new leaders will be their challenge in the future.
- 6) The NGO assisted: i) organization structure improvement, including review and revision of organizational by-law, various PO policy formulation, establishment of working groups, socialization of the by-laws and the policies; ii) the discussions and decision-making on important and sensitive matters such as benefit sharing policies and compensation to PO officers, which helped create trust among the members and leaders.

- 7) Working groups were one of the keys for the effective implementation of plantation establishment and other physical work. Some working groups functioned well when the members recognized the importance of their work and internalized it. The working groups functioned well when the group leaders received compensations. In Dapiz, the NGO supported the PO in the creation of sub-associations under the original association, and established a set of officers per sub-association whose members were bounded more closely geographically and ethnically. However, the creation of sub-associations was delayed due to the peace and order situation in the area, and its effects are yet to be confirmed.
- 8) The NGO executed the participatory community appraisal and assisted participatory planning using such methods as PRA, strategic planning that featured community land use mapping, and CAP. As a result, the CRMF and AWP were formulated or reviewed/revise. Due to the technicalities of such activities, most activities were initiated by the NGO who generated concrete outcomes (maps, diagrams, table and plans) for the communities. The participatory community appraisal and planning contributed little to capability building of the POs because the POs were not able to execute those activities. The people in the communities were a source of information rather than the executer.
- 9) Various training activities were planned and executed efficiently because the NGO had adequate experience in organizing such training programs and had an extensive network of resource persons. The following are the topics of training conducted to PO members.
 - Training on Leadership, Duties and Responsibilities of Members and Officers I, II
 - Training on Monitoring and Evaluation (M&E)
 - Financial Management Training I, II, III
 - PO Internal Audit Training
 - Cooperative Management Training
 - Training on Entrepreneurship
 - Training on Livelihood Project Management
 - Training on Project Proposal Writing
 - Training on Forest Protection
 - Training on Integrated Farming System(IFS)/SALT
 - Training on Cut Flower Production
 - Training on Handcraft (mat, hat and basket making)
 - Training on Silvo-pasture
 - Training on Soft Broom Making
 - Livestock Breeding Training
 - Cross Visit to Baguio, Banila, Malabing Valley Cooperative

Each training session lasted for two days except financial management training III and forest protection training. On an average, 14.2 participants joined each training session. The total number of trainees was 836 PO members and potential PO members of 6 POs.

The NGO was knowledgeable about Training Needs Analysis (TNA) and training module development. According to the pre- and post-tests and training evaluation by participants, the participants gained knowledge and skills through the training program. However, the impact of training on the capabilities of POs could be manifested only after the application of newly acquired knowledge and skills, thus difficult to evaluate at the end of the Pilot Project.

Result of Pre/Posttests of PO Training

	Banila	Dapiz	Nunhabatan	Balligui
Pretest Total	720	417	489	451
Posttest Total	1,123	864	763	939
Difference	403	447	274	488
Improvement per participants	4.7	5.1	4.0	5.5

Source: JICA Study Team

- 10) The major problem of training conducted was that the training subjects were selected based on requests from the PO members during the CAP workshop and each training session was designed separately without relating each other. A series of training sessions was not integrated into a comprehensive training program. A training strategy for each PO based on their interests and weaknesses was not created, and hence a training program with the objectives and emphasis based on the uniqueness of each PO was not formulated.
- 11) The execution of training program was completed by the end of the Pilot Project, but delayed in mid course due to the reasons that: i) the TNA took longer time than expected, ii) training schedule was overloaded, which induced conflicts with other PO activities, iii) CBFMA area development activities were seasonally intensified because of the nature of work, on which PO members were tied up. Community members who became PO members or leaders after the training remained untrained.
- 12) The work load for PO capability building was heavy compared with the time given for the work. As a result, the assisting organization (NGO) was pressured to complete the work, and could not execute the work as desired. For example, PO leaders and members could have completed some workshops and meetings with minimum assistance from the assisting organization if the PO leaders were trained appropriately beforehand. In reality, the assisting organization intervened exceedingly because the assisting organization was pressured to produce the outcome quickly and had limited time to train local leaders. Due to the exceeding intervention of assisting organization, the effect of leader's development and the PO capability building was undermined to a certain extent.
- 13) On-the-job training and coaching on PO management such as financial management, internal auditing, formulation and enforcement of management policies, management and evaluation of contract work, organizing meetings, and member management were assisted by the NGO. For financial matters, the financial management specialist of the NGO provided technical assistance to the POs in collaboration with community development officers of the same who semi-permanently resided in the communities. Not all the community development officers were well experienced or skillful in on-the-job training and coaching on PO management. PO management was pursued

- better by the PO who had had regular and substantial assistance from other agencies, LGUs and other organizations.
- 14) The NGO assisted the financial capability building of the POs through assistance in collection of fees and dues, capital share (in case the PO is a cooperative), fund raising activities, income from the contract with the Study Team and donation (including free labor). In addition, the NGO assisted the business development, including support on business planning. The NGO also assisted the POs and PPMOs in formulation of the feeding plan for cattle breeding, the forage garden establishment and the cut flower production, but NGO's assistance in this regard was unsatisfactory due to limited expertise of PO business expert. In the long term, the PO business should strengthen the financial capabilities of POs. It was learned that experts in PO business development in the areas were rare.
 - 15) Distrusts among members and leaders of POs, which had been fomented because of financial mismanagement, made the PO management difficult. It was found to be effective for resolving it that the transparency and disclosure be ensured through the establishment of democratic and participatory PO management. However, the sustainability of transparency and disclosure is uncertain without external assistance after the Pilot Project.
 - 16) During their service periods, three out of nine NGO staff members were replaced, one staff member shortened her term (she was not replaced by anyone because the contract was ending) and the other two took a long leave, one of who was a team leader (maternity leave). Two out of the three replaced members were virtually terminated internally due to their poor performances. The NGO has room to improve expertise and experience of the community development officers in social preparation.
 - 17) The NGO was expected to work closely with Community Organizing and Strengthening Unit (COSU) of the 2 PPMOs or IU Supervisor in the absence of COSU, but not all the COSU members functioned as planned. Some COSU members did not participate in the Pilot Project for unknown reasons, and the NGO failed to encourage them to participate.
 - 18) Supervision of the NGO was the responsibility of the Study Team, but due to the limited assignment of Japanese experts, the Counterpart executed the work in the absence of Japanese experts. The quality of supervision by the Counterpart needed improvement, especially over the quality control of NGO activities and reporting.
 - 19) In terms of sequence of assisting activities, PRA, strategic planning and CRMF formulation should have been executed before the AWP formulation using the CAP. Also, some training and field visits should have been executed earlier, as pointed out in the report of the NGO.

4.9.4 Examination of the Subjects

(1) What are the conditions under which the assisting organizations (e.g., NGO) appropriately provide the services for the capability building of POs under the CBFMP?

The following conditions need to be met for effective and efficient capability building of POs under the CBFMP.

- a) It is important that assisting organizations (e.g., NGOs) are established as a stable organization and have sufficient regular income, cash flow and contingency fund. The assisting organizations are required to have adequate office and necessary office equipment, as well as vehicles for mobility. The assisting organizations should have established financial management and human resource management systems.
- b) The assisting organizations are required to: i) have a stock and network of well-trained, experienced experts in the relevant fields; ii) constitute effective team; iii) be able to replace team members promptly in the case of unexpected turnover; and iv) have internal training system to further improve the level of expertise of its team members.
- c) The Terms of Reference (TOR) for assisting organizations should clearly illustrate the expected work and be able to accommodate the creativity and flexibility in case of unexpected change of external conditions. For this reason, the control of work progress and outputs of the assisting organizations require an elaborated basis for close monitoring, and the supervising agency (i.e., DENR) should inspect the quality of activities and outcomes of the assisting organizations directly at the field level. DENR should have profound understand and expertise in PO capability building.
- d) The assisting organizations should have ability to understand the situation in target areas and act in accordance with the characteristics of areas.

(2) What are the conditions under which the assisting organizations (e.g., NGO) properly assist the achievement of PO capability building under the CBFMP?

The following conditions need to be met for the achievement of goals of PO capability building under the CBFMP.

- a) It is required that DENR, LGUs and other stakeholders cooperate in PO capability building, and that the assisting organizations secure the cooperation through necessary coordination and regular communication. It is also important that those activities lead to maximize productive political interventions to a project.
- b) It is important to balance the work load of and time/resources given to the PO capability building.
- c) It is important that the assisting organizations develop their expertise in enhancing social development potential (or social readiness for development) of target communities through social preparation activities (**Section 4.11**). The accomplishment of the PO capability building will be affected if the social preparation is not executed properly.

- d) The work schedule should be designed to suit the capability of POs. The activity scheduled should not be overloaded since the people in the target communities often have their own economic activities aside from the CBFM activities. The assisting organizations should avoid demanding that all PO members participate in all PO activities because it is simply inefficient. The assisting organizations should assist the POs to strategize their activities and determine the members who should participate in what activities.

4.9.5 Recommendations for M/P Formulation

- (1) In the M/P, the selection criteria of the assisting organizations for PO capability building should be clearly illustrated in respect of sufficiency of cash flow and contingency fund (requirement of performance bond), possession of adequate office space, equipment and vehicles. For the selection of the assisting organizations, the internal training system and benefit of candidate organizations should be evaluated, in addition to the regular evaluation of qualifications of team members. The qualifications of their expertise and experience should be in a wide range of relevant fields in PO capability building.
- (2) In the M/P, it should be planned that personnel who possess profound understanding and extensive experience in PO capability building be assigned at DENR so as to inspect and control the work of the assisting organizations.
- (3) The strengthening of DENR and LGUs in the M/P should be in line with the needs of PO capability building
- (4) PO capability building in the M/P should be designed as follows.

First Stage: Assistance in Preparatory Work

Activities include: i) social preparation (such as community entry activities of assisting organizations, community appraisal, social investigation and assistance in leader identification through meetings, key informant interviews and informal dialogues, information dissemination on development options, environmental education and community visioning); ii) assistance in identification of potential CBFMA areas; and iii) assistance in preparation and collection of various maps needed, organizing CBFM orientation for LGUs and local leaders, master listing of CBFMA area occupants and users, delineation of potential CBFMA area, etc.

Second Stage: Assistance in Diagnosis and PO formation

Activities include: assistance in; CBFM campaign and consensus building at the community level (finalization of CBFMA area), identification and development of potential leaders, execution of detailed community appraisal, PO formation, CBFMA application, etc.

Third Stage: Assistance in Participatory Planning

Activities include: assistance in formation of CRMF (long-term strategic plan), AWP and business planning

community was identified to be socially prepared, the community was judged to have a social development potential that is high.

Before commencement of development interventions under the CBFMP, a set of activities to enhance social development potential (social readiness for development) of the community concerned should be undertaken to achieve the goal of CBFM effectively and efficiently.

4.10.2 Subjects of Study

With regard to social development potentiality, the following question was studied.

“What are the factors and activities that affect the enhancement of social development potential?”

4.10.3 Results of the Pilot Project and Findings

(1) Study on Social Condition using Local Social System Analysis (LOSSA) and Local Community System Analysis (LOCSA)

The level of development potential of a community should be measured at the outset of development initiatives so that the planning and programming of development interventions for and by the community can be designed in accordance with the measured levels. However, the development potential (social readiness) is difficult to measure due to its nature.

The study on social condition was carried out to indicate the levels of development potential of six target communities by the Study Team using an innovative social analysis tool entitled LOSSA/LOCSA at the beginning of the implementation phase of Pilot Project¹². The study was recommended and inspired by Professor Ohama, a member of Advisory Committee of the Study.

The study on social condition was to measure the degree of the development of embedded structural functions of a community and characteristics of social norms in respect to the natural resource management under the CBFM concept. In other words, the measured level of development of structural functions and social norms are the indicators for social development potential.

The data needed for indicators was collected through key informant interviews, and the characteristics of the six target communities were analyzed by looking at nine types of structural functions as defined in the table below.

¹² The survey was between May and July 2002. The study report was completed in January 2003

Nine Types of Structural Functions

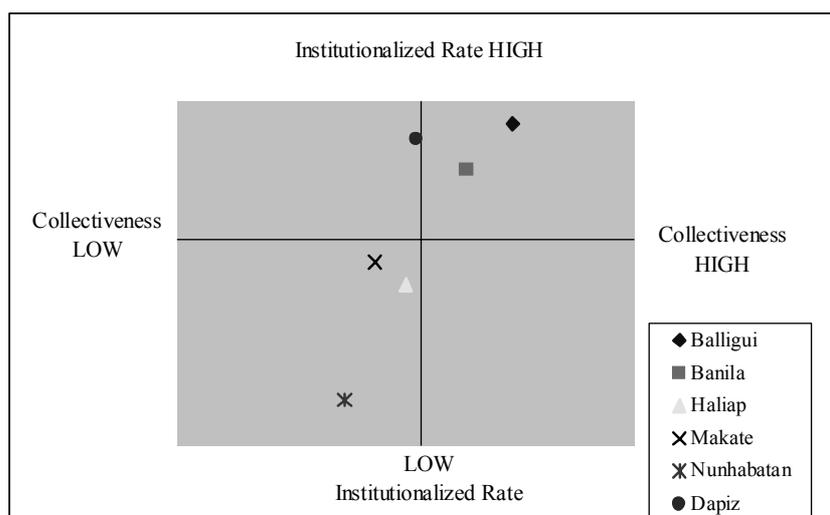
	Physical Resources	Human Resources	Information
Production Function	Is an embed function in a community to produce physical and monetary resources mainly using their own resources?	Is an established function to enhance both quality and quantity of mobilized labor forces within a community through the investment of internal resources?	Is an institutionalized function of community whereby information, indigenous knowledge and local technologies are produced by the community itself?
Consumption Function	Is an embed function in a community for the utilization and consumption of physical and monetary resources mainly coming from outside?	Is an established function to enhance both quality and quantity of mobilized labor forces within a community mainly using external resources?	Is an institutionalized function of community whereby a community receives and utilizes information, knowledge and technology mainly coming from outside?
Maintenance Function	Is an embed function in a community fairly independent from external support to manage and maintain physical and monetary resources?	Is an established function fairly independent from external support to continuously enhance both the quality and the quantity of mobilized labor forces within the community?	Is an institutionalized function fairly independent from external support to continuously produce community's original information, knowledge and technologies?

Source: JICA Study Team

Among the varieties of social norms existing in the community, two social norms, namely the collectiveness and institutionalization were selected for the study. The two social norms were deemed to be most relevant to CBFM since CBFMA areas are expected to be managed by community members collectively.

Based on the survey results, the six communities were classified in accordance with the degree of social norms.

Six Target Communities by Social Norms



Source: JICA Study Team

The community should have the social norms in order that the collective decision-making and actions may become customary practices for the majority of individual community members. CBFM communities should institutionalize the rules, enforcement of rules and sanctions to regulate land use of their CBFMA areas. Therefore, it was important to look at the conformity of such institutions.

Based on the analysis of structural functions and social norms, development strategies for six communities were created. The development strategies were adopted by the NGO for the execution of PO capability building activities.

(2) Analysis of Effect of the Pilot Project on Social Development Potential

Through the Pilot Project the POs carried out various activities that potentially affect the status of social development potential. Those activities include:

- a) CBFM orientation to LGUs;
- b) Community entry of assisting organization staff;
- c) Study on social condition using LOSSA and LOCSA;
- d) Leadership identification and development;
- e) Environmental education and value formation;
- f) Community appraisal (i.e., PRA);
- g) Identification of CBFMA area and PO formation;
- h) Strategizing development initiatives (as a result of study on social condition) and community visioning (at Strategic Planning);
- i) Policy formulation and advocacy (rule setting and enforcement); and
- j) CBFM campaign and consensus building on the participation in the CBFM project

These activities were executed using various venues as socializing events, informal dialogue, meeting, workshop, formal training session and on-the-job coaching. The expected outcomes of above activities were:

- a) Integration of assisting organization staff and community;
- b) Raised awareness of community people about the status and history of their community, especially the condition of natural resources and gained knowledge of assisting organization about the community;
- b) Established external support system;
- d) Developed community leaders who become community development field workers;
- e) Established vision and concrete strategies to achieve the vision;
- f) Commitment of community members to the sustainable development of their community; and
- g) Institutions, social systems, social norms, behaviors and values of people to govern the commitment and put them in practice

As a result, the community was expected to become socially capable in utilizing external inputs, internalizing the inputs and pursuing their endogenous development effectively and efficiently. The activities that generate above outcomes (enhancement of social development potential) are generally called “social preparation activities”, which include, but not limited to, the activities described above. Therefore, those outcomes are regarded as the indicators of enhancement of social development potential.

The outcomes described above as a result of social preparation inevitably replace the existing social systems, norms, behaviors and values within the community. Some changes occur in a short period without significant effects on the people’s lives, and some require time and effort. The outcomes create chaos and negative effects when such changes take place without proper timing, period and guidance.

During the Pilot Project, some changes took place as observed. For example in Nunhabatan, the revenue of the PO was managed and utilized at discretion of PO leaders before the Pilot Project. This customary practice was replaced by management with institutionalized guidelines and norms of reporting and approval among the leaders and members.

Another example is that before the Pilot Project, it was widely perceived that the government services are a relief to individual people. In the case of animal dispersal in the previous practice, the animals dispersed become a possession of individual with marginal impact on the development at large. The Pilot Project emphasized that the focus of the Project was on development, not a relief for segregated individuals, and the recipients of public investment (e.g., animal dispersal) will be a public entity, such as a PO to utilize the investment for the development of their community. In a sense, the Pilot Project replaced an old perception of community people as well as their social systems with a new way of thinking and social mechanisms in which individuals will benefit collectively from the proper management of PO’s dispersal services.

The target communities, except Banila, were governed by the social norm that a PO is a mere “tunnel” of external inputs for development. For example, when DENR contracted a PO for reforestation, the PO often informally subcontracted the forest tree/agroforestry plantation establishment to PO members without proper monitoring. This prevailing social norm in these communities is called *pakyaw* in local dialect, which literally means, “wholesale of contract.” Under this customary practice, it is impossible for DENR to control the progress and quality of PO’s work because the responsibilities of the PO are already distributed a number of individuals. Sustainable resource use and management could be realized through the collective management and self-governing restrictions to control the maximization of individual interests. Because the *pakyaw* is a resource management system of individual discretion, sustainable resource use would not be achieved under *pakyaw*. During the Pilot Project, the customary *pakyaw* was replaced by a practice in which a PO functions as a catalyst for individuals to coordinate their individual interests. Under this system, sustainable resource management could be brought to reality.

4.10.4 Examination of the Subjects

(1) What are the factors and activities that affect the enhancement of social development potential?

It takes a certain time to enhance the social development potentiality, so the result of activities is still inconclusive. However, the Study Team collected the relevant information through semi-structured interview with the team leader and training specialist (assistance team leader) of the NGO and estimated the factors that might have affected the structural functions and social norms of the target communities as follows.

- a) The assisting organization staff should: i) properly design and monitor social preparation; ii) clearly recognize the outcomes of social preparation activities; and iii) secure necessary benchmark information and data for monitoring of the outcomes.
- b) Experience, knowledge and ability of the assisting organization staff in social preparation activities are utmost importance for the enhancement of social development potential. The assisting organization staff should possess profound understanding and skills to integrate them into the target community using appropriate communication and socialization techniques. The assisting organization staff should have been trained in sensing and capturing the social dynamics of the community and be able to locate themselves in the community situation properly.
- c) The assisting organization staff should possess skills to assist the communities in facilitating meetings and workshops, enhancing various survey skills, mediating conflict and environmental education.
- d) The assisting organization staff should: i) have profound understanding in the concept, procedures and expected outcomes of CBFM projects relating to the communities; and ii) know the methods of preparation, PO formation, participatory planning and implementation of the CBFM projects.
- e) Local leaders and key community members should be well informed about the CBFM projects. Prior to this, they should have had education and experience in respect of development, and have recognized the vision for the development through attending information dissemination and education about the development.
- f) With proper guidance from the assisting organizations such as intensive training, coaching, meetings and dialogues, local leadership and social systems in the communities should be developed to a level that they could internalize the external development initiatives. The communities should have new institutions, rules, social values and social norms through the intensive support from assisting organizations and DENR, and the trained local leaders should be able to govern the development.
- g) Community members should understand the CBFM concept, benefit, restrictions, rights and responsibilities of community appropriately through the CBFM campaign and various means of information dissemination and education. They should also appropriately understand the social, economic, political and cultural impacts of the CBFM projects on their community, which should be acceptable for

most community members who would be affected with the projects. The understanding of the community members about the CBFM projects helps enhance social readiness.

- h) Appropriate time and resources should be allocated to social preparation activities since most of the outcomes stated above are pertaining to the deeply embedded social, cultural and political practices and customs of the communities, and the outcomes require time and continuous effort both by external development organizations/workers and people in the communities.

4.10.5 Recommendations for M/P Formulation

It is recommended that a set of activities called social preparation activities to enhance social development potential be included in the M/P. The M/P should incorporate the cost, time and human resources necessary for social preparation activities.

The M/P should also include training of the assisting organizations and government officials in social preparation activities since the expertise in this field is underdeveloped in the Philippines.

4.10.6 Further Issues

The enhancement of social development potential requires persistent assistance for a few years, depending on the present level of development potential of a community. As the enhancement of social development potential was still on going at the end of Pilot Project, it is desirable that the assistance to the POs be continued for a while. The expertise of the NGO in social preparation should be improved as well. The assignment of international consultant to guide and monitor the NGO is necessary.

4.11 Study on Approach, Process, Time Frame, Institution, and Input Used for PP

4.11.1 Background

The purpose of the Pilot Study was: i) to experimentally substantiate a miniature of the draft M/P that applied the CBFMP as a main strategy; and through it ii) to validate the viability and effectiveness of the approach, components of activities, process, procedure, method, time required, institutional framework, and input requirement used in the same. In previous sections, recommendations for the M/P formulation were made on the procedure, method, time, institutional framework and input requirement for each of the component. In this section, therefore, the validation and recommendations will be made on approach, process, time, institutional framework and input requirement to implement the M/P as a whole.

4.11.2 Subjects of Study

(1) Component of Activities for CBFM Centered Watershed Management

Through the implementation of the Pilot Project based on the draft M/P, the necessary work components for implementation of the CBFM centered watershed management were examined. The components consist of: i) strengthening service mechanism of the administrative organization i.e., DENR; ii) enhancement of social development potential of the six communities/POs concerned with the Pilot Project; iii) PO formation and CBFMA acquisition by joint effort of two communities out of the six and DENR/LGUs; iv) planning of CBFMA area development and management by the joint effort of four POs out of the six and the DENR/LGUs; v) implementation of CBFMA area development and management by the four POs under supervision and management of the DENR; vi) supporting activities consisting of institutional strengthening of the DENR/LGUs, capability building of the POs and technical and managerial assistance to the DENR from the Study Team (project consultant); vii) coordination among stakeholders pertaining to management of Forestland and Protected Areas; and viii) initiative for establishing cost sharing mechanism required for appropriate Forestland and Protected Area management. The components stated above are broadly grouped into core components and supporting components. The former includes components i) to v) above, while the latter consists of the rest. Detailed activities included each component are illustrated in **Figure 4.11.1**.

(2) Process and Time

In general, participatory development projects used to take longer time to pursue necessary process from the beginning through completion or even terminate without completion depending upon the circumstances of the projects. There are cases, at the other extreme, that the projects were completed within a limited time without adopting the necessary participatory process. It was therefore considered that participatory development project like the Pilot Project should be formulated and implemented with the process and schedule fully agreed by and between the PO concerned and the DENR. During the implementation of the Pilot Project, the Study Team tried to strictly follow the process prescribed in the regulations relevant to CBFM and allocate sufficient time for each of the required steps in the process for the POs and the DENR/ Study Team.

(3) Institutional Framework

An institutional framework for the implementation of the CBFM centered watershed management was also studied during the implementation of the Pilot Project. The assumptions examined concerning the institutional framework were that:

- a) The POs should be the frontline managers to protect, rehabilitate and conserve the natural resources within CBFMA areas with close assistance, guidance and management from DENR and LGUs.

- b) External assistance organizations/bodies such as NGOs and national/international consultants should be hired by the DENR on a contracted basis to complement the field staff of the DENR/LGUs in respect of expertise they have little capability.
- c) An implementing organization should be established for the M/P implementation apart from regular organization in the DENR.
- d) The implementation of the CBFMA area development and management including community-based enterprise development should be contracted out to the POs concerned by the DENR so far as the POs can execute the work.

(4) Input Requirement

Input requirement for project implementation is broadly divided into human, financial and material inputs. Standard input requirement and share of the input between the government and POs have not been determined for CBFM centered projects.

As for the forest rehabilitation such as reforestation, agroforestry, bamboo/rattan plantation, assisted natural regeneration (ANR), enrichment plantation, and timber stand improvement (TSI), the standard input in terms of the unit cost per ha was prepared for JBIC funded FSP in January 2001.¹³ However, standard input requirement for the other components of the CBFMA area development and management such as management facilities, rural infrastructures, fire control, and community-based enterprise development are yet to be determined.

It was therefore considered that the input requirement should be on a need basis, and that they should be derived from the CRMF and AWP quantitatively formulated with sufficient and reasonably accurate data and information.

4.11.3 Results of the Pilot Project and Findings

(1) Components

Most of the components implemented in the Pilot Project were studied and their viability and effectiveness were validated for refining the M/P.

As for strengthening service mechanism, policy initiative has not yet been examined and establishment of implementation organization was limited to the creation of the PPMOs that assumed field level supervision and guidance offices. Through the Pilot Project, the roles and responsibilities of the PPMOs were practiced and their importance was recognized.

Concerning coordination among stakeholders, only consultations on establishing watershed management council and cost sharing mechanism were conducted with the stakeholders of the Project in Nueva Vizcaya, Quirino, Isabela and Ifugao Provinces.

¹³ DENR Memorandum Circular No. 2001-19 (MC No. 2001-19) Guidelines Governing the Updating of Cost Estimates and Intensification of Plantation, Maintenance and Protection Activities for DENR-FSP Watershed Subprojects under JBIC Funding.

It was confirmed at the consultation meetings with the stakeholders that: i) they were willing to create watershed management council as a coordinating body over the Study Area; ii) there were stakeholders committing to participate the mechanism; and iii) continuous effort will be required to build consensus on establishing cost sharing mechanism among the on-site and off-site stakeholders.

In addition to the core components consisting of enhancement of social development potential, PO formation & acquisition, planning of CBFMA area development and management and implementation of the CBFMA area development and management, it was confirmed that all supporting components that included PO capability building by the NGO, institutional strengthening by the Study Team and the NGO and technical and managerial assistance to the PPMOs and the Counterpart, were useful and indispensable for effective and successful implementation of the Pilot Project.

(2) Process and Time

The CBFMP is designed to be implemented in four stages, i.e., diagnostic stage, PO formation and CBFMA acquisition stage, planning stage and implementation stage. It was optimal that the four stages were practiced with the target communities of the Pilot Project. Due to the time constraints, however, two POs without CBFMA were chosen to pursue the first two stages, and four other POs with CBFMA were selected to practice the last two stages.

The two POs commenced at the first stage and terminated the activities at the CBFMA acquisition and CRMF preparation. In parallel with the activities of the two POs, the four POs pursued the last two stages presuming that all the required process and procedure that had to be undertaken during the first two stages had been cleared properly. In reality, however, all the CRMFs concerned failed to: i) identify occupants and users of the CBFMA area; ii) quantitatively formulate a strategic resource management plan but conceptual description; and iii) delineate land use plan on an appropriate map.

Due to the time constraints, for the four POs, the Pilot Project started at formulating AWP's without revising the previously prepared CRMF, in which entire resource management plan was not seen. The strategic resource management plan for the entire CBFMA area was retroactively prepared during May – July 2003, for which the Study Team provided present vegetation and land use map with contour information and land classification map on a digitally magnified scale of 1:10,000 derived from NAMRIA topographic map on a scale of 1:50,000 and satellite images through GIS analysis.

Throughout the Pilot Project period, the core component and supporting component (**Section 4.11.2**) were simultaneously and intensively conducted. Especially PO capability building for the four POs was designed and implemented comprehensively because they had little basic knowledge and skills that had to acquire before the Pilot Project. These intensive activities left them little time to digest what they had learned and also to have hard

time for participating in formal and informal meetings, workshops, general assemblies, to conduct CBFMA area development, and to carry out their own livelihood activities simultaneously.

(3) Implementation Framework

During the Pilot Project, the POs became the frontline manager of CBFMA area development and management especially in respect of rehabilitation of the degraded forest since the POs were the contractor for the rehabilitation work.

Institutional setting up for the Pilot Project was minimal in respect of the administrative organization, for which only four PPMOs were established as field level supervision and technical guidance offices. This was because: i) implementation period of the Pilot Project was as short as 16 months (April 2002 – July 2003); and ii) the fund for the Pilot Project implementation were handled by the Study Team. The PPMOs were expected to assist, guide, supervise and manage the implementation of the CBFMA area development and management, but their expected roles and responsibilities were not necessarily fully exerted due to various reasons (**Section 4.2**).

The NGO highly contributed to capability building of the POs as an external assisting organization. Assistance of the Study Team and the Counterpart was effectively provided for the PPMOs in project management and technical guidance as well. Some LGUs, appurtenant organizations of DA, and academia played important roles as assisting agencies in providing technical services for road rehabilitation and community-based enterprise developments.

(4) Input

Input of human resources: Input of human resources for the Pilot Project/Study between January 2002 and August 2003 is shown in the table below.

Input of Human Resources for Pilot Project

Organizations/Agencies	Expertise	Persons	Months	M/M
Study Team (Project management and technical assistance)	TL/Watershed management	1	11.0	11.0
	Forest Management	1	4.2	4.2
	Participatory Development	1	7.7	7.7
	Community Forestry/Coordinator	1	14.5	14.5
	Agro-forestry	1	3.0	3.0
	M&E	1	2.7	2.7
	Socio-eco., Institution, Forest magmnt	3	3.4	3.4
	Sub-total	9	46.5	46.5

Organizations/Agencies	Expertise	Persons	Months	M/M
Counterpart personnel	Forestry	4	20	80
NGO (PO & PPMO capability building)	Team Leader	1	14.0	14.0
	Community development specialist	4	14.0	56.0
	Enterprise development specialist	2	14.0	28.0
	Financial management specialist	1	3.5	3.5
	M&E	1	14.0	14.0
	Community appraisal coordinator	1	2.0	2.0
	Training specialist	1	14.0	14.0
	Administrative officer	1	14.0	14.0
	IEC product development	1	2.0	2.0
Sub-total		13		147.5
PPMOs (Supervision and technical guidance of CBFMA development management area &)	PPM Officer	4	16.	64
	COSU Staff	4	16.	64
	IU Supervisor	4	16	64
	IU Surveyor, Assistant surveyor	4	16	64
	Extension Officer (Agriculture)	3	On-call	0
	Extension Officer (Agroforestry)	3	On-call	0
	Extension Officer (Livestock)	2	On-call	0
	ASU-Technical clerk	4	16	64
	ASU-Validation and Billing	4	16	64
	ASU-Administrator	4	16	64
Sub-total		36		448
Assisting Agencies				
CV HILROS	Forage development	1	On-call	
CV-UPROS	Livestock	1	On-call	
LGU Lamut	Civil engineering	1	On-call	
LGU Dupax	Livestock	1	On-call	
LGU Madela	Civil engineering	2	On-call	
	Livestock supervisor	1	On-call	
NVIST	Horticulture	1	On-call	
Sub-total		8		-

Source: JICA Study Team

Financial input: Financial input for the Pilot Project/Study was ₱ 13,933,000 in total excluding the consulting services. Breakdown is shown below.

Financial Input for Pilot Project and Study

	Items	Amount (peso)
1	CBFMA Area development and management	3,590,000
2	Community based enterprise development	1,080,000
3	Rural infrastructure	550,000
4	PO capability building	1,790,000
5	Institutional strengthening	1,470,000
6	Assisting organization (the NGO)	4,630,000
7	PPMO operation	403,000
8	Travel allowance for counterparts	420,000
	Total	13,933,000

Source: JICA Study Team

4.11.4 Examination of the Subjects

(1) Components

It was validated that all the core components of the Pilot Project were adequate and important to protect, rehabilitate and preserve the CBFMA area and enhance livelihood of the local people, and that supporting components were indispensable to implement the core component of the Pilot Project properly and effectively. Considering the status of the POs before Project, it is not conceivable that the Pilot Project could be completed without capability building of the POs.

(2) Process and Time

It was learned from the Pilot Project that prior to proceeding to formulating implementation schedule, state of the POs with CBFMA should be thoroughly reviewed in respect of by-laws, PO policies, PO organization, CBFMA area map, CBFMA area occupants and users, CRMF, AWP and RUP if any, and technical, financial and managerial capabilities. It was also learned that existing CRMFs in general were quiet conceptual and contained little quantitative information, which made it difficult for the POs to formulate definite and quantitative AWP. Sufficient time, therefore, should be allocated to study the state of the POs with CBFMA, and to review and revise the existing CRMF and AWP.

The single year contract for plantation establishment tended to force the POs to push through the plantation even under unfavorable dry condition. A multiple year contract is indispensable for work whose implementation is dependent on weather conditions.

Based on the above examination, the implantation schedule of the M/P is assumed as illustrated in **Table 4.11.4**.

(3) Implementation Framework

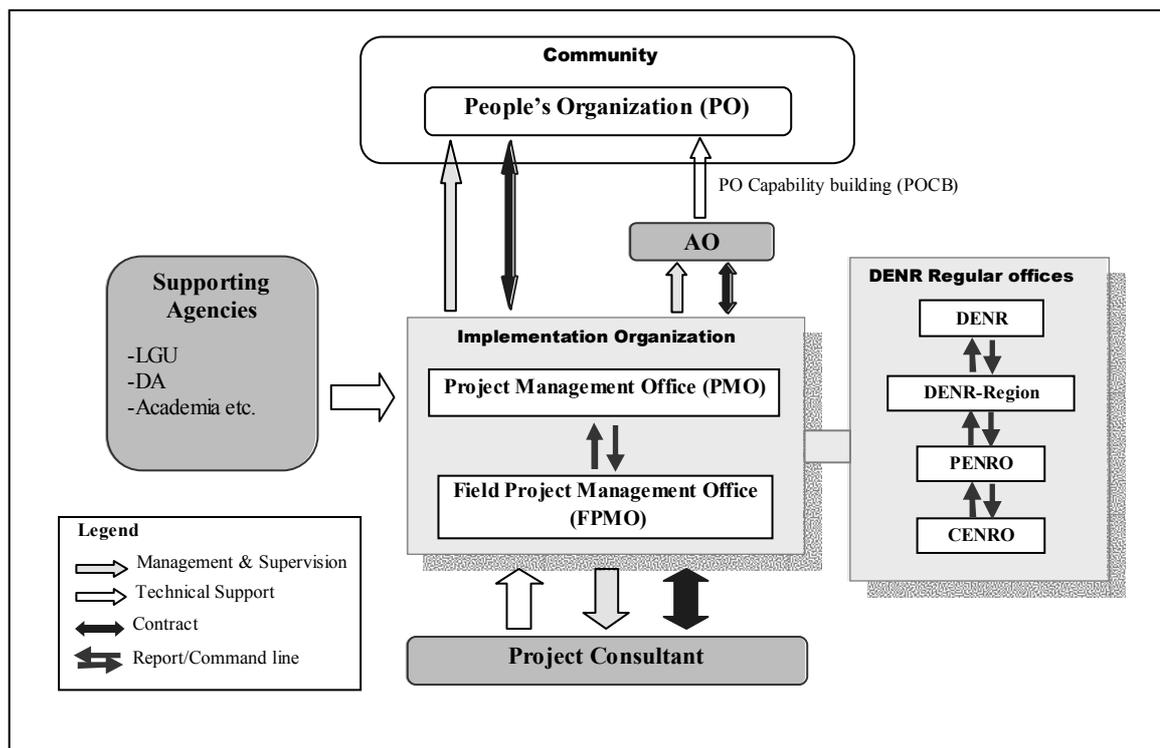
It was learned that the existence of the PPMOs was crucial for the implementation of the Pilot Project, and that the PPMO members who were concurrently serving their regular positions in the CENRO concerned limitedly contributed to the task of the PPMO. Assignment of the members who were designated to serve the Pilot Project had to be full time and exclusive basis.

The training need analysis and evaluation of the Pilot Project revealed that expertise of the PPMO members was basically limited to that of forestry. Linkage with the supporting agencies or outsourcing should be sought for the expertise of civil engineering, agriculture and agriculture extension service, horticulture, livestock industry, etc., relating to CBFMA area development and management. With regard to the PO capability building, it was confirmed that DENR has limited expertise. The work should be outsourced to assisting organizations, such as NGO. The assisting organizations should be competent enough and have ample experience in participatory development, capability building and Information, Education, Communication (IEC).

The Study Team in the position of the Project consultant was also indispensable to assist DENR in guidance and management of the Pilot Project. Although the expected roles and responsibilities of the PPMOs were not fully exerted due to various reasons (**Section 4.2**), the importance of the PPMO was validated.

Base on the lessons learned, the possible institutional framework for the implementation of the M/P is assumed as illustrated below.

Assumed Institutional Framework



Source: JICA Study Team

(4) Input

As discussed in the previous sections, only the AWP were developed for the four CBFMA areas through CAP workshop without quantitative and definite CRMF, in which financial input requirement for the entire CBFMA area had to be estimated. Further, the total financial input of the Pilot Project was basically decided as ceiling amount by JICA headquarter regardless the field specific conditions and requirement. Therefore, it was not possible to validate adequate input amount required for each of the four CBFMA areas in the Pilot Project.

4.11.5 Recommendations for the M/P Formulation

- 1) **Components:** It is recommended that basically the same components as the Pilot Project be applied for the M/P. It is recommended that a topographic map on a scale of at least 1:10,000 derived from aerial photogrammetry be produced for the Study

area, and that this map be utilized for identification and delineation of the CBFMA areas, for CRMF and AWP formulation, for monitoring the CBFMA area development and management, and for validation of the intervention. It is recommended that continuous effort be made by a task force to establish and institutionalize the watershed management council and cost sharing mechanism before finishing the implementation of the M/P so that the Forestland and Protected Areas in the Study area be managed in a sustainable manner with reasonable funds.

- 2) **Process and time:** It is recommended that the process and procedure prescribed in the regulations pertaining to the CBFM be fully followed. It is recommended to allocate at least five years for PO capability building.
- 3) **Institutional framework:** It is recommended that the project for implementation of the M/P be pursued as a national project because of its geographical extent, and that a specific implementing organization exclusively devoting to the implementation of the M/P be established.
- 4) **Input:** It is recommended that input requirement be estimated on need based plan. To this end, quantitative and definite CRMF be formulated based on data/information sufficient and accurate enough to estimate total input required for the entire CBFMA area.

Tables

Table 4.1.1 Personnel, number of CBFM projects, and perceived ideal number of CBFM personnel at the CBFM Unit at the CENRO

Items	Dupax	Aritao	Aglipay	Nagtipunan	Lamut	Cauayan	San Isidro	Minimum	Maximum	Average
Number of CBFM projects	5	6	4	7	4	1	7	1	8	5
Total area (ha) of projects	3,183	NA	10,180	NA	1,618	5,000	1,140	1,140	10,608	4,989
Number of personnel at CBFM Unit	11	5	4	7	5	2	4	2	11	5
No. of projects w/o PMO	4	3	0	1	0	0	0	0	4	2
Ideal no. of CBFM personnel	6	9	5	8	2	3	6	2	12	6

Source: JICA Study Team

Table 4.1.2 Budget allocation (MOOE) for CBFM Program and other locally funded DENR Programs

(Unit: 1,000 Pesos)

Programs	1999	2000	2001	2002	2003	2004
Community-based forestry	55,260	57,227	24,443	30,947	30,947	28,249
Forest protection	59,089	63,327	34,799	37,257	37,257	34,669
Watershed management & soil conservation	53,925	62,221	28,445	25,358	25,358	24,800
Coastal and marine resources management	62,027	62,692	47,479	39,611	39,611	35,719
Plantation establishment and management	21,066	25,438	8,953	8,823	8,823	8,479

Source: JICA Study Team

Table 4.1.3 Travel allowance, supplies and materials, fuel, oil and other items at the CBFM Unit in CENROs at the study area (in pesos) in 2001

Items	Dupax	Aritao	Aglipay	Nagtipunan	Lamut	Cauayan	San Isidro	Minimum	Maximum	Average
Travel allowance for Unit	89,268	12,000	3,000	100,000	26,000	73,200	4,500	3,000	100,000	33,697
Travel allowance per person per annum	8,160	1,500	750	2,000	2,500	12,200	1,124	750	12,200	3,425
Supplies and materials for Unit	62,785	3,000	2,000	50,000	7,000	35,000	2,500	2,000	62,785	18,229
Supplies and materials per person per annum	5,707	375	500			5,800	625	375	5,800	2,311
Fuel, oil and others for Unit	44,664	3,900	10,000		2,000	8,500		2,000	44,664	12,195
Fuel, oil and others per person per annum	7,636		24,000			8,500		488	8,500	3,586

Source: JICA Study Team

Table 4.1.4 Budget allocation (MOOE) for Foreign Assisted Programs of DENR (thousand pesos)¹

Programs	1997	1998	1999	2000	2001	2002	2003
JBIC Forestry Sector Project ⁴	195,351	18,030	172,663	155,483	149,248	172,540	173,513
Philippine-German Community Forestry Project – Quirino	3,935	4,140	6,250	5,400	3,915	5,415	5,400
Natural Resources Management Program/Ecogovernance Prog.	11,698	25,152	28,286	31,576	26,576	29,877	12,000
Watershed Management Improvement Component (WRDP) ²	743	2,186	34,000	131,000	66,000	77,000	
Cordillera Highland Agricultural Resources Management Project			7,209	20,970	20,970	23,621	19,529
Southern Mindanao Integrated Coastal Zone Management Proj. ³			11,634	74,885	70,047	88,807	
National Integrated Area Development Program (NIPAP) ⁵		8,602	26,778	29,650	10,500	5,250	

Source: JICA Study Team

1 Includes proceeds and counterpart funds

2 Total amount, MOOE cannot be isolated, terminated in 2002

3 Amount released, terminated in 2002

4 Terminates in 2003

5 Terminated in 2002

Table 4.2.1 Evaluation of PPMO Regular Reports

Contents of Report*		Name of PPMO			
		PPMO A	PPMO B	PPMO C	PPMO D
1) Submission of Weekly Report		Submitted with Monthly Report for formality	Submitted with Monthly Report for formality	No submission.	Submitted with Monthly Report for formality
2) Submission of Monthly Report	Aug 2002	Sept 18	Oct 14	Sep 13	Oct 7
	Sep 2003	Oct 16	No submission	Oct 10	Oct 7
	Oct 2003	Nov 26	Dec 23	Nov 25	Nov 11
	Nov 2003	Dec 5	Dec 23	Jan 13	Dec 20
	Dec 2003	Jan 8	Feb 24	No submission	Jan 7
	Jan 2003	Jan 31	Feb 24	Feb 7	Jan 12
	Feb 2003	Mar 3	Feb 24	No submission	No submission
	Mar 2003	Apr 14	No submission	Apr 7	No submission
	Apr 2003	June 11	No submission	May 26	No submission
	May 2003	June 11	No submission	June 12	No submission
June 2003	No submission	No submission	No submission	No submission	
July 2003	Aug 4	No submission	Aug 11	No submission	
3) Description of Accomplishments		Necessary quantitative information is recorded.	Necessary quantitative information is recorded, but many encoding errors.	The accomplishment table was not attached, and quantitative information was hard to understand. Good descriptions of activities.	Necessary quantitative information is recorded but difficult to understand the contents.
2) Illustration and Analysis of Issues/Problems		Briefly explained, but no elaborate analysis.	Not mentioned at all.	Brief explained, but no analysis. The quality of illustration decreased as the project progresses.	Relatively detailed problems were illustrated, but no analysis. The illustration are only in the monthly report.
3) Description of Action Taken		Actions of PPMO only. NO descriptions of PO's actions.	Not mentioned at all.	The quality of illustration decreased as the project progresses.	Good illustration of actions.
4) Explanation of Necessary Support		No concrete explanation.	No concrete explanation.	Not mentions.	Not mentioned.
5) Specification of Schedule		No specific target.	Not mentioned.	Not mentioned.	No specific target.

* The contents of report were specified in "Operation Manual for PPMO"

Table 4.2.2 Evaluation of PPMO Validation Reports

Evaluation Item	Name of PPMO			
	PPMO A	PPMO B	PPMO C	PPMO D
1) Frequency of Billing Request from POs	10 times/15 times Always delayed With photo proof	9 times/15 times Always delayed With photo proof	11 times/15 times Always delayed With photo proof	9 times/13 times Always delayed Without photo proof
2) Frequency of Validation Report of PPMO	9 times*/10 times	5 times*/9 times	8 times*/11 times Timing of validation report did not correspond to billing request from PO.	7 times*/9 times
3) Quality of Validation Report	Validation report was based on field validation	Validation report was based on field validation.	Since validation did not take place upon billing request, validation was baseless.	There were cases that the result of field inspection of JICA Study Team and PPMO Validation Report contradicted. Weeding of 2nd contract was not validated on time but a few months later, which is impossible.

* The billing requests at the beginning of Pilot Project did not require validation because they are mostly the down payments.

Table 4.9.1 List of PO meeting assisted by NGO (1/3)

Meeting	PO	Target Days	Target Pax	Date	Actual Days	Actual Pax		Total	Gap
						Day1	Day2		
Campaign for CBFM Program to the LGUs and Other Organizations	Makate	1	35	September 20, 2002	1	19		19	-16
	Haliap	1	35	August 22, 2002	1	24		24	-11
	Nunhabatan	0	0	July 10, 2002	1	26		26	26
CBFMA Campaign	Banila	0	20	Canceled				0	-20
	Balligui	1	35	September 5, 2002	1	40		40	5
	Dapiz	0	32	October 17, 2002	1	38		38	6
	Nunhabatan	0	38	September 13, 2002	1	37		37	-1
	Makate	1	35	August 16, 2002	1	84		84	49
	Haliap	1	35	July '30, 2002	1	66		66	31
Environmental Education & Value Formation Training & CBFM Campaign	Banila	1	35	December 5, 2002	1	18		18	-17
	Balligui	1	35	November 29, 2002	1	33		33	-2
	Dapiz	1	35	December 6, 2002	1	19		19	-16
	Nunhabatan	1	31	November 27, 2002	1	13		13	-18
	Makate	1	35	July 4, 2003	1	35		35	0
	Haliap	1	35	July 1, 2003	1	24		24	-11
Consensus Building Meeting	Dapiz	0	0	May 29; June 5, 2003	2	14	13	27	27
	Makate	1	35	December 2, 2002	1	30		30	-5
	Haliap	1	35	October 24, 2002	1	33		33	-2
Team Building	Dapiz	0	0	May 16, 2003	1	13		13	13
	Dapiz	0	0	July 1, 2003	1	20		20	20
	Nunhabatan	0	0	July 10, 2003	1	23		23	23
Community Appraisal	Makate	0	0	May 19 - 20, 2003	2	18	20	38	38
	Haliap	0	0	May 14 - 15, 2003	2	28	22	50	50
Feed backing of Community Appraisal Results	Makate	0	0	June 11, 2003	1	28		28	28
	Haliap	0	0	June 10, 2003	1	25		25	25
Boundary Conflict Meeting	Makate	0	0	May 10, 2003	1	10		10	10
Settlement Meeting on Boundary Conflict	Makate	0	0	June 9, 2003	1	20		20	20
Election of BOD	Banila	0	0	March 30, 2003	1	83		83	83
	Balligui	0	0	February 28, '2003	1	38		38	38
	Balligui	0	0	March 31, 2003	1	7		7	7
	Dapiz	0	0	June 22, 2002	1	41		41	41
	Makate	0	0	August 27, 2002	1	22		22	22
Review and Reformulation of Organizational By-laws, JICA Pilot Project Operational Policies	Banila	1	35	June 24, 2002	1	16		16	-19
	Banila	0	0	July 5, 2002	1	55		55	55
	Banila	0	0	March 16, 2003	1	9		9	9
	Banila	0	0	April 25, 2003	1	6		6	6
	Balligui	1	45	June 21, 2002	1	17		17	-28
	Balligui	0	0	July 4, 2002	1	43		43	43
	Dapiz	1	35	June 7, 2002	1	41		41	6
	Dapiz	0	0	July 26, 2002	1	34		34	34
	Dapiz	0	0	July 24, 2002	1	23		23	23
	Nunhabatan	0	0	June 17, 2002	1	22		22	22
	Nunhabatan	1	35	July 5, 2002	1	27		27	-8
	Makate	1	35	September 27, 2002	1	5		5	-30
	Makate	0	0	November 10, 2002	1	24		24	24
	Haliap	1	35	June 14, 2003	1	7		7	-28
Drafting of resolution authorizing coop officers for the CBFMA application	Haliap	0	0	November 2, 2002	1	6		6	6
Issuance and Awarding of CBFM Agreement	Haliap	0	0	May 9, 2003	1	49		49	49
Discussion and approval meeting of 6% admin cost utilization policy of JICA Pilot Project	Dapiz	0	0	October 16, 17, 2002	2	38	5	43	43
	Banila	0	0	November 24, 2002	1	30		30	30
	Balligui	0	0	November 7, 2002	1	56		56	56
	Balligui	0	0	May 14, 2003	1	13		13	13
	Nunhabatan	0	0	October 20, 2002	1	29		29	29
	Nunhabatan	0	0	May 20, 2003	1	14		14	14

Table 4.9.1 List of PO meeting assisted by NGO (2/3)

Meeting	PO	Target Days	Target Pax	Date	Actual Days	Actual Pax		Total	Gap
						Day1	Day2		
Contract Negotiation and Contract Review Phase II	Banila	0	0	June 21, 2003	1	13		13	13
	Balligui	0	0	February 20, 2003	1	15		15	15
	Dapiz	0	0	February 24, 2003	1	40		40	40
	Dapiz	0	0	April 27, '2003	1	7		7	7
	Nunhabatan	0	0	February 26, 2003	1	25		25	25
Pre Membership Education and Seminar	Balligui	1	63	February 30, 2003	1	30		30	-33
	Balligui	0	0	February 25, 2003	1	42		42	42
	Dapiz	1	75	Canceled				0	-75
	Nunhabatan	1	31	April 30, 2003	1	29		29	-2
Formation of Working Group Committees	Banila	1	35	Canceled				0	-35
	Balligui	1	35	July 4, 2002	1	46		46	11
	Dapiz	1	35	July 26, 2002	1	34		34	-1
	Nunhabatan	1	30	June 17, 2002	1	22		22	-8
	Nunhabatan	0	0	July 10, 2002	1	26		26	26
Formation of CBFM Sub-Association	Dapiz	0	0	June 25, 26, 2003	2	27	27	54	54
Sub Association Management Committee Meeting	Dapiz	0	0	July 11, 2003	1	8		8	8
Sub Association Policy Formulation Meeting	Dapiz	0	0	July 17, 2002	1	7		7	7
Strategic Planning and CRMF Reformulation	Banila	2	70	April 25-26, 2003	2	24	28	52	-18
	Balligui	2	70	May 8-9, 2003	2	16	17	33	-37
	Dapiz	2	70	June 26, 27, 2003	2	27	20	47	-23
	Nunhabatan	2	70	May 6-7, 2003	2	22	32	54	-16
	Makate	2	70	July 8-9, 2003	2	36	42	78	8
	Haliap	2	70	June 19-20, 2003	2	29	24	53	-17
Presentation and Approval of Strategic Plan and CRMF	Banila	1	35	June 24, 2003	1	35		35	0
	Balligui	1	35	June 26, 2003	1	21		21	-14
	Dapiz	1	35	July 30, 2003	1	17		17	-18
	Nunhabatan	1	25	June 25, 2003	1	24		24	-1
	Haliap	1	35	July 5, 2003	1	15		15	-20
	Macate	1	35	August 13, 2003	1	87		87	52
Fund raising planning	Dapiz	0	0	November 15, 2002	1	10		10	10
	Nunhabatan	0	0	January 30, 2003	1	11		11	11
	Balligui	0	0	January 18, 2003	1	11		11	11
Formulation Meeting of Proposed Financial Management Policies	Balligui	0	0	April 28, 2003	1	7		7	7
	Banila	0	0	June 7, 2003	1	7		7	7
Presentation Meeting of PO Internal Audit Results and PO Financial Status	Banila	0	0	April 30, 2003	1	83		83	83
	Dapiz	0	0	April 4, 2003	1	28		28	28
	Balligui	0	0	March 24-25, 2003	2	13	15	28	28
	Nunhabatan	0	0	December 15, 2002	1	19		19	19
Presentation of PO Internal Audit Results and PO Financial Status Phase II	Banila	0	0					0	0
	Dapiz	0	0					0	0
	Balligui	0	0					0	0
	Nunhabatan	0	0					0	0
Presentation/Approval Meeting of PO Internal Audit Results and PO Financial Status	Banila	0	0	April 30, 2003	1	83		83	83
	Balligui	0	0	April 4, 2003	1	23		23	23
	Dapiz	0	0	April 4, 2003	1	28		28	28
	Nunhabatan	0	0	April 8, 2003	1	21		21	21
	Nunhabatan	0	0	8-Mar-03	1	22		22	22
	Haliap	0	0	February 12, 2003	1	19		19	19
Survey Meeting for business plan development	Balligui	0	0	July 3, 2003	1	18		18	18
Presentation and Approval of Business Plan	Banila	1	35	June 24, 2003	1	35		35	0
	Balligui	1	35	July 9, 2003	1	14		14	-21
	Nunhabatan	1	25	June 25, 2003	1	24		24	-1

Table 4.9.1 List of PO meeting assisted by NGO (3/3)

Meeting	PO	Target Days	Target Pax	Date	Actual Days	Actual Pax		Total	Gap
						Day1	Day2		
Formulation meeting on Forest Land Management Policy	Balligui	0	0	January 31, 2003	1	35		35	35
	Balligui	0	0	February 5, 2003	1	33		33	33
	Dapiz	0	0	November 22, 2002	1	38		38	38
	Dapiz	0	0	January 31, 2003	1	18		18	18
	Nunhabatan	0	0	February 5, 2003	1	10		10	10
	Banila	0	0	February 27,2003	1	98		98	98
Brgy Ordinance Formulation	Banila	1	21	January 21, 2003	1	18		18	-3
	Balligui	1	35	December 4, 2002	1	16		16	-19
	Dapiz	1	35	December 3, 2002	1	17		17	-18
	Nunhabatan	1	35	January 15, 2003	1	18		18	-17
	Nunhabatan	0	0	February 10, 2003	1	52		52	52
	Nunhabatan	0	0	February 11,2003	1	37		37	37
Burning Incident Meeting I	Dapiz	0	0	May 22, 2003	1	11		11	11
Burning Incident Meeting IL	Dapiz	0	0	June 30, 2003	1	19		19	19
Formulation of Livestock Feeding Plan, Validation of Forage Garden, Dispersal Policy	Balligui	0	0	February 26, 2003	1	33		33	33
	Balligui	0	0	May 21, 2003	1	13		13	13
	Balligui	0	0	May 28, 2003	1	16		16	16
	Dapiz	0	0	February 27, 2003	1	31		31	31
	Dapiz	0	0	March 7, 2003	1	5		5	5
	Dapiz	0	0	May 27, 2003	1	15		15	15
	Nunhabatan	0	0	February 21, 2003	1	40		40	40
Drafting of Management Scheme for SALT Farm	Balligui	1	35	November 7, 2002	1	57		57	22
	Dapiz	1	34	October 17, 2002	1	38		38	4
Presentation and approval of sustainability mechanism of silvo projects	Nunhabatan	1	35	November 3, 2002	1	23		23	-12
Preparation Meeting for PO Cross Visit	Banila	0	0	May 10, 2003	1	7		7	7
Validation Meeting of PO Assessment Results	Balligui	0	0	October 31, 2002	1	9		9	9
	Dapiz	0	0	February 6, 2003	1	15		15	15
	Dapiz	0	0	January 29, 2003	1	11		11	11
	Dapiz	0	0	April 24, 2003	1	3		3	3
	Nunhabatan	0	0	January 23, 2003	1	29		29	29
Presentation and Validation Meeting of PO Assessment Results	Banila	0	0	January 25, 2003	1	12		12	12
	Balligui	0	0	January 26, 2003	1	35		35	35
	Dapiz	0	0	February 7, 2003	1	15		15	15
	Haliap	0	0	February 12, 2003	1	19		19	19
Total		54	2,010		145			3,804	1,794

Table 4.9.2 List of PO training given by NGO (1/2)

Training	PO	Target Days	Target Pax	Date	Actual Days	Actual Pax		Total	Gap
						Day1	Day2		
Training on Leadership, Duties and Responsibilities of Members and Officers I	Banila	2	60	September 6-7, 2002	2	24	22	46	-14
	Balligui	2	60	September 12-13, 2002	2	19	16	35	-25
	Dapiz	2	60	September 17-18, 2002	2	19	20	39	-21
	Nunhabatan	2	62	September 23-24, 2002	2	9	12	21	-41
Training on Leadership, Duties and Responsibilities of Members and Officers II	Banila	0	0	October 6-7, 2003	2	26	20	46	46
	Balligui	2	50	March 31, April 1, 2003	2	30	30	60	10
	Dapiz	1	35	April 2-3, 2003	2	20	17	37	2
Training on M&E	Banila	2	30	November 26-27, 2002	2	5	5	10	-20
	Balligui	2	30	October 29-30, 2002	2	9	11	20	-10
	Dapiz	2	30	November 26-27, 2002	2	9	9	18	-12
	Nunhabatan	2	40	October 22-23, 2002	2	13	10	23	-17
Financial Management Training I	Banila	2	30	July 22-23, 2002	2	14	10	24	-6
	Balligui	2	30	July 18-19, 2002	2	15	13	28	-2
	Dapiz	2	30	July 25-26, 2002	2	10	10	20	-10
	Nunhabatan	2	50	July 3-4, 2002	2	15	17	32	-18
Financial Management Training II	Banila	0	0	December 2-3, 2002	2	2	2	4	4
	Balligui	0	0	December 2-3, 2002	2	3	3	6	6
	Dapiz	0	0	December 6, 2002	2	3	3	6	6
	Nunhabatan	0	0	December 2-3, 2002	2	3	3	6	6
Financial Management Training III	Banila	0	0	July 14, 2003	1	6		6	6
	Balligui	0	0	July 14, 2003	1	6		6	6
	Dapiz	0	0	July 14, 2003	1	5		5	5
	Nunhabatan	0	0	July 14, 2003	1	5		5	5
PO Internal Audit Training	Banila	0	0	March 28-29, 2003	2	13	13	26	26
	Balligui	0	0	March 24-25, 2003	2	11	11	22	22
	Dapiz	0	0	March 26-27, 2003	2	7	7	14	14
	Nunhabatan	0	0	March 14-15, 2003	2	11	11	22	22
Cooperative Management Training	Banila	2	60	March 20-21, 2003	2	23	26	49	-11
	Balligui	0	0	March 17-18, 2003	2	30	30	60	60
	Nunhabatan	2	50	July 11, 2003	1	22		22	-28
	Makate	0	0	June 12, 2003	1	18		18	18
	Haliap	0	0	May 22 -23, 2003	2	30	20	50	50
Training on Entrepreneurship	Banila	2	30	September 14-15, 2002	2	11	12	23	-7
Training on Livelihood Project Management	Banila	2	20	November 20-21, 2002	2	12	13	25	5
Training on Project Proposal Writing	Haliap	0	0	June 26-27, 2003	2	22	15	37	37
Training on Forest Protection	Banila	2	40	January 22, '2003	1	18		18	-22
	Balligui	2	50	January 21, 2003	1	24		24	-26
	Dapiz	2	74	January 24, 2003	1	35		35	-39
	Nunhabatan	2	20	January 23, 2003	1	28		28	8
Training on IFS/SALT	Balligui	2	50	August 14-15, 2002	2	35	35	70	20
	Dapiz	2	70	September 6-7, 2002	2	18	17	35	-35
	Dapiz	2	70	September 5-6, 2002	2	21	18	39	-31
Training on Cut Flower Production	Banila	2	30	October 14-15, 2002	2	17	18	35	5
Training on Handcraft (mat, hat and basket making)	Banila	2	30	October 24-25, 2002	2	8	9	17	-13
Training on Silvo-pasture	Nunhabatan	1	31	July 23-24, 2002	1	14		14	-17
Training on Soft Broom Making	Banila	2	30	October 23, 2002	2	9	6	15	-15
Livestock Breeding Training	Dapiz	0	0	June 5, 2003	1	27		27	27
	Nunhabatan	0	0	June 3-4, 2003	2	18	20	38	38
Cross Visit to Baguio	Banila	1	15	December 10-11, 2002	1	5		5	-10
	Balligui	0	0	December 10-11, 2002	1	4		4	4
	Dapiz	1	25	December 10-11, 2002	1	4		4	-21
	Nunhabatan	1	30	December 10-11, 2002	1	5		5	-25

Table 4.9.2 List of PO training given by NGO (2/2)

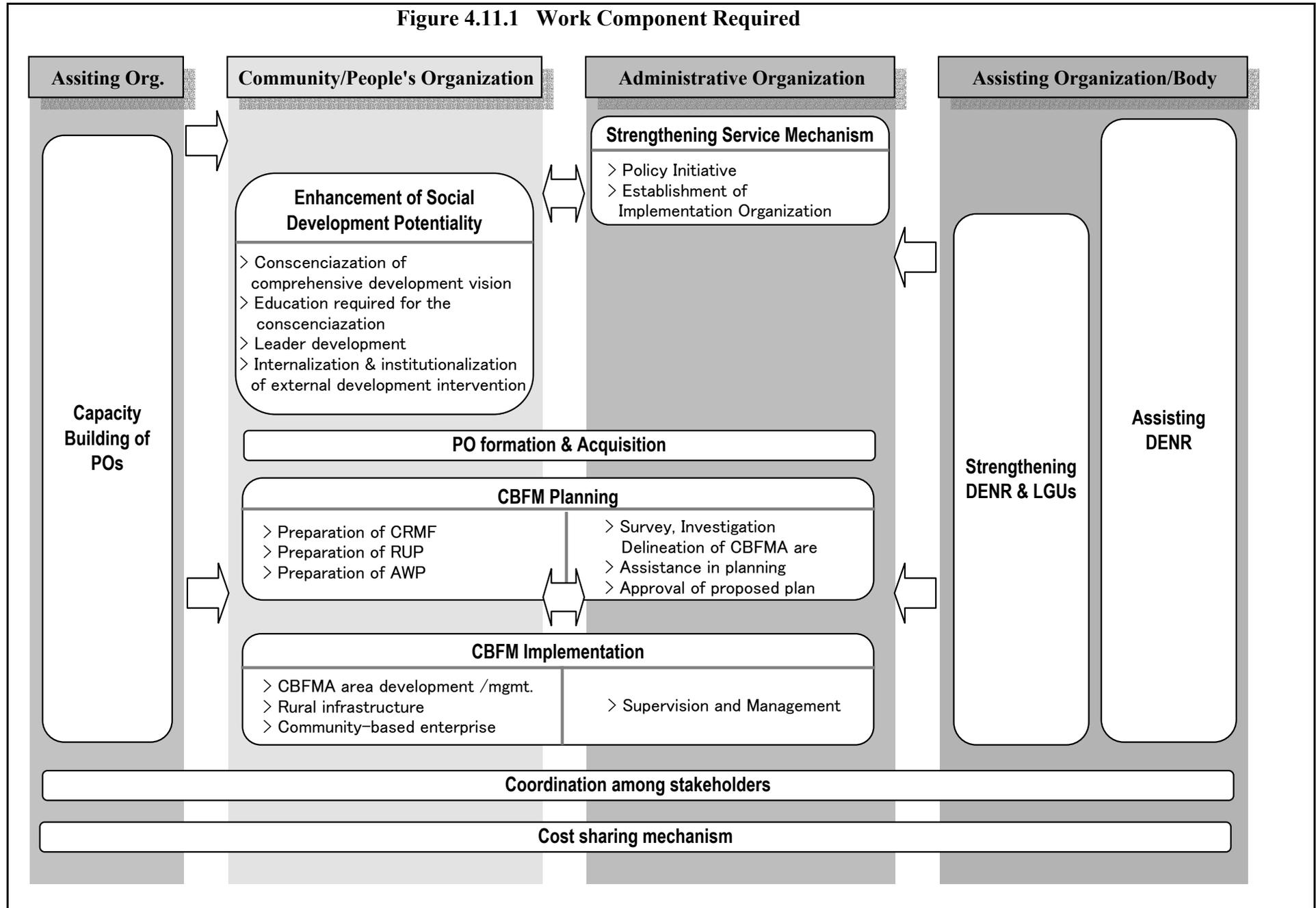
Training	PO	Target Days	Target Pax	Date	Actual Days	Actual Pax		Total	Gap
						Day1	Day2		
Cross Visit to Banila	Balligui	1	15	May 30, 2003	1	11		11	-4
	Dapiz	1	15	May 30, 2003	1	14		14	-1
	Nunhabatan	1	15	May 30, 2003	1	15		15	0
	Makate	1	15	May 30, 2003	1	13		13	-2
	Haliap	1	15	May 30, 2003	1	17		17	2
Cross Visit to Malabing Valley Cooperative	Balligui	0	0	June 27, 2003	1	18		18	18
	Dapiz	0	0	July 2, 2003	1	20		20	20
Total		64	1,397		95			1,392	-5

Table 4.11.1 Implementation Schedule of CBFM Program

Activities	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
1 Preparatory works	█	█	█	█	█							
2 PO Formation and CBFMA Acquisition		█	█	█	█							
3 Participatory Planning			█	█	█							
4 CBFMA Area Development & Management			█	█	█	█	█	█	█	█	█	█
5 Rural Infrastructure Development			█	█	█	█	█	█	█	█	█	█
6 PO Capacity Building (POCB) by AO		█	█	█	█	█	█					
7 Institutional Strengthening	█	█	█	█	█	█						
8 Initiative fro Watershed Management Council		█	█	█	█	█	█	█	█	█	█	█
9 Initiative for Cost Sharing mechanism			█	█	█	█	█	█	█	█	█	█

Figure

Figure 4.11.1 Work Component Required



Attachment-A

*Training Needs Analysis for Pilot
Community-Based Forest Management Study*

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ANNEXES

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Annex-B: Minimum Qualifications

Annex-C: PPMO Profiles (Sample)

Annex-D: Summary of Training Needs of PPMO and Result of TNA Analysis
(Sample)

TRAINING NEEDS ANALYSIS FOR PILOT COMMUNITY-BASED FOREST MANAGEMENT STUDY

1. INTRODUCTION

1.1 Objective of the Study

The draft Master Plan for the Watershed Management in Upper Magat and Cagayan River Basin identified Community-based Forest Management (CBFM) as the main strategy for implementation of the Plan. While CBFM has been implemented in the country for almost 20 years now and lessons have been learned in its implementation it was deemed necessary to validate these lessons through the implementation of pilot studies.

The time available to undertake the pilot studies is, however, limited. It was decided, therefore, to conduct the pilot study under two situations, one where the people's organization (PO) has already been granted a community-based forest management agreement (CBFMA) by the Department of Environment and Natural Resources (DENR), and the other where the CBFM POs are still to be organized for eventual grant of a CBFMA.

The general objectives of the Pilot Study are:

1. to obtain data/information that would allow the Study Team to formulate more realistic M/P for implementation through the Pilot Study; and
2. to partly support the implementation of the CBFM schemes formulated in the Phase I of the Study.

The data and information that are expected to be collected during the Pilot Study will consist of a) technical and managerial ability of the PO concerned in the formulation of CRMF, RUP, and AWP and the implementation of the AWP; b) assessment and recommendation of DENR's and LGU's capacity to support and provide technical assistance to POs under the pilot CBFM scheme; c) issues and problems in the implementation of the CBFM and their possible solutions; and d) identification of support services needed in the successful implementation of the CBFM¹.

The Pilot Study will also provide opportunities for the Study Team to identify various policies and policy-implementation practices that are supportive or constraining the implementation of CBFM program.

¹ Implementation Program for the Pilot Study, June 2002. The Master Plan Study for Watershed Management in Upper Magat and Cagayan River Basin in the Republic of the Philippines. Nippon Koei Co. Ltd. and Japan Overseas Forestry Consultants Association.

The general scope of work in the Pilot Study with a CBFMA² include:

1. The formulation of community-based forest management plans for the CBFMA POs pursuant to the steps in the formulation of an annual work plan (AWP) and resource use plan (RUP); and
2. The building of the capacity of the POs to implement their CBFM management plans in accordance with CBFM policies, and to guide, monitor and evaluate their performance.

In the non-CBFMA Pilot Study area, the general scope of work is:

1. The organization of the CBFM POs; and
2. Assisting them acquire CBFMA from the CENRO/PENRO concerned.

In both types of Pilot Study, it is the objective to enhance a) environmental awareness, b) managerial capacity, and c) technical skills of the POs as well as the CENROs/PENROs and ENROs concerned through training and cross visits.

1.2 The Pilot Study Areas

The procedures for selection of the Pilot Study areas are detailed in the Study Team Report for Pilot Study³.

The selected Pilot Study areas for the non-CBFMA are:

1. The Macate Watershed Economic and Development Multi-purpose Cooperative, Inc. in Barangay Makate, Diffun, Quirino (referred to as Makate area); and
2. The Haliap Multi-purpose Cooperative, Inc. in Barangay Haliap, Asipulo, Ifugao (referred to as Haliap area).

The selected Pilot Study areas with CBFMA are:

1. The Banila Community-based Cooperative, Inc. in Barangay Banila, Dupax del Sur, Nueva Vizcaya (referred to as Banila) with an area of 2,395 ha;
2. The Balligui Community Forestry and Development Cooperative, Inc. in Purok 6 and 7 in Barangay Balligui, Maddela, Quirino and in Aglipay, Quirino (referred to as Balligui area) with an area of 1,080 ha;
3. The Ayangan-Dapiz Agro-forestry Development Association Inc. in Sto. Nino and Bautista, San Agustin, Isabela (referred to as Dapiz area) with an area of 487 ha; and
4. The Nunhabatan Greeners Livelihood Association, Inc. in Hapid, Lamut, Ifugao (referred to a Nunhabatan area) with an area of 241 ha.

² Operation Manual for the PPMO for the Pilot Project (Version 1), June 2002. Master Plan Study for Watershed Management in Upper Magat and Cagayan River Watershed. Nipon Koei Co. Ltd. and Japan Overseas Forestry Consultants Association.

³ Implementation Program for Pilot Study, *Op cit*.

1.3 Specific Activities in the Pilot Areas

The requirements for successful implementation of CBFM in the 6 pilot sites are different owing to the different stages they are in the implementation of the CBFM program. The specific activities therefore differ. The details of these activities are contained in the Study Team report, *Implementation Program for the Pilot Study*⁴.

For the Pilot sites **with CBFMA** the general activities cover CBFMA development and management, PO capacity building, and institutional strengthening. The CBFMA development and management cover:

1. forest plantation establishment;
2. agro-forestry establishment and management;
3. establishment and management of demonstration farm/area;
4. fire control;
5. construction of multi-purpose building for PO;
6. rehabilitation of existing feeder road/trail;
7. community-based enterprise development.

PO capacity building will be in various forms of training aimed at the improvement of financial, structural, managerial and technical capacity of PO for the better development and management of the CBFM areas. Institutional strengthening covers a) human resources development of DENR and LGU personnel; b) organizational arrangements and linkages; and c) initiatives for institutional mechanism for watershed management.

For the **non-CBFMA** sites the general activities include PO organizing and CBFMA acquisition, and PO capacity building. The non-CBFMA POs will be assisted in the formation/strengthening of the organization, formulating or revision of by-laws, formulating the CRMF and the acquisition of CBFMA. PO capacity building activities will be the same as those with CBFMA.

2. ORGANIZATION OF THE PILOT PROJECT MANAGEMENT OFFICE

To assist the communities implement the Pilot Studies in the six sites and to ensure smooth implementation and management of the Pilot Project, the Pilot Project Management Office (PPMO) was organized. In all instances, the Pilot Project Management Officer is the CENRO in the concerned area, who is seconded/designated by DENR to the PPMO. The other staff of the PPMO basically comes from DENR or from the Provincial Environment and Natural Resources Office (ENRO) seconded to the PPMO.

The details of the organizational structure, functions and minimum qualifications of staff members of the PPMO are contained in *Implementation Program for the Pilot Study*⁵. There are only four CENROs concerned in the implementation of the Pilot Projects, Dupax del Sur (Nueva Vizcaya), Diffun (Quirino), Lamut (Ifugao), and San Isidro

⁴ Implementation Program for the Pilot Study, Op cit.

⁵ Implementation Program for the Pilot Study. *Op cit.*

(Isabela). Balligui pilot site (with CBFMA) and Makate pilot site (without CBFMA) are within the jurisdiction of CENRO Diffun (Quirino), while Nunhabatan site (with CBFMA) and Haliap site (without CBFMA) are within the jurisdiction of CENRO Lamut (Ifugao). The Banila site (with CBFMA) and Ayangan site (with CBFMA) are, respectively, under the jurisdiction of CENRO Dupax (Nueva Vizcaya) and CENRO San Isidro (Isabela). Since the pilot projects are located in only four CENROs, only four PPMOs were organized corresponding the CENROs where the pilot projects are located.

2.1 Staffing of the PPMO

The staff members of the PPMOs are shown in the table below:

		Location				Assignment
		Dupax	Lamut	Diffun	Sn Isidro	
PPM Officer	CENRO	1	1	1	1	Full time, concurrent
COSU	COSU Staff	0	1	1	0	Full time
	COSU Staff	0	1	1	0	Full time
IU	Supervisor	1	1	1	1	Full time
	Surveyor	1	1	1	1	Full time
	Asst. Surveyor	1	1	2	1	Full time
ESU	EO Agriculture	1	0	1	1	On-call
	EO Agro-forestry	1	1	1	1	On-call
	EO Livestock	1	0	1	1	On-call
ASU	Administrator	1	1	1	1	Full time
	Validation & Billing Officer	1	1	1	1	Full/part time
	Technical Clerk	1	1	1	1	Full time
TOTAL		10	10	13	10	

The list of PPMO Officers in the various CENROs is shown in Annex-A. The minimum qualifications of each PPMO position are shown in Annex-B. Some information on the educational background, employment and training of the PPMO officers are likewise shown in Annex B.

3. THE TRAINING NEEDS ANALYSIS

3.1 Purposes of the Training Needs Analysis

A comparison of the present skills and knowledge of the staff members of the PPMO based on their educational background and trainings undertaken and the identified minimum qualifications required for the positions they occupy in the PPMO show some gaps. Furthermore, there are other skills that are deemed needed by the staff in the conduct of their duties and functions in the implementation of the Pilot Projects. It was deemed necessary, therefore to conduct a Training Needs Analysis (TNA) focused on the staff members. This would identify the specific training requirements of the staff. In addition, and this is probably most important, is the identification of the minimum skills

and knowledge that officers must have when implementing the CBFM program. The lessons from the TNA will be in-puts in the finalization of the Master Plan for the Upper Magat and Cagayan River Basins. These minimum skills and knowledge requirements could apply to the implementation of CBFM program in other areas outside of the M/P study site.

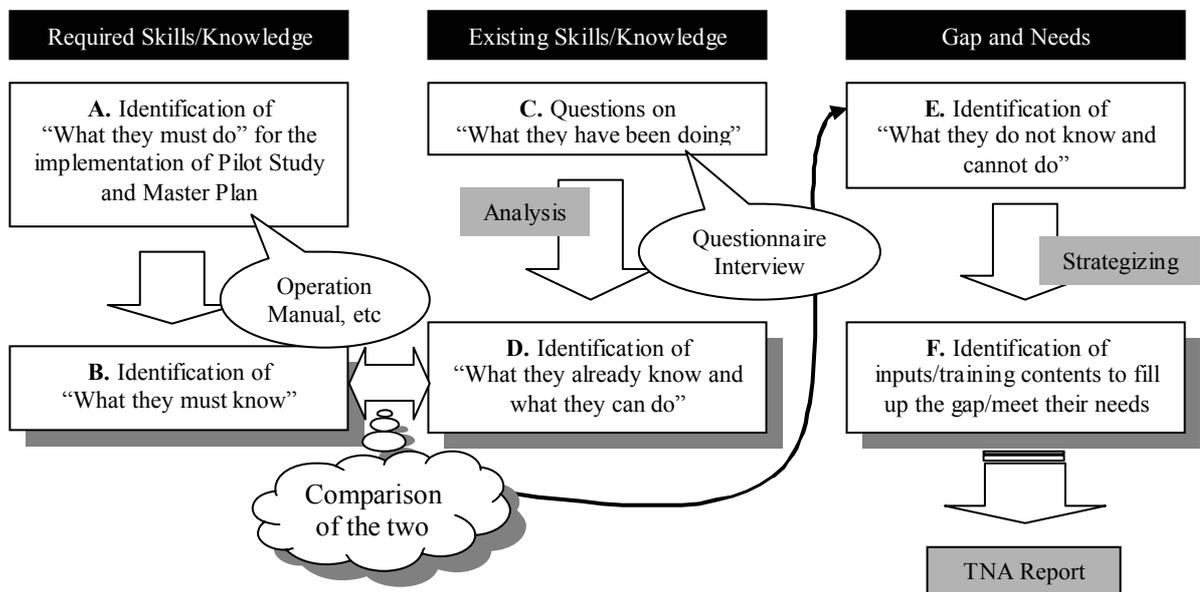
The purposes of the training needs analysis are:

- To assess the training needs of PPMO personnel; and
- To establish a strategy for the capacity building of PPMO.

The target personnel are the 43 PPMO staff assigned to assist in the implementation of the Pilot Study.

3.2 Analytical Framework

The analytical framework⁶ of this TNA is expressed in the drawing below.



3.3 Methodologies

(1) Profiling of Interviewees

Prior to the interview, a profile of each of the PPMO staff members was conducted. The purpose of profiling is to gather basic information about their educational background, employment history, and training undertaken to enable the analysts to examine the orientations of academic knowledge and work experiences of interviewees and the requirements of the positions they occupy in the PPMO. The profiles of the PPMO staff are shown in Annex C. The gaps between the prescribed educational requirements and experience for the PPMO positions and the educational background and experience of those designated to the positions can be observed from Annex-B and C.

⁶ Adopted from Mr. T. Tsuji, TNA Manager

(2) Structured Interview

The survey was executed using the structured interview. The interviewer and his assistant used the questionnaires developed by the TNA Manager. The interview was conducted with one respondent per interview and it lasted between 30 minutes to 2 hours depending on the position of interviewee at PPMO.

The interview was focused on both quality and quantity of “what the interviewees have been doing.” For this, the interviews followed the question structure indicated below:

1. Have you	
2. If yes, when did you do it?	2'. If no, have you at least learned it?
3. How often/how many times?	3'. If yes, when and how did you learn it?
4. Please describe in detail your experiences on it	4'. Please describe what you learned.
5. How was the result of your work on it? Please describe your self-evaluation of the result and its basis.	5'. Please self-evaluate your level of knowledge/skill on it.

(3) Analysis of data and interview results

The TNA Team was composed of a Manager who created the TNA design including the questionnaires, managed and arranged the survey activities, and supervised the interviewers. The interview questionnaires were discussed among the TNA Team after which it underwent pre-testing before it was finalized.

The interviews were conducted by a lead interviewer and by an assistant interviewer. The TNA Manager trained the lead and assistant interviewers how to conduct the interview using the questionnaires, how to re-phrase follow up questions to elicit the desired information. The interviewers compiled the data and information obtained during the interviews.

The analysis was done in accordance with the format below.

Required Skills/Knowledge	Present Skills/Knowledge	Gaps	Training Needs	Suggested Interventions
1.				
2.				
3.				
⋮				

Each analyst focused on the required levels of knowledge/skills for the implementation of the Pilot Project and Master Plan, **not the requirements as DENR or LGU personnel found in their job descriptions.** For this purpose all analysts studied the required level of

knowledge/skills of each PPMO position as found in the “Operation Manual of PPMO⁷” and the minimum qualifications as indicated in Annex-B.

Based on the answers of the interviewees with respect to “what they have been doing” the analysts translated these to “what the interviewees know/can do” and rated them according to the following:

- 4: Excellent knowledge/skills for the implementation of the Pilot Project and M/P
- 3: Adequate level of knowledge/skills
- 2: Certain level of knowledge/skills, but needs improvement
- 1: Would have difficulties in the implementation with the present knowledge/skills

Based on the above rating the gaps between the required and the existing knowledge/skills were determined and the necessary interventions to fill up the gaps were identified for each of the PPMO personnel. In general, the level of knowledge/skills sufficient to carry out the various activities was set at level 3. The present level of skills/knowledge of the PPMO officers was measured against this level. Where the present skills/knowledge of the officer satisfies the required level, the gap is zero. Where the officer totally lacks experience, skills or knowledge on a certain activity, the gap is 3. Where the gap is assessed as 2 or more, training is recommended.

Preliminary analysis of survey results for each of the PPMO positions was assigned to individual analysts. One analyst conducted the preliminary training needs analysis for the Pilot Project Management Officers and the Implementation Unit Staff, another did the analysis on Community Organizing Support Unit staff, another on the staff of the Extension Support Unit and yet another made the preliminary analysis of the training needs of the staff of the Administrative Support Unit. A main analyst was tasked to conduct the final analysis of the training requirements of the various staff members of the PPMO.

4. RESULTS OF THE TRAINING NEEDS ANALYSIS

The Annex-D-1 shows the rating of the present level of skills and knowledge of the officer and the gap for PPMO Diffun as a sample. It also shows the identified training needs and the type of intervention to provide the training. Appendix D shows a summary of the training needs analysis for the PPMO officers.

4.1 Pilot Project Management Officer (CENRO in concurrent capacity)

The general duties of the PPM Officer are to provide supervisory functions and leadership in the implementation of the pilot projects. In Diffun and Lamut, the functions of the PPMO cover both the organization of the POs and the activities toward the acquisition of CBFMA as well as planning and implementation of developmental activities such as plantation development, agro-forestry development, etc. In Dupax and in San Isidro, the

⁷ Operation Manual for PPMO for the Pilot Project (Version 1). Op cit.

Pilot Projects have already CBFMA and the activities to be conducted are planning and implementation of development projects.

The areas of knowledge and skills evaluated for the PPMO are, a) general skills, b) office management, c) knowledge in contracting, d) knowledge in surveys and survey validation, e) review of reports, and general knowledge and understanding of the CBFMP.

The results of the training needs analyses for PPMO are shown in Appendix D.

Minimum Education and Experience Requirements – There was no indicated minimum requirements for education and experience for the PPM Officer. This was due to the fact that the PPM Officer is the CENRO in concurrent capacity.

General Skills – The general skills analyzed for the PPM Officers were basically on computer operation. In general all the PPM Officers have very limited knowledge in the use of computers. They usually assign encoding of reports to their clerks or secretaries. Only one has basic knowledge of report presentation (power point) but with limited hands-on experience. All do not have any knowledge on GIS and other software application.

While it is true that the PPM Officer position is basically a supervisory position the use of information and communication technology (ICT) has become indispensable in the office. Beyond word processing and spreadsheet operation or preparation of report presentation as in Power Point, the supervisor should be knowledgeable in other ICT applications such as in MIS and the use of the internet. The latter is quite important especially in the acquisition of information through the web not only locally but also from foreign sources. It is therefore recommended that the PPMO undergo training in the use of the computer software such **word processing, spreadsheet, report presentation (at least Power Point), and access to the internet.**

Review of Reports – Among the reports that are evaluated by the PPM Officer, interview results show that the four PPM Officers need some skills in evaluating financial and audit reports. It is true that the main task of reviewing financial and audit reports rests on the PPMO Administrator but the PPM Officer should have the ability to spot in the report if the operation of the Pilot Project is proceeding well or if there is something amiss in the operations.

CBFMP – It appears that all the 4 PPM Officers are familiar and highly knowledgeable about the CBFMP except for PPMO of Diffun. The educational and work experience of the PPMO Diffun is not available. It is recommended that he be provided with an orientation course on the CBFMP otherwise he would not be able to provide the leadership needed in pushing through the Pilot Project.

4.2 Community Organizing Support Unit Staff (COSU)

There are four COSU staff, two each for PPMO Diffun and Lamut where the two non-CBFMA pilot sites are located. All the four COSU staff met the educational requirement for the position, which is BS in Forestry or Community Development. They are all

foresters having obtained their degrees as early as 1980. However, the work experience in community organizing or forestry development of at least 5 years was not satisfied by any of the COSU staff. The COSU personnel in Lamut, however, have had training in community organizing.

A summary of the analyses of the skills and knowledge possessed by the COSU staff relative to their functions and duties in the Pilot Project is shown in Annex-D/D-1. It can be observed that they require training on basic operation of the computer on word processing and the use of spreadsheet. All need training in other applications such as in report presentation (such as power point) and use of the internet.

Contracting – Only one among the four COSU staff has experience in drafting/preparing terms of reference for bidding purposes, however, none of them has had experience in actual bidding process. They also need orientation in monitoring and evaluation of the performance of a contractor.

CBFM campaign – The COSU staff has the basic knowledge of organizing orientation meetings but in general they need to understand more the concept of CBFM and the laws and regulations governing it. They should also study closely the M/P so that they would be able to explain it to potential members of the PO.

Identification and evaluation of CBFM area – The COSU staff needs to study and understand more the evaluation criteria for CBFM area as well as acquire the skills for undertaking reconnaissance survey of the area.

Processing of conflict claims – One of the COSU staff has extensive experience in resolving conflict claims. The other three require extensive training in this area.

Community appraisal – Two COSU members are familiar with community appraisal having conducted community appraisal activities in the region. The other two require training on design and execution of community appraisal.

Community organizing – Community organizing pervades all the activities in the formation of the people's organization including strengthening their financial and managerial capabilities. This is one area where the COSU members should have very good grounding. The skills and knowledge of the COSU members are spotty and it would do well for the Pilot Project if they undergo training in community organizing, not discounting the fact that two of them have undergone such training. This would constitute a refresher course for them and round off their skills since they have not had any hands-on experience in community organizing. For the other two this would provide them with the basic tools for community organizing. This is one area that the PPM Officer should really monitor in the course of the implementation of the Pilot Project.

Consensus building – This is another area where the COSU staff needs training. It could be integrated in the community organizing training since indeed the components indicated under it are patently part of community organizing such as recruitment of members and consensus building itself.

Application for CBFMA – Only one among the four COSU staff has had training and experience in the application for CBFMA or similar agreement from DENR. The rest needs extensive training on the documents needed and the processes for CBFMA application. This component can again be integrated in the community organizing training.

Preparation of the CRMF and AWP – AWP is the continuation of the preparation of the CRMF. It is the implementing plan for the CRMF. The two should go along together. The main difference between the two is the level of accuracy of data needed. The AWP would need more precise data upon which the annual work plan is based. Training on CRMF and AWP should be undertaken as these are very important components towards the acquisition of a CBFMA, which is the ultimate goal of the Pilot Project on the two sites currently without it.

Financial capability strengthening of PO – The focus of training on financial capability strengthening should be in fund raising including collection of fees, concepts of loans and savings (including linkage with and access to credit and capital sources), livelihood project establishment and development such as in livestock raising, buy and sell activities, cottage industries and other entrepreneurial endeavors.

Managerial capability development of PO – Undoubtedly there is a need for training in managerial capability development for the POs. Such training should cover all the components identified in the interview such as policy advocacy, monitoring and evaluation, strategic planning, and networking.

Report preparation – Report preparation has always been a gap in the skills of professionals, not only those engaged in forestry and forestry development but also in other professions. While the JICA quality of report is emphasized in the interview any training in report writing should stress accuracy of data/information and conciseness and clarity of statements.

4.3 Implementation Unit (IU) Supervisor

Each of the PPMO has an Implementation Unit composed of the Unit Supervisor, a Surveyor and an Assistant Surveyor. There are two Assistant Surveyors in PPMO Diffun, one coming from the LGU. The Implementation Unit is charged with the conduct of surveys and investigations necessary such as boundaries of areas, establishment of monuments, preparation of final maps, assisting the PO in the conduct of the implementation of development activities as well as providing technical assistance to PO members.

The IU Supervisor should have at least a BS Forestry degree and with 2 years experience in watershed management, soil conservation, and forest/agro-forest plantation establishment. All the four IU Supervisors have BS Forestry degrees with one having a Masters in Management degree. All have more than 2 years in their respective

assignments at DENR but the experience of one of them is that of a forest ranger. The experience of one of the IU Supervisors was not available.

General Skills – Again, this pertains to computer literacy of the IU Supervisors. It appears that there is need for training for all of them on basic computer operation using word processing, spreadsheet, and report preparation (such as power point) and access to the internet.

Contracting – One of the IU Supervisors require training in contracting in particular drafting of TOR documents, bidding procedures and the creation of contract documents. It appears that the rest have adequate knowledge on these matters.

Survey Validation – Results of the survey show that there is no need for training on survey validation. The IU Supervisors have had experiences in surveying and therefore have the preparation to evaluate different types of surveys and map preparation. One has not done line surveying but training on it could be done with on-the-job training.

Technical Assistance – The IU Supervisors have wide experience in the procurement of planting materials, maintenance of planting stock, site preparation and planting since they have been assisting POs in these matters. What they need is training in establishment of demonstration farms, road rehabilitation and construction of multi-purpose (Multi-purpose) building.

Progress and Quality Control – The level of skills and knowledge of the components under this work category is generally low except for the Supervisor of Dupax who is the CBFM Officer and site coordinator. It is however recommended that the Supervisors undergo training on quality inspection on the establishment of fire control lanes, construction of Multi-purpose building, lookout tower, road rehabilitation, demonstration farms on silvo-pasture and agro-forestry. Furthermore, the training should include evaluation of weekly accomplishment record, revision of work schedule and auditing of PO. For the Supervisor who already has some knowledge on these subject matters, it should be taken as a refresher course

Report Review – There is need for training on the evaluation of inspection/validation report, billing requests and financial and auditing reports, except for the Supervisor of Dupax who has had wide experience on these matters.

Financial Capability Strengthening of PO – Financial capability strengthening of the PO is also a task assigned to the COSU staff. The reason this task was also assigned to the IU Supervisor is because in two PPMO there are no COSU personnel. The IU Supervisor for Dupax and Diffun, being CBFM Officers have the experience in most of the components of this task except in livestock raising, and cottage industries establishment. The other two Supervisors need training in all components of this task.

Managerial Capability Development of PO – Similar to the financial capability strengthening of the PO, the managerial capability development was also assigned to the COSU staff for the same reason. As far as the IU Supervisors are concerned, the

Supervisor from Dupax have more than adequate knowledge in this task and does not require any training except in the auditing of the PO. The other three would need training in all aspects of this task. This would provide a well-rounded knowledge on managerial capability development of the PO for all the Supervisors.

Understanding the CBFMP – The IU Supervisor of Lamut is the only one who needs a better understanding on the concept of the CBFMP including the laws and regulations attendant to it and the procedures for its implementation.

Reporting – Again there is a need for on-the-job training of the IU Supervisors in the preparation of reports that are of the quality required by JICA. It pertains to the accuracy of data, clear and concise presentation.

4.4 Implementation Unit Surveyor

The minimum requirement for educational qualification for the IU Surveyor is BS in Geodetic Engineering, Civil Engineering or Forestry. He should at least have 3 years experience in surveying work.

Only the IU Surveyor for Diffun does not have the basic qualification. He is a Forest Ranger while the other three either have a Civil Engineering or Forestry degree. The IU Surveyor in Dupax has a Masters in Management. While all four have been in their positions for at least three years, their experiences are not in surveying but in forest protection or supervision and management of CBFM projects except the IU Surveyor in Dupax who processes public land applications. Relevant trainings are not available except for the IU Surveyor for Lamut who had training in selective logging.

General Skills (Computer operation) – All the IU Surveyors, except that of Dupax need training in computer operation. The Dupax IU Surveyor is adept in MS Word, Excel, Power Point, Adobe and Pagemaker. He is also familiar and has hands-on experience in GIS.

Identification and survey of CBFM perimeter, plantation area, fire lines and firebreaks – Among the four IU Surveyors the one from Dupax needs extensive training on surveying and map preparation. The rest have had experiences in this kind of work except in the establishment of permanent monuments but there is not need for training here as this could easily be learned while on the job.

Survey and design of road rehabilitation – It appears that all the four IU Surveyors need training in survey and design of road rehabilitation despite the fact that two of them are civil engineering graduates. This may be due to the fact that they have not had any experience in road construction or rehabilitation.

Alignment and spacing – There is no need for training on these activities since they can be learned easily on the job.

Progress and quality control – There is general need for training in quality inspection of the various construction work from quality of planting materials to workmanship in road

rehab, fire control lines and firebreaks, lookout tower, Multi-purpose building, demo farms and nurseries.

4.5 Implementation Unit Assistant Surveyor

There are two IU Assistant Surveyors for Diffun PPMO, one from DENR and another from the LGU. The other three PPMOs have one IU Assistant Surveyor each. The minimum educational qualification the position calls for is either a BS Civil or Geodetic Engineering or BS Forestry with at least one-year experience in surveying work. Among the five IU Assistant Surveyors, the Dupax officer is a BS Forestry graduate and one in Diffun (from the LGU) is an Associate Geodetic Engineer. The officer in San Isidro is a BS Agricultural Engineer while the other officer in Diffun is a BS Agribusiness graduate. The Asst. Surveyor in Lamut is a CRTP graduate.

As to work experience in surveying only the Asst. Surveyor in Diffun from the LGU has actual experience in surveying of barangay roads and as draftsman. The other Diffun officer has had experience in cartography. The Dupax Asst. Surveyor is a project management officer of Banila while the other two officers (Lamut and San Isidro) have experience as forest rangers. Relevant training of the officers are not available except for the Asst. Surveyor in Lamut who has had training in para legal work, forest fire control and management and in human relations and value formation.

General skills (computer) – All the Assistant Surveyors need training in computer operation from word processing, spreadsheet and other applications except the officer in Dupax who has had training in MS Word and Excel and is using the skills regularly in his work.

Identification and survey of CBFM perimeter, plantation area, fire lines and firebreaks – There appears to be a discrepancy between the stated work experience and the results of the survey. One of the Asst. Surveyors in Diffun is a graduate Junior Geodetic Engineer and with experience in surveying of barangay roads while the other has had work as cartographer. However, they are the ones identified to have the greatest training needs in these activities. The rest needs training in organizing survey teams, conduct of perimeter survey and computation of survey results.

Survey and design of road rehabilitation – All the five Asst. Surveyors need training in this area except the junior geodetic engineer.

Alignment and spacing – There is really no need for training in these activities as they can be learned easily and on the job.

Progress and quality control – There appears to be a general need for training of all the five Asst. Surveyors in all aspects of inspection and quality control.

4.6 Extension Support Unit (ESU): Agriculture

The extension officers in the PPMO are in agriculture, livestock and agro-forestry. There are no extension officers for agriculture and livestock for Lamut.

The educational qualification for this PPMO officer is BS Agricultural Extension or equivalent. The Extension Officer for Agriculture in Diffun is a BS Agriculture graduate (1969) while the officers in Dupax and San Isidro are both BS Agricultural Education graduates (1996 and 1972, respectively). The experience requirement is at least 5 years in agricultural extension work. The Extension Officer for Agriculture in Diffun has been doing extension work since 1999 to the present while the Dupax Extension Officer assists in program evaluation and approval since 1997. The Extension Officer in San Isidro is a municipal agriculturist whose work basically is in extension.

General Skills (computer operation) – All the three Extension Officers in Agriculture need training in computer operation particularly in word processing and spreadsheet.

Skills and knowledge in agriculture – Since all the three Extension Officers in Agriculture have BS in agriculture they are familiar in most activities in agricultural extension. What they need, except the Officer in Diffun, are refresher courses in soil conservation methods, crop rotation, seed storage, and integrated pest management.

4.7 Extension Support Unit: Agro-forestry

The basic educational qualification for the position is BS Agro-forestry or any relevant bachelor's degree. All the four Extension Officers in Agro-forestry meet this qualification being graduates in forestry or agriculture. The field experience required is 5 years work in extension. The Extension Officer in Diffun and Dupax meet the requirement having been doing coordinating work with ISF farmers or conducting information dissemination in forestry. Identification of training needs, however, indicate that the Dupax Officer needs general training in all aspects of agro-forestry.

General skills (computer operation) – All four again need basic and general training in the operation of computer particularly in word processing and spreadsheet.

Seedling procurement – Only the Extension Officer in Dupax needs general training in these particular skills. The others indicated only a needed training in the identification of preferred species, which could be acquired through on-the-job training.

Site preparation – The skills needed here are not difficult to acquire. Again this could be done through on-the-job training. The Officer in Dupax again need general training here with the others needing training in the application of herbicides.

Planting and fertilization – The Dupax Officer again needs general training in this area while the others need specialized training in composting, fertilizer application and pasture grass planting.

Maintenance – Only the Dupax Officer again need this training except for the Officers in Lamut and San Isidro who need training in maintenance of firelines/firebreaks and in pruning, coppicing and pollarding.

Seedling propagation – The Extension Officer in Diffun and San Isidro need training only in germination and growing medium while general training are needed by the Officer in Dupax and in Lamut.

4.8 Extension Support Unit: Livestock

The educational requirement for this PPMO position is BS Animal Husbandry or Agriculture or Veterinary Medicine. There is no Extension Officer for Livestock in Lamut. The Extension Officers in Diffun and Dupax are BS Agriculture graduates while the officer in San Isidro is BSA Education graduate. The Extension Officer for Agriculture and for Livestock in San Isidro is the same person. The experience required is 5 years. The Officer in Diffun has only three years experience.

General skills – The Extension Officers again require training in computer operation basically on word processing and spreadsheet. They also need training on soil conservation measures.

Livestock management – The Extension Officer for Livestock in Diffun needs general training in livestock management. The Extension Officer in San Isidro needs only training on pasture improvement.

4.9 Administrative Support Unit (ASU): Administrator

The educational and experience requirements for Administrator in the PPMO is any BS in any field related to administrative management or public administration and at least 5 years experience in administrative work. Except for the Lamut Administrator who has a Bachelor of Arts degree, the other three are graduates in forestry.

The Diffun and Dupax Administrators have experiences less than 5 years. Only the Officer in Lamut is an administrative officer and with more than 5 years experience.

General skills - The four administrators require training in computer operation, which would generally be in word processing and use of the spreadsheet.

Office management – Except for Diffun, the three administrators need training in budget and expense management.

Contracting – The Administrators in Diffun and San Isidro need training in drafting of TOR, bidding procedures and creation of contract document.

Monitoring of administrative work – The San Isidro Administrator require training in coaching and delegation of tasks to PO, documentation and record keeping. On the other hand the Administrator in Diffun need training in record keeping and documentation.

CBFMP – The Diffun and Lamut Administrators need training on all aspects of the CBFMP.

Reporting – The Administrators of Diffun, Lamut and San Isidro need training in the preparation of reports to foreign donors such as JICA.

4.10 Administrative Support Unit: Technical Clerk

The Technical Clerk should at least have a taken a secretarial course or computer related courses with at least three years experience.

The Technical Clerk for Diffun and Lamut have BS Forestry degrees while the one in Dupax is a BS Commerce (Accounting) graduate. The assigned Technical Clerk for San Isidro has not yet been interviewed.

General skills – The Technical Clerks for Dupax and Diffun need general training in computer operation such as MS Word and Excel. The Technical Clerk in Lamut has adequate experience in these two operations.

Office management – The Technical Clerk in Dupax does not need any training in office management but those of Diffun and Lamut need to train in this area.

Contracting – The Dupax Technical Clerk need training on contracting particularly in drafting TOR, the bidding procedures and creation of contract documents. The Diffun Technical Clerk need training in drafting TOR while the Lamut Technical Clerk need training in creation of contract document.

Monitoring administrative work – The Technical Clerks need to be trained in this area.

Understanding the CBFMP – In general all the three Technical Clerks need to imbibe the principles of CBFMP to the point that they will able to disseminate information effectively.

Reporting – Only the Dupax Technical Clerk require training in the preparation of reports with the level of quality desired by donor agencies such as JICA. The Technical Clerk of Lamut was a counterpart personnel of the M/P during the early stages of the project and is familiar with writing report to a donor agency.

4.11 Administrative Support Unit: Validation and Billing Officer

The educational requirement is that of BS Commerce and with an experience of 5 years. Two of the designated Validation and Billing Officers (Dupax and Lamut) have BS Commerce (Accounting) degrees while the other two are forestry graduates. The Dupax Officer is a Budget Officer whose experience is in allocation of funds, preparation of requests of allocation, vouchers, payrolls and processing of claims. The Lamut Officer is an Accountant and is familiar in the preparation of financial reports. The Diffun Officer is a CDO II whose experience is in monitoring and evaluation of CBFM projects while the San Isidro Officer is a Forester I whose work is very well specified.

General skills – The Validation and Billing Officers of Diffun, Lamut and San Isidro needs training in computer operation particularly on word processing and use of the spreadsheet.

Validation and Billing – The skills of all the Officers in this area is spotty and it appears that there is need for building their skills in this area.

Auditing – In this area it is only the Officer in Lamut, an Accountant, who does not need training in this area.

Reporting – The Officer in Diffun has good experience in preparation of monthly accomplishment reports, and month inspection/validation reports. The other three need training in this area.

5. SUMMARY TRAINING NEEDS OF PILOT PROJECT MANAGEMENT OFFICERS

Observations can be made that the educational requirements of designated PPM Officers do not satisfy the educational and experience requirements of their office. As such there is a need to provide them some training. The summary of training needs of the Pilot Project Management Officers is shown in Table 1. It shows the knowledge or skills that the PPM Officers need to acquire to be able to provide the needed services to the POs and to able to discharge various duties and functions.

6. RECOMMENDATIONS

There are 31 items in the list of skills and knowledge deemed needed by PPMO officers. However, there are certain topics that can be grouped such as those in Community Organizing to include Consensus Building, Application for CBFMA, Preparation of CRMF, and Preparation of AWP (and Resource Use Plan). Similarly, the topics on Validation and Billing can all be combined in one training course. The training duration should be programmed so that the PPM Officers will not be too pre-occupied with the training leaving them no time to carry out their functions. Furthermore, the topics should also be studied carefully to identify those that can be done on an on-the-job training module.

Some recommendations on the training include:

1. Computer operation is now a basic necessity in any given work, whether for office or field personnel. This is particularly true for managers who have to keep abreast of the technological changes taking place globally. It is also necessary in accessing or delivering information. More and more digital documents are generated replacing paper documents. However, it should be noted that in San Isidro there is a great necessity to upgrade their equipment and train them in up-to-date word processing and spreadsheet programs. The level and intensity of training may vary but all PPMO officers should undergo this training.
2. It appears that all the COSU officers must undergo training relative to better understanding the CBFMP concept, contracting and related activities leading to securing a CBFMA for the community. This is particularly true in community organizing, consensus building, preparation of CRMF, AWP and RUP, financial

- capability strengthening of the PO and managerial capability development of the PO. Report preparation is another skill that they need to have training in.
3. For the Implementation Unit Supervisors, the needed training is on technical assistance on road rehabilitation and building construction, progress and quality control of work as well as report review. They also need training in report preparation.
 4. The IU Surveyors and IU Assistant Surveyors require training in identification and survey of perimeter, plantation, firelines and firebreaks. They also need training in technical assistance in road rehabilitation and building construction as well as progress and quality control of work.
 5. The Extension Officers for Agriculture for Dupax and San Isidro need training in agriculture relative to soil conservation, crop rotation and integrated pest management.
 6. The Extension Officers for Agroforestry particularly the officer from Dupax require general skills training in agroforestry. Special skills are needed in herbicide/insecticide application, plantation design, fertilizer application, pasture grass planting, pruning, coppicing and pollarding and in seed germination especially in the preparation of growing medium. Pest and disease control is another area that they need skills in.
 7. The Extension Officer in Diffun needs general training in livestock management. Other areas of skills/knowledge improvement are in soil conservation methods as well as in pasture improvement.
 8. Even if their job is on administration, the ASU Administrators need to carefully study the concept of CBFMP in order to in-sync with the overall objectives and activities of the pilot study. This is particularly true for Diffun and Lamut. Furthermore, the Officers in Diffun and San Isidro need training on contracting, monitoring of administrative work, and preparation of reports.
 9. The Technical Clerks need skills/knowledge in most aspects of the work such as in office management, contracting, monitoring of administrative work, refresher course in CBFMP. The Officer in Dupax needs further training on report preparation.
 10. The Validation and Billing Officers require training on general validation and billing, auditing and except the Diffun Officer, in report preparation.

Some general recommendations include:

1. It would not be practical to conduct training of the various PPMO in a formal manner. Some of the training could be done on-the-job. Understanding the CBFM concept can be done by further study of the program and not undergo formal classroom training. Other areas for on-the-job training are in contracting, report review, agriculture, agroforestry, livestock management, monitoring of administrative work, validation and billing and reporting.
2. In formal or semi-formal training, efforts should be made to combine skills areas that are closely related to each other or sequential in attaining certain objectives such as the skills associated in the acquisition of a CBFMA. These include identification and evaluation of CBFM areas, community appraisal, community organizing, consensus

- building, preparation of CRMF (including AWP and RUP), financial capability and management capability building.
3. The duration of training shall be properly defined so that the PPMO officers will not be away from their work for too long a time. The training should be segmented so that the skills gained can be applied and observations made before continuing the training in other areas.
 4. The services of training providers should be taken advantage of since professional groups are very well trained to undertake this kind of work.
 5. Where applicable and practical and the number of trainees is not large, even non-PPMO officers should be accommodated in the training for as long as their line of work at DENR or at the Provincial ENRO are aligned with the training conducted.

Annex-A

List of PPMO Members

PPMO Members in CENRO Dupax, Nueva Vizcaya

Annex-A

No.	Name	Position	working time
1	Rolando B. Valdez	PPM Officer	concurrent capacity
2	Gilbert F. Ramajo	IU Supervisor	full time
3	Ericson A. Garroville	IU Surveyor	full time
4	Roderick V. Abriam	IUAsst. Supervisor	full time
5	Lily S. Acosta (LGU)	Extension Officer on Agriculture	on call
6	Pricilla S. Pudiquet (LGU)	Extension Officer on Livestock	on call
7	Filipinas A. Lumanga	Extension Officer on Agro-forestry	on call
8	Saturnina S. Gabarino	ASU-Validation&Billing Staff	full time
9	Valentin A. Baccay	ASU-Administrator	full time
10	Ma. Theresa Seraspi	ASU-Technical Clerk	full time

PPMO Members in CENRO Diffun, Quirino

No.	Name	Position	working time
1	Manolito Dela Cruz	PPM Officer	concurrent capacity
2	Jose B. Corpuz	COSU Staff	full time
4	(PNREO-LGU)	COSU Staff	full time
5	Disodado M. Ragala	IU Supervisor	full time
6	Romulo Gabrillo	IU Surveyor	full time
7	Arturo Camaro (LGU)	IU Asst. Surveyor	on call
8	Roque S. Yanguas	IU Asst. Surveyor	on call
9	Larina Mentoc (LGU-Municipal)	Extension Officer (Agriculture)	on call
10	Eusebio Tuzon (LGU-PNREO)	Extension Officer (Agroforestry)	on call
11	Ernesto Tam-on (LGU-PNREO)	Extension Officer (Livestock)	on call
12	Ruel S. Villanueva	ASU - Validating & Billing Staff	on call
13	Francisco Carboonel	ASU - Administrator	full time
14	Rosemarie B. Yanguas	ASU - Technical Clerk	full time

PPMO Members in CENRO San Isidro, Isabela

No.	Name	Position	working time
1	Henry F. Costales, Sr.	PPM Officer	concurrent position
2	Manolino V. Sunio	IU Supervisor	full time
3	Henry E. Macayanan	IU Surveyor	full time
4	Dominador M. Batara	IU Asst. Surveyor	full time
5	Cecily M. Saldivar	Extension Officer (Agro-forestry)	on call
6	Julio V. Lamug (LGU)	Extension Officer (Agriculture)	on call
7	Julio V. Lamug (LGU)	Extension Officer (Livestock)	on call
8	Jackeline M. Asuncion	ASU - Validation & Billing Staff	full time
9	Isaias Asuncion	ASU - Administrator	full time
10	Leonora dela Cruz	ASU - Technical Clerk	full time

PPMO Members in CENRO Lamut, Ifugao

No.	Name	Position	working time
1	George P. Gines	PPM Officer	concurrent capacity
2	Sonia T. Vidad	COSU Staff	full time
3	David Bangsoyao (PAENRO-LGU)	COSU Staff	full time
4	Wilson C. Panag	IU Supervisor	full time
5	Napoleon D. Fontanilla	IU Surveyor	full time
6	Dominador B. Taberna	IU Asst. Surveyor	on call
7	Magtanggol S. Soberano	Extension Officer (Agro-forestry)	on call
8	Carol M. Agnapan	ASU - Technical Clerk	on call
9	Evelyn T. Orizar	ASU - Administrator	on call
10	Fidel M. Manuel	ASU - Validation & Billing Staff	on call

Annex-B

Minimum Qualifications

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lamut		Diffun	
	SONIA VIDAD	DAVID BANGSOYAO	ROGELIO LAGGUI	JOSE CORPUZ
BS Forestry/Sociology or Community Development	BS Forestry (1980)	BS Forestry (1980)	BS Forestry (1986)	BS Forestry (1980)
With experience in community organizing or forestry development (5 yrs)	IEC and forest protection (1992- present)	Nursery in charge (1992 – present)	Forest Ranger (forest protection and law enforcement) (1995 – present)	Scaler/IEC Officer, monitoring and evaluation of project development by site (NA)
Relevant Training	Integrated WM course (31 d), agroforestry (5 d), forest pests and diseases (5 d), recent developments in forestry and environment (5 d), community development (2d), and basic community organizing .	Community organizing (45 d), ISF (53 d), barangay administration (5 d), dev't and management of water resources (2 d)	NA*	NA*

* Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lamut	Diffun	Dupax	Sn Isidro
Implementing Unit Supervisor	WILSON PANAG	DIOSDADO REGALA	GILBERT RAMAJO	MANOLINO SONIO
BS Forestry,	BS Forestry (1984)	BS Forestry (1976)	BS Forestry (1980), Masters in Management	BS Forestry (1976)
2 yrs experience in watershed mgt., soil conservation, forest/agro-forest plantation establishment	Forest Ranger ('89 to '02),	Chief of CBFM and CDA II (1989 – present)	CBFM Officer, site coordinator (1995 – present)	NA*
Relevant training	Inventory of forest occupants, fire preparedness and fires prevention, performance evaluation system, para-legal training, range mgt and land capability assessment, Windows 95 & MS office 97, SWIP	NA*	NA*	NA*

*Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lamut	Diffun	Dupax	Sn Isidro
1. Implementing Unit-Surveyor	NAPOLEON FONTABILLA	ROMULO GABRILLO	ERICSON GAROVILLO	HENRY MACAYANAN
Geodetic/Civil Engineer, BS Forestry At least 3 yrs experience.	BS Civil Engineer (1967); Forest ranger, forest protection officer (1991 – present)	Forest Ranger (1981); Forest ranger, forest protection officer (1999 – present)	BS Civil Eng'g (1992), Masters in Management; Special Investigator I, accepts public land application (1999 – present)	BS Forestry (1985) CDA II, supervision and management of CBFM projects (1999 – present)
Relevant training	Selective logging (5 d)	*NA	NA*	NA*
2. Implementing Unit – Asst. Surveyor	DOMINADOR TABERNA	ROQUE YANGUAS	RODERICK ABRIAM	DOMINADOR BATARA
Geodetic/Civil Engr., BS Forestry At least 1 year experience	CRTP (1973) Forest Ranger, forest protection officer (1995-2002)	BS Agri-business (1990) Tree marker, cartographer (1998-2002)	BS Forestry (1999) CDA, PMO Banila (2002)	BS Agricultural Engineering (1986) Forest Ranger (NA)
Relevant training	Para legal training, forest ranger re-orientation course, forest fire control & mgt., seminar on human relations and value classification	NA*	NA*	NA*

*Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lanut	Diffun	Dupax	Sn Isidro
1. Implementing Unit-Surveyor				
Geodetic/Civil Engineer, BS Forestry At least 3 yrs experience.				
Relevant training				
2. Implementing Unit – Asst. Surveyor		ARTURO CAMARAO		
Geodetic/Civil Engr., BS Forestry At least 1 year experience		Assoc. Geodetic Eng’r (1994) Instrument man, draftsman, surveying of barangay roads (1996-2001)		
Relevant training		NA*		

*Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lamut	Diffun	Dupax	Sn Isidro
1. Extension Support Unit- Agriculture		LARINA MENTAC	LILY ACOSTA	JULIO LAMUG
BS Agricultural Extension or relevant degree		BS Agriculture (1969)	BSA Education (1996)	BSA Education (1972)
At least 5 yrs experience in extension work		Agriculturist II, agricultural extension (1999 to present)	Agriculturist II, assists approval agricultural programs (1997 – present)	Municipal Agriculturist (1986- present)
Relevant training		NA*	NA*	NA*
2. Extension Support Unit – Agro-forestry	MAGTANGGOL SOBERANO	EUSEBIO TUZON	FILIPINAS LUMANGA	CECILY SALDIVAR
BS Agro-forestry or any relevant BS	BS Forestry (1987)	BS Forestry (1977)	BS Agriculture (1982)	BS Agriculture (1979)
5 years experience in extension as required by Pilot Project	Forest Ranger, information officer (NA)	CDA. PDO; coordinates and assists ISF participants (1999 – 2002)	Forest Ranger; conducts/ assists info-dissemination activities (1990 – present)	NA*
Relevant training	Inventory of forest occupants, fire preparedness and fire prevention, para legal training, environmental educ. Echo training workshop, environmental training for LGUs, NGOs and line agencies	NA*	NA*	NA*

*Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lamut	Diffun	Dupax	Sn Isidro
1. Extension Support Unit- Livestock		ERNESTO TAN-OM	PRECILA PUDIQUET	JULIO LAMUG
BS Animal Husbandry or Agriculture or Veterinary At least 5 yrs experience		BS Agriculture (1969) Agriculturist II, agricultural extention (1999 to present)	BS Agriculture (1980) Agricultural Technologist, performs agricultural services in barangays (1993-present)	BSA Education (1972) Municipal Agriculturist (1986- present)
Relevant training		NA*	NA*	NA*
Administrative Support Unit – Administrator	EVELYN ORIZAR	FRANCISCO CARBONEL	VALENTIN BACCAY	ISAIAS ASUNCION
Any BS relative admin. management/Public Ad. At least 5 years experience	Bachelor of Arts (1975) Administrative Officer II, administrative services functions (1988 – present)	BS Forestry (1979) Forester II, supervises implementation of regulatory works (1999 – present)	BS Forestry (1982) CDO II, assists CENRO implement plans and programs (1999 – present)	BS Forestry (1984) Forest Ranger, field man (1994 – present)
Relevant Training	Personnel Mgt. Course, effective administrative discipline, value orientation seminar, supervisory development course	NA*	NA*	NA*

*Not available (not known whether there is relevant training or none at all)

Minimum Qualifications for PPMO Position vs Qualifications of PPM Officers

Minimum Qualifications	Lanut	Diffun	Dupax	Sn Isidro
1. Administrative Support Unit – Validation and Billing Staff	FIDEL MANUEL	RUEL VILLANUEVA	SATURNINA GABATINO	JACKELINE ASUNCION
BS Commerce At least 5 yrs experience	BSC Accounting (1975) Accounting II, preparation of financial reports (1989 – present)	BS Forestry (1982) CDO II, monitoring and evaluation of CBFM projects (1989 - present)	BSC Accounting (1974) Budget Officer, allocate funds, prepare ROAs, vouchers, payroll record/process claims (1998-present)	BS Forestry (1984) Forester I, undertake field and office work (1999 – present)
Relevant training	Job training	NA*	NA*	NA*
Administrative Support Unit – Technical Clerk	CAROL AGNAPAN	ROSEMARIE YANGUAS	MA THERESA SERASPI	LEONILA DE LA CRUZ**
At least secretarial graduate or Computer related courses At least 3 years experience	BS Forestry (1993) Forest Ranger, Assistant planning officer (1998 – present)	BS Forestry (1982) Forest Ranger, assist in training of PO, process application for tree ownership under Tree for Legacy Prog. (1999 – present)	BS Commerce Accounting (1986) Clerk II, Acting Records Officer (1997 – present)	
Relevant Training	Participatory rural appraisal, marketing information system, forest protection and fire control and management	NA*	NA*	

*Not available (not known whether there is relevant training or none at all)

**No interview conducted yet

Annex-C

PPMO Profiles

(Sample)

Profile PPMO Lamut

Personal Background									
#	Name	PPMO Pos	Hm Address/Tel. No.	Ofc Address/Tel. No.	Age	Gen	CS	Bday	Bplace
1	George P. Gines	PPM Officer	202 Plaridel Heights, Subd., Plaridel, Santiago City	DENR, CENRO, Lamut,. Ifugao	48	M	M	1954/7/9	Santiago City
2	Wilson C. Panag	IU Supervisor	La Torre, Bayombong, Nueva Vizcaya	DENR, CENRO Lamut, Ifugao	44	M	M	10/03/57	La Torre, Bay., Nueva Vizcaya
3	Napoleon Fontanilla	IU Surveyor	Ineangan, Dyupax Del Norter, Nueva, Vizcaya	DENR, CENRO Lamut, Ifugao	57	M	M	1945/4/17	Ineangan, Dupax del Norte, N. Vizcaya
4	Dominador Taberna	IU Asst. Surveyor	Solano, Nueva Vizcaya	DENR, CENRO Lamut, Ifugao	48	M	M	1954/6/23	Solano, Nueva Vizcaya
5	Magtanggol Soberano	Agro-For. Ext. Officer	Cutar, Aritao, Nueva Vizcaya	DENR, CENRO Lamut, Ifugao	35	M	S	1967/6/30	Aritao, Nueva Vizcaya
6	Fidel M. Manuel	ASU-Validation & Billing Staff	Silauan Norte, Echague, Isabela	Accounting II	48	M	S	1905/5/7	
7	Evelyn Orizar	ASU-Administrator	Poblacion South, Lagawe. Ifugao	DENR, PENRO, Lamut, Ifugao	48	F	M	1954/6/20	Hingyon, Ifugao
8	Catrol Agnapan	ASUTechnical Clerk	Nayon, Lamut, Ifugao	DENR, PENRO, Lamut, Ifugao	31	F	M	1970/9/1	Banaue, Ifugao
9	Sonia T. Vidad	COSU	Pob., West, Lamut, Ifugao	DENR, CENRO, Lamut,. Ifugao	43	F	M	1958/10/27	Asipulo, Ifugao
10	David Bangsayao	COSU	Debibi, Cabarroguis, Quirino	PAENRO, Lagawe. Ifugao	47	M	M	1954/3/4	Bukod, Benguet, Mt. Province

Profile PPMO Lamut

Educational Background

#	Name	PPMO Pos	College			Vocational			Post Graduate		
			Course	School	Yr. Grad.	Course	School	Yr. Grad.	Course	School	Yr. Grad.
1	George P. Gines	PPM Officer	BS Forestry	UPLB	1977				MPA (Candidate)	SMU Bayombong	
2	Wilson Panag	IU Supervisor	BS Forestry	NVSIT	1984						
3	Napoleon Fontanilla	IU Surveyor	BS Civil Engineer	SMC	1967						
4	Dominador Taberna	IU Asst. Surveyor				CRTP	Samson Tech.	1973			
5	Magtanggol Soberano	Agro-For. Ext. Officer	BS Forestry	Accounting II	1987						
6	Fidel M. Manuel	ASU-Validation & Billing Staff	BSC, Accounting	SMU	1975						
7	Evelyn Orizar	ASU-Administrator	Bachelor of Arts	St. Louis, College	1975						
8	Carol Agnapan	ASU Technical Clerk	BS Forestry	ISCAF	1993						
9	Sonia S. Vidad	COSU	BS Forestry	ISCAF	1980						
10	David Bangsoyao	COSU	BS Forestry	BSU	1980						

Profile PPMO Lamut

Employment History							
#	Name	PPMO Pos	Company / Organization	DENR Position	Functions/Responsibilities	From	To
1	George Gines	PPM Officer	DENR	Forester II	Team Leader, Land Eval. Party	1905/6/19	1905/6/23
2	Wilson Panag	IU Supervisor	DENR	Forest Ranger		1989	2002
3	Napolen Fontanilla	IU Surveyor	DENR	Forest Ranger	Forest Protection	1991	2002 (present)
4	Dominbador Taberna	IU Asst. Surveyor	DENR	Forest Ranger	Forest Protection	1995	2002
5	Magtanggol Soberano	Agro-For. Ext. Officer	DENR	Forest Ranger	Information Officer		
6	Fidel M. Manuel	ASU-Validation & Billing Staff	DENR	Accounting II	Preparation of Financial Reports	1989	2002(present)
7	Evelyn Orizar	ASU-Administrator	DENR	Admin. Officer II	Administrative Services	1988	to date
8	Sonia T. Vidad	COSU	DENR	Forest Ranger	IEC and Forest Protection	1992	to date
9	David Bangsoyao	COSU	PAENRO-LGU	CDA II	Nursery In-Charge	1992	to date
10	Carol Agnapan	ASU Technical Clerk	DENR	Forest Ranger	Asst. Planning Officer	1998	2002

**Profile PPMO Lamut
Training History (1/5)**

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
1	George Gines	PPM Officer	Theodolite Survey and Electronic Traversing	UP Diliman and DENR	05/06/1905				
			Delineation of Forestland Boundaries	DENR	60 DAYS				
			High Impact Seminar/Training	DENR	2 DAYS				
2	Wilson Panag	IU Superviso	Training on Inventory of Forest Occupants Leverl III	DENR	April 17-29, 1989				
			Seminar Workshop on Human Relation and Value Clasification	DENR-HRD	August 7-9,1993				
			Fire Preparednes and Fires Prevention	DENR	Nov. 16-20, 1993				
			Performance Eval. System and Mamamayan Muna Hindi Mamaya Na	CSC	August II, 1994				
			Code of Conduct and Ethical Standard and Mamamayan Muna Hindi mamaya na Part II	CSC	12/08/1994				
			Para Legal Training	DENR	January 25-28, 1995				
			Range Mgt. And Land Capability Assessment Training	DENR	February 20-28, 1995				
			Forest Ranger Orientation Training	DENR	May 29-30,1996				
			Microsoft windows 95 and microsoft office 97 training	DENR	October 27-31,1997				
			Small Water Impounding system training	DENR	October 7-14,1998				

**Profile PPMO Lamut
Training History (2/5)**

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
3	Napolen Fontanilla	IU Surveyor	Selective logging	BFD	Oct. 16-20, 1968				
4	Dominador Taberna	IU Asst. Surveyor	Fores Ranger Re-orientation course	DENR, PENRO, Ifugao	Dec. 12-14, 1995				
			Para Legal Training	DENR, PENRO, Ifugao	Dec. 4-6, 1996				
			Forest Fire Control and Management	DENR, CAR, Baguio City	Dec. 10-13, 1996				
			Seminar Workshop on Human Relation and Value Clasification	CSC,HRD, CAR	August 8-9, 1993				
5	Magtanggol Soberano	Ext'n Off. Agroforestry	Inventory of Forest Occupants	DENR	5 DAYS				
			Fire Preparednes and Fire Prevention	DENR	5 days				
			On Site Para Legal Training	DENR	4 days				
			Salin Turo Envrionmental Education Echo Training Workshop of the Dalaw Turo Nature Conservation and and Awareness Outreach Program	DENR	8 days				
			Envrionmental Education Training for LGUs, NGO's and other line agencies	CECAP, MIRIAM Peace	3 days				
			Dalaw Turo Training for CARP-IEC and Enhancement		4 days				

**Profile PPMO Lamut
Training History (3/5)**

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
6	Sonia T. Vidad	COSU	Integrated Watershed Management Course for Project Implementation	JICA	31 days				
			Agroforestry for Sustainable development and People Empowerment	UPLB	5 days				
			3rd Training/Workshop on Forest Pest and Diseases Mgt.	DENR	2 days				
			Recent Development on Forestry and Environment Course	UPLB	5 days				
			Salin-Turo Trainors Training	DENR	9 days				
			Training/Workshop for Dalaw-Turo	DENR	5 days				
			Training on Community Development	DENR	2days				
			Basic Community Organizing and Local Government	DENR-SECAL	6 DAYS				
7	Carol Agnapan	ASU Technical Clerk	Participatory Rural Appraisal	DENR	November 13-17,1995				
			Marketing Information System	DENR	July 9-12,1996				
			Forest Protection and Fire Control Management	DENR	May 26-30,1994				

**Profile PPMO Lamut
Training History (4/5)**

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
8	David Bangsayao	COSU	Community Organizing	ASPI-DENR	July 1989(45 days)				
			Second Middle Level Training on Integrated Social Forestry	DENR	Jan.-March 1981(53 days)				
			Brgy. Administration Training Program	LGU	August 9-13, 94				
			Workshop for the Development and Management of Water Resources	DENR	April 16-17,97				
9	Evelyn Orizar	ASU Administrator	Personnel Mgt. Course	CSC	4 DAYS				
			Seminar Training on Effective Administrative Discipline	CSC	4 days				
			Mamamayan Muna Hindi Mamamaya Na	CSC	1 day				
			Value Orientation Seminar	DENR					
			Supervisory Development Course-Track I	CSC	4 days				
10	Fidel Manuel	ASUV Validation and Billing Unit	Job Training	DENR-CAR	May 17-11/24,1989				

**Profile PPMO Lamut
Training History (5/5)**

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
			Modified Disbursement System	COA	Marcj 26-27,1990				
			National Government Accsounting	COA	November 11-19,1991				
			Local Government Accountingfo r devolved agencies	COA	September 11,-23,1993				
			New Standard Charts of Accounts	COA	Nov/ 16-17,1993				
			National Government Accsounting	COA	May 2-13,1994				
			National Governmen Accounting System (NGAS)	COA	December 17-20,2001				
			Year End Financial Mgt. Seminar	DENR, Cenrtral	Jan. 22-26. 2001				

Area: San Isidro

Training History (1/3)

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
1	Costales, Henry F.	PPM Officer	Dairy and Beef Production Seminar	DTRI, UPLB	4/29-30/1982 (16 hrs.)		Para-Legal Seminar on Forestry Laws and	DENR-CENRO, San Isidro, Isabela	12/12/2001
			2nd Echo Workshop Seminar Leadership Institute on Forestry Extension (Life)	UPLB, Bureau of Forest Development, R-	8/27-29/1982 (24 hrs.)				
			1983 Forestry Symposium on Forest Conservation	UPLB- College of Forestry	11/22-23/1983				
			R-01 & R-02 US Peace Corps Pre-Service Training Supervisors Conference	US Peace Corps Philippines 301	12/1-4/1983				
			US Peace Corps R-02 Supervisors Conference	US Peace Corps Philippines 301	3/25-28/1984				
			5th Middle Level Forestry Technician Training Course on Forest Conservation (Soil Erosion Control & Forest Road Construction)	RP-Japan Training Center for Forest Conservation, Bureau of Forest Dev't., Diliman, QC	10/14-12/12/1985				
			Watershed Management & Environmental Impact Assessment and Monitoring	ASEAN-US Watershed Project	4/16-25/1986				
			Budget and Planning Workshop	Bureau of Forest Dev't, Tug.,	10/ 22-23/1986				
			Reforestation Workshop for Project Managers	Bureau of Forest Dev't, Tug.,	10/29-30/1987				
			Forest Managers Course	Forest Dev't Training Center,	4/14-15/1988				
			National Forestation Program Workshop	DENR Central Office, Diliman,	9/28-30/1989				
			Proper Use of Hiko Tray	DENR Central Office, Diliman,	12/14-15/1989				
			1991 National Forestation Program (NFP) Regional	NPCO, DENR Central Office,	10/15-18/1990				

Area: San Isidro

Training History (2/3)

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
			National Forestation Program	NPCO Roving Team, DENR	8/12-13/1991				
			Orientation/Workshop on the SOP of the DENR Monitoring	Proj. Dev't. & Eval. Div., DENR CO	29/10/1992				
			Seminar/Workshop on Contract Management	NRMP, DENR Central Office	12/14-17/1992				
			Work Improvement Scheme for Effectiveness	CSC, Reg- 2, Tug. Cagayan	3/2-4/1993				
			Human Relations and Communication	CSC, Reg- 2, Tug. Cagayan	8/2-6/1993				
			Orientation/Workshop on the NFP Forestry Sector Program & Project Loan & Appraisal of Sites under FSP (Loan II)	DENR Reg- 2, Tug. Cagayan	7/11-15/1994				
			18th Regional Alumni Institute	UP Alumni Association	11/18-19/1994				
			Cattle Management Seminar	Dept. of Agriculture, Reg-	3/9-11/1995				
			Sub-project site (Appraisal Training Course)	DENR, NFDO, Diliman, QC	5/14-21/1995				
			Course on Financial and Economic Analysis of	DAP, Proj. Dev't. Institute	5/27-31/1996				
			10th CPE Short Course on Recent Developments in Forestry and Natural Resources	IFC, UPLB College of Forestry, College, Laguna	11/24-28/1997				
			Golden Anniversary and Annual National Convention of the Society of Filipino	Society of Filipino Foresters, Inc., Nat'l Chapter	8/24-26/1998				
			Seminar Workshop on Water Advocacy Forum	PCARRD, UPLB	3/22-23/1999				

Area: San Isidro

Training History (3/3)

#	Name	PPMO Pos	Title of Training Attended	Sponsor	Date Attended	Learning Applied	Title of Training Conducted	Sponsor	Date Conducted
			Strategic and Investment Planning Workshop on Convergence Toward Sustainable Rural	DAR, Reg- 2, Tug. Cagayan	5/26-27/1999				
			51st Anniversary and National Annual Convention of the Society of Filipino	Society of Filipino Foresters, Inc., Nat'l Council	8/26-28/1999				
			On Site Training Workshop on Bambosetum Establishment and Clonal	DENR, Reg. 2, Tech. Transfer and Info. Division	9/19-20/2000				
			53rd National Annual Convention of the Society of Filipino Foresters, Inc.	Society of Filipino Foresters, Inc., Reg. X, Cagayan	9/10-12/2001				
2	Sunio, Manolino	IU Supervis							
3	Macayana n, Henry	IU Surveyor							
4	Batara, Dominado	IU Asst. Surveyor							
5	Saldivar, Cecily M.	Agro-For. Ext.							
6	Lamug, Julio V.	Agri & Livestock							
7	Asuncion Jackeline	ASU-Validatio							
8	Asuncion, Isaias T.	ASU-Administr							

Annex-D

***Summary of Training Needs of PPMO
and Result of TNA Analysis (Sample)***

TNA RESULT ANALYSIS TABLE (Sample) (1/21)

Rating scales: 4: Excellent knowledge/skills for the implementation of the Pilot Project and MP
3: Adequate level of knowledge/skills
2: Certain level of knowledge/skills, but needs improvement
1: Would have difficulties in the implementation with the present knowledge/skills

Position at PPMO: PPM Officer of Diffun, QUIRINO (Manolito dela Cruz)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	From basic
Office Management	2	HR management	4		4	0		
	3	Budget/expense management	3		4	-1		
	4	Coordination with LGU and other line agencies	4		3	1		
	5	Resource generation/mobilization/fund raising	3		3	0		
	6	Conflict resolution	3	He has experienced	3	0		
Contracting	7	Drafting of a TOR	3		3	0		
	8	Bidding procedure	3		1	2	unnecessary	
	9	Creation of contract documents	3		3	0		
	10	Supervision of contract work	3		4	-1		
Survey Validation	11	Evaluation of perimeter survey and mapping	3		4	-1		
	12	Evaluation of parcellary survey and mapping	3		4	-1		
	13	Evaluation of line survey and mapping	3		4	-1		
Report Review	14	Evaluation of Monthly Accomplishment Report	3		4	-1		
	15	Evaluation of Inspection/Validation Report	3	no answer	2	1	necessary	watch points for evaluation
	16	Evaluation of Billing Request	3		1	2	necessary	watch points for evaluation
	17	Evaluation of Financial and Auditing Report	3		1	2	necessary	watch points for evaluation
CBFMP	18	Understanding of CBFMP	3		1	2	necessary	concept of CBFM

TNA RESULT ANALYSIS TABLE (Sample) (2/21)

Position at PPMO: Implementation Unit Supervisor: Diffun (Diosdado M. Ragala)

Required Skills/Knowledge		Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate	
General Skills	1	Computer Skills	3		1 2	necessary from bas+I83ic
Contracting	2	Drafting of a TOR	3		4 -1	
	3	Bidding procedure	3		1 2	unnecessary
	4	Creation of contract documents (agreement, work schedule, tech specifications)	3		4 -1	
	5	Supervision of contract work			4 -1	
Survey Validation	6	Evaluation of perimeter survey and mapping	3	He has confident/experience	1 2	unnecessary
	7	Evaluation of parcellary survey and mapping	3	He has confident/experience	1 2	unnecessary
	8	Evaluation of line survey and mapping	3	no answer	3	unnecessary
Technical Assistance	9	Assistance in planting material procurement	3	familiar with the process	1 2	unnecessary
	10	Maintenance of planting stock (holding area management and mud puddling)	3		2 1	unnecessary
	11	Site preparation	3		4 -1	
	12	Planting	3		4 -1	
	13	Establishment of demo farms	3		3 0	
	14	Road rehab	3		1 2	necessary civil engineering
	15	Construction of MP buildings	3		2 1	necessary civil engineering
	16	Nursery establishment and maintenance		familiar with the process	3 0	
Progress and Quality Control	17	Formulation of detailed work schedule	3		4 -1	
	18	Procurement basing on the progress of land	3		1 2	necessary on the job training
	19	Quality inspection of planting materials, stock management, planting (spacing, holes, etc.) and survival rate	3		1 2	necessary on the job training
	20	Quality inspection of fire control activities,	3		1 2	necessary on the job training
	21	Quality inspection of construction of MP building	3		2 1	necessary civil engineering
	22	Quality inspection of road rehab	3		1 2	necessary civil engineering
	23	Quality inspection of construction of lookout tower	3		1 2	necessary civil engineering
	24	Quality inspection of silvo pasture demo farms	3	no experience for inspection	1 2	unnecessary concept of sylvopasture
	25	Quality inspection of agroforestry demo farms	3	experience in Salt I	1 2	unnecessary
	26	Quality inspection of nursery		familiar with the process	1 2	necessary
	27	Daily field inspection	3		4 -1	
	28	Weekly accomplishment record	3		4 -1	
	29	Revision of work schedule	3		1 2	necessary on the job training

TNA RESULT ANALYSIS TABLE (Sample) (3/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Report Review	30	Auditing of PO	3		1	2	necessary	watch points of auditing/inspection/validation
	31	Evaluation of Inspection/Validation Report	3		1	2	necessary	
	32	Evaluation of Billing Request	3		2	1	necessary	
	33	Evaluation of Financial and Auditing Report	3		3	0	necessary	
Financial Capability Strengthening of PO	34	Fund Raising	3		3	0		
	35	Collection of Fees	3		1	2	unnecessary	
	36	Savings and Loans	3		3	0		
	37	Buy and Sell	3		3	0		
	38	Livestock Breeding	3		1	2	necessary	general knowledge
	39	Cottage Industries	3		1	2	necessary	
	40	Regular Accounting	3		3	0		
Managerial Capability Development of PO	41	Policy advocacy (e.g., Brgy ordinances)	3		2	1	necessary	supporting skills for PO
	42	Monitoring and Evaluation	3		1	2	necessary	supporting skills for PO
	43	Strategic Planning	3		2	1	necessary	supporting skills for PO
	44	Auditing of PO	3		3	0	necessary	supporting skills for PO
	45	Training needs analysis	3		1	2	necessary	supporting skills for PO
	46	Coordinating of managerial trainings	3		2	1	necessary	supporting skills for PO
	47	Networking	3		3	0	necessary	supporting skills for PO
CBFMP	48	Understanding of CBFMP	3	no experience as mediator	3	0		boundary conflict
Reporting	49	Preparation of Monthly Reports with a JICA quality	3		1	2	necessary	on the job training

TNA RESULT ANALYSIS TABLE (Sample) (4/21)

Position at PPMO: Implementation Unit Surveyor: Diffun (Romulo Gabrillo)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	from basic
Identification and Survey of CBFM Perimeter, Plantation Area and Fire lines/ Firebreaks	2	Reconnaissance survey w/ local population	3		3	0		
	3	Approximate delineation on a map	3		3	0		
	4	Organizing of a survey team	3		1	2	necessary	on the job training
	5	Conduct of perimeter survey	3		3	0		
	6	Establishment of permanent monument	3		1	2	necessary	on the job training
	7	Computation of survey results	3		3	0		
	8	Creation of CBFM area map	3		1	2	necessary	refresh skill
	9	Creation of plantation area map	3		1	2	necessary	refresh skill
	Survey and Design of Road Rehab	10	Reconnaissance survey w/ local population	3		3	0	
11		Identification of appropriate survey methods	3		1	2	necessary	civil engineering
12		Coordination w/ surveyor at LGU	3		2	1	necessary	on the job training
13		Preparation of rehab plan (design, work breakdown, work schedule, cost)	3		1	2	necessary	civil engineering
Alignment and Spacing	14	Alignment of brushing lines/spots and stakes	3		3	0		
	15	Spacing of stakes	3		3	0		
	16	Alignment of demo farms	3		1	2	necessary	
Progress and Quality Control	17	Formulation of detailed work schedule	3		4	-1		
	18	Procurement basing on the progress of land	3		3	0		
	19	Quality inspection of planting materials, stock management, planting (spacing, holes, etc.) and survival rate	3		1	2	necessary	
	20	Quality inspection of fire control activities,	3		1	2	necessary	
	21	Quality inspection of construction of MP building	3		1	2	necessary	
	22	Quality inspection of road rehab	3		1	2	necessary	
	23	Quality inspection of construction of lookout tower	3		1	2	necessary	
	24	Quality inspection of silvo pasture demo farms	3		1	2	necessary	
	25	Quality inspection of agroforestry demo farms	3		1	2	necessary	
	26	Quality inspection of nursery	3		1	2	necessary	
	27	Daily field inspection	3		2	1	necessary	
	28	Weekly accomplishment record	3		4	-1		
	29	Revision of work schedule	3	no questionnaire				

TNA RESULT ANALYSIS TABLE (Sample) (5/21)

Position at PPMO: Implementation Unit Assistant Surveyor: Diffun (Roque S. Yanguas)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	from basic
Identification and Survey of CBFM Perimeter, Plantation Area and Fire lines/ Firebreaks	2	Reconnaissance survey w/ local population	3		1	2	necessary	mapping skills
	3	Approximate delineation on a map	3		3	0	necessary	mapping skills
	4	Organizing of a survey team	3		1	2	necessary	mapping skills
	5	Conduct of perimeter survey	3		2	1	necessary	mapping skills
	6	Establishment of permanent monument	3		1	2	necessary	mapping skills
	7	Computation of survey results	3		1	2	necessary	mapping skills
	8	Creation of CBFM area map	3		4	-1	necessary	mapping skills
	9	Creation of plantation area map	3		2	1	necessary	mapping skills
	Survey and Design of Road Rehab	10	Reconnaissance survey w/ local population	3		1	2	necessary
11		Identification of appropriate survey methods	3		1	2	necessary	civil engineering
12		Coordination w/ surveyor at LGU	3		1	2	necessary	
13		Preparation of rehab plan (design, work breakdown, work schedule, cost)	3		1	2	necessary	civil engineering
Alignment and Spacing	14	Alignment of brushing lines/spots and stakes	3		1	2	necessary	planation method
	15	Spacing of stakes	3		1	2	necessary	planation method
	16	Alignment of demo farms	3		1	2	necessary	planation method
Progress and Quality Control	17	Formulation of detailed work schedule	3		4	-1		
	18	Procurement basing on the progress of land	3		1	2	necessary	planation method
	19	Quality inspection of planting materials, stock management, planting (spacing, holes, etc.) and survival rate	3		1	2	necessary	planation method and inspection knowledge
	20	Quality inspection of fire control activities,	3		1	2	necessary	inspection knowledge
	21	Quality inspection of construction of MP building	3		1	2	necessary	inspection knowledge
	22	Quality inspection of road rehab	3		1	2	necessary	inspection knowledge
	23	Quality inspection of construction of lookout tower	3		1	2	necessary	inspection knowledge
	24	Quality inspection of silvo pasture demo farms	3		1	2	necessary	inspection knowledge
	25	Quality inspection of agroforestry demo farms	3		1	2	necessary	inspection knowledge
	26	Quality inspection of nursery	3		1	2	necessary	inspection knowledge
	27	Daily field inspection	3		1	2	necessary	inspection knowledge
	28	Weekly accomplishment record	3		4	-1		
	29	Revision of work schedule	3		1	2	necessary	on the job training

TNA RESULT ANALYSIS TABLE (Sample) (6/21)

Position at PPMO: Implementation Unit Assistant Surveyor: Diffun (LGU, Arturo Camaro)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	from basic
Identification and Survey of CBFM Perimeter, Plantation Area and Fire lines/ Firebreaks	2	Reconnaissance survey w/ local population	3		1	2	necessary	mapping skills
	3	Approximate delineation on a map	3		1	2	necessary	mapping skills
	4	Organizing of a survey team	3		1	2	necessary	mapping skills
	5	Conduct of perimeter survey	3		2	1	necessary	mapping skills
	6	Establishment of permanent monument	3		1	2	necessary	mapping skills
	7	Computation of survey results	3		3	0	necessary	mapping skills
	8	Creation of CBFM area map	3		1	2	necessary	mapping skills
	9	Creation of plantation area map	3		1	2	necessary	mapping skills
	Survey and Design of Road Rehab	10	Reconnaissance survey w/ local population	3		4	-1	
11		Identification of appropriate survey methods	3		3	0		
12		Coordination w/ surveyor at LGU	3		4	-1		
13		Preparation of rehab plan (design, work breakdown, work schedule, cost)	3		3	0		
Alignment and Spacing	14	Alignment of brushing lines/spots and stakes	3		1	2	necessary	planation method
	15	Spacing of stakes	3		1	2	necessary	planation method
	16	Alignment of demo farms	3		1	2	necessary	planation method
Progress and Quality Control	17	Formulation of detailed work schedule	3		4	-1		
	18	Procurement basing on the progress of land	3		1	2	necessary	planation method
	19	Quality inspection of planting materials, stock management, planting (spacing, holes, etc.) and survival rate	3		1	2	necessary	planation method and inspection knowledge
	20	Quality inspection of fire control activities,	3		1	2	necessary	inspection method/ knowledge
	21	Quality inspection of construction of MP building	3		1	2	necessary	inspection method/ knowledge
	22	Quality inspection of road rehab	3		4	-1		
	23	Quality inspection of construction of lookout tower	3		1	2	necessary	inspection method/ knowledge
	24	Quality inspection of silvo pasture demo farms	3		1	2	necessary	inspection method/ knowledge
	25	Quality inspection of agroforestry demo farms	3		1	2	necessary	inspection method/ knowledge
	26	Quality inspection of nursery	3		1	2	necessary	inspection method/ knowledge
	27	Daily field inspection	3		2	1	necessary	inspection method/ knowledge
	28	Weekly accomplishment record	3		3	0		
	29	Revision of work schedule	3	no questionnaire				

TNA RESULT ANALYSIS TABLE (Sample) (7/21)

Position at PPMO: Community Organizing and Strengthening Unit Officer: Diffun (Jose Corpuz)

Required Skills/Knowledge			Present Skills/Knowledge		Gaps	Training Needs	Interventions	
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3	Have knowledge of basic operations of MSWord and Excel, though not used frequently. Have an idea about GIS but can't operate it. No knowledge of other computer application software.	2	1	Needs improvement on use of MSWord and Excel.	Re-orientation on MS Word and Excel, and Training on other software applications that might be needed in the project.
Contracting	2	Drafting of a TOR	3	Have not drafted TOR personally but familiar with content and process.	2	1	Needs supervision in drafting TOR's or technical specification	Orientation on TOR drafting procedures.
	3	Bidding procedure	3	Familiar with bidding process but no experience on it	2	1	Needs exposure to actual bidding process	Exposure to actual bidding process
	4	Creation of contract documents	3	Have not drafted a contract personally but familiar with content and process.	2	1	Needs supervision in drafting a contract	Orientation on creation of contract documents
	5	Organizing of an orientation for contractor	3	Organized orientation and trainings for contractors. Have adequate knowledge and skills on this area.	3	0	none	none
	6	Training of a contractor	3		3	0	none	none
	7	Monitoring of contractor's activities	3	Have adequate knowledge and skills on this area. Supervised activities of contractor in NOVADECO.	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (8/21)

Required Skills/Knowledge		Present Skills/Knowledge		Gaps	Training Needs	Interventions		
Areas	#	Specifics	Rate	Descriptions	Rate			
CBFM Campaign	8	Organizing meetings with LGU personnel	3	Has not organized meetings with LGU. But was asked to be a resource person in LGU meeting.	1	2	none	none
	9	Organizing meetings with local population	3	Although he has not organized meetings with local population on CBFM, he has experience in organizing meeting with them re: other topics	3	0	none	none
	10	Explanation of the concept of CBFMP	3	Have adequate knowledge and experience on this area. He has frequently done CBFM orientations including laws and regulations.	3	0	none	none
	11	Explanation of the laws and regulations of CBFMP	3		3	0	none	none
	12	Explanation of the application process of CBFMA	3	Have sound knowledge and experience on CBFMA and its processes	4	-1	none	none
	13	Explanation of the rights and responsibilities of PO	3	Have sound knowledge and experience on explaining the rights and responsibilities of PO as part of CBFMP	4	-1	none	none
	14	Explanation of JICA Master Plan	3	Have not discussed with anyone but familiar with it through briefing/orientation	3	0	none	none
	15	Explanation of JICA Pilot Project	3	Have not discussed with anyone but familiar with it through briefing/orientation	3	0	none	none
	16	Execution of follow-up activities	3	Familiar with CBFM campaign activities.	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (9/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Identification and Evaluation of CBFM Area	17	Execution of Community Mapping	3	Has minimal exposure to Community Mapping though familiar with it	2	1	Needs supervision in executing community mapping due to minimal experience and knowledge on it	Re-orientation on Community Mapping
	18	Understanding of evaluation criteria	3	Have not been part of an evaluation team	1	2	Needs orientation on evaluation criteria used	Orientation on evaluation criteria used in identifying CBFM Areas
	19	Collecting necessary maps and information	3	Have not been part of a identification of CBFM area	1	2	Needs orientation on collecting maps and information	Training on basic skills in collecting maps and information
	20	Reconnaissance survey	3	No experience.	1	2	Needs orientation on reconnaissance survey	Training on basic skills in reconnaissance survey
Processing of Conflict Claims	21	Identification of Brgy boundaries	3	No fieldwork experience in identifying Brgy boundaries	1	2	Needs orientation and exposure on identification of Brgy	Training on identification of Brgy boundaries
	22	Identification of existing boundary conflict	3	No experience in identifying existing boundary conflict	1	2	Needs orientation and exposure on identification of Brgy	Training on identification of Brgy boundaries
	23	Mediation of conflict for CBFMA	3	No experience in mediating in conflicts.	1	2	Basic skills in mediation of conflicts	Facilitator's training in conflict management.
Community Appraisal	24	Designing of community appraisal	3	Has adequate knowledge and skills. Have designed as part of his training in PRA.	3	0	none	none
	25	Execution of community appraisal	3	Has adequate knowledge and skills. Has conducted appraisals in Cagayan Valley and conducted similar researches in Makate and Abra.	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (10/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Community Organizing	26	Identification of leaders among forest occupants	3	Has adequate knowledge and skills. Has done so as part of organizing work.	3	0	none	none
	27	Core group development	3	Has adequate knowledge and skills. Has done so as part of organizing work.	3	0	none	none
	28	Formulation of by-laws	3	Has adequate knowledge and skills. Has done so as part of organizing work.	3	0	none	none
	29	Selection of BOD and officers	3	Has adequate knowledge and skills. Has done so as part of organizing work.	3	0	none	none
	30	Formation of committees	3	No experience	1	2	Needs training on formation of	Training on Community Organizing (specific focus on formation of committees and development of second liners).
	31	Registration	3	No experience	1	2	Needs training on registration of Pos	
	32	Formulation/enforcement of organizational policies	3	No experience	1	2	Needs training on formulation of organizational policies	
	33	Development of second line leaders	3	Have assisted in leadership trainings (but has minimal experience in developing second liners)	2	1	Needs training in developing second liners	

TNA RESULT ANALYSIS TABLE (Sample) (11/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Consensus Building	34	Master listing of forest occupants	3	Has adequate knowledge and skills.	3	0	none	none
	35	Continuous education of PO members on CBFMP	3	Has adequate knowledge and skills. However, this is done on a "per needs/request" basis	2	1	Needs to develop plan for continuous education of PO members on CBFMP	Development of plan for coaching PO members
	36	Expansion of PO members/recruitment	3	Have assisted Pos but not formally	2	1	Needs training on expansion of PO members/recruitment	Training on Community Organizing.
	37	Consensus building on the CBFM area	3	Has adequate knowledge and skills	3	0	none	none
	38	Validation w/neighboring Brgys, Mayors, Governos	3	No experience in validating with neighboring areas	1	2	coordination with LGU members of areas adjacent to CBFM	none
Application of CBFMA	39	Preparation of application documents	3	Have not directly prepared documents but assisted in preparation	2	1	Needs minimal assistance in preparation of application	none
	40	Understanding of evaluation criteria	3	Has adequate knowledge on evaluation criteria	3	0	none	none
	41	Execution of application evaluation	3	Have not directly prepared documents but assisted in preparation and familiar with evaluation criteria	2	1	Needs minimal assistance in execution of application evaluation	
	42	Feedback to PO	3	No experience.	1	2	Basic skills in giving feedback on results of studies, et al	Training on Communication Skills (How to give effective feedback on results of studies, et al)
Preparation of CRMF	43	Explanation of concept of CRMF to PO	3	Has adequate knowledge on concepts of CRMF	3	0	none	none
	44	Secondary data collection and analysis	3			3		
	45	Formulation of CRMF	3	Has adequate knowledge on concepts of CRMF	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (12/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Preparation of AWP	46	Designing of community action planning	3	No experience.	1	2	Needs orientation on community planning and its processes	Training on Preparation and Finalization of AWP
	47	Execution/facilitation of CAP workshop	3	No experience.	1	2		
	48	Technical evaluation of the plan	3	No experience.	1	2		
	49	Finalization of the plan	3	No experience.	1	2		
	50	Approval of the plan at GA	3	No experience.	1	2		
Financial Capability Strengthening of PO	51	Fund raising	3	No experience.	1	2	Familiarization with Fund raising activities	Training on various aspects of Financial Capability Strengthening of PO like fund raising
	52	Collection of fees	3	Have assisted POs in collection of fees	3	0	none	none
	53	Savings and loans	3	No experience.	1	2	Familiarization with savings and loans	Training on various aspects of Financial Capability Strengthening of PO like savings and loans
	54	Buy and sell	3	No experience.	1	2	Familiarization with buy and sell operations	Training on various aspects of Financial Capability Strengthening of PO like buy and sell operations
	55	Livestock breeding	3	Have assisted agriculturist but no direct experience	2	1	Needs orientation on livestock breeding	Orientation on livestock breeding
	56	Cottage industries	3	No experience.	1	2	Familiarization and identification of cottage industries appropriate for the community	Training on cottage industries
	57	Regular accounting	3	No experience.	1	2	Familiarization with Regular accounting	Course on Coaching on Financial Management

TNA RESULT ANALYSIS TABLE (Sample) (13/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Managerial Capability Development of PO	58	Policy advocacy (e.g., Brgy ordinances)	3	Has experience and adequate knowledge and skills on policy advocacy	3	0	none	none
	59	Monitoring and evaluation	3	Have assisted POs informally. No formal guidelines used.	2	1	Needs further training on monitoring and	Training on Project Monitoring and Evaluation
	60	Strategic planning	3	Has experience and adequate knowledge and skills on policy advocacy	3	0	none	none
	61	Auditing	3	No experience.	1	2	Orientation on auditing guidelines	Course on Coaching on Financial Management
	62	Training needs analysis	3	No experience.	1	2	Familiarization with TNA process	Orientation on TNA
	63	Coordinating of managerial trainings	3	Has coordinated trainings like leadership trainings, et al with POs	3	0	none	none
	64	Coordinating of managerial trainings	3	Has coordinated trainings like leadership trainings, et al with POs	3	0	none	none
	65	Networking	3	Have not personally facilitated but have given advice on	3	0	none	none
Reporting	66	Preparation of reports with a JICA quality	3	Have not prepared reports for foreign donors but have given info/data for report	2	1	Familiarization with JICA specifications on report documentation	Orientation on JICA specifications on report documentation

TNA RESULT ANALYSIS TABLE (Sample) (14/21)

Position at PPMO: Community Organizing and Strengthening Unit Officer: Diffun (Rogelio Laggui)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3	No knowledge of any software applications.	1	2	Basic computer software applications like MSWord and	Training on basic operations of MSWord and Excel (and other computer applications that are
Contracting	2	Drafting of a TOR	3	Has assisted in drafting TORs for contractors but still needs further training/assistance	2	1	Needs supervision in drafting TOR due to minimal experience	Orientation on drafting of TOR documents
	3	Bidding procedure	3	Have not been a part of bidding process but familiar with it	2	1	May need further training and exposure to bidding procedures	Orientation on Bidding Procedures
	4	Creation of contract documents	3	Has extensive experience in creating contracts as former president of an NGO	3	0	none	none
	5	Organizing of an orientation for contractor	3	No experience.	1	2	Needs to be oriented on guidelines in organizing for orientation purposes	Orientation on organizing meetings for contractor
	6	Training of a contractor	3	No experience. Trainings were centralized in DENR. But have assisted in various trainings for contractors.	2	1	May need assistance in developing and conducting trainings for contractors	none
	7	Monitoring of contractor's activities	3	Has monitored PO activities in Baligui and Cofkaville as part of tasks as supervising officer of FAR project	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (15/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
CBFM Campaign	8	Organizing meetings with LGU personnel	3	No experience	1	2	Needs to be oriented on guidelines in organizing meetings for LGU	Orientation on organizing meetings for LGU
	9	Organizing meetings with local population	3	No experience	1	2	Needs to be oriented on guidelines in organizing meetings for local population	Orientation on organizing meetings for local population
	10	Explanation of the concept of CBFMP	3	No experience	1	2	Needs to be oriented on CBFMP, as well as its activities, and CBFMA	Orientation and Trainer's Training on CBFMP and CBFMA
	11	Explanation of the laws and regulations of CBFMP	3	No experience	1	2		
	12	Explanation of the application process of CBFMA	3	No experience	1	2		
	13	Explanation of the rights and responsibilities of PO	3	No experience	1	2		
	14	Explanation of JICA Master Plan	3	Has not even attended orientation/briefing	1	2	Needs to be oriented on JICA Master Plan	Orientation and Trainer's Training on JICA Master Plan
	15	Explanation of JICA Pilot Project	3	Has not even attended orientation/briefing	1	2	Needs to be oriented on JICA Pilot Project	Orientation and Trainer's Training on JICA Pilot Project
16	Execution of follow-up activities	3	No experience. Not familiar with CBFM campaign activities	1	2	Needs orientation on CBFM campaign activities	Orientation on and planning for follow-up of CBFM campaign activities	
Identification and Evaluation of CBFM Area	17	Execution of Community Mapping	3	Has adequate knowledge but minimal exposure	2	1	none	none
	18	Understanding of evaluation criteria	3	No experience	1	2	Needs orientation on evaluation criteria	Orientation on evaluation criteria
	19	Collecting necessary maps and information	3	No experience	1	2	Needs to acquire skills in collecting necessary maps and information	Training on collecting necessary maps and information
	20	Reconnaissance survey	3	Has adequate experience on recon survey. Done recon survey in Cofkaville.	3	0	none	none

TNA RESULT ANALYSIS TABLE (Sample) (16/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Processing of Conflict Claims	21	Identification of Brgy boundaries	3	Has created brgy boundary maps in ISF areas	3	0	none	none
	22	Identification of existing boundary conflict	3	Has identified brgy boundary conflict between Sto Nino and Maddela	3	0	none	none
	23	Mediation of conflict for CBFMA	3	Has mediated between Sto Nino and Maddela	3	0	none	none
Community Appraisal	24	Designing of community appraisal	3	No experience	1	2	Needs skills in design and conduct of	Training on design and conduct of community appraisal
	25	Execution of community appraisal	3	No experience	1	2		
Community Organizing	26	Identification of leaders among forest occupants	3	Has identified local leaders numerous times in relation to present designation in DENR as forest protection and law enforcement officer	3	0	none	none
	27	Core group development	3	No experience	1	2	Needs skills in core group development and	Training on Community Organizing
	28	Formulation of by-laws	3	No experience	1	2		
	29	Selection of BOD and officers	3	Has assisted in the selection of officers through facilitating the election.	3	0	none	none
	30	Formation of committees	3	No experience	1	2	Needs skills in various aspects of community organizing	Training on Community Organizing
	31	Registration	3	No experience	1	2		
	32	Formulation/enforcement of organizational policies	3	No experience	1	2		
33	Development of second line leaders	3	No experience	1	2			

TNA RESULT ANALYSIS TABLE (Sample) (17/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Consensus Building	34	Master listing of forest occupants	3	Has created a master list of forest occupants in relation to ISF project	3	0	none	none
	35	Continuous education of PO members on CBFMP	3	No experience	1	2	Needs to acquire skills on planning and coaching on/of PO	Training on planning and coaching on/of PO activities
	36	Expansion of PO members/recruitment	3	No experience	1	2	Needs to acquire skills in PO expansion	Training/orientation on PO expansion
	37	Consensus building on the CBFM area	3	No experience	1	2	Needs to acquire skills in Consensus building	Training/orientation on Consensus building
	38	Validation w/ neighboring Brgys, Mayors, Governors	3	No experience	1	2	Coordination with Officials of CBFM neighboring areas	Coordination with Officials of CBFM neighboring areas
Application of CBFMA	39	Preparation of application documents	3	No experience	1	2	Needs to familiarize self with application processes of CBFMA	Training on application processes of CBFMA
	40	Understanding of evaluation criteria	3	No experience	1	2		
	41	Execution of application evaluation	3	No experience	1	2		
	42	Feedback to PO	3	No experience	1	2		
Preparation of CRMF	43	Explanation of concept of CRMF to PO	3	No experience	1	2	Needs to familiarize self with Preparation of CRMF	Training on Preparation of CRMF
	44	Secondary data collection and analysis	3	No experience	1	2		
	45	Formulation of CRMF	3	No experience	1	2		
Preparation of AWP	46	Designing of community action planning	3	No experience	1	2	Needs to familiarize self with preparation and finalization of AWP	Training on preparation and finalization of AWP
	47	Execution/facilitation of CAP workshop	3	No experience	1	2		
	48	Technical evaluation of the plan	3	No experience	1	2		
	49	Finalization of the plan	3	No experience	1	2		
	50	Approval of the plan at GA	3	No experience	1	2		
Financial Capability Strengthening of PO	51	Fund raising	3	No experience	1	2	Needs to familiarize self with different aspects of Financial Capability Strengthening of PO	Trainer's training on Financial Capability Strengthening of PO
	52	Collection of fees	3	No experience	1	2		
	53	Savings and loans	3	No experience	1	2		
	54	Buy and sell	3	No experience	1	2		
	55	Livestock breeding	3	No experience	1	2		
	56	Cottage industries	3	No experience	1	2		
	57	Regular accounting	3	No experience	1	2		

TNA RESULT ANALYSIS TABLE (Sample) (18/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Managerial Capability Development of PO	58	Policy advocacy (e.g., Brgy ordinances)	3	No experience	1	2	Needs to familiarize self with policy advocacy processes	Facilitator's Training on Policy Advocacy
	59	Monitoring and evaluation	3	No experience	1	2	Needs to familiarize self with Project monitoring and evaluation	Trainer's training on Project monitoring and evaluation
	60	Strategic planning	3	No experience	1	2	Needs to familiarize self with Strategic planning	Facilitator's Training on Strategic planning
	61	Auditing	3	Has assisted PO in auditing process through preparation of pertinent documents.	3	0	none	none
	62	Training needs analysis	3	No experience	1	2	Needs to know process of TNA	Orientation on guidelines for TNA
	63	Coordinating of managerial trainings	3	No experience	1	2	Needs to identify managerial trainings needed by PO	Identification of managerial trainings
	64	Coordinating of managerial trainings	3	No experience	1	2		
	65	Networking	3	No experience	1	2	Needs to know networking process	Orientation on Networking
Reporting	66	Preparation of reports with a JICA quality	3	No experience	1	2	Needs to be familiar with JICA specifications in report	Orientation on JICA specifications in report documentation

TNA RESULT ANALYSIS TABLE (Sample) (19/21)

Position at PPMO: Extension Officer (Agriculture): Diffun (Larina Mentoc)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	basic
	2	Soil conservation methods	3		4	-1		
	3	Assessment of target population and area	3		3	0		
	4	Crop rotation	3		4	-1		
	5	Seed storage	3		4	-1		
	6	Post harvest processing	3		4	-1		
	7	Identification of quality seeds	3		1	2	necessary	technical knowledge
	8	Identification of preferred species	3		4	-1		
	9	Integrated pest management	3		4	-1		

Position at PPMO: Extension Officer Agroforestry: Diffun (Eusebio Tuzon)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	basic
	2	Soil conservation methods	3		3	0		
	3	Assessment of target population and area	3		3	0		
Seedling Procurement	4	Establishment of holding area	3		3	0		
	5	Quality control of plating materials	3		4	-1		
	6	Seedling transportation (trimming, loading, covering, unloading)	3		4	-1		
	7	Seedling maintenance (shading, hardening, watering, trimming, pruning, mud puddling)	3		4	-1		
	8	Establishment of demo farms	3		3	0		
	9	Identification of preferred species	3		1	2	unnecessary	
Site Preparation	10	Strip brushing	3		4	-1		
	11	Staking	3		4	-1		
	12	Hole digging	3		4	-1		
	13	Cultivation	3		4	-1		
	14	Application of herbicides	3		4	-1		

TNA RESULT ANALYSIS TABLE (Sample) (20/21)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
Planting and Fertilization	15	Compost production	3		1	2	necessary	practice
	16	Plantation designing	3		1	2	unnecessary	
	17	Basal application methods	3		1	2	necessary	
	18	Side-dressing methods	3		2	1	necessary	
	19	Preparation and planting of cutting	3		3	0		
	20	Direct seeding	3		4	-1		
	21	Pasture grass planting	3		1	2	necessary	practice
	22	Mulching	3		1	2	necessary	practice
Maintenance	23	Strip weeding	3		4	-1		
	24	Ring weeding, Lodging	3		4	-1		
	25	Mixing methods and usage of insecticides and fungicides	3	no questionnaire, but assumed from 32	4	-1		
	26	Maintenance of fire lines/firebreaks	3		4	-1		
	27	Pruning, coppicing and pollarding	3		4	-1		
Seedling Propagation	28	Lay out of sheds and beds	3		4	-1		
	29	Germination and growing medium	3		1	2	practice	practice
	30	Potting	3		4	-1		
	31	Bare root seedling production	3		4	-1		
	32	Pest and disease control	3		4	-1		

Position at PPMO: Extension Officer (Livestock): Diffun (Ernesto Tam-on)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	basic
	2	Soil conservation methods	3		2	1	necessary	practice
	3	Assessment of target population and area	3		1	2	necessary	
Livestock Management	4	Stall feeding	3		3	0		
	5	Inoculation	3		1	2	necessary	knowledge/skills
	6	Disease recognition	3		2	1	necessary	knowledge/skills
	7	Veterinary practice	3		1	2	necessary	knowledge/skills
	8	Castration	3		1	2	necessary	knowledge/skills
	9	Pasture improvement	3		2	1	necessary	knowledge/skills

TNA RESULT ANALYSIS TABLE (Sample) (21/21)

Position at PPMO: Administrative Support Unit Administrator: Diffun (Francisco Carbonel)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		1	2	necessary	
Office Management	2	HR management	3		3	0		
	3	Budget/expense management	3		4	-1		
Contracting	4	Coordination with LGU and other line agencies	3		4	-1		
	5	Drafting of a TOR	3		1	2	unnecessary	continious reading
	6	Bidding procedure	3		3	0		
Monitoring of Admin Works	7	Creation of contract documents	3		1	2	unnecessary	
	8	Coaching and delegation of tasks to PPMO members	3		3	0		
	9	Documentation	3		2	1	unnecessary	
	10	Record keeping	3		1	2	unnecessary	
CBFMP	11	Evaluation of report and document	3		4	-1		
CBFMP	12	Understanding of CBFMP	3		3	0		
Reporting	13	Preparation of Monthly Reports with a JICA quality	3		1	2	unnecessary	

Position at PPMO: Technical Clerk: Diffun (Rosemarie Yanguas)

Required Skills/Knowledge				Present Skills/Knowledge		Gaps	Training Needs	Interventions
Areas	#	Specifics	Rate	Descriptions	Rate			
General Skills	1	Computer Skills	3		2	1	tutorial on other skills	
Office Management	2	HR management	3		1	2	unnecessary	
	3	Budget/expense management	3		3	0		
Contracting	4	Coordination with LGU and other line agencies	3		1	2	unnecessary	
	5	Drafting of a TOR	3		1	2	unnecessary	continious reading
	6	Bidding procedure	3		3	0		
Monitoring of Admin Works	7	Creation of contract documents	3		1	2	unnecessary	
	8	Coaching and delegation of tasks to PPMO members	3		1	2	unnecessary	
	9	Documentation	3		4	-1		
	10	Record keeping	3		1	2	necessary	
CBFMP	11	Evaluation of report and document	3		1	2	MES Training	
CBFMP	12	Understanding of CBFMP	3		1	2	unnecessary	continious reading
Reporting	13	Preparation of Monthly Reports with a JICA quality	3		1	2	unnecessary	