



Decentralization and Sustainability:
A Case Study of an Upland Community

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Abstract

This paper poses two questions: (1) Is decentralization a better alternative to central state control in the management of upland resources? (2) Can decentralization promote sustainable upland development? In tackling these, the paper first describes the framework of environmental governance in the Philippines, and the actors and their roles. It describes governance space for upland resources as consisting of three elements: hierarchy or levels of governance, sectors and themes. The third and fourth parts demonstrate the experience of an upland municipality in Bukidnon in trying to achieve upland sustainability in the era of decentralization. The fifth part discusses the challenges in implementing the municipality's watershed management plan, noting that the problem of upland degradation in the 21st century is not just deforestation anymore, but the consequences of intensive upland agriculture.

Given the insights in our study site, we conclude that decentralization is a better alternative to central state control in upland resource management, but the paradigm in its present form is not the absolute answer to sustainable upland management. There are governance conflicts that need to be managed and that more innovative ways of resource governance will bring this community, and similar other upland communities to a more sustainable development path.

1. Introduction

The Local Government Code (LGC), passed in 1991 was a landmark law that revolutionized the Philippine governance structure. Among others, it gave local governments more power to manage their own natural resources; facilitating sustainable development¹ (Brillantes, 1996). With this power shift, local governments must assume accountability and responsibility in achieving the sustainable development goals of the country. The *codal* provisions of the LGC strengthened the legal framework for attaining sustainability at the local level. The LGC further invoked the participation of the civil society, and the involvement of the private sector in providing opportunities for financing and developing local enterprises.

The decentralization of decisions was a strategy facilitated by external or even domestic pressures to transfer the power closer to those who are most affected by the exercise of that power. As Agrawal and Ostrom further (1999) point out "In all its

¹ Sustainable development as a policy started when the Philippines signed the accord developed in Rio de Janeiro in 1992. During this meeting, governments have accepted the challenge that "the more rationale choice for human society is the road to development that blends sound environmental policies with economic stability" (Habito 1995).

variants, decentralization is about a renegotiation of the institutions and the social arrangements through which this power is exercised in different forms. It is concerned with the distribution of power, resources, and the administrative capacities through different territorial units of a government or local groups. Therefore, the most important element in understanding devolution and whether it is likely to occur is attention to the politics that surrounds it.”

Despite the LGC, which started full implementation in 1996, environmental degradation in the uplands has been on-going and at a more rapid rate (Deutsch et al, 2001). After almost a decade, it would be worth noting the implementation challenges of this code seen from an upland community’s point of view. Some of these are jurisdictional, technical and administrative capacities; and financial challenges. Whether decentralization’s impact on upland communities’ environment is positive is still an empirical issue. Understanding its implementation difficulties can guide planners in reshaping strategies to generate desired outcomes.

In this paper, we take the experience of Lantapan, Bukidnon to illustrate the strengths and weaknesses of the current legal framework and the issues and concerns that accompany the implementation of the LGC at the municipal level. It poses the question- is decentralization a better alternative to central state control in the management of upland resources?

To set the stage for the analysis, the second part of the paper describes the framework of environmental governance in the Philippines, and the actors and their roles. It describes governance space for upland resources as consisting of three elements: hierarchy or levels of governance, sectors and themes. The third part is a description of the study site and part four illustrates watershed management at the municipal level. The fifth part discusses the challenges in implementing the municipality’s watershed management plan with decentralization, noting that the problem of upland degradation in the 21st century is not just deforestation anymore, but the consequences of intensive upland agriculture. The last part answers the question: “Can decentralization promote sustainable upland development?”

2. Governance of Upland Resources: Actors and their Roles

2.1. Framework for Decentralized Governance of Upland Resources

Governance of upland resources can be characterized in terms of the multiplicity of state institutions, hierarchy of coverage of the institutions (national to local), the different mandates, and the involvement of different sectors (government agencies, non government agencies, people’s organizations, etc) and the issues over its use (technical, social, economic, political). “Governance space” of upland resources is defined by *hierarchy, sectors and themes* (**Figure 1**).

Decisions and actions for resource management are not events that occur by themselves; but are a product of complex competition and collaboration among institutions (Malayang 2004). These institutions and their constituencies will either

compete (which will most likely occur if their mandates overlap) or collaborate (if their mandates are complementary) to address one or more concerns on upland resource management. This cooperation or competition will depend on the power of the institution to influence decisions. Power of institutions is a creation of many factors as enumerated by Malayang (2004): its statutory mandate, its customary recognition, its human, technical and financial competence, its political clout; its social standing and those of its leaders and staff; and the size and vastness of its constituency. While the local governments have the legitimate mandate for local environmental governance, it could be the lack of capacities and the credibility with the public they serve, that at the moment can be a source of weakness.

2.2. Governance of Upland Resources in the Philippines

In the Philippines, the national government and its agencies still have the power over most decisions because of political clout and financial and technical capacities. The local governments, are seen to be still weak in capacity and financial capability but were given due powers to exercise need to assert their stakes. Furthermore, other sectors also come into play. The decentralization law allowed local governments to govern the soil and water resources within their political boundaries. Aside from political boundary planning, LGUs also plan for environment as a group of communities or a “watershed cluster.”

Hierarchies of Governance—National to Local

National Level

Philippine laws state that it is the duty of the national government to maintain ecological balance. Various institutions articulate this function at the national level and these have regional and provincial counterparts.

The Department of the Environment and Natural Resources (DENR) is tasked to lead in this function at all levels of governance. The Department of Agriculture (DA), and its affiliate agencies including the National Irrigation Administration (NIA), the National Power Corporation (NAPOCOR) and other bodies dealing with use of natural resources naturally serve this function as well. The Department of Agrarian Reform (DAR) allocates Alienable and Disposable land in the uplands. The Secretariat of the Philippine Council for Sustainable Development is housed in the National Economic and Development Authority (NEDA). The National Commission for Indigenous Peoples (NCIP) is mandated to look after the welfare of the upland tribes.

Regional Level

The agencies mentioned above have regional offices in each of the 13 regions of the country. These offices implement the mandates of the national offices at the sub-national level. For instance, the regional DENR serves as chair of the Protected Areas Management Board (PAMB) in cases where the protected area is bounded by several provinces. Maintenance of water quality in the region is a mandate of the regional Environmental Management Bureau (EMB), a regulatory agency for water under the DENR. The regional DA and DAR have programs national in scope and funding, and are

managed by the regional staff. For the DA, the functions of the regional offices are for implementation of national programs and research and development activities.

Provincial level

With the devolution, the Office of the Governor hosts the provincial level offices of the national agencies mentioned above. The Local Government Code provisions pertaining to environmental concerns at the province level include: 1) the enforcement of forestry laws diverted to community-based forestry projects; 2) Pollution control law, small-scale mining law, and other laws on the protection of the environment; and 3) Mini-hydro electric projects for local purposes. The Provincial Environment and Natural Resources Office (PENRO) is the line agency of the DENR at the local level, and is accountable to the national DENR. PENRO is mandated to grant permits on land gravel, quarry projects, does the monitoring functions including the monitoring of the Environmental Clearance Certificate (ECC) compliance. Their responsibility includes the management of the Community Based Forest Management (CBFM) program.

Most provinces create their own Environmental and Natural Resources Office (ENRO), funded by the local government. Monitoring compliance is ENRO's concern, which duplicates the role of the line agency, PENRO. Complete devolution of the PENRO to local governments takes place when the provincial government is willing to place the structure within the local government's budget and supervision. However, in most cases, the provincial governments hesitate to do so.²

The appointment of the ENRO by the provincial government is optional. In contrast, each province must have a Provincial Agricultural Office (PAO). The Agriculturist coordinates with government and non-government agencies that promote agricultural productivity through appropriate technology "compatible with environmental integrity" (LGC 1991).

Municipal level

In the same manner as the province, the municipal mayor is the office in charge of the municipal level bodies of the national agencies that take care of the environment. The municipal government's mandate for upland resource management are as follows: 1) water and soil resource utilization and conservation projects; 2) implementation of community-based forestry projects including the Integrated Social Forestry Program and similar projects; 3) management and control of commercial forests with an area not exceeding fifty (50) square kilometers, and 4) establishment of tree parks, green belts, and similar forest development projects but *pursuant to national policies and subject to supervision and review of the DENR*.

The Municipal Environment and Natural Resources Office (MENRO) and the Municipal Agricultural Office (MAO) are both optional for cities and municipalities.

² Because most of the personnel of the PENRO are already retirable, devolution would mean that the local government bears the burden of the pension payments of the devolved national staff.

Village/Barangay Level

As the basic political unit, the barangay³ is the primary planning and implementing unit of government policies, plans, programs, projects, and activities in the community, and as such serves as a forum where collective views of the people may be expressed, crystallized, and considered, and where disputes are amicably settled (LGC, 1991). The barangay government also has three branches: executive, legislative and judiciary. On the management of natural resources, the executive is mandated to enforce laws and regulations relating to pollution and the protection of the environment; the legislative body can prescribe fines for violation of barangay ordinances; while the judiciary (*Lupong Tagapamayapa*) which is chaired by the barangay head, settles disputes. In barangays where majority of the members are from the cultural minorities, local systems of settling disputes through their councils of datu or elders shall be recognized without prejudice to the applicable provisions of the LGC (Chapter 7, sec 399 (f), of the LGC 1991).

At the “barangay” level, environmental programs are initiatives of the households and communities who have a common environmental cause. This happens in communities where people trust one another; and are willing to act in behalf of the other. Local community can sponsor fund- raising campaigns for environment programs; volunteers guard the forests.

Sectoral Governance

Various state and non state sectors are involved in upland resource management.

Following the Earth Summit in 1992 in Rio de Janeiro, the national government created the Philippine Council for Sustainable Development (PCSD)⁴ (DENR, 1990).. The PCSD is mandated to oversee and monitor the implementation of the Philippine Agenda 21 (PA 21), the Philippines’ blueprint for sustainable development, by providing the coordinating and monitoring mechanisms for its implementation. The PCSD served as guide in the environment and sustainable development initiatives in the country. PCSD formulated the Philippines’ Agenda 21, as the country’s blueprint for sustainable development. It is among the first institution in the country to adopt the principles of counter-parting and consensus building in their structure. It institutionalized the participation of members of the civil society as counterparts of government representatives (PCSD nodate a).

As the LGC was aiming for full implementation in 1996, the PCSD’s mandate was strengthened to mobilize coordinating bodies, including the Regional Development

³ A barangay may be created out of a contiguous area with a population of at least two thousand (2,000) inhabitants. But to enhance delivery of basic services in the indigenous cultural communities, barangays, according to the LGC (1991) may be created in such communities by Act of Congress, even without the required number of people stipulated above.

⁴ This is headed by the Director-General of the National Economic and Development Authority (NEDA) as Chairperson, the Secretary of the DENR as the Vice-Chairperson and with membership coming from both government and non-government organizations.

Councils and the local councils for sustainable development. To date, PCSD⁵ has expanded in structure. Local councils were organized in the various regions of the country, and projects to design environmental management involved both the government and non-government sectors in a pilot watershed, province, city and other ecosystems (i.e, river management) (PCSD no date b). These were initial efforts to mainstream sustainable development into local development processes.

Currently, for each protected area in the country, there is an assigned Protected Area Management Board (PAMB) that acts as the manager. This board is composed of members of different sectors and coordinated locally. The Chair of the Board is the regional director of the DENR. The PAMB illustrates that because environment is porous, it is not practical to assign environmental management functions by political administrative units. The Philippines therefore has established structures that can take care of resources spanning several local government units (PAMB, the watershed management councils, the river councils, etc)

The LGC required municipalities to establish the Natural Resources Management Council (NRMC) that is tasked to oversee the implementation of the municipal natural resources management plan. This is a multi-sectoral group comprised of representatives from the agribusiness sector, NGOs, people's organizations, members of the municipal legislative council, and the provincial level agencies.

The non-state sector is increasingly concerned with environmental government issues as well. These consist of Non Government Organizations (NGOs), Peoples Organizations (POs), other local voluntary organizations, the private industry and others. They appropriate part of their resources to conservation and they also partner with civil society people in the implementation of programs. These organizations straddle along the hierarchical space. The more effective for natural resource management could be the local level institutions (Rasmussen and Meinzen-Dick 1995), such as village level people's organizations as they are closer to the people and the resources they protect.

Thematic Governance

The third aspect of upland resource governance as we have illustrated in Figure 1 is the various themes such as watershed management, water management, sloping land management and forest management. In practice, watershed management already subsumes the three other resource management efforts to get a whole picture.

For upland agriculture which is our theme of interest, the relevant resources are the sloping land management and the water management, and are parts of the activities within an ideal watershed management plan.

⁵ An assessment of PCSD showed good governance practices: by including participation of civil society, by granting NGOs/POs a role in policy decisions through consensus building, and by being transparent. The PCSD embodies the true meaning of "people empowerment." More and more, it is an arena where business, government, and civil society can come together to address issues both at the national and local levels.

2.3. *Issues in Implementation of Decentralized Governance*

Several issues come into play in the decentralization process. Some of them are the following:

Incomplete Decentralization

The national DENR is represented by two line agencies: the PENRO mainly for forest protection and titling, and the CENRO for watershed management.

Sometimes local government would have their own PENRO office, accountable to the provincial government, to take care of devolved functions, e.g. small-scale mining (Sumbalan, 2001). PENRO assists the LGU in technical matters. For instance, while a devolved function, CBFM implementation still needed national DENR guidance, as the local officials don't have the technical expertise in community organizing and site development.

Multiplicity of Local Institutions

A host of local agencies do environmental management at the local level. In the protected areas, the CENRO works with the PAMB. CENRO also works with Peoples' Organizations (POs) that were contracted by DENR. Currently, the thrust of the CENRO activities is capacity building for persons involved in watershed management activities of the different watershed clusters.

Non Coordination of National and Local State Agencies

There is lack of coordination in the management strategies between national and local bodies. An example is in the use of water - water allocation mechanism in the uplands is non-existent. In a province, there are usually two GOCCs that govern water use. One is the National Power Corporation (NPC)⁶ which is charged with management of the portion of the uplands that are needed for their operations. The other agency, the National Irrigation Administration (NIA) does not have any influence on the quantity and quality of water flowing in their irrigation canals. The NIA provincial office has no projects related to watershed management, as it sees this to be the job of the DENR. This lack of coordination leads to lack of information about policies that should have governed activities like watershed protection⁷ by the NPC.

⁶ Over the last ten years, it has been initiating watershed management programs in these areas. In the Pulangui-Agusan-Talomo Watershed Area, NPC has been implementing projects related to watershed management through its watershed management division. Budget allocation for watershed management activities by the NPC has been sustained from 1994 to the present. Currently, NPC has a total of 26⁶ personnel in the Pulangui-Agusan-Talomo watershed area team.

⁷ The implementation of the law on easement suffered from this lack of information. The law states that permanent trees, e.g. bamboo, should be planted within forest land 40 m both sides of rivers or creeks (the protection forests). But according to NPC officials, no one advises them on what kind of trees to plant. GOCCs, according to the PENRO foresters in Bukidnon, have no technical knowledge and would need some orientation, but there is no mechanism for DENR to collaborate on this.

Jurisdictional Issues

Interviews with the local officials in Bukidnon revealed that mandates and jurisdictions including programs among the different environmental offices are slowly beginning to be more clear to the officers concerned (Rola et al. 2004). The critical factor was the political will of the current provincial administration to deal with devolved function. There will be no conflict between national and local agencies as long as they have defined their functions.

3. Decentralization, Governance, and Resource Management in an Upland Municipality⁸

3.1. Study Site

The study municipality, Lantapan in the province of Bukidnon, is located in the Southern Philippine island of Mindanao. It has a landscape that climbs from river flats (300-600m) through a rolling middle section (600-1100m) to high-altitude, steeply sloped mountainsides (1100m-2900m). It hosts the headwaters of a major river (the Manupali) that runs into a dam which diverts flow into a network of canals comprising a 4,000 hectare irrigation system constructed by the Philippines' National Irrigation Authority in 1987. The entire system ultimately drains into the Pulangi River, one of the major waterways of Mindanao Island, about 50 kilometers upstream from the Pulangi IV hydroelectric power generation facility, one of the six largest hydro power generating plants in the country.

The population in the study area has risen since 1980 at an annual average of 4%, much higher than the Philippine average of 2.4%, mainly due to in-migration. Population growth rate during 1990 to 2000 however indicates a reduction to just about the same level as the national average of 2.3%. About 43% of the total population in 2001 belongs to the indigenous tribe called *Talaandig*.

In spite of rapid growth in recent decades, agriculture continues to dominate the economy of the municipality and of the province. More than half of the municipality's land area is devoted to agriculture, mostly planted to annual crops. The lower footslopes produce corn and sugarcane; corn is dominant in the upper footslopes that make up the largest area of the watershed. Coffee is an important secondary crop at middle altitudes, while at higher elevations, corn is planted alongside both coffee and temperate-climate vegetables such as: beans, tomatoes, cabbages and potatoes. Starting in 1998, at least ten commercial hog and poultry firms started putting up business; in 1999, two banana companies were established in the area in both the upper and lower parts of the town. About 500 hectares of bananas were formerly corn farms. In the early times, both logging and forest fires facilitated agricultural expansion. In recent decades, however, the profitability of commercial vegetable cultivation has been the primary impetus for forest encroachment, with decisive contributions from road development and the lack of well-

⁸ Taken from Rola and Coxhead (2005).

defined and enforced property rights in land (Cairns 1995). The expansion of vegetables and plantation crops in lieu of cereal crops in the area is also a result of favorable price and trade policies.

3.2. *Environmental Consequences of Development*

Lantapan's forestland was opened by commercial loggers granted a Timber License Agreement (TLA) by the national government. Agriculture followed the loggers, with migrants from other parts of the Philippines contributing to rapid area expansion. Rapid deforestation took place from the 1950s to the 1990s. The uplands were indeed seen as a source of "green gold" by lowlanders (Malanes 2002), and the spread of intensive upland agriculture was largely driven by market opportunities (Coxhead et al. 2001). Fallow periods were short, and in general, soil conservation measures were not practiced, leading to significant land degradation. During 1974-1994, primary forest cover was reduced from half to less than one third of municipal land area, being replaced mainly by corn and corn-based farming systems (Li Bin 1994). Resource management decisions were the responsibility of national agencies (especially those now known as the Department of Agriculture or the DA and the Department of Environment and Natural Resources, or the DENR), although in practice, land use rights and practices were allocated largely through local and informal mechanisms. In-migrants (some relocated from Northern Luzon highland areas in government programs) acquired land from indigenous people in exchange for small sums or in barter trade; ownership claims were established through officially invalid means such as land tax declarations (Paunlagui and Suminguit 2001). In Lantapan, the transition from customary law to forest and agricultural land race occurred in little more than 2 decades following Independence.

Our data show that deforestation rate has decreased in the past decade. The estimated rate of deforestation is about -0.6% annually during the period 1994-2001, less than half that of the -1.4% national estimate during same period. Outmigration has begun to be observed, especially though not exclusively during the drought years 1997-98 (Rola et al. 1999). On the other hand, agricultural intensification continues driven by opportunities in domestic and international markets. Land use data also confirms the intensive cultivation mostly of annual crops not just in the lower slopes, but likewise in the upper watershed. Water quality monitoring since 1994 in several watersheds shows that measures of total suspended solids (TSS) are considerably higher in those areas where agricultural cultivation is more widespread, in spite of lower average slope, and that seasonal TSS peaks appear to coincide with months of intensive land preparation activity (Deutsch et al. 2001).

On a wider watershed scale, other consequences of rapid and increasing soil erosion rates as a result of agricultural intensification can be seen in the deterioration of the two water impoundment structures,⁹ the MANRIS diversion dam and the Pulangi IV hydro power installation on the Pulangi River, located a few kilometers below the junction of the Manupali. Although forest management policies and strategies to reduce deforestation were adopted in the 1990s, and despite a ban on commercial logging,

⁹ See also Pingali, 1997, for similar evidences elsewhere in Asia.

policies to promote sustainable upland management have yet to translate into better environmental health.

3.3 Municipal Governance under Decentralization: Watershed Management in Lantapan, Bukidnon

A watershed,¹⁰ also termed as a catchment, refers to areas that supply water by surface or subsurface flow to a given drainage system, be it a stream, river, or lake. It is a hydrologic unit that has been described and used both as a physical-biological unit and as a socioeconomic and sociopolitical unit for planning and implementing resource management activities (Dixon and Easter 1986). The watershed approach to resource management has a strong biophysical and economic logic. The appropriateness of the watershed as a unit of planning was that water flows downhill and that this phenomenon creates a unidirectional dimension to the cause and effect relationships. Soil, nutrients, and agricultural chemicals are all transported in the water medium. Embedded in this approach is the linkage between uplands and lowlands not only in biophysical but also in socioeconomic contexts.

Watershed management was a traditional concern of the DENR only. It is construed as the area protecting the headwaters of a river. With the more recent definition (Dixon and Easter 1986), multi-sectors are naturally involved in the management. This latter concept is quite new in the Philippines.

Bukidnon started to divide the province into watershed units since 1999, although the system is not yet operational in other areas of the province. Lantapan's story is described below.

3.3.1. The Lantapan Watershed Management Plan

Lantapan belongs to two bigger watersheds- the Upper Pulangi and the Manupali watershed (**Figure 2**). It is wholly contained in the Manupali watershed, the later is wholly contained in the Upper Pulangi watershed. Some parts of Manupali and Lantapan are within the jurisdiction of the Mt. Kitanglad Range Nature Park (known as the Park), a protected area. Therefore the management¹¹ of Lantapan resources is influenced by: 1) the management of the Mt. Kitanglad Range, the headwaters of the Manupali; 2) management of the agricultural areas that are within the jurisdiction of the Manupali watershed; and 3) the management of the watershed cluster (Upper Pulangi) to where the Manupali belongs. Each of these actors has its own management plans and implementing units.

Evolution of the Municipal Watershed Management Plan

The period 1996-1998 was an exciting one for Lantapan in terms of environmental management. While the devolution orders took effect in about 1992, Lantapan started to address the issue on appropriate natural resource management in 1996. Lantapan government invoked its mandate from the LGC that enjoined local

¹⁰ A river basin is similarly defined (Dixon and Easter 1986) but is of a larger scale.

¹¹ Over and above these plans is the ancestral domain management plan as provided in the Indigenous People's Rights Act (IPRA).

governments to prepare their own local environmental programs, by developing a Natural Resources Management Plan (NRMP). Key pillars of the vision of the Lantapan NRMP include: a) improving water quality, quantity and distribution, b) conserving soil for sustained productivity; and c) protecting the remaining forests. To realize these, the NRMP called for support to programs for natural resources management and improving the capability of the LGU and the community groups for program implementation (Queblatin, Catacutan and Garrity, 2001). An initiative of the former Mayor Teddy Pajaro, the plan was an effort to incorporate the scientific and research outputs that have been assembled (Lai, et al, 1998) with the implementation of the SANREM Project in Lantapan.

To move a step ahead in the plan's implementation, then Mayor Pajaro executed an administrative order creating the natural resource management council (NRMC) to provide local leadership in the development and implementation of the natural resource management plan, and more importantly, serve as the local government's policy arm in various aspects of environmental decision making. Thus, in 1998, a municipal ordinance was passed which set up the structures to provide the implementation of the plan (Sumbalan and Buenavista, 2001). This ordinance was conceived as a way to institutionalize NRMP across political administrations. But efforts along these failed to get votes for the mayor in the elections held May of 1998, which supported the point that "local officials have hardly any incentive to act in the interest of watershed preservation" (CCLE, 2000).

The litmus test came when the change of administration occurred in May 1998 elections. The new mayor, Atty. Narciso Rubio, initially, seemed less enthusiastic in implementing the NRMP and questioned the composition of the NRMC, leading to a setback in the plan implementation.

But later during Atty. Rubio's administration, Lantapan entered into a MOA with Local Government Support Program¹² (LGSP) to develop the plan on natural resource management focusing on watershed management. After training the LGU staff on Natural Resource Management, there was an agreement that they would come out with their own watershed management plan based on the framework plan of the whole Bukidnon.¹³ The Municipal Technical Working Group (MTWG) for Watershed Management and Development composed of 10 member representatives from LGU (municipal and provincial), NGOs and other organizations crafted the comprehensive watershed management plan of Lantapan.

The municipal watershed management plan covered mostly the lower watershed portion, the alienable and disposable lands and those of private agricultural lands, in the confines of Lantapan. This plan to be coordinated by the local government unit was approved by the Sanggunian Bayan (SB) last September 2003. Altogether, the municipal plan will guide in the management of the production forest, the agricultural lands and the water resources in its domain.

¹² CIDA provided funds for training of LGU officials.

¹³ At the province level, all municipalities and cities have just formulated and submitted their final watershed management plans. The LGUs in Bukidnon have appropriated a total of P14.97 M for watershed management for CY 2004 (BWPDC minutes of the meeting, Feb. 20, 2004).

The upper watershed agricultural areas and other A and D lands in Lantapan are theoretically under the jurisdiction of the Park management. The Park's management plan,¹⁴ completed in 2000, is the responsibility of the Protected Area Superintendent¹⁵ (PASu) who is directly accountable to the PAMB. The Provincial DENR supervises the day-to-day activities. The management of the Park institutionalizes the sustainable management regime exercised by the empowered communities (of both the IPs and the tenured migrants) who enjoy a firm tenure over the resources, and are actively involved in biodiversity conservation and protection activities, and supported by the government and a public which has internalized conservation values and respects cultural integrity (Sumbalan, 2004).

The Upper Pulangui (cluster) watershed management plan, to be owned by the cluster of municipalities contained in the Upper Pulangui has not been formally formed as of 2004. This is to be the responsibility of the province-level Bukidnon Watershed Protection and Development Council (BWPDC).¹⁶

Existing Municipal Level Programs

Even without the approved watershed management plan, Lantapan has been implementing projects for rehabilitation of its critically denuded watershed through the support of both national and local government agencies (DA, DENR, Barangays, Municipal Government), NGOs, POs, and two (2) banana plantation companies. Activities include: 1) information drives for local people to be aware of the natural resources in Lantapan and the need to conserve and protect its resources, 2) bamboo planting along riverbanks, and 3) agro-forestry program for the small-scale farmers. This was still an outcome of the earlier Lantapan NRMP. The activities do not only involve the water issue but also issues on soil, forest, biodiversity and community awareness and cooperation. To be noted are the different implementers with corresponding sources of funds. In the past, there was no office in the municipal government to coordinate all of these. Presently, environment related programs are being coordinated through the Municipal Management Office (MMO) and support staff such as NRM Program, Land Care, Clean and Green, Solid Waste Management Program, CBFM and other existing structure.

Planned Municipal Level Programs

The proposed development projects under the Lantapan Watershed Management Plan (2002) are defined by ecozone in the four main tributaries of the Manupali

¹⁴ Among its management strategies are the following: 1. Adoption and implementation of an effective park protection, zoning, and resource management program; 2. Formulation of an integrated policy and livelihood support and assistance framework for the conservation, sustainable use and economic development of protected areas beneficiaries in partnership with the local communities; 3. Ensuring biodiversity conservation awareness and information programs; and 4. Institutionalization and strengthening of capacities for effective protected area management and supervision.

¹⁵ The office of the Protected Area Superintendent (PASu) became functional in 1994.

¹⁶ It is composed of the following: a) Provincial Government, b) Representative from concerned National Line Agency, c) Local Government Units (LGUs), d) sectoral institutions including NPC, and e) NGOs covered by specific watershed clusters in the province.

watershed, considered sub-watersheds of Lantapan. This will facilitate easy consolidation with the plans of other municipalities where Manupali River crosses. In each of the ecozone, almost the same sets of activities are listed, revealing lack of capacity at the very local level to determine their real needs. Some of these activities could be just copied from other planners or suggested by the trainer.

3.3.2. Implementation Issues

Administrative Set-up and Jurisdictional Issues

The Lantapan Watershed Management Council, a multi-sectoral body, oversees the implementation of environment related programs and projects of the municipality. Because there is no designated MENRO, it is the BENRO that is tasked to coordinate the implementation of the management plan. There is no expertise at the municipal level to carry out this plan as the MAO is also not trained to implement elements of the plan.

Lantapan also derives benefits with the implementation of the Park's plan. Some 370 Kitanglad Guard Volunteers (KVG) administratively under the national DENR guard the forest and watch out for forest fires. These members of the local indigenous communities (IPs) promote biodiversity conservation in the protected area and do patrol activities within the park. They report on illegal activities to the DENR and PASu aside from posing as escorts to DENR personnel during visits and are responsible in hauling apprehended logs within the park. They are annually deputized by the DENR to do the community-based park protection. But the link between the buffer zone guards who are the staff of the national DENR and the MENRO and BENRO is not clear at this time.

Funding the Plan

The Lantapan Watershed Management Plan is for five years and is seen to guide the implementers in providing appropriate interventions to primarily solve the acute water supply problem (LWMC 2002). The budgetary requirement for the plan is PhP 4.7 million but there is no guarantee that funds will be available for implementing the management plan. According to local officials of Lantapan, the town may be compensated for their stewardship of the water used by resource users like the NPC, and the NIA, and even the Valencia Water District. The rates of payments are still a subject of study. There are no plans for the strategies to protect soil resources in the meantime that intensive agriculture is taking place. While deforestation has been curbed to a certain extent with the operation of the PAMB, the other "threat," agricultural intensification is not seen as a reason to implement the plan.

The Park meanwhile has come up with the financial requirements to implement the plan at least for the next five years. This was facilitated by several factors: 1. engagement of local communities in the activities and hence, some savings in the protection and guarding of the park; 2. local governments committed funds as a result of mutual trust among the membership of the management body, the PAMB; and 3. the trust and confidence given by the private sector to the PAMB in the management of the Protected Area. Other entities such as the DENR and the NGOs, the local indigenous and migrant communities who are directly dependent on the park maintain their stake in the Park management (Canoy and Suminguit, 2001).

Financial support for Park management has had humble beginnings. In 1993, municipal mayors had to fund meetings from their own pockets. The park was also one of the country's 10 sites covered under the Conservation of Priority Protected Areas Project¹⁷ (CPPAP), a seven-year project that took off in 1994. During the life of CPPAP, fund amounting to P6.9 million were provided to the indigenous peoples for non-destructive livelihood activities (NDLA), mostly in terms of agro-forestry related projects; and PhP12 million for production related livelihood activities.¹⁸

With the termination of the CPPAP in June 2002, the LGUs and their barangay counterparts took over funding the implementation of the plan. In the later years, the local governments have also increased their funding for watershed management activities. In 2004, PAMB solicited funds from the private companies who are downstream resource users of the watershed services by organizing a water policy forum. An amount of P48 million was pledged for the next twenty years (Sumbalan 2004).

Management Instruments

The provisions of the plan should have supporting municipal ordinances for these to be legal and to be implementable. This ordinance defines the rewards and penalties for non-compliance¹⁹. There is an ordinance encouraging farmers to practice soil conservation measures in Lantapan. The incentive was that those practicing would have the priority participation in the DA's production program. Other ordinances being implemented by the local government to protect its environmental resources are on waste disposal, management of stray animals, sustainable agriculture (i.e., requiring all farm tillers to adopt contour farming on all sloping areas , and watershed protection. (Tabien, 2000). It is suspected that since violations are not monitored, these ordinances may not really be put into effect.

Monitoring and Evaluation

The Municipal Management Office coordinates the activities, but lacks the capacity to monitor implementation. No institution for monitoring and evaluation has been established for activities done. This is a serious gap in the implementation of the plan. Aside from the structure, there also seems to be a need for capacity building for monitoring and evaluation.

¹⁷ The grant is managed by the World Bank, in partnership with the Government, the Philippines (represented by the DENR) and the NGOs for Integrated Protected Areas (NIPA). All of these three are bound in a tripartite agreement. The NIPA is a national consortium of NGOs that manage the local host-NGOs selected at the site coordinating the project together with its counterpart entity, the DENR-Park Superintendent's Office (PaSU), and its corresponding PAMB.

¹⁸ The NDLAs rest on the principles of balancing sustainable development and biodiversity conservation to uplift the socio-economic conditions of the IPs and tenured migrants in order to mitigate human pressure on the protected watershed. A total of 79 POs are implementing NDLA Projects in the park and some of them became beneficiaries of CBFM Projects and are currently managing integrated livelihoods undertakings.

¹⁹ However, according to local partners, this will be difficult, given that community members consider themselves as members of the same clan, and the norm is that one cannot punish a "brother." But the IP tribe can improve a "sala," a customary rule of punishment (Mordeno, 2003).

3.3.3. *Partnerships with Local Organizations*

Grassroots' management of upland resources will be effective if in partnership with institutions that use these resources. In Lantapan, this meant collaboration by indigenous communities, the local governments, and the PAMB. Other institutions involved in the management are the special interest groups such as the tenured migrants, industry sector (such as agribusiness (banana, poultry) and relay communication operators) as well as voluntary organizations (such as the mountaineering societies, research and academic organizations (Mt. Kitanglad Range Management Plan, 2000). Other resource institutions involved in the conservation activities within the park including international research centers.²⁰ Since resources are limited, especially human resources, LGU's partnering with communities is needed in the protection, conservation, rehabilitation, of upland resources. This is devolution in the strict sense (Meinzen-Dick and Knox 1999).

The SANREM project introduced innovations through grassroots' management of upland resources. At least three organizations now help in the governance: the water watchers, the Land care group and the agroforestry seed association of Lantapan (Rola 2005). Local organizations such as these could be cost effective partners in sustainable upland management.

4. **Municipal Governance and its Challenges for Sustainable Outcomes**²¹

Lantapan, like many upland municipalities across the country, faces a major policy challenge: promoting sustainable development that is ecologically, economically and socially sound. Decentralization does not seem to offer an easy solution. It is observed that despite the existing laws and rules, most local officials do not play a significant role in watershed management (Oposa, 2000). Studies also show that most local governments do not possess the requisite technical or managerial skills required to assume devolved functions (IIRR, LGSP, SANREM CRSP/Southeast Asia 2000; Paje 1998). Additionally, while decentralization has been considered a major breakthrough in Philippine legislature, the lack of clear guidelines has caused some local-national as well as inter-agency tension because of unclear, limited and often times overlapping mandates (Elazegui *et al.* 2001). For example, while the national government has decentralized water resource management to various local governments, national government agencies continue to interfere in local decisions such as in the establishment and role of water

²⁰ Some activities of international centers are those of the Center for International Forestry Research in the testing of an Adaptive Co-Management (ACM) approach to forest conservation and livelihood assistance to a community of farmers who are holders of community-based Forest Management Agreements (CBFMA). The Voluntary Services Overseas (VSO), on capacity building for CBFMA holders at the buffer zone. AusAID likewise promotes in the protected area farming systems improvement and the promotion of contour/conservation farming. Heifer Philippines International on animal nutrition and environmental management and providers of support to a local citizen water watch involved in monitoring of water quality and quantity, among others.

²¹ Materials for this section were mostly taken from Rola, Sumbalan and Suminguit, 2004

districts and the implementation projects to improve water supply systems (Sumbalan and Buenavista, 2001).

4.1. Challenges in Municipal Plan Implementation

Several challenges will have to be recognized early on so that expectations of the impacts of decentralization can be realized. The following discussions highlight some of these.

Sustaining Financial Support

Local officials in Bukidnon²² have high awareness of environmental issues, thus, political, social and financial support to environmental programs are generated.

But municipalities don't usually allocate budget for environmental programs; and in most instances, beautification of premises already epitomizes environmental programs. Elective officials do not have enough incentives to have workable environmental management programs, such as water and soil management; they do not see the full and concrete benefits from this that can be translated into votes.

The participation of the private sector who acknowledges that the environment is an integral input in the sustainability of their business operations downstream is also ideal, and this has to be tapped.

Limited Instruments

At the municipality and the cluster level, there has not been enough effort to generate revenues for the resources use, basically because there are no or very limited economic instruments²³ that can guide the local government to enact these. In Lantapan, water supplied to households is subsidized by the local government. Water user charges for plantation agriculture have not been properly defined.

Current thinking supports the efficient allocation principle, and thus, natural resources should be treated as an economic good. But the structure of any particular system of resource allocation is influenced by the existing institutional and legal frameworks (Dinar, et al. no date). User fees maybe legitimate and necessary, to fund activities that sustain management of watershed resources.

Institutional, Administrative and Legal Constraints

It is also common to see towns without institutional capacity to enforce the environmental mandate of the LGC. The environment is the last priority activity of an LGU. The current de facto MENRO is a staff of the Provincial Environment and Natural Resources Office (PENRO). Lantapan, however, may deputize its Municipal Agricultural Office (MAO) to take charge of the conservation activities. The Municipal Agrarian

²² Bukidnon has been awarded by the a national body the “Cleanest and Greenest” province in the country for the years 2003 and 2004.

²³ One source of revenue of the Park comes from user fee charges for the environmental services that it offers. For 2003, some Php 520,135.00 have been collected from visitors entry fee and land use fee/rental of the different establishments located at the range summit (Sumbalan 2004).

Reform Office (MARO) now charged with land distribution could also be involved in the implementation of the Plan. They can for instance avoid giving titles to non A and D lands. The MARO, MAO and the MENRO could actually work together in one office in the municipality and coordinate efforts in order to operationalize the management plan.

Human Capital Constraints

Lantapan needs to build capacity in sustainable agriculture (SA) as part of watershed management. Presently, there is one forestry graduate employed in the Municipal Agricultural Office (MAO), but is not well versed in Sustainable Agriculture (SA) technologies, including soil conservation. The agricultural technicians of the MAO can be trained to do some monitoring of soil resource degradation. The Lantapan has a trained water watch volunteer group that can be engaged by the LGU to monitor water quality (Deutsch, et al. 2001).

4.2. Lessons in Decentralization

Upland resource management can be implemented by changing the locus of decision-making from national to local agencies, but it will be a slow process and should be properly guided. Decentralizing management does not merely mean devolving responsibilities previously concentrated with the national bureaucracy but also means accompanying devolution with decision-making authority, budget and capacities, to various stakeholders. Decentralization provided a venue for the participants such as the non-government organizations, local communities, indigenous peoples, and other related projects to come together for a common purpose. Decentralization could also settle conflicts in resource access and use. The experience by the PAMB demonstrated that sensitivity and recognition of cultural and local knowledge, as well as, flexibility to negotiate with various stakeholders sustain watershed protection and development activities (Sumbalan 2004).

5. Can Decentralization Promote Sustainable Upland Management?

Decentralization, like globalization, undermines the potency of the traditional environmental management model based on regulatory constraints designed and implemented by central government agencies. After years of failed attempts at centralized control over natural resources management, opinion has now turned decisively in favor of local approaches. In Southeast Asia, as in many parts of the developing world, this shift coincides with the decentralization of numerous other government functions. Can local governments do a better job of resource management than central governments? Some advantages are clear; local administrations can be expected to have specialized knowledge of environmental and economic conditions, and therefore should also have the ability to fine-tune policy. But there are disadvantages as well.

Externalities. Jurisdictional boundaries do not typically coincide with relevant natural resource boundaries (such as watersheds), leading to problems of horizontally

overlapping control areas and unresolved externalities. When the correspondence between the boundaries of political jurisdictions and the optimal units for natural resource management is inexact, environmental policy managers have an incentive to overexploit the resource.

Accountability of local administrations is a critical constraint to socially beneficial local decision-making. At the macro level, accountability requires institutional checks and balances on the actions of local governments, private businesses and even NGOs. A strong external audit system is considered to be critical in ensuring macro-level accountability (Manasan et al. 1999). Local governments could be more fiscally responsible and accountable if they are given more taxing powers, because they are closer to the constituents that they tax. Currently, local governments in most countries in the region are authorized to collect real property and local business taxes only (Gonzales and Mendoza, 2002). In countries like the Philippines, a large portion of a typical local government's income is still controlled by central government. When local funds are limited, fiscal incentives exist for local governments to promote polluting industries and accelerate resource extraction (Rola et al. 2003). This has also been in evidence in Indonesia since the fall of the New Order regime (World Bank 2000a).

At the micro level, accountability is determined by the availability of constitutional and practical instruments by which communities acquire “voice” in the formation and implementation of local policy. While decentralization “does not guarantee that local communities will reap more benefits and be more interested in sustainable environmental management, it does increase the chances that this will happen” (Manasan 2002).

Assignment of functions A third and related problem arises from incomplete and uneven decentralization of functions. This often means that the mandate assigned to a local agency may not be matched by the authority vested to it; and also that policies applied by one agency may cancel the effects of policies applied by others.²⁴ One of the most common problems reported in the literature is the inadequate coordination between line agencies and the elected local authorities that have assumed the management of their environmental resources. Line agencies at the local level are still very much committed to national programs even if these are not consistent with local development goals. Hence, one challenge of decentralization is to “embed efforts in a framework that promotes overall national goals of economic and administrative integration, environmental quality and revenue generation while allowing sufficient flexibility in local implementation to meet unique local conditions” (Dupar and Badenoch, 2002).

Capacity constraints Finally, local governments face capacity constraints in the conduct of analysis, policy, and fiscal powers needed to implement some measures (Coxhead, 2002b). Another perceived stumbling block of decentralized system of environmental governance and management is the lack of capacity to do so at the local level. Local officials, in addition, lack the technical capacity for policy design and implementation, and for monitoring and evaluation of environmental projects. In the

²⁴ See Manasan (2002).

Philippines, most technical experts for environmental management report to the central office; only a very lean force is assigned at the field level (Manasan, 2002).

Among solutions that have been suggested to build capacity are the forging by local governments of partnerships with central governments or other entities like NGOs, and the provision of technical expertise to local officials by agencies of the central government.

We conclude, given the insights in our study site that the decentralization paradigm in its present form is currently not the absolute answer to sustainable upland management. There are conflicts that need to be managed and that more innovative ways of resource governance will bring this community, and similar other communities to a more sustainable path of development.

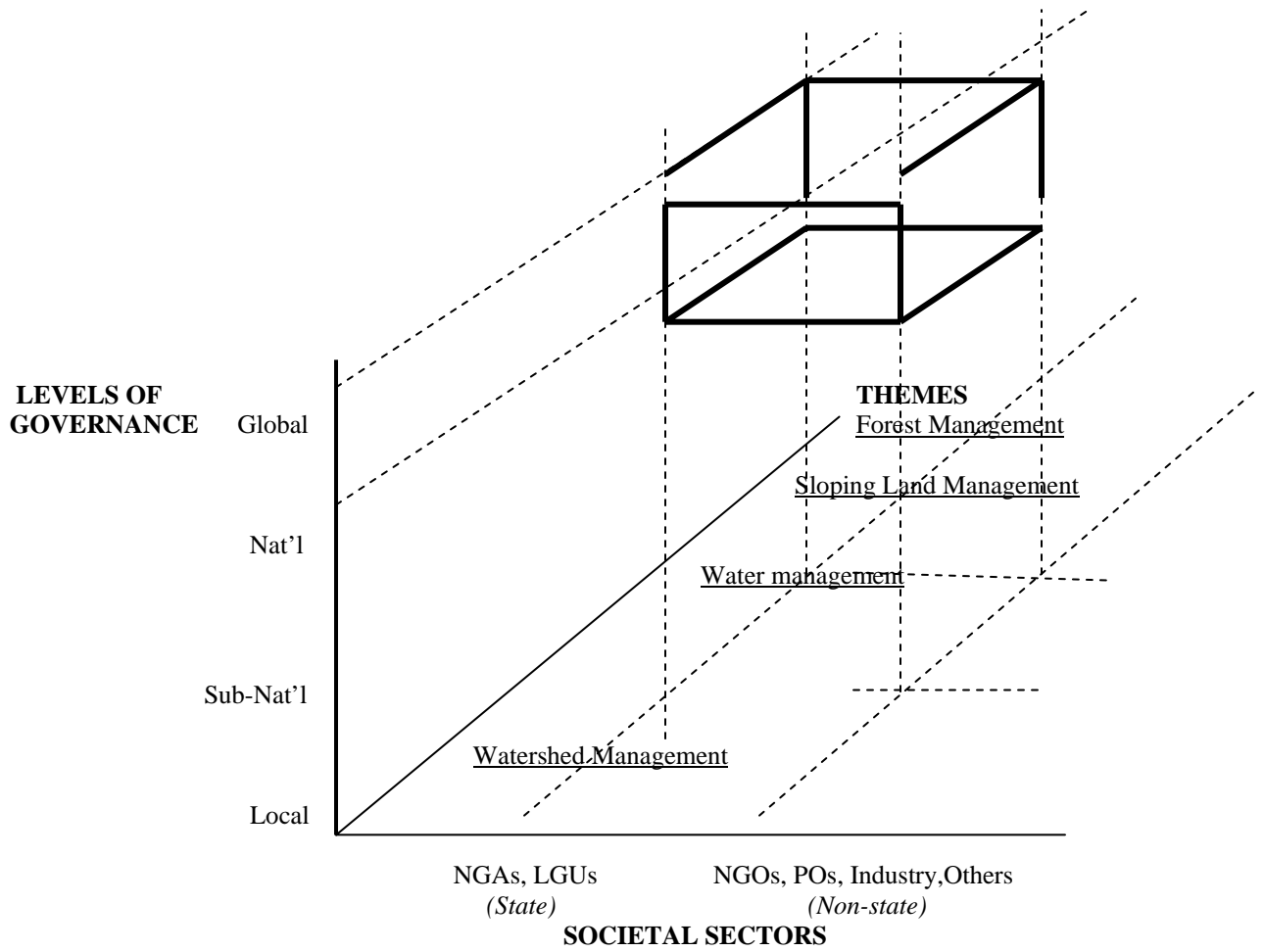


Figure 1. Three dimensions of upland resource governance (adapted from Malayang 2004).

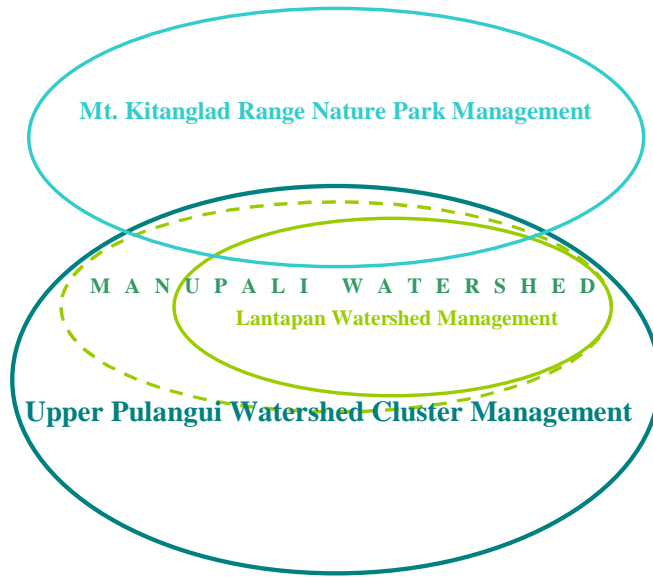


Fig. 2. Linkages of Management Entities of Lantapan Environmental Resources

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