

Employment Generating Capability of Smallholder Upland Development Projects in Selected CBFM Sites in the Philippines

Sofronio C. Camacho^{a,*}, Nena O. Espiritu^a,
Priscilla C. Dolom^a, Ma. Magdalena B. Villanueva^a,
Leonito A. Donoso^a, Ramon A. Razal^b, and
Eleno O. Peralta^{a,c}

INTRODUCTION

Through Executive Order (EO) No. 263 issued in July 1995, the Department of Environment and Natural Resources (DENR) adopted CBFM as its banner program to ensure social equity and the sustainable development of the country's forest resources. Operational guidelines were promulgated with the issuance of DENR Administrative Order (DAO) No. 1996-29 (Rules and Regulations for the Implementation of EO 263) and further enhanced with the issuance of the Revised Rules and Regulations for the Implementation of CBFM under DAO No. 2004-29. The implementation of CBFM assures the generation of employment opportunities in the uplands. These arose from various CBFM operations undertaken by the participating communities such as seedling production and nursery establishment, plantation establishment, forest protection and conservation activities, harvesting, processing, transporting, and marketing of CBFM products.

As of mid-2005, a total of 5,503 CBFM projects had been established encompassing an aggregate area of 5.97 million ha involving 690,691 households. Of these areas, 1,577 CBFM sites with a total area of 1.57 million ha were allocated to organized communities through issuance by the Philippine government of long-term CBFM Agreements (Bacalla 2006).

The implementation of various CBFM operations involved in the program alone was envisioned to directly employ significant number of workers that include foresters, forestry technicians,

ABSTRACT

Smallholder upland development projects like Community-Based Forest Management (CBFM) play vital roles in uplifting the socio-economic conditions of community members whose employment and income depend on various activities within the CBFM. Twenty people's organizations (POs) awarded with varying areas of forest land under the CBFM program in different regions of the Philippines were visited to document and analyze the program's impacts in terms of employment and income generation. Through focus group discussions (FGD) and key informant interviews (KIIs) with CBFM implementers, beneficiaries, and other actors involved in various CBFM activities, the levels of employment generated and related issues and concerns about the program were identified and determined. A number of CBFM policy issuances designed to provide employment opportunities to upland communities and localized employment policies and practices within the POs were also reviewed and analyzed. The results showed that generally, the CBFM program was able to alleviate employment problems in the community especially during the period coinciding with the Comprehensive Site Development (CSD) phase when members were employed in the CBFM. However, benefits were inequitably distributed as non-PO members were seldom hired. Majority of the POs focused on short-term benefits like their income share from timber harvesting. The enthusiasm and interest of PO members waned with the termination of funding support and the suspension of harvesting and utilization permits. Hence, alternative forest-based employment and livelihood activities aside from timber utilization should be available in CBFM areas. Technical and institutional support to enhance the employment generating capacity of the CBFM program need to be strengthened.

Keywords: community-based forest management, employment generation, people's organization

and the local people. Bundled within the CBFM are livelihood projects that could provide intermediate sources of income and employment while the planted timber species and non-timber forest products (NTFPs) matured. Enhanced economic activities were envisioned particularly during harvesting, transporting and marketing of major products from the CBFM. Thus, in addition to traditional employers like the wood-based industries and other formal forestry sectors, smallholder upland development projects like the CBFM were seen as potential sources of employment especially for new BS Forestry graduates faced with very limited job options.

The anticipated potential employment along the CBFM activity chain starting from nursery establishment to marketing of forestry products was seen as very promising at first. However, after more than 10 years of implementation, the employment generated by the program had been less than impressive relative

^aForestry Development Center, College of Forestry and Natural Resources, UPLB

^bDept. of Forest Products and Paper Science, CFNR, UPLB

^cDept. of Social Forestry and Forest Governance, CFNR, UPLB

Corresponding author: sonny_camacho@yahoo.com

to the funds and resources channeled to it. There remains a great deal of uncertainty about the impacts of CBFM in terms of alleviating rural unemployment and in improving the income of farmers and other participants in the CBFM program.

The general objective of this study was to document and analyze smallholder upland development program like the CBFM as significant sources of employment and income. Toward this end, the study sought to attain the following objectives:

1. to review and analyze employment generation programs and policies of smallholder upland development projects in CBFM;
2. to identify and describe the various activities and the functions and skills of actors involved in CBFM areas;
3. to document the actual employment conditions in a smallholder upland development project in CBFM;
4. to identify issues, problems and concerns relative to employment generation and the flow of goods and services emanating from the CBFM project;
5. to estimate the level of employment generated by the CBFM project along the entire supply chain;
6. to come up with policy recommendations on employment generation in order to encourage people's participation and attain sustainability in smallholder upland development projects.

Conceptual Framework

Figure 1 shows the conceptual framework of the study *vis a vis* employment generation in a smallholder upland development project (SHUDP) in CBFM. The sources of employment may come from the management of the CBFM project itself and associated site development activities in the supply chain. These include nursery establishment, plantation development, harvesting and processing, transport and marketing either

through wholesale or retail, forest protection, conservation and maintenance activities, and other forest-based, income generating activities initiated by the local community, each of them having its own labor and management components.

Employment in the CBFM project was determined by counting the actual number of persons hired as well as verifying the source, timing, duration and expertise/skills of people employed; the flow of major goods and services; and their contributions to the community. Localized employment policies and programs in CBFM areas were also examined and assessed.

Issues, problems and concerns in the implementation of CBFM activities were identified, reviewed and analyzed. The areas of concerns included socio-economic, bio-physical, institutional, political, and financial, among others.

Limitations of the Study

Based on the study's conceptual framework, the focus is on forest-based employment in smallholder upland development projects. Given the limited funds, the project did not take into account non-forest-based employment opportunities that may contribute to the farmer's income, much less determine the percentage contribution of forest versus non-forest-based jobs to the total income derived by members of the community. There was great variability in locations of the CBFM sites that could affect the nature and availability of non-forest based employment which in turn could complicate analysis of income opportunities from forest-based activities. However, this points to a future research direction that should be pursued for a more holistic assessment of livelihood and income opportunities available to forest community members participating in SHUDPs.

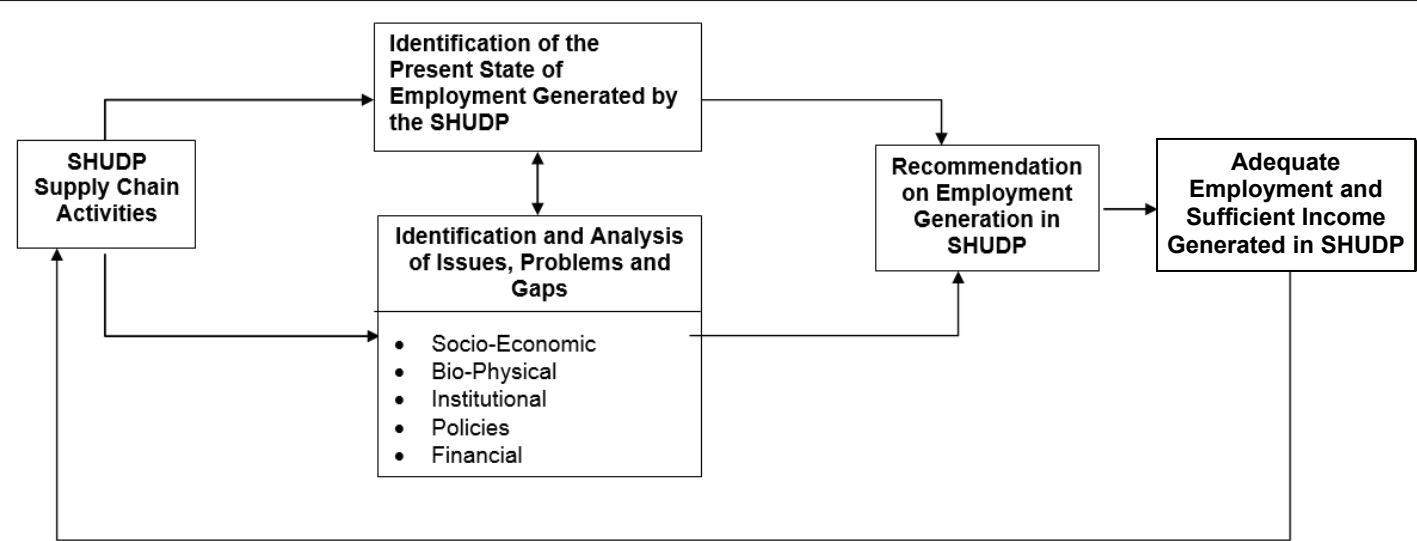


Figure 1. Conceptual framework of employment generation in a smallholder upland development project (SHUDP).

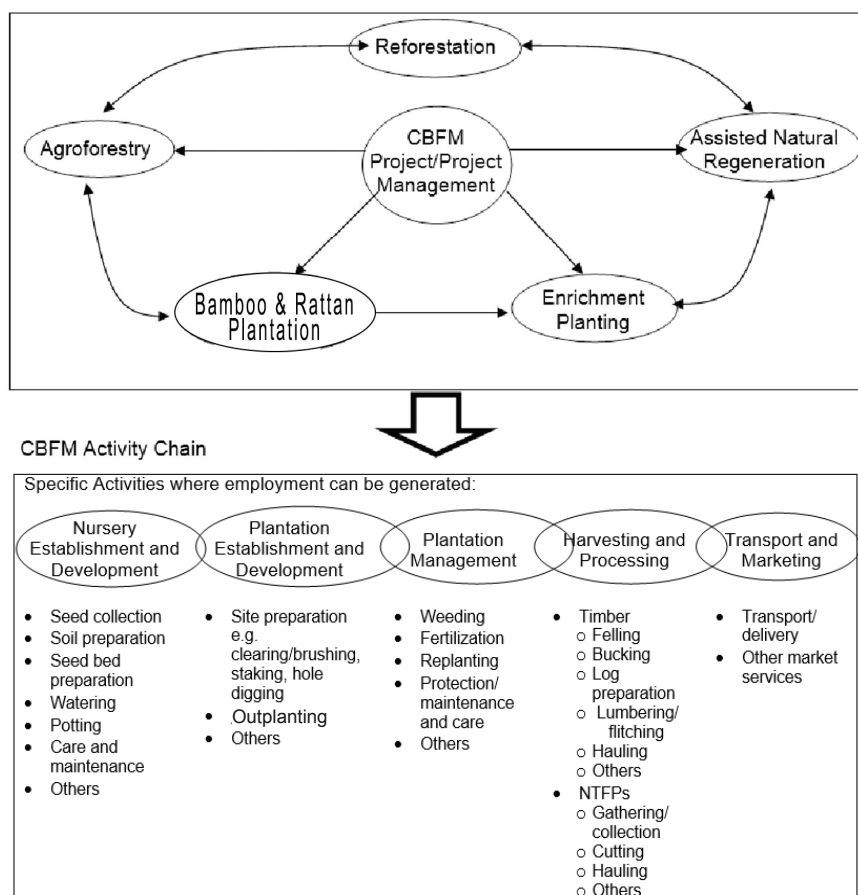


Figure 2. Components of the CBFM Project and the specific activities where employment can be generated.

Also, in view of limited funds, the sites were selected based mainly on pre-determined criteria and other practical considerations. The final selection was done in collaboration with the DENR, both from the central and the field offices.

METHODOLOGY

The following predetermined criteria and considerations were used to select the region and the particular CBFM sites included in the study: a) the region with the most number of CBFM agreements issued; b) the presence of an organized and active People's Organization (PO); c) availability of utilizable timber and NTFPs with the PO having harvesting and utilization permits; d) existence of the entire activity chain from planting to harvesting in the area; e) nature of funding support at the start of the project; f) availability of baseline information about the project; and g) favorable peace and order situation.

Final selection of study sites was done in collaboration with DENR's Central and Regional offices as well as with the Provincial (PENRO) and Community Environment and Natural Resources Offices (CENRO). Primary data were gathered through key informant interviews and focus group discussions. The target respondents were the project staff and other personnel coming from the LGUs and the DENR who were assisting the POs and in some cases, former project personnel and other individuals who had been part of the CBFM project. Information such as work experience, issues and problems encountered in the course of employment were gathered and analyzed. Historical and other secondary data like CSD reports and project completion

reports containing data on employment in CBFM were collected from the POs, DENR Central Office, and from different DENR PENROs and CENROs. Statistical tools such as frequency counts, percentages, means and ranges were used in analyzing the socio-demographic and socio-economic data in the different project sites.

Policy issuances, rules and regulations formulated by government agencies to provide employment to upland communities were reviewed to identify overlaps, inconsistencies, conflicts and gaps to resolve issues and concerns related to the capability of CBFM to create employment.

Using the activity chain shown in Figure 2 as guide, an analysis of the various components in a CBFM project where employment can be generated was done. The levels of employment generation in each of the activities in the chain were examined. The labor inputs in terms of the number, gender, age, education, training and skills of personnel required or utilized for the different activities were determined. Figure 2 also shows that CBFM project management by itself already generated employment in upland, small hold setting.

Lessons learned from the analyses were translated into specific policy recommendations on forest-based, employment generation with the goal of supporting sustainable management of forest resources.

RESULTS AND DISCUSSIONS

The Policy Environment on Employment Generation

National policies such as the Constitution, the Medium-Term Philippine Development Plan (MTPDP) of 2004-2010, and the National Employment Plan (NEP) promote full employment and greater equality of access to employment by Filipino citizens. The NEP specifically defines three major strategies: employment generation, manpower development and employment facilitation.

The DENR, for its part, formulated and issued specific policies on CBFM to operationalize the CBFM strategy (Compilations of Environment and Natural Resources Policy Issuances, various years) as shown in Table 1. All of these policies included provisions on employment opportunities and livelihood which could help alleviate poverty in the uplands.

Analysis of the above policy issuances showed that the CBFM program had the support of government at the national, regional and provincial levels. However, many of these policies are unstable as they changed with change in the DENR leadership. This in turn affected the CBFM implementation and PO's operations. Suspensions of RUPs hampered plantation development, harvesting and marketing operations. Financial instability of the POs ensued following these events.

General Description of the CBFM Study Sites

Twenty CBFM projects were surveyed, distributed as follows: eight in Luzon, two in Visayas and ten in Mindanao. Eighteen of the study sites were upland CBFM while the other two sites were in mangrove areas.

The CBFM project sites were compared in terms of location and accessibility, land use and vegetative cover, availability of NTFPs and other resources, CSD, and the types of income generating projects engaged in by the POs. Evaluation of the data showed that despite the diverse cultural setting, different socio-political-institutional and economic backgrounds, and varying bio-physical endowments of the various CBFM areas, they shared common characteristics such as: presence of residual and plantation forests, existence of NTFPs, the practice

of agroforestry, and the potential for ecotourism in the area. They had received one to three year funding support from foreign donors for CSD; and POs have on-going income generating projects (IGPs) or had tried to implement one in the past.

Employment in CBFM Projects

Employment in CBFM projects mainly comes from forest-based activities in the CBFM area and in the project management of the organization as illustrated in Figure 2. Labor requirements are high during the CSD Phase. Human labor or inputs associated with these activities were performed by PO members who were hired on contractual, output, or daily basis. At times, non-PO members were hired depending on the size of the area and the urgency of completing a specific activity. Active PO members were given priority in hiring, however. Employment in CBFM projects stem from the following: nursery establishment; forest protection and maintenance; harvesting, processing and marketing (Figure 2).

Nursery Establishment and Management. Majority of the POs established forest nurseries for their reforestation activities. Nursery establishment employed a nursery foreman who performed operations like seedling and planting stock

Table 1. Specific policies formulated and issued by DENR to operationalize the CBFM strategy

ISSUANCE	DATE	TITLE
Executive Order No. 263	July 19, 1995	Adopting CBFM as the National Strategy to ensure the Sustainable Development of the Country's Forest Lands Resources and Providing Mechanisms for its Implementation.
DAO No. 96-29	Oct. 10, 1996	Rules and Regulations for the Implementation of EO 263 otherwise known as Community-Based Forest Management Strategy (CBFMS)
DENR MC NO. 97-12	July 18, 1997	Guidelines for the Formulation of Community Resource Management Framework (CRMF) and Annual Work Plan (AWP) for CBFM Areas
DAO No. 98-10	March 4, 1998	Guidelines on the Establishment and Management of CBFM Projects within Mangrove Areas
DENR MC No. 98-09	June 24, 1998	Additional Guidelines on the Issuance of Interim Resource Use Permit or (IRUP).
DAO No. 98-41	June 24, 1998	Guidelines on the Establishment and Management of Community-Based Forest Management Projects within Watershed Reservations.
DAO No. 99-35	Aug. 10, 1999	Revised Guidelines in the Implementation of the RUP in CBFM Program.
DAO No. 99-49	Nov. 24, 1999	Guidelines in the Identification, Development and Implementation of Livelihood Activities and Opportunities for Qualified Protected Area Occupants.
DAO No. 2000-29	March 14, 2000	Guidelines Regulating the Harvesting and Utilization of Forest Products within Community-Based Forest Management Areas
DAO No. 2000-44	June 6, 2000	Amending Certain Provisions of DAO 96-29 and Providing Specific Guidelines for the Establishment and Management of Community-Based Projects (CBP) with protected areas
DAO No. 2000-78	Nov. 7, 2000	Regulations in the Recovery and Disposition of Abandoned Logs, Drifted Logs, Sunken Logs, Uprooted and Fire/Typhoon Damaged Trees, Tree Stumps, Tops and Branches
DAO 2004 – 29	Aug. 25, 2004	Revised Rules and Regulations for the Implementation of EO 263 otherwise known as Community-Based Forest Management Strategy (CBFMS).
DAO No. 2005-25	Nov. 17, 2005	Guidelines in the Implementation of Upland Agroforestry Program.

maintenance and inventory. He was usually assisted by laborers or nursery operation workers who were hired to conduct the following activities: seedbed preparation, sowing of seeds, soil collection, potting, transplanting of seedlings from seedbeds to bags/plots, watering and preparation of seedlings for out-planting. These activities were contracted on per output basis to the PO members composed mainly of women, children or the elderly. A variable number of persons were employed in nursery establishment and maintenance.

In one CBFM area in Region 2, between 10 to 12 persons were employed to maintain seedling production in its 2-hectare nursery. In other CBFM areas, three to five persons were hired for two days per week for the whole year for seedling production and maintenance of the nursery. Each nursery worker received a daily wage of PhP100. During peak seasons, the POs contracted potting to the members with all the materials provided at PhP0.50-1.00 per seedling.

Plantation Establishment. Plantation establishment involves site clearing and strip brushing, hole digging and staking, seedling transport and outplanting, and plantation maintenance. Approximately, an average of 50 man-days ha⁻¹ were required for plantation establishment. Plantation maintenance activities which included ring weeding, cultivation, replanting and fertilization, were done from 6 months to 3 years after planting.

Based on interviews with the different POs, the different activities can be contracted to the PO members at the rate of PhP3,000 to 3,500 per hectare. Each person contracted was paid PhP100 to 150 per day. For plantation maintenance activities, around seven persons were contracted yearly for three years, for at most 60 days per year. There were times when these activities were contracted to PO members at PhP3,150 ha⁻¹. In other CBFM areas visited, plantation maintenance was done 6 times a year for three years at five persons ha⁻¹. They are paid on a daily basis at PhP100-150 each.

Forest Protection and Maintenance. Forest protection and maintenance were religiously implemented by the POs to monitor and apprehend perpetrators of illegal activities within CBFM areas such as encroachment, illegal cutting, kaingin-making, and other destructive activities. However, they

rendered voluntary services or were paid depending on the availability of PO funds. Many PO members volunteered to do patrolling since they needed to protect their stakes in the CBFM plantations. There were POs that employed two to three teams per day at two to three shifts per day. Each team was composed of three to four members working on a PhP200/person/week allowance or a daily wage rate of PhP100-150 per person. There is low labor demand for forest protection and maintenance in the CBFM area as compared to plantation establishment and maintenance.

Harvesting, Processing, and Marketing. Harvesting of timber was done within the existing residual and plantation forests of CBFM projects. The harvesting activities included felling, bucking, log preparation and hauling of lumber/logs to the market or processing plant. Skilled workers like scalers, fellers, cutters, and flitchers were hired during harvesting of timber and non-timber forest products. Hauling/transporting of harvested timber and non-timber forest products from the cutting area to the nearest road and to the lumberyard or sawmills or furniture markets also entailed employment of several people.

Equipment used in harvesting included chainsaws and bolos. Marked trees were felled and bucked with the use of chainsaws by a hired, skilled chainsaw operator, assisted by one or two persons. Bucking would involve the cutting of felled trees into desired log lengths.

Sawing of logs into lumber was usually done at the stump site in the presence of a scaler tasked with measuring and sorting lumber. The sawing of logs into lumber on the average was performed by four members of the PO whose activities also included sorting, measuring the dimensions, and piling of lumber prior to transport to the loading area.

Usually, the hauling of logs and/or lumber from the cutting area to the loading site was accomplished by about ten PO members with the help of two or more carabaos. The logs, sawn lumber, and flitches were then brought to a waiting vehicle or truck for transport to legitimate wood processing plants or furniture shops in nearby towns. According to the POs, for every 30 cu m of logs cut and delivered to the processing plant or furniture shop, they needed 100 man-animal days; two units of chainsaw; four man-

Table 2. Kind of furniture produced, specifications, total volume of wood used and estimated number of persons employed.

Kind of Furniture	Specifications	Total Volume of Wood Used	Estimated No. of Persons - Days Employed
Sala Set (full set)	4 singles, 1 love seat, 2 side tables, 1 center table	180-200 bd ft	70
Dining Set	6 seater, 1 round or square table	200-210 bd ft	28
Bed	54 inches × 75 inches	80-90 bd ft bed ⁻¹	35
Cabinet	7-8 ft - height, 10 ft-length, 20-22 inches- width	180 bd ft	45
Door Jamb	3 ft × 7 ft (standard size)	34 bd ft	1
Door	80 cm × 210 cm × 2 inches × 6 inches (standard)		6
Hanging Cabinet	3 ft (ht.) × 14 inches × 1 inch × 8 ft length) thickness	60 bd ft	8

days for chainsaw operator; 11 man-days for helper; and 12 man-days for loader.

Some of the POs included in the study had been granted Wood Processing Plant Permit (WPPP) by the DENR that was co-terminus with the CBFM Agreement. Consequently, they established a mini sawmill that had a rated capacity of 1,500-3,000 bd ft day⁻¹ (eight hours operation) which could employ three to six persons who were paid based on their output. For each band saw, three persons had an output of 1,500-3,000 bd ft day⁻¹. Contract cost is PhP0.50 bd ft⁻¹, distributed as follows: sawyer at PhP 0.20 bd ft⁻¹, helper at PhP0.15 bd ft⁻¹ and receiver at PhP 0.15 bd ft⁻¹. The rate was inclusive of food and housing. Work was for six days except Sunday which was a rest day. Some of the POs delivered their wood products to a legitimate furniture shop or wood processor. Examples of the kind of furniture produced and the number of persons employed are shown in Table 2.

Project Management

While there was no fixed number of persons employed in the CBFM project, it was found that the organizational structure of the POs was basically composed of the general manager, finance officer, accountant, bookkeeper and secretary. Employment status was either on regular or contractual appointment.

A general manager is hired by the Board of Directors (BOD) to manage and supervise the entire project as well as the daily operations of the cooperative. He would also conduct periodic visits to monitor project status and progress and ensure compliance with policies and guidelines set by the Project.

The finance or account officer is also a member of the BOD, usually a commerce graduate major in accounting or an undergraduate with knowledge in accounting and financial management. A bookkeeper/secretary is hired to record and prepare transaction and financial reports of the POs.

POs Employment Policies and Practices

All major hiring and employment policies were written, agreed upon and approved by the mass members of the PO. There were also unwritten policies in the sense that they were agreed upon only at the level of the BOD as part of PO management and were not approved by the General Assembly. Some of the unwritten employment policies were on the hiring of office staff such as secretary, treasurer, and bookkeeper.

Hiring of workers was limited to PO members residing in the barangay(s) covered by the CBFM areas. Seldom did the POs hire workers from other barangays outside of the CBFM areas. The hiring of workers depended on the operational needs and financial capability of the POs. Wages and salaries were based on the prevailing rates in the area. If funds were scarce or limited, labor was performed on voluntary basis or the PO would provide food allowance to the workers.

Activities during nursery establishment and plantation development were contracted to the PO members with BOD members acting as team leaders and coordinators in their barangay/areas. The team leaders then sub-contracted the various activities to other PO members and sometimes to non-PO members. Most of the hired workers were recommended by the BODs and were often found to be their blood relatives, neighbors and friends. The same practice was observed in the hiring of workers on contractual, rotational and daily basis. Such practice created a wrong impression especially among non-PO members as to the actual objectives of the CBFM project.

Because of the nature of activities in a CBFM area, sectoral employment was applied. Women, children and elderly were employed in nursery activities. Men were employed during outplanting, harvesting, processing and transporting. Indigenous people were employed in protection and maintenance activities since their homes are located in the uplands. Indigenous people were seldom hired in nursery establishment and plantation development because these activities were believed to be incompatible with their culture of slash and burn or kaingin-making.

Variables that Influence the Employment Capability of CBFM

The following variables were identified to influence the availability of employment opportunities within CBFM areas:

Five-Year Work Plan. Part of the obligation of the PO as a CBFMA holder is to come up with a 5-year work plan consistent with the Community Resource Management Framework (CRMF), which comprises the community's strategic plan to manage and benefit from the forest resources on a sustainable basis. The Five-year Work Plan contains the detailed strategies, activities and targets of the PO on activities like protection, development, rehabilitation, utilization, organizational strengthening, financing, marketing, resource utilization and enterprise development.

Many of the POs hired private professional foresters to prepare the Five-year Work Plan and CRMF as these documents were too technical and largely beyond the capability of the POs to do on their own. A private forester would receive around PhP20,000 in preparing these documents for the PO.

Harvesting and Utilization of Forest Products within CBFM Areas. The provisions for harvesting and utilization of forest products within CBFM areas were clearly stated in DAO 96-29, the Implementing Rules and Regulations of the CBFM. This directive allows the issuance of an Interim Resource Utilization Permit (IRUP) and a Resource Utilization Permit (RUP). An Interim Utilization Permit is granted to the PO at the beginning of their CBFM work to generate start-up resources needed for resource assessment, rural appraisal, planning, and similar preparatory activities.

With a maximum of one year, IRUP was granted only once and would terminate upon the affirmation of the first Annual Work

Plan of the PO. RUPs are issued for the harvesting and utilization of naturally grown and plantation species in CBFM areas. The income to be generated from the RUP can be used as financial capital to support social, economic and other development activities. Majority of the interviewed POs regarded RUP as the “lifblood” of the CBFM project.

However, there had been three national suspensions of RUPs since 1998. The series of RUP suspensions had greatly affected the plans, programs and activities of the different POs. These had caused reduction in employment that could be derived along the CBFM activity chain. As revealed in one of the focus group discussions, many of the POs were just starting to harvest when the DENR suspended their operations. Worse, most PO members had already shelled out money for the various harvesting operations at the time of RUP suspension.

Income Generating Projects (IGP). The main purpose of livelihood and other income generating projects is to provide long-term employment to the community. These projects would develop sustainable employment for community members and not just bridge the gap between employment during plantation establishment and development and at the time of harvest. One important element that a livelihood/income generating project must possess is its being labor intensive to generate as much employment as possible to the community. The more jobs these projects could create, the better for the CBFM. Some of the IGPs undertaken by the POs included: rattan production and marketing, handicraft making, resin production and animal (hog/poultry/goat and cattle) raising, among others.

Financial Assistance/Funding Mechanism for the CBFM. The funding mechanisms for the CBFM program such as budgetary allocations from DENR, CBFM Special Account, and Community Forestry Development Fund are not well-established. From 1997 to 2001, many CBFM projects throughout the country were financed by foreign funding institutions such as Overseas Economic Cooperation, Japan Bank for International Cooperation, and Asia Development Bank, among others, for the conduct of comprehensive site development and rehabilitation within CBFM areas. The implementation of these activities afforded a lot of employment opportunities. However, these were short-lived or temporary since employment were available for 3 to 5 years only. Employment depended much on the allotted funds for the various activities.

Impact of Species Planted by CBFM Projects. The choice of plantation species in CBFM projects is pre-determined. The species planted are mostly premium and fast growing species for quick returns on investment. The species planted in the CBFM areas had an impact on employment generated by the project. Different species require different cultural and management practices which entailed the hiring of workers. Within 3 to 4 years, employment was generated in nursery and plantation development and maintenance work.

In most of the CBFM areas visited, agroforestry, which consists of planting cash crops and perennial crops had become the main

livelihood and source of employment for the upland communities. Many of the CBFM sites in Mindanao for instance, planted Falcata more than any other species since Falcata was in great demand by veneer and plywood plants and other wood processing plants in the region. Other species considered for planting in CBFM projects particularly in Mindanao is pararubber. Pararubber trees are tapped for latex that can be used in the production of tires and other rubber products.

Production Sharing. The active participation in the various activities of the CBFM project could have been maintained if there was equitable distribution of benefits and burdens among the PO members. Economic benefits from CBFM can be derived in two ways: first, between the government and the PO, and second, among the members of the PO themselves. Production sharing is one mechanism by which a qualified entity can enter a resource use agreement with the government. Entities like CBFM participants are qualified under existing laws. The scheme for sharing of benefits followed by CBFM at the first level is 75% to the PO and 25% to the government. When properly managed, this would increase available capital for the various development activities of the PO. In turn, this would increase incomes as a result of the employment generated in the implementation of various CBFM activities.

The second level of benefit sharing necessitated the establishment of in-house benefit-sharing system within the organization, which posed a problem on the part of the PO since members would expect to receive a considerable share of the PO's profits. Sixty percent of the aggregate income were received by PO members having the highest income range of PhP180,000.00 and above. The average income for this bracket was PhP348,979.00. This showed that the officers and team leaders of the POs got the lion's share of the benefits. There appeared to be inequitable access and enjoyment of resources, opportunities and eventually material benefits generated by the CBFM Project. This implies failure on the part of the POs to develop and implement an equitable benefit-sharing arrangement among its members.

ISSUES AND CONCERNS

The various issues and concerns identified by the study relative to the employment generation capability of CBFM as a program included the following:

Changing and Unstable CBFM Policies. The DENR has issued a lot of policies, rules and guidelines to support the implementation of the CBFM Program. However, many of these policies are unstable, conflicting and changeable with the change in DENR Secretary. A case in point was the suspension of RUPs involving both natural and plantation species in all regions of the country except for Region 13. This suspension adversely affected CBFM implementation. Likewise, the financial standing of the POs were jeopardized due to these events, as PO members would be unable to derive income from timber harvesting.

Another example is the confusion created by the presence of conflicting provisions within DAO 96-29, the implementing rules and regulations (IRR) of the CBFM Program approved in October

10, 1996 and DAO 2004-29, the revised rules and regulations of the CBFM Program approved in September 2004. Securing permits for harvesting planted timber and non-timber forest products in CBFM areas had been problematic for most POs. POs are unclear about the proper procedure to follow in securing harvesting permit because of conflicting provisions in DAO 1996-29 and DAO 2004-29.

DAO 1996-29 states that once the resource use plan (RUP) is approved and accepted by the DENR, the same shall serve as the permit to harvest and utilize the forest products within the CBFM areas. However, Section 26 of DAO 2004-29 has been subjected to different interpretations by CENROs. Under the Revised IRR, the POs are no longer required to prepare an RUP. In lieu of the RUP, the POs are required to have an affirmed CRMF and FYWP. Furthermore, Section 26 states that: "Harvesting, processing and transport of forest and biodiversity products in CBFM areas shall be in accordance with existing rules and regulations."

The DENR field offices, mainly the CENROs, implemented this policy by requiring the POs to apply for a separate permit to harvest forest products inside the CBFM areas. This simply revived problems faced by the POs in the old permitting system such as: delayed approval of harvesting due to numerous requirements and bureaucratic approval process, and high transaction cost of securing harvesting permits.

Lack of viable income generating project (IGP) to support PO activities after the termination of foreign funding support. At the time of the study, majority of the POs had no on-going livelihood projects although a few years earlier, they had already initiated IGPs like backyard livestock-raising, tilapia culture, and handicrafts. However, many of these projects were short-lived due to various financial, technical, marketing, and managerial problems.

Lack of financial assistance to livelihood and/or development projects. In accordance with EO 263, the DENR is mandated to establish a CBFM Special Account. This Order further reiterates that the DENR is mandated to provide financial assistance to the POs in implementing development projects e.g., enterprise development, ecotourism, agroforestry, plantation development and other related activities that will expand the forest resource base, harvesting and processing of forest products, and posting of bonds for forest charges as contained in the PO's affirmed CRMFs and AWP. DAO No. 98-44, Guidelines on the Establishment and Management of the CBFM Special Account (CBFMSA), identified the sources for the CBFM Fund.

However, this special account was never created. The framers of CBFM policy missed out on the provision under the General Appropriations Act and the State Auditing Code of the Philippines, which stipulates that all revenues collected by the government be deposited with the National Treasury or a National Government Repository. Hence, although CBFM was adopted as the country's national strategy for sustainable

development of forest resources and social justice, no funds had been earmarked for sustaining the CBFM Program.

Inadequate technical assistance and institutional support. Considering that the POs are grassroots organizations, they still need continuing technical assistance and institutional support even after the termination of external funding. The preparation of CRMF, RUP, feasibility studies and other related documents are too technical for them to comprehend, much less undertake on their own. Likewise, they also need continuing institutional support.

The DENR and the LGUs, the primary institutions mandated to provide institutional support, do not have sufficient resources to extend such services. A CBFM coordinator at the regional, PENRO and CENRO level would handle 5-30 CBFM sites. Also, logistics support is not enough for the CBFM coordinators to visit and provide technical assistance to their CBFM sites.

Transparency in the hiring and employment of PO members and non-members. There was a common perception among the different POs that income and other benefits from the CBFM project were being inequitably distributed among the members. The greater share of the benefits went to the BOD members who usually acted as team leaders and coordinators. Focus group discussions also revealed that members who were hired on a regular basis were either blood relatives or recommendees of the BOD. Although the CBFM project alleviated employment problems, material benefits gained by members and officers could have been more equitably distributed if the PO management practiced transparency in hiring workers.

RECOMMENDATIONS

In view of the findings of the study, the following recommendations were drawn:

- a. Improve or revise the current policies on harvesting and utilization permits. The CBFM policy particularly DAO 2004-29 should be revised to facilitate sustainable harvesting of forest products. Specifically, it should include a provision that once the five-year work plan (FYWP) has been approved by DENR, the work plan itself should serve as the permit to harvest both timber and non-timber products. Only a transport permit would be required if forest products were to be transported outside the CBFM/CADT areas. In case of suspension of harvesting and utilization permits, this should be selective and should not cover the entire country. This should be based on merits and performance. Suspensions therefore, should be given only to POs that are found to have violated existing forestry rules and regulations
- b. Provide an alternative employment and livelihood activities for the forest communities aside from timber utilization. The full potential of NTFPs should be considered as an alternative livelihood source. The POs should also come up with value-added processing activities for various products which could generate employment such as handicraft making, furniture making, and food processing among others.

- c. Strengthen technical and institutional support to enhance the employment-generating capacity of the CBFM Program. The POs still lack technical adeptness with respect to sustaining the operations of the CBFM project. Since the DENR still assumes control of the country's forest resources, it should continue to provide technical assistance to the POs. If possible, funds for technical assistance should be incorporated in the DENR's regular budget. There is also a need to hire foresters to guide and oversee the activities and operations of the PO through the Regional CBFM-PO federation. They can also help prepare important documents like the CRMF, Five-year Work Plan and project feasibility studies. The current practice of the POs was to hire a forester on a contractual basis because they could not afford to pay them a regular salary. Likewise, collaboration with the LGUs should be strengthened.
- d. Pursue studies to compare forest-based from non-forest based employment opportunities for upland communities as basis for crafting policies to support the human resource development component of sustainable forest management.

LITERATURE CITED

- Bacalla, D.T. 2006. Promoting equity: a challenge in the implementation of community-based forest management strategy in the Philippines. FMB-DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 96-29. Oct. 10, 1996. Rules and regulations for the implementation of EO 263 otherwise known as community-based forest management strategy (CBFMS). Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No.98-10. March 4, 1998. Guidelines on the establishment and management of CBFM projects within mangrove areas. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 98-41. June 24, 1998. Guidelines on the establishment and management of community-based forest management projects within watershed reservations. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 99-35. Aug. 10, 1999. Revised guidelines in the implementation of the RUP in CBFM program. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 99-49. Nov. 24, 1999. Guidelines in the identification, development and implementation of livelihood activities and opportunities for qualified protected area occupants. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 2000-29. March 14, 2000. Guidelines regulating the harvesting and utilization of forest products within community-based forest management areas. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 2000-44. June 6, 2000. Amending certain provisions of DAO 96-29 and providing specific guidelines for the establishment and management of community-based projects (CBP) with protected areas. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 2000-78. Nov. 7, 2000. Regulations in the recovery and disposition of abandoned logs, drifted logs, sunken logs, uprooted and fire/typhoon damaged trees, tree stumps, tops and branches. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 2004 – 29. Aug. 25, 2004. Revised rules and regulations for the implementation of eo 263 otherwise known as community-based forest management strategy (CBFMS). Compilations of Environment and Natural Resources Policy Issuances, Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Administrative Order No. 2005-25. Nov. 17, 2005. Guidelines in the implementation of upland agroforestry program. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Memorandum Circular No.97-12. July 18, 1997. Guidelines for the formulation of community resource management framework (CRMF) and annual work plan (AWP) for CBFM areas. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- DENR Memorandum Circular No. 98-09. June 24, 1998. Additional guidelines on the issuance of interim resource use permit or IRUP. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- Executive Order (EO) No. 263. 1995. Adopting CBFM as the national strategy to ensure the sustainable development of the country's forest lands resources and providing mechanisms for its implementation. Compilations of Environment and Natural Resources Policy Issuances. Planning and Policy Studies Office, DENR, Visayas Ave., Diliman, Quezon City.
- Medium-Term Philippine Development Plan (MTPDP) of 2004-2010. National Economic Development Authority (NEDA)
- National Employment Plan (NEP):1993-1998. 1994. Institute of Labor Studies, Department of Labor and Employment, Republic of the Philippines.
- The 1987 Constitution of the Republic of the Philippines.