

The Cebu Social Forestry Pilot Project: A Case Study on Upland Development

SALVE B. BORLAGDAN*

The rehabilitation, conservation, and protection of forest resources is the concern of the DENR Upland Development Program (UDP) implemented in the context of the Integrated Social Forestry Program. The UDP primarily aims to assist the DENR in the protection and management of upland resources while at the same time addressing the problems of poverty. These objectives are operationalized through three major strategies, namely: 1) land tenure; 2) agroforestry; and 3) community organizing. The UDP strategies are tried out in three pilot projects, one of which is in Sitio Bulolakaw in Alcoy, Cebu. This project is considered as one of the more advanced pilot projects of the UDP for its success in the area of community organizing where a clearer conception of the role of upland organization is defined: that given the proper technical methods and assistance, uplanders are ready to undertake upland development work and they could really be the government's partners in forest protection.

Introduction

Since 1984, the Forest Management Bureau (FMB) and the Department of Environment and Natural Resources (DENR) have been implementing a pilot project in upland Southern Cebu under the Upland Development Program (UDP). Supported by the Ford Foundation and launched in 1981, the UDP is an action research program touted to be the research and development arm of the FMB-DENR's Integrated Social Forestry (ISF) Program. The UDP aims to assist the DENR to "develop effective approaches towards organizing uplanders to protect and manage upland resources while also addressing poverty problems (DENR 1990)." In pursuit of sustainable development, the UDP aims more importantly to help the national agency develop the appropriate institutional capabilities needed to implement these participatory approaches effectively.

At the inception of the UDP, the ISF was a fledgling program, containing what then were novel ideas for the forestry professionals. From a traditional regulatory function, the ISF promised to move the foresters into the hitherto uncharted territory for them, that is—of upland development. Instead of treating uplanders

*Director, Research Study on the Cebu UDP Project for the Institute of Philippine Culture, and currently a doctoral student of community development at the University of the Philippines at Los Baños (UPLB).

This paper is based on process documentation research undertaken by the Institute of Philippine Culture, Ateneo de Manila University on the Bulolakaw-Cebu UDP project from 1984 to mid-1991. It was first submitted to AERS 150 class at the Department of Agricultural Education and Rural Studies, UPLB.

as criminals to be hunted and persecuted, the ISF sought to persuade occupants of upland areas classified as timberlands to become the foresters' partners in upland development.

ISF Objectives

The specific objectives of the ISF are: (1) to rehabilitate, conserve, and protect upland forest resources; and (2) to improve the socioeconomic well-being of uplanders (DENR DAO No. 97, series of 1988). A major strategy used by the ISF is the provision of land security as an incentive for the adoption of rehabilitative, conservative, and protective forest management practices that will ultimately stabilize the uplands; land tenure instruments called "certificates of stewardship" are awarded to qualified upland occupants — individuals, families, or organizations — and guarantee continued access to public land for 25 years, renewable for another 25. Another major strategy is the promotion of agroforestry and soil and water conservation technologies to spur greater land productivity and, corollarily, increased income. The ISF also encourages the formation of upland community organizations to mobilize people's participation in forest management activities. A third objective, (3) to promote social justice, was more recently articulated to emphasize the significance of providing land security only to actual tillers of occupied upland areas (DENR DAO NO. 4, 1991).

UDP Setup

Under the UDP, the ISF objectives were operationalized into three major implementation strategies or components: 1) land tenure; 2) agroforestry and soil and water conservation; and 3) community organizing. To attain its research objectives of helping DENR operationalize people's participation in these components, the UDP implemented three pilot projects in 1984, and then another 13 in 1989, wherein community organizing and agroforestry promotion strategies were tried out. For assistance in training and supervision of fieldworkers in the area of community organizing, the UDP contracted the services of nongovernment organizations, first the Philippine Association for Intercultural Development (PAFID), and then the Philippine Business for Social Progress (PBSP). The UDP also sought help from the University of the Philippines' College of Forestry and the Institute of Environmental Science and Management (IESAM) to develop agroforestry community appraisal methodologies as well as train and support fieldworkers in their task of promoting agroforestry and soil and water conservation technologies. Finally, the UDP sought the services of social science research institutions, the Institute of Philippine Culture (IPC) of the Ateneo de Manila University, and the Research Center of the De La Salle University, to undertake process documentation research on two of the three pilot projects implemented in 1984. The Research Institute for Mindanao Culture (RIMCU) of Xavier University in Cagayan de Oro City, the Center for Social Research of the Visayas State College

of Agriculture in Baybay, Leyte, and the Social Forestry Division of FMB were also later engaged to undertake process documentation research in 1990.

The research was deemed necessary to provide continuous feedback on field activities, issues, and problems, to the Upland Development Working Group, the multi-institutional body that provided the directions for and managed the UDP. Process documentation research data from 1984 to 1987 helped researchers and key social forestry officers of the FMB formulate a comprehensive implementation framework integrating the community organizing, land tenure, and agroforestry and soil/water conservation components of the ISF (Bacalla, Borlagdan *et al.* 1989). The framework guided the implementation of the 13 additional pilot projects launched in 1990.

In the pilot projects started in 1990, forest community organizers (FCOs) serve as the key ISF fieldworker. Assigned to only one project site, each FCO stayed fulltime in the field to ensure close working relationships with the participating uplanders. The FCO, the only field personnel provided full remunerations by the UDP, is assisted in the field by a community development assistant (CDA), and their supervisor, the community development officer (CDO). Together, the three make up the field team accountable to the Community Environment and Natural Resources Officer (CENRO) who in turn is directly responsible for the project before the provincial, regional, and national offices of the DENR. The CENRO and the field team are provided management support by the Provincial Environment and Natural Resources Officer (PENRO), the regional social forestry chief, the Regional Technical Directors for Research and for Forestry, and, finally, the Regional Executive Director. These personalities, together with the CENRO and the field team, compose the regional working groups formally known as the Regional Upland Development Committees (RUDCs). The RUDCs are tasked to monitor and support field implementation of UDP projects, and to elevate to the central office as well as act on policy issues relevant to the goals of the ISF and the UDP.

The UDP lends a very strong learning orientation to the DENR and the ISF. Following a social learning framework in its activities (Korten 1980), the UDP strives to help the bureaucracy look at itself objectively and embrace its mistakes so that it may learn from them. From field lessons will come the methodologies, approaches, and guidelines that UDP will recommend to improve field performance.

Process documentation research is among the many activities UDP undertakes to facilitate the learning process. Other activities include the holding of regular quarterly meetings by the RUDCs, annual review and planning workshops, orientation sessions with new RUDC members, and intermittent trainings to prepare field teams for the different phases of project implementation. By helping to develop supportive relationship among field team members and between field teams and their supervisors, and by developing the necessary manuals and practical

field guides, the UDP hopes to facilitate the development of institutional mechanisms compatible with field efforts to foster broad uplanders' participation in the ISF projects.

The Bulolakaw-Cebu Project

The Bulolakaw-Cebu UDP pilot project is one of the three original pilot projects implemented by the UDP in 1984. The project is located in Sitio Bulolakaw, one of the 14 sitios of Barangay Nug-as in the municipality of Alcoy, about 90 kilometers southwest of Cebu City. It is directly accessible from the poblacion of Alcoy via an 18-kilometer barangay road that ends in Nug-as Proper, about 6 to 8 kilometers southwest of Sitio Bulolakaw. Alcoy municipality is itself accessible via the provincial road that traverses the entire eastern coast of Cebu province from the north to the south. Buses bound for Dumaguete City and Bato have serviced Alcoy municipality for some time prior to 1984. For Nug-as, however, jeepneys and trucks only commenced to provide regular bi-weekly service in 1990, upon the establishment of a public market in Nug-as Proper.

The Land

Sitio Bulolakaw is the most populated among the sitios of Barangay Nug-as. Located in a relatively hilly ground, the sitio may be divided into three geographical sectors based on elevation and topography. The first sector consists of a low-lying area in the central, north, and northwest portions of the sitio. Having the lowest elevation — i.e., averaging 600 meters above sea level — the area is referred to as "Lower Bulolakaw." Its central and eastern section is called "Walog," meaning valley, while in the northeastern section, it is called "Tulabugan" after the "labog" vines associated with the place. The terrain in Lower Bulolakaw, though occasionally studded with small, sharp hills, is rolling. This sector houses the greatest proportion of the sitio population since it encompasses the more arable lands. This sector is also the center for community activities where the chapel, the artesian and open wells, the "tabo-an" or market stalls, the communal nursery, the recently installed communal faucets are located. Since almost all of the land in this sector is claimed and under cultivation, only a few forests can be found in this area. In addition to a lush natural forest said to be guarded by magical white monkeys, a DENR forest plantation and a 40-hectare community-established reforestation plantation adjoins this area in the northwest.

The second sector is called "Upper Bulolakaw" because of its higher elevation. Ranging from 600 to 700 meters above sea level in elevation, part of this area is surrounded by the low-lying Walog areas in the west while the larger part of it lies to the east of Walog, stretching from the northwest boundary of the sitio to the barangay road in the south and southeast. Perhaps because of its difficult terrain

which is marked with abrupt gullies and numerous sinkholes, this area is sparsely populated; it thus has the largest section of still unclaimed land in the sitio. *Imperata cylindrica* or cogon dominate the landscape. A 23-hectare community-established reforestation plantation can also be found in the eastern boundary of this sector.

The third sector is separated from the first two by the barangay road that traverses the southern section of the sitio from east to west. It borders Walog on the east, running from the northeast boundary of the sitio to the far south. Encompassing among the highest peaks in the sitio, this area ranges from 700 to 800 meters above sea level in elevation and is referred to as "Bungtod" or hill. Compared to Walog, it is also sparsely populated because the land is very steep. Along almost the entire stretch of the barangay road on the lower portion of the Bungtod are found reforestation plantations established by the upland organization created under the UDP and by the Southern Cebu Reforestation and Development Program (SCRDP) of the FMB. Plantation species include mountain agoho, Baguio lumbang, and mahogany. The staffhouse of the UDP project is also located at the foot of the Bungtod along the barangay road and directly opposite the trail leading to Walog.

According to land use, Bulolakaw consists of croplands, grasslands, and forest lands. Of the 356-hectare total project area (i.e., covering the entire sitio), about 246 hectares (roughly 69 percent) are croplands found in the three elevation-based sectors of the community. Forest plantations distributed in the three sectors take up about 85 hectares (24 percent) while natural, second-growth forests concentrated mostly in the Bungtod and Walog sectors take up only about 14 hectares (4 percent). Cogon grass and brushlands cover roughly 11 hectares (3 percent) and can be found mostly in Upper Bulolakaw. Coal mine pits of undetermined underground coverage can be found in the cropland areas in Walog.

The croplands are planted mainly to corn, the staple crop, and vegetable crops like Baguio beans, cabbage, pechay, espada, spring onions, black pepper, sayote, eggplant, and carrots. Croplands are planted two to three times a year. Predominant cropping patterns include: corn-corn; corn-Baguio beans-corn; corn-cabbage/pechay/sweet pepper; carrots/sayote/eggplant-corn; and corn/espada/spring onion-corn/espada/spring onion. Only eight of the total cultivators are engaged solely in corn production. Farmers with more resources intercrop corn with Baguio beans, cabbage, pechay, carrots, sayote, and eggplant. Farmers with less resources intercrop corn with two or three of these other crops. Vegetable crops are sold in Mantalungon market which is about 20 kilometers and 4 to 6 hours walk away, in the new Nug-as market about 6 kilometers away, and in Alcoy Proper, about 18 kilometers away. Prior to the opening of the Nug-as market, Mantalungon was the place most people brought their produce to since the prices here were higher than those in Alcoy Proper.

The People

The residents of Bulolakaw are mostly descendants of migrants from the mountain areas of Dalaguete, Abaca, Pugalo, and Malarid. Only one came from Iloilo, and several others from Bohol and Davao. Except for four who belong to Iglesia Catolica Pilipina Romana, a sect with headquarters in Bohol, all the residents belong to the Roman Catholic Church.

According to a 1986 survey conducted by the project, there were 115 recognized cultivators of the project area. However, only 92 families and 87 households inhabited the sitio; the other cultivators resided in adjacent or nearby sitios and barangays. Household sizes range from 3 to 15 members. As of December 1990, the total population was 393, 53 percent of which was female and 47 percent male. Some 37 percent belonged to the 15-44 age bracket while 14 percent belonged to the 45-59 group. Children from 0-6 years constituted 23 percent while those aged 7-14 comprised 19 percent. The 60-above age group comprised only 7 percent of the total population.

Bulolakaw is the product of two migration waves. The first wave came in the late 19th century, constituting 20 families. The second came during and after the second world war. Later migrants who trickled to the site came to join relatives who had arrived earlier. Thus, about 80 percent of the total population are related to one another by blood or by marriage. Now into the fifth generation of migrants, the population bears at least four common family names.

Except for a few landless farmers who work as farmhands of the better-off families, all Bulolakaw families have access to an average of about 2.5 hectares of land. Prior to the awarding of stewardship certificates by the FMB, several families possessed tax declarations for the land and considered themselves as owner-cultivators. A few acted as pseudo-landlords¹ who obtained income from shares of harvests remitted by tenants. Other farmers who could not make such claims served as tenants of pseudo-landlords and absentee claimants from the lowlands. Still others have combined statuses: it is not uncommon for a pseudo-landlord to be an owner-cultivator also and tenant at the same time.

The Project Staff

Being one of the earliest projects of the UDP, the Bulolakaw project was also the site for experimentation on the composition of project management staff suitable for the ISF. From 1984 to 1988, two fieldworkers shared major responsibility for project implementation. Called the "project field coordinators" or PFCs, these fieldworkers were originally a team of two females, both of whom were agriculture graduates. They were trained in community organizing and supervised by the Philippine Association for Intercultural Development (PAFID). They were also

assisted in the field by a fulltime clerk, a part-time accountant, and a surveyor who was detailed to the project for the duration of its perimeter and parcellary survey activities. In 1986, one of the female PFCs who left the project was replaced by a male forester.

In late 1989 when the 13 new UDP pilot projects were launched, the composition of field staff was changed following the implementation framework that contained field lessons from 1984 to 1988. Arguing that one fieldworker was capable of managing a 350-hectare project area, the UDP reduced the number of PFCs in Bulolakaw to only one. Moreover, the UDP revised the name of the fieldworker from PFCs to FCOs or "forest community organizers." In Bulolakaw, the remaining female PFC became the FCO. The male PFC was assigned the position of community organizing coordinator (COC) whose job was to monitor and supervise the FCOs of all UDP pilot projects in the Visayas and Bicol.²

Project Activities

The major activities at the early stage of the project (i.e., from 1984 to early 1986) were the implementation of a fertilizer credit project, the conduct of parcellary surveys, the formulation of a five-year development plan, and the establishment of the upland community organization to manage the fertilizer project. Soil and water conservation measures were promoted via the construction of rockwalls along contours of corn fields using the traditional system of exchange labor called "alayan." Promotion was done by providing instructions on their construction and by making rockwall construction a prerequisite to the approval of fertilizer loan applications. Tree planting was also encouraged through the distribution of fruit and forest tree species to anyone who was interested. Trainings and field visits to model agroforestry farms in Cebu were also among the extension methodologies used by the PFCs to promote agroforestry.

In mid-1986 immediately prior to the arrival of the male PFC, the remaining female PFC helped the Bulolakaw women form their own women's organization. This was the women's response to their inability to participate in the male-dominated organization, then called the *Kapunongan sa Mag-uuma sulod sa Yutang Lasangnon sa Bulolakaw* or KMYLB.³ It was also a response to conflicts among the men regarding payments for fertilizer credit which brought organization activities to a halt (Borlagdan 1987).

The arrival of the male PFC as well as the entry of the Philippine Business for Social Progress (PBSP) into the UDP brought changes in the project. The men's and women's organizations were integrated, planting of hedgerows along contour lines was promoted as an alternative to rockwall construction, different leguminous species were tried out as hedgerows and cover crops, black pepper production was

tried out by a few farmers, and one farmer ventured into beekeeping and converted about a third of his farm into a woodlot.

Simultaneous with these activities, the PFCs, with assistance from PBSP consultants, implemented training programs on team building and leadership. They led the KMYLB to select members who could be trained and developed into Community Organizing Volunteers (COVs) and Agroforestry Volunteer Technicians (AVTs). These COVs and AVTs were to assist the PFCs in community organizing and promoting agroforestry and later continue project activities beyond the project period. Trainings for the COVs were held in the project site. Trainings for the AVTs, on the other hand, were held outside the site.

Among the major activities of the project since 1989 was the implementation of a contract reforestation project by the men and women of the KMYLB. This was part of the DENR's National Forestation Program which the KMYLB was able to participate in through a contract with the DENR. All told, the KMYLB entered into three such contracts from 1989 through mid 1991. The first contract involved reforesting a 23-hectare area on the mid-eastern boundary of Upper Bulolakaw; much of the reforestation work here was undertaken by the menfolk of the KMYLB since the area was far and traversed steep terrain. The contract had a price of P20,000/hectare to be paid by the KMYLB over a three-year period and at intervals determined by stages of plantation establishment and plant growth.

The second contract involved a 15-hectare area on the southernmost boundary in the Bungtod section of Upper Bulolakaw. This contract was implemented under the now-defunct "Farm Forest Development Contract" scheme. It was entered into by the KMYLB for the women and youth since they were barred from joining the 13-hectare contract. It was thought that women's participation in the first contract would slow down the pace of work so the women complained about the discrimination until KMYLB officers and the CENRO worked out the second contract for them.

The third contract covered a 40-hectare grassland near the northwestern boundary of Bulolakaw; this reforestation area straddled the boundary of Bulolakaw and portions of the adjoining Sitio Abaca, also of Barangay Nug-as. Implemented at a time when demands for labor was great on account of a domestic water supply project and located very near to the Walog area, this contract involved all members of KMYLB households – men, women, and youth. Trails from the central settlement were built to facilitate access.

Another major activity, implemented in support of the contract reforestation project was the establishment of a communal nursery on a farmplot donated by one of the big owner-cultivators. This activity involved the levelling of the farmplot, the construction of a semi-concrete shed using materials donated by the DENR and cement from the municipal government, as well as the potting and maintenance of

seedlings. Like the reforestation project, this activity generated a lot of participation from KMYLB men, women, and youth.

Another important activity was the construction of a water supply project funded by a grant from the Tulongan sa Tubigan Foundation, one of the NGO channels of the Philippine president's countryside assistance funds. The project involved the construction of a spring box in a nearby sitio, the laying out of a 3.5-kilometer pipeline, the construction of reservoir boxes, and the installation of public faucets in at least four points of the line. Unlike the reforestation project which provided employment to participants, work in the water supply project was purely voluntary, since labor served as the KMYLB counterpart to the P180,000.00 grant. Like the contract reforestation project, the water supply project drew a lot of new members to the KMYLB, raising the number from 27 in 1985 to about 50 by end of 1990.

Towards the end of 1990, the project also attempted to revitalize its agroforestry component which had slowed down on account of the contract reforestation and water supply projects. Lacking time with which to attend to farm development, many farmers left their fields uncultivated while they availed of employment opportunities from the contract reforestation project. To revive the agroforestry component, the project held farm appraisal activities and farm planning workshops in an attempt to help six farmer-cooperators transform their areas into model farms. These activities — i.e., farm appraisal and farm planning — were undertaken to align the Bulolakaw project activities with those recommended in the then newly-formulated UDP implementation framework which was also being implemented in the 13 new UDP projects.

In spite of the lull in agroforestry promotion in 1989, and of the FCOs' anxieties about the perceived weakness of the project's agroforestry component, IPC researchers found in mid 1990 wide adoption of soil and water conservation measures (Raymundo *et al.* 1990). For instance, all farmers had constructed rockwalls in their farms although only about 20 percent of those constructed were in good condition. Rockwalls were the chosen erosion control structure particularly in the rocky southwestern and southeastern section of the project site. Contour hedgerows were also established as alternatives to rockwalls. "Kakawate" (*Gliricidia sepium*) was the favorite hedgerow species because of its usefulness as fodder and nurse tree for black pepper. A few farmers used crotollaria and desmodium as hedgerows. Napier grass had also been tried out by about 40 households but because it competed with corn and vegetable crops for soil nutrients, about 50 percent of these households destroyed the grass they planted; the remaining growers of napier grass use the species for fodder. Fascine countouring, i.e., the piling and staking of crop residues like corn husks, twigs, and cut grasses along contours, was also being practiced in at least six farms.

In addition, a good number of farmers were found to have undertaken tree planting activities with and without encouragement from the project staff. Forest species planted were anislag, bagalnga, tikala, wild duhat, mahogany, gmelina, eucalyptus, mountain agoho, bagilumbang, and *Albizia falcataria*. Except for anislag, bagalnga, tikala, and wild duhat which were sourced locally (i.e., from wildlings), these forest species were obtained directly from the UDP project or stolen from FMB field nurseries. Fruit trees were also planted in large quantities. These included mango, jackfruit, cacao, guyabano, baungon, kamias, star apple, avocado, caimito, and tambis. Seeds or seedlings of these were obtained from fruits consumed, from friends and relatives, and from UDP project staff.

Still other tree species planted were kakawate and giant ipil-ipil for hedgerow purposes, salago, and bamboo. Salago, a source of fiber for the manufacture of bank notes, was planted in large quantities by at least three farmers for the purpose of selling its bark. Bamboo was planted as a source of house construction material. Kakawate was also used by farmers as "insect repellent" to protect cabbage crops from "dangan" (larvae of a certain type of butterfly).

Issues and Concerns

The Bulolakaw project has been considered as one of the more advanced pilot projects of the UDP for its performance in the area of community organizing. The solidarity of the KMYLB and the growing organizational capabilities of its leaders were perceived to be the factors behind what was perceived as outstanding performance in contract reforestation and the water supply project. The project staff acknowledged that while community organizing was indeed the project's strongest component, agroforestry and soil and water conservation were its weakest. This was considered a result of farmers' preoccupation with the two KMYLB projects. It is in the context of these perceptions that issues and concerns regarding project implementation are discussed.

Agroforestry Promotion

The project staff's misgivings about their performance in the area of agroforestry (in spite of accomplishments revealed by IPC research data) were indicative not of lack of action on the part of field implementors, but of lack of a coherent agroforestry diagnosis and design framework. This is clearly evident in the fumbling attempts to promote rockwall construction through the fertilizer credit project in 1985-86,⁴ establish a demonstration farm and communal nurseries from 1985-88, embark on a village woodlot project in 1986, and promote composting in 1987-88 and black pepper production in 1987. Farm planning activity was undertaken after an agroforestry training sometime in 1985 but the farm plans made — which were

merely sketchmaps of farms — were never implemented. It was only in late 1990 when more thorough processes of farm appraisal and planning were undertaken.

Without such a framework to help study existing farming systems, and identify farm problems, and without the technical knowhow with which to recommend interventions in farming systems, agroforestry promotion activities centered primarily around tree planting and erosion control methods.⁵ That is, around seed and seedling distribution as well as the promotion of rockwall construction, and later, hedgerow planting. How the choice of hedgerow species affected the overall farming system, what alternative combinations of crop and tree species could be used, and how total upland farming systems could be improved were agroforestry questions that were overlooked.

The absence of a system for following up and monitoring adoption and participation in agroforestry activities seemed to have been the principal reason, too, for the negative perception which the staff had about their performance in the area of agroforestry. Unable to trace where the distributed seeds and seedlings went, who obtained what quantities of seeds/seedlings, who actually planted these and with what results, and what problems these encountered, the project staff could only have vague ideas about the tree planting activities of their participants. Early records on seed/seedling distribution were in disarray and not used as basis for following up on recipients' tree planting activities. Rather, they merely served as records of receipt of materials from the project.

Finally, the lack of technical knowhow on the part of the fieldworkers was compounded by the inability of the UDP and DENR to provide them adequate technical support. This was evident in the fieldworkers' inability to fully provide technical assistance to some farmers as they attempted innovations on their own. It can be said that opportunities to assist innovative farmers were wasted because of this inability. Several examples of such wasted opportunities are provided below.

The first example was the case of one farmer who experimented with beekeeping in his farm. The farmer learned beekeeping technology from a radio program and began his experiments by raising wild honeybees which he found in the forest. He was encouraged by UDP agroforestry consultants who provided him with an "Italian" variety, i.e., the *Apis millefera*, and was assisted in procuring the wax foundation for honeycombs from Manila by process documentation researchers. He also planted yellowbells and other flowering plant species in his farmland to provide pollen for his bees, and experimented with different models of boxes for his colonies. However, when he met problems — e.g., when moths preyed on his bees, or when the bees tended to swarm for some reason — the project could not help him.

Another example was the case of the black pepper which the same farmer attempted to propagate in Bulolakaw after UDP agroforestry consultants delivered

about 400 Laguna runners to him. After receiving some instructions from the consultants, the farmer experimented with various nurse trees to find the most suitable species and with different locations receiving varying intensities of light and heat. After finding the species (kakawate) and location that seemed to provide optimum growth for the runners, he later discovered that less than five of the runners that survived actually produced berries. Why the results? The project could not help him explain the reason for this result, nor find ways of resolving field problems.

Still another example was the case of siapo production which a few (3-4) farmers undertook on their own. Having heard of the high value of siapo bark from the project and other sources, the farmers collected planting materials and propagated a large number of this specie on their farms. Come harvest time, however, they discovered to their chagrin that the task of peeling the bark from the slender trunks of the bushy plant was a time-consuming one, a task that competed with other farming activities. Consequently, majority of these farmers abandoned their siapo project.

Land Tenure

In the area of land tenure, the Bulolakaw project has had its share of successes and failures. An area of success was the participatory scheme developed by the PFCs and the surveyor together with the farmers in the conduct of perimeter and parcellary survey in 1986. Having learned from a 1985 mistake of not involving farmers fully in parcellary survey activities, the project staff: (a) deployed a fulltime survey aide in the site so that he could closely coordinate work with the farmers; (b) organized the farmers into sectoral groups which worked out the schedules and day-to-day survey activities with the survey aide; (c) reached agreements with the farmers that no farm survey would be done unless all the farmers sharing farm boundaries were present; (d) instituted procedures for verifying maps resulting from the survey and for rectifying incorrect stewardship certificates; and (e) undertook a complete parcellary survey of the project area. These measures were actively supported by the project staff's superiors in the district office (later the CENRO) who facilitated the deployment of personnel and movement of necessary logistics.

Because of these careful measures, parcellary survey activities took over one year to complete. However, farmers were satisfied with the results of the survey. The perimeter survey delineated the project area of their choice — i.e., the whole of Sitio Bulolakaw. The parcellary maps produced were accurate and covered all of their landholdings. Moreover, boundary conflicts were resolved among them.

Data from the complete survey gave the project staff an accurate picture of how many farmers were there in the area, how many were qualified for stewardship,

how many cultivators were resident and how many were nonresident, and so on. Such data helped the project staff set their targets as to the number of farmers to award stewardship certificates, as well as to monitor how many had already applied for stewardship and the reasons for others' failure to do so. From an initial of 11 stewardships awarded before the project (i.e., prior to 1984), and 31 stewardships awarded in 1985, the project had awarded a total of 92 stewardships by the end of 1990, or 80 percent of the 115 cultivators of Bulolakaw fields.⁶

Complete parcellary survey also provided the project exact data on the land uses in the community — i.e., how many hectares were forested, how many were grasslands, cultivated lands, claimed lands, and so on. Such data later facilitated the identification of lands available for contract reforestation.

Failure to uphold the legal rights of stewardship awardees in the courts of law tended to overshadow these gains. Dragged into court by his pseudo-landlord who sought affirmation of the traditional landlord-tenant relationship, a stewardship holder, who had refused to remit his share of his vegetable harvest, yielded in 1985 to his landlord's demands after almost two years since the complaint was lodged. Instead of giving shares of harvests, the steward agreed to pay a fixed rent to the landlord for the use of the land. The case highlighted: (a) the FMB's inability to defend its stewardship instruments and stewardship awardees in court;⁷ (b) the court's bias towards lowland absentee-landlords; and (c) the municipal government's role in supporting landlordism through the collection of tax declarations on timberlands in the public domain. These issues were related to larger, national policies outside the control of the uplanders. They were issues which the FMB and DENR itself had difficulty resolving.

In the face of the project's impotence vis-a-vis this problem, the farmers turned to the upland organization, the KMYLB for support in withstanding opposition from absentee landlords. Efforts were made to include in its constitution and bylaws the settlement of court cases or complaints as among the emergency situations that merited financial contributions from the KMYLB members. A subsequent threat from a pseudo-landlord was met by another stewardship awardee with passive resistance. However, a large number of stewardship recipients continued to quietly pay their pseudo-landlords rent or remit shares of harvests to avoid further trouble.

The Bulolakaw experience also illustrated another source of threat to land security: the government itself. During the days of the Southern Cebu Reforestation and Development Project (SCRDP)—i.e., from late 1970s to about 1987 or 1988—farmers complained about the encroachment of SCRDP forest plantations onto their farmholdings. Fields under fallow were particularly susceptible to encroachment since SCRDP workers could easily defend their ignorance of the land use of an area. Such conflicts strained relationships between farmers and SCRDP managers even though the farmers needed the jobs which the project could offer.

These conflicts were also cited as among the possible reasons for the mysterious fires that burned down SCRDP plantations in Bulolakaw.

This experience almost repeated itself in the 40-hectare contract reforestation project of the KMYLB in the northwestern boundary of Bulolakaw. Without the benefit of an actual survey, the 40-hectare coverage was determined on paper by the DENR. KMYLB participants in the project later found that the 40-hectare coverage included some areas being cultivated by Abaca farmers. To avert conflicts, the KMYLB had to find other unclaimed areas as replacement.

Another source of conflict was the granting by the DENR of permits to outsiders to explore coal deposits in the sitio. The area where coal explorations were made was situated right in the central settlement of Walog, near the water sources of the community. Because they had no participation whatsoever in the granting of the permit, Bulolakaw farmers felt they were in a weak position to negotiate the terms under which explorations could be undertaken in their very own landholdings. Moreover, they had no means of protecting their water sources and circumventing the adverse effects of underground mining activities.

Community Organizing

The community organizing component of the Bulolakaw project was adjudged outstanding by foresters in the CENRO and regional levels of the DENR primarily because of the KMYLB's performance in the contract reforestation project and their success in accessing and implementing the water supply project in the period 1989-1990. Largely because of the significant benefits these two projects offered, the KMYLB was able to mobilize almost 100 percent of the Bulolakaw residents to participate in reforestation and pipeline construction activities. Moreover, they were able to do this simultaneously, while maintaining a high survival rate in their reforestation contract and keeping the schedules of both projects.

The role that these two projects played in community organizing cannot be overemphasized. Prior to 1989, the KMYLB had undergone two organizational crises that almost brought UDP project activities to a halt. The first was in 1986 when organization leaders and members were split over the issue of how to fully collect payments to the credit fertilizer project, and how to make use of the money generated.

During this period, the KMYLB was into its second set of officers. The conflict between KMYLB leadership consisting of the former president, who favored the continued keeping of project money in the bank, and the concurrent president, who was among the big borrowers who refused to make immediate payment and who favored the use of the money for organizational projects, led to strained relationships

among officials, between officials and members, and between officials and project staff.

The second crisis occurred around 1987 on account of the black pepper production activity endorsed by UDP agroforestry consultants. During this period, the PFCs had attempted to break the 1986 organizational impasse by encouraging farmers to plan agroforestry activities on a sectoral basis. The crisis erupted when UDP agroforestry consultants gave the second sector some of the black pepper runners it had promised to the sector that planned and asked for them. This heightened the rift between the ex-president, whose sector asked for the black pepper, and the community at large. It further alienated the ex-president from the project staff.

These crises were followed by periods of inactivity by the organization and the hapless project.⁸ They highlighted the crucial role conflicts and organizational ability to manage conflicts played in the development of the KMYLB.

The factors that may have contributed to the project's overcoming these temporary setbacks perhaps included: (1) the persistent presence of the project and staff in the area; and (2) the community's own interest in pursuing organization building. Continued project presence in the area indicated to the community its sincerity in assisting the project. On the other hand, realization of the project's potential ability to help provide or access resources and services through a community organization spurred the community to persist in organization building.

A third factor may have also been the tradition that the community already had of organizing itself for community activities such as fiestas and for helping one another in house construction as well as land preparation (i.e., the "alayon" system). Also, the strong kinship ties must have helped community members to rebound after temporary setbacks due to conflicts.

A note must be made on the manner of conflict resolution adopted by the KMYLB on these critical occasions: conflicts were not really resolved; they were just allowed to die down and organizational activities resumed in response to new activities or ideas. Up to 1990, avoidance was the principal community strategy for managing conflicts.

Where conflict management was the weakest point of the KMYLB, the development of norms, rules and regulations to clarify roles and responsibilities — and prevent the occurrence of conflicts — was among its strong points. From 1984 to 1990, the KMYLB formulated, reviewed and revised its constitution and bylaws three times (1985, 1987, and 1990) to spell out the rights and responsibilities of members and officers. In the planning and implementation of its projects, the KMYLB, too, took pains to draft guidelines and procedures for farmers' participation in them.

For instance, in the fertilizer credit project, the organization created *ad hoc* committees that formulated and implemented guidelines for ascertaining the qualification of credit applicants, for monitoring the use of the inputs, and for collecting credit payments. Also in the reforestation and water supply projects, the KMYLB developed mechanisms for recording who participated when, and imposing sanctions on those who failed to render service in the water supply project. The organization also developed sanctions for tardiness in officers' caucuses and general assembly meetings, and imposed fines for absences.

The project staff greatly influenced these developments in the KMYLB. With the guidance of PAFID consultants, they helped organization officials conceptualize and organize ad hoc committees for the fertilizer credit project. Experience in this project later helped shape the way the KMYLB organized itself in future activities. With the help of PBSP consultants, the project staff also helped the KMYLB conceptualize and resolve organizational issues that needed to be threshed out in the constitution and bylaws, such as the issue of women and youth's membership in the organization. As in the period of the PAFID consultants, they helped the KMYLB link up with other agencies and organizations to access resources (e.g., in the water supply project conceptualized as far back as 1985) and services (e.g., health and nutrition services in 1987).

These experiences in the Bulolakaw project revealed: (a) the need to take an integrated approach to upland development; therefore, (b) the impossibility of narrowly focusing on technology promotion; and (c) the crucial role the community organization can play in accessing resources and services which could not be obtained from the DENR.

As the KMYLB rode in 1990 on its successes in generating employment through contract reforestation and delivering a steady supply of potable water to Bulolakaw, an impending organizational crisis again loomed in the organizational funds generated from the ten percent management fee of the reforestation contracts.

Fired with enthusiasm for the KMYLB's projects, KMYLB officers and members left the problem of managing organizational funds to the incumbent president who held the organization's bankbook and drew and used funds at will. Other officers who were supposed to provide checks and balances regarding the withdrawal and utilization of funds were unable to carry out their functions. One reason given was that they had absolute trust on the president who was among the most educated farmers in the community and had learned to deal with government officials and even bankers with aplomb. Another reason was that the other officials were friends or relatives of the president and could therefore not demand to see records or insist on explanations for expenditures.

This particular problem highlighted the need for new organizational skills in the KMYLB, that of keeping and maintaining financial and other records, as well

as accounting for activities and expenses. It also echoed the need to develop appropriate conflict resolution mechanisms particularly in light of the close kinship ties people have with one another.

Conclusions and Recommendations

The Bulolakaw project, documented as thoroughly as it was, presented the UDP with lessons that found their way to the 1989 Implementation Manual for Participatory ISF Projects. The community organizing processes of working with small core groups of leaders; of forming and mobilizing committees to foster broad participation and leadership development; of conducting groundworking activities to prepare leaders and members for major activities like meetings, workshops, project activities; of meticulously preparing for and conducting leadership, agroforestry, and organizational trainings — these were among the organizing strategies tried and refined in the Bulolakaw project.

From the Bulolakaw experiences in the agroforestry component, the UDP also drew recommendations to provide it with clearer directions and integrate these more closely with community organizing. Thus, from the project came the emphasis on farm appraisal and farm planning activities, the selection of a few farmer cooperators on which to concentrate technical assistance, the development of cooperators' farms into model farms which other farmers could learn from, and the use of crossfarm visits to complement demonstrations and structured classroom-type agroforestry trainings.

Finally, with the community organizing experiences in Bulolakaw came the clearer conception of the role the upland organization must play: not only in supporting stewardship rights and accessing additional resources and services through linkage with outside groups, but also in drawing natural resource management plans for the community, implementing soil/water conservation and forest protection measures, and, most importantly, in developing and transmitting the traditions of resource conservation and protection that would ensure the sustainability of social forestry efforts.

From the key activities, issues and concerns discussed in this case study, several conclusions can be made about certain aspects of upland development and the kinds of efforts needed to support and sustain it. First, the conclusion must be made, given the research data, that the uplanders are ready to undertake upland development work when this is perceived beneficial to them. Farmers' readiness in Bulolakaw to experiment with new species and new activities also showed their willingness to take risks and venture into new areas of endeavor. Second, the same conclusion must also be made about DENR fieldworkers' commitment and dedication to their jobs in spite of technical inadequacies. As data in Bulolakaw showed, inability to support certain specialized activities could be offset by project staff's

diligence in promoting the methods and techniques they knew best. It can also be said that through persistence, the fieldworkers succeeded in raising the community's consciousness about tree planting and soil conservation, and in actually getting farmers to plant trees, build rockwalls, and establish hedgerows.

The key dimensions missing in the UDP agroforestry promotion were the technical methods and assistance needed to: (a) help project staff and farmers develop coherent plans for improving farming systems; and (b) provide follow-up support to farmers who embark on specific and more specialized agroforestry endeavors. Also missing were relationships with local agroforestry experts and research institutions which could have filled technical assistance gaps which the UDP or the DENR itself could not supply on a needs basis.

Perhaps another missing dimension is the link between agroforestry activities — which were largely farm-based in Bulolakaw — and overall resource management activities of the project. It must be noted here that though it involved tree planting and therefore forest rehabilitation, the contract reforestation project served basically as an employment generating activity for the ISF project. This was because the reforestation project was not an ISF project — it involved unclaimed lands and its management was handled by another unit in the DENR. The tenurial instrument that will later be awarded over the reforestation plantations — i.e., the Forest Land Management Agreement or FLMA — will be separate and distinct from the individual stewardship instruments of ISF. It is envisioned that while the KMYLB will also manage the FLMA, forest management activities here will have no relation to the management of individually stewarded lands.

It must be further noted that while the stewardship certificates and the FLMA will cover cultivation areas and forest plantations, the total of which will comprise virtually the whole of Bulolakaw, no mechanisms exist for extending KMYLB's protection over natural forests. Thus, while fire fighting and protection activities were being done in the KMYLB-established forest plantations, few forest management activities were being done in the few remaining natural forests. Moreover, no action was being taken to block the encroachment of farms onto some of these forests. These deficiencies in the project reflect limitations on the sole use of agroforestry and soil and water conservation as the resource management systems to utilize. This limitation is also due to the farm-oriented view of agroforestry implementation adopted by the ISF.

A broader rural resource systems perspective is necessary to help project staff and upland communities envision and implement more integrated, community-wide natural resource management plans. With a systems perspective, communities will be able right away to realize and appreciate the potential available resources that their communities provide and the responsibilities that come with realizing these potentials. Such a broader perspective will require the DENR to provide the

integrated policy arrangements that will legitimize the people's access to and control over resources within the bounds of their communities.

A final conclusion that cannot be emphasized enough from the case study is the potential the upland community organization has for sustaining upland development efforts. The Bulolakaw experience particularly highlighted the role development of traditions, norms, rules, and regulations played in the organization's own institution building. It also highlighted the role leadership and leadership development played in the development of these institutional mechanisms. These traditions, norms, rules and regulations — regarding crucial aspects of community and organizational life such as leadership, accountability, participation, resource management, and so on — are the key elements of institution-building needed to ensure sustainable development.

Among the critical areas that must also be emphasized in the development of crucial institutional mechanisms is the area of conflict management. Conflicts are inherent in all social interactions (Simmel 1985). Most of the time, they cannot be avoided. Depending on how they are managed, conflicts can in fact spur useful organizational changes and technological innovations (Lauer 1977). Managed badly, they can undermine relationships, activities, communities, and even the whole development process.

Since conflicts must be taken as "givens" in any development endeavor, community organizers should help community organizations learn how to deal with conflicts not only with external groups, but most especially with conflicts among its members. The resilient organization will be that which can emerge from crises and conflicts stronger and better. Organizations must be helped to develop the conflict management strategies appropriate to the local culture and effective enough without compromising community solidarity. Community organizing must help organizations learn to welcome conflicts as opportunities for further innovation, and for further strengthening of community ties. This way, community organizing can help build genuine communities that endure.

Endnotes

¹Because the sitio is part of the public domain which is not alienable and disposable, no one can technically own land in the sitio. Thus, claimants with tenants can only be considered "pseudo-landlords."

²In Luzon, the new pilot projects were located in Sablan, Benguet (CAR Region); in Caba, La Union (Region 1); in Maddela, Quirino (Region 2); Botolan, Zambales (Region 3); Sta. Maria, Laguna (Region 4); and Baras, Catanduanes (Region 5). In the Visayas, these were located in Buenavista, Guimaras (Region 6); Catmon, Cebu (Region 7); and Camansihay, Tacloban City (Region 8). In Mindanao, these were located in Labason, Zamboanga del Norte (Region 9); Alubijid, Misamis Oriental (Region 10); Magsaysay, Davao del Sur (Region 11); and Pamantingan, Sultan Kudarat (Region 12). In

addition to the Bulolakaw-Cebu pilot project, the two other "old" sites were in Malan-og, Mansalay, Oriental Mindoro (Luzon); and Pamucutan, Zamboanga City (Mindanao).

⁵The Bulolakaw women's experiences in the UDP project is the topic of Borlagdan, Salve B., Edna M. Alegado, Isabel M. Carrillo, and Joselito F. Alcaria, "The Cebu Integrated Social Forestry Project," in Jeanner F.I. Illo (ed.) *Gender Issues in Rural Development: A Workshop Report*, Quezon City: Institute of Philippine Culture, Ateneo de Manila University, 1988.

⁶The fertilizer project in fact ran counter to environmental stabilization objectives of the project since it promoted the use of chemical/inorganic fertilizers rather than organic fertilizers.

⁷The International Council for Research in Agroforestry (ICRAF) defines agroforestry as "land use systems and practices in which woody perennials are deliberately grown on the same land management unit as crops and/or animals, either in some form of spatial arrangement or in a time sequence, and in which there is a significant interaction between the woody perennials and the crops or animals." Quoted by Bill Macklin, "Overview of Agroforestry Systems: A Classification Developed for Extension Training," in *Agroforestry Land-Use Systems: Proceedings of a Special Session on Agroforestry Land-Use Systems in International Agronomy*. American Society of Agronomy Annual Meeting, 28-29 November 1988, Anaheim, California, p.1.

⁸The rest could not be awarded stewardship certificates because they were nonresidents of Bulolakaw and had farmlands in other parts of the municipality.

⁹The complaint was one of breach of personal contract and therefore classified as an estafa case outside the jurisdiction of the FMB lawyers. See Borlagdan, S. B. *Working With People in the Uplands*, pp. 94-96.

¹⁰The project itself experienced its own crisis when the male PFC was shot by an unidentified assailant in the staff house one evening in 1988. The incident occurred at a time when peace and order was a problem due to alleged marijuana production in nearby sitios.

References

- Bacalla, D., Borlagdan S. B. *et al.*
1989 *Implementation Manual for Participatory ISF Projects*. Quezon City: Upland Development Program, Department of Environment and Natural Resources.
- Borlagdan, Salve B.
1987 *Working With People in the Uplands*. Quezon City: Institute of Philippine Culture, Ateneo de Manila University.
- Borlagdan, Salve B., Edna M. Alegado, Isabel M. Carrillo, and Joselito F. Alcaria,
1988 *The Cebu Integrated Social Forestry Project* in Jeanner F.I. Illo (ed.) *Gender Issues in Rural Development: A Workshop Report*. Quezon City: Institute of Philippine Culture, Ateneo de Manila University.
- Department of Environment and Natural Resources (DENR)
1988 Administrative Order No. 97. DENR
1990 *The Upland Development Program. UDP Brochure* (October).
1991 Administrative Order No. 4. DENR (February).
- Korten, David C.
1980 *Community Organization and Rural Development: A Learning Process Approach. Public Administration Review*.

-
- Lauer, Robert H.
1977 *Perspectives on Social Change*. Allyn and Bacon, Inc.
- Macklin, Bill
1988 Overview of Agroforestry Systems: A Classification Developed for Extension Training in *Agroforestry Land-Use Systems: Proceedings of a Special Session on Agroforestry Land-Use Systems in International Agronomy*. American Society of Agronomy Annual Meeting, (28-29 November) Anaheim, California.
- Raymundo, Ma. Cristeta, Carmenia May Magno, and Salve B. Borlagdan
1990 Bulolakaw Update. *IPC PM Report No. 2*. (June).
- Simmel, Georg
1955 *Conflict*. Translated by Kurt H. Wolff. New York: The Free Press.