

# Policy Imperatives for Natural Resource Management Under a Decentralized Regime: The Philippines Case<sup>1</sup>

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## ABSTRACT

*The policy link of national and local government units in natural resource management (NRM) is a crucial factor to the state of a country's natural resources. It therefore becomes imperative to examine the mandates of both levels of government and pose the question: What are the implications of policy gaps and lapses in effecting NRM within a local jurisdiction vis-à-vis a national management regime?*

*In this context, the paper will provide insights on how natural resource management is constrained or facilitated by the country's policy and institutional framework. It reviews the Philippines' Local Government Code (Republic Act 7160 of 1991); as well as the mandates of the Department of Environment and Natural Resources and other national based institutions concerned with NRM policy in the Philippines. Recommendations for policy reforms for a better-coordinated and more sustainable NRM are also cited.*

## I. Introduction

The Local Government Code (LGC) is considered a major breakthrough in the Philippine legislature. It was enacted in 1991 to decentralize or devolve power and authority to local political units in response to criticism of too much centralization in the past government regimes. Devolution involved the transfer of responsibility in the delivery of basic services from the national government to the local government, including personnel, assets, equipment, programs and projects. Local autonomy, the very essence of LGC, provides local government units (LGUs) a more direct and responsive mechanism in addressing concerns in their respective areas of jurisdiction. The LGUs in the Philippine political system refer to 78 provinces broken down into 95 cities and 1,514 municipalities consisting of 42,000 barangays; one metropolitan government; and two autonomous regions in the Muslim South (IIRR *et al.*).

Among the basic services that were devolved from the national government to LGUs is environmental management; in particular, community-based forest and communal forest management. The Department of Environment and Natural Resources (DENR), at the national level, remains the primary government agency responsible for the conservation, management, development, licensing and regulation of the utilization of the country's environment and natural resources.

Most of these natural resources are in watersheds comprising 70 percent of the Philippines' total land area of 30 million hectares. There are 183 watersheds in the country, and 114 (62%) are assessed as already critical. This means that these areas need immediate rehabilitation due to fast denudation resulting in accelerated erosion and destructive floods (Arevalo 2000). The annual rate of deforestation of 262,000 ha between 1990 and 1995 (FAO cited in Vitug 2000) was a result of overexploitation of forest resources such as logging operations, overharvesting of forest products, conversion of forest lands into agricultural zones, forest fires. The forest cover of the country has diminished from almost 50% in 1950 to 20% in the 1990s, thus limiting the watershed's waterholding capacity. And these are observed to continue to rise despite the decentralized regime of governance.

The question that arises is: does decentralization augur well for a sustainable natural resource management? Considering the persistently increasing rate of degradation of natural resources, what are the factors that facilitate or constrain a sustainable mechanism for natural resource management? Could these factors pertain to the provisions of the LGC itself having been a subject of criticism over the

years? Or could these be due to ambiguities, inconsistencies or conflicts in policies of the different national agencies as raised in various fora?

This paper discusses the current policy environment for natural resource management in the Philippines; identifies gaps and lapses in policies and other emerging issues; and, illustrates how these bear implications on sustainability of management scheme. Lastly, it cites initiatives for an improved management regime.

## **II. A National-Local Interface for Natural Resource Management**

Economic, administrative and even political authority in managing natural resources inevitably involves a two-tiered system of governance - national and local. The degree of national-local relations depends on coherence between national and local development goals and distribution of powers and functions.

Devolution is one mechanism of distributing authority, powers and resources from the central government to local government units. This provides for a decentralized decision making on grounds of efficiency, accountability manageability, and autonomy. Rondinelli and Cheema (1983, cited in Cariño (n.d.)) argue that decentralizing is a means to overcome limitations of central planning, cut through red tape, increase information regarding local needs, develop the administrative capacity of sub-national units, relieve top officials of routine tasks, improve coordination, integrate isolated or lagging areas into wider economies of scale, and improve efficiency.

In reality, the central or regional levels of government still hold the powers to modify allocation of power and resources differentially between national and local levels. This is logical in cognizance of varying or limited administrative capacity of local government units and in recognition of areas of concern that transcend local political boundaries. Natural resource management in such cases may involve an administrative scheme, such as the river basin or watershed approach, that would integrate both the functional and territorial dimensions in planning and decision making.

The river basin or watershed management approach is functional and logical because of interrelationships between land and water resources and bio-physical linkages of upstream and downstream activities. It is holistic and considers social, economic and institutional factors bearing impact on sustainable management programs. It takes into account both on-site and off-site changes and impacts and internalizes the externalities from utilization and management practices. Moreover, the approach could also address conflicts arising from resource utilization, costs and benefits sharing among affected communities.

National-local relations in natural resource management may vary in degree in spatial and temporal terms. Extent of decentralization and devolution is likewise debatable. Other local government units maybe fast achievers and others, laggards. Local chief executives may set directions and programs autonomously but in some cases, decentralization at a level higher than municipalities, cities and provinces is necessary to address concerns with an area-wide impact not divisible by local boundaries, such as soil erosion, water quality deterioration.

Looking at these mechanisms may require a review of the policy environment policy to identify the necessary policy changes as done in the following sections.

## **III. The Current Policy Environment in the Philippines**

In the Philippines, natural resource management is largely controlled by national government

agencies. Around 70% of the watersheds are managed by DENR, over 15% by National Power Corporation (NPC), 12% Philippine National Oil Corporation (PNOC), and 2% by the National Irrigation Authority (NIA). This means they are mainly responsible for the conservation, management, development and regulation of utilization of the country's natural resources.

Among the powers and functions of DENR are to formulate, implement and supervise government policies, plans and programs; and promulgate rules and regulations on the development, disposition, extraction, exploration and use of the country's forestland, watershed areas, all lands of public domain, and mineral resources. These functions are decentralized down to the regional, provincial and community levels. There are at present 15 regional offices, 73 Provincial Environment and Natural Resources Offices (PENROs) and 171 Community Environment and Natural Resources Offices (CENROs).

Devolved from DENR are a total of 895 personnel (Brillantes 1996). Some were designated as the PENRO, some as the Municipal Environment and Natural Resources Officer (MENRO), but others were reportedly performing non-forestry-related functions (DENR Website). The devolved personnel represents only 4.20% of the total DENR personnel before devolution while the devolved budget represents only 8.64% of the DENR budget before devolution (Manasan 2001).

For local-level governance of natural resources, the LGC stipulates the following provisions:

1. For a municipality, the implementation of community-based forestry projects, including integrated social forestry programs and similar projects, management and control of communal forest with an area not exceeding fifty (50) sq. km.; establishment of tree parks, greenbelts, and similar forest development project, subject to the control and review of DENR.
2. For a province, enforcement of forestry laws limited to community based-forestry projects, pollution control law, small-scale mining law and similar laws for environmental protection, subject to supervision, control and review of DENR.
3. The environment and natural resources management officer (ENRO) shall take charge of the office on environment and natural resources and shall be in the frontline of the delivery of services concerning the environment and natural resources. However, the position is optional for provincial, city, and municipal governments.
4. LGUs have a share from the proceeds by any government-owned or -controlled corporation engaged in utilization of national wealth to be allocated to the province (20%), component city/municipality (45%) and barangay<sup>[3]</sup> (35%). If the natural resources cover more than two LGUs, sharing is based on population (70%) and land area (30%). This share should be utilized for local development and livelihood projects.<sup>[4]</sup>

The LGC is now on its tenth year of implementation. There are already proposed amendments to the LGC as contained in the Omnibus Bill submitted to the Philippine Congress. The Bill includes proposals to make the positions of ENRO mandatory in all cities and municipalities, to create a local environment and natural resource board and to increase share of local government units in the national wealth. During the First Philippine Local Governance Congress held in Oct. 2001, there was a proposal to authorize LGUs to issue Environment Clearance Certificates except for high impact projects. No agreement was reached as most participants felt that this needs further study and discussion.

The foregoing discussions present some gaps and lapses and implications of the LGC vis-avis other national policies on natural resource management. This addresses political and economic constraints to the allocation of powers and functions on NRM, areas of jurisdiction, sharing of national wealth and other related issues.

#### **IV. Allocation of Powers - What Works**

After ten years of devolution, what are the lessons that could be distilled, so far? As one local official put it (SANREM Conference 2001), the law has held the environment hostage. Apparently, devolution has been the cause of the stalemate in the natural resource management as nothing seems to be moving in the LGUs nor in DENR. Supervision and control of natural resources, e.g., extraction of user charges, remain with DENR. Devolved function was limited to community-based forestry projects and communal forests and policy and economic constraints snag implementation of some LGC provisions.

DENR continues to gain primacy in natural resource management. However, DENR remains to function in a regulatory mode, rather than in a developmental mode (SANREM 2001), as indicated by its budget and programs. This is understandable 60 years ago when there was still 60% forest cover to regulate but now that the forest is disappearing, it has to shift to a more developmental mode. Meanwhile, the meager human and financial resources devolved to LGUs indicate devolution of responsibility without capacity.

Sound political culture in the management system is also critical for devolution to work so that environment and natural resource management does not become hostage to political changes. There are NRM policy decisions that are considered political as these could affect ones' political career such as imposing extraction fees or user charges on businesses and individuals utilizing natural resources. On the other hand, there are LGUs aggressive in the pursuit of sustainable NRM. Again, this is because there is political will from the local chief executives.

There are several examples of good practices in local-based management schemes in the Philippines. In Nueva Vizcaya province of Northern Philippines, one lesson learned is the power of 'incentive to community' through tenure. Security of tenure has solved seasonal fires and stabilized the watershed. The local government was also able to liaise with DENR for use rights over a 400-ha land. Another example is the Mt. Kitanglad Natural Park, a state-proclaimed protected area of around 47,000 hectares where the ancestral domain of the Talaandig in Bukidnon is being negotiated.<sup>[5]</sup>

Another model is the "Save Mount Makiling Program" in Southern Luzon. The University of the Philippines-Los Baños (UPLB) in collaboration with other institutions has encouraged a community-based forest management. The settlers were allowed to maintain their dwellings and activities in the forest in return for their commitment to protect the forest. Training programs, organizations of communities undertaking reforestation of critically damaged areas and adoption of ecological farming practices resulted in a high degree of people's participation and recovery of ecological balance.

The above examples emphasize the importance of development-oriented attitude of political leaders so devolution will work. Devolution should give way for a mind shift in local chief executives – from traditional executive and more regulatory powers to more development-oriented efforts. It would be useful to assess the management scheme in areas where forest degeneration have been arrested or slowed down. Various experiences all over the Philippines could be collated as a showcase; and for further investigation and scaling-up.

On another perspective, as pointed out by a local official, there is no such thing as absolute devolution, only meaningful devolution. Devolution provides for democratic governance, therefore, entails participation of stakeholders as well. One legal avenue for such participatory governance is the existing joint memorandum circular of the Department of Interior and Local Government (DILG) and DENR that provides implementing guidelines for the LGC. It stipulates that some DENR officials in the LGU particularly at the provincial level will assist in setting up the mechanism for the management of the devolved functions. It also provides for the creation of the board or council at the local level for the management of the environment and natural resources and the participation of other stakeholders, e.g., local community, NGOs, in natural resource management. If this memorandum would be pursued extensively, the roles of various parties could be clearly defined.

## **V. NRM Jurisdiction - Finding a Middle Ground**

One important consideration in a decentralized management regime is the appropriate jurisdictional area that would internalize all the costs and benefits from utilization and management of natural resources. In terms of technical capability to manage, to what extent can the local governments handle very technical functions? What are these and what are the areas where the expertise belongs to DENR? What should be devolved?

One argument in favor of devolution is that it is cheaper for local governments to manage administrative responsibilities than central government. On the other hand, municipalities and provinces are political entities, but they may not necessarily be the right entities for managing forests or a whole watershed. At the provincial level, there could be some economies of scale as environmental services transcend municipal boundaries. One current proposal is to design river basin authorities for the major river basins in the Philippines. The advantages of the river basin approach are articulated in the abovepresented framework.

To propose for DENR to further devolve its powers, other laws dealing with the powers of DENR have to be examined. For instance, there is no point in giving local government supervision or general responsibility over its area of jurisdiction if DENR still controls tenurial rights. The local government can have the best plans and the best people, but if DENR decides to grant mining rights over public lands in a particular area, then conflict arises.

Provisions of the Forestry Code vis-a-vis the LGC is also one point of consideration. Revision of the Code has been debated in three congresses already. In the final version of the Code, there are still provisions for a centralized management of forest resources. It is in the guise of sustainable forestry management via community-based management but there are so many places in those provisions wherein DENR can actually take back those devolved powers. Among the provisions in the Forestry Code is the 'easement law' that says that for protection of rivers, lands within 20 meters from both sides of the riverbank should not be titled. DENR issues land title, and the reason why some of these easement lands have titles is because DENR lacks information on the locations of rivers in the countryside. A consultation with the LGU could have prevented this issuance of titles, and most probably, the observed current degradation of rivers.

Further amendment to the LGC has to ensure that DENR whole-heartedly devolve their powers, with matching programs and budgets. The budget of DENR itself is a revelation that true devolution may not happen soon, due to non-provision of capacity building activities for local government units in managing environment and natural resources.<sup>[6]</sup>

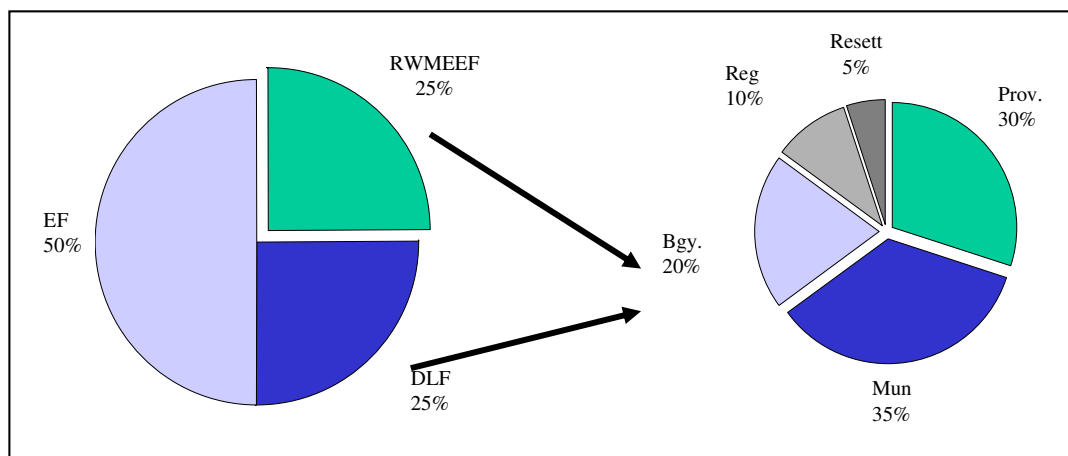
## **VI. Share in National Wealth - Who Gives, Who Gets?**

Governance without local capacity, e.g., financial, will not result in autonomy. In response to this, the LGC also serves as the legal framework for local-based initiatives that enhance revenue-raising capacity of LGUs. One source of revenue is the share in national wealth. However, there is a need to amend the LGC to provide a clear definition of national wealth to avoid further ambiguities and conflict. Beyond the LGC, there is also a need to clarify the implementing rules and regulations issued by concerned entities involved in the utilization of national wealth.

One concrete example is the Department of Energy (DOE) Circular stipulating that the energy resource developer/power producer should allocate one centavo (PhP0.01) per kilowatt-hour of the generated electricity sales to host barangays, municipalities/cities, provinces and region where the energy-generating facilities are located.

This one-centavo share should be apportioned in the following manner - one-half for electrification fund (EF), one-fourth for development and livelihood fund (DLF), and one-fourth to reforestation, watershed management, health and/or environment enhancement fund (RWMEEF). Half of EF goes to electrification in priority areas of host province and region and part of the other half goes to reforestation, watershed management and environment enhancement projects. Like DLF, the amount earmarked for RWMEEF is distributed to the resettlement area, host barangay, municipality, province, and region as shown in Box 1.

**Box 1. Allocation of one-centavo per kwh of electricity sales for LGUs.**



For more than one host LGU, DLF and RWMEEF shall be equally divided among the host LGUs or if there is clear delineation of boundaries where the facilities are located, allocation shall be based on percentage of land area. [7]

Issues emerging from this policy could be illustrated in the case of the National Power Corporation (NPC)-Pulangui IV hydroelectric plant constructed along the Pulangui/Manupali watershed in Mindanao. Unclear territorial jurisdiction over these areas snags implementation of NPC programs in the watershed. NPC charter allows jurisdiction over watershed surrounding it, but the term 'surrounding' or 'embracing' does not give any concrete delineation. Pulangui watershed is almost 50 percent of the province of Bukidnon, too large for NPC to manage. This entails not only a huge cost for NPC but also depends on the technical capability of NPC. [8] As per the DOE Circular, the beneficiaries cover a vast area, such that funds could be spread out too thinly. [9] Another oversight in the Circular is the source of water of the power plant. Municipalities (upstream) where the source of water is located are not entitled

to any share at all, when they are also affected by the plant's activities. Moreover, the provision on subsidizing the cost of electricity negates principles of resource conservation as this could encourage use of electricity.

To motivate local government units, one mechanism is to assure that taxes collected from that declared protected area go directly to the protected area management board.<sup>[10]</sup> This would ensure continuous budgetary support for the protected area and would give an incentive to local government units to push for the declaration of whatever protected areas in their locality. But deficiencies in the law still exist. For instance, despite local ordinances, timber poaching and illegal cutting of trees in areas, and other dangerous activities within NPC property continue. In the law, LGUs could only fine a maximum amount of P5,000 (US\$100) for such violation unlike national agencies which could impose a much bigger penalty.

There are other local initiatives to enhance financial capacity of LGUs through charges in the use of natural resources. For example, in Lantapan, Bukidnon, the SANREM study site, there is a banana firm that exports to Japan and the Middle East. For every box of banana exported, 10 cents (US dollar currency) will be earmarked for environmental concerns in the municipality. There is also a plan to put up a foundation to manage the activities and engage professional foresters who are related to the local Lumads, the Talaandig – in Lantapan. The approach is formulated to ensure that community based management is sustainable for 25 years, the same duration of the plantation's contract with local landowners.

## VII. Other Issues: Conflict in Water Management

Water management is a case where institutional conflicts from both local and national government perspectives arise. In the Philippines, there are at least four institutions governing water supply planning and operation, demand management, watershed protection, regulatory and other related functions. What is lacking is an integrative mechanism to interrelate the said functions.

The National Water Resources Board (NWRB) is the coordinating and regulating agency for water resources management and development in the Philippines. Due to varied physio-geographical and climatic conditions of the Philippines, NWRB delineated the country into twelve (12) water resources regions to serve as management units for comprehensive planning of water resources development. (Dayrit 2000). It is also authorized to deputize any government official or agency to perform any of its specific functions or activity. Different agencies issuing appropriate clearances or documents for water permit applications are given in Box 2.

**Box 2. Interagency collaboration in water use regulation.**

Required Document	Agency in charge	Purpose of water use
Environmental Compliance Certificate or Certificate of Exemption	Department of Environment and Natural Resources (DENR)	All water permit applications except for domestic purposes
Certificate of Registration with Articles of Incorporation (for corporation or association)	Security Exchange Commission (SEC)	All water permit applications
Initial permit (as per R.A. 7156)	Department of Energy (DOE)	Power purposes
Physical and chemical analysis of water	Department of Health (DOH)	Recreation/commercial purposes
Clearance (if within the watershed of Laguna Lake)	Laguna Lake	Fisheries and industrial purposes
Certificate of registration of business name for sole-proprietorship application	Department of Trade and Industry (DTI)	Industrial purposes
Certificate of conformance (for water districts)	Local Water Utilities Administration (LWUA)	Domestic purposes
Certificate of registration (if a Barangay Waterworks Association)	Barangay unit	Domestic purposes

Clearance (if reuse of wastewater for human consumption)	Department of Health (DOH)	Domestic purposes
Clearance from affected deputized agent	National Irrigation Association (NIA), Metropolitan Waterworks and Sewerage System (MWSS), Department of Public Works and Highways (DPWH), Water District, National Power Corporation (NPC)	

Source: Dayrit, H.A. 2000. Role of Interagency Collaboration

NWRB works with the National Statistical and Coordinating Board (NSCB) on policy initiatives concerning Philippine economic-environmental and natural resources accounting. It also coordinates with various water districts that govern drilling, operation and maintenance of wells within their territorial boundaries. It has direct control over the operation of public water supply services outside the jurisdiction of Metropolitan Waterworks and Sewerage System (MWSS) and Local Water Utilities Administration (LWUA) water districts. [11]

As an agency with a conservation mandate, the DENR requests NWRB to review programs/projects related to water resources. It has also forged an agreement with LWUA on co-management of certain watersheds supporting facilities of local water districts (Javier 1999). One complication here is illustrated in the following example. In Bukidnon, the Valencia Water District conducts planting of timberlands in Valencia town but when the time for tree cutting comes, permit to cut trees has to be secured from DENR. It is, therefore, important that right from the start of the watershed project, institutional arrangement must be clear.

In recognition of the lack of an integrated water resource management, one recent development is the proposed river basin approach under the coordination and control of a centralized regulatory body, the proposed creation of the National Water Authority. At present there are only two declared river basins in the Philippines, and current efforts plan to expand this number to eighteen.

### VIII. The Need for Policy Reforms

In view of the lapses cited above, there are now at least two initiatives to improve on the situation. One is the call for amendments of the LGC on the provisions for environmental management – this has also been referred to as the “unfunded” mandate of the LGC. The second is the effort to integrate water management bodies and functions into one central body. Initial effort along this will be kicked off during the water summit in the last week of November 2001. What seems to be the problem still is the centralization versus the decentralization aspects of both proposals. What seems to be the middle ground is the idea that there will be several river basin authorities in the country, and this will be regulated by a central authority. It is expected that creation of the central authority will be a long process (the estimated time to pass legislation is four years). There will also be some need for conflict resolution at all levels of governments and all sectors concerned.

In the pursuit of reforms for local environmental management, there are three important things to consider - relevance, enforceability, and sustainability (SANREM 2001). Relevance is an indication of response to current needs and situation. Enforceability is the attribute that decisions and actions are implementable. Sustainability means that the decision and actions could be continually carried out over the long term. Sustainable resource management means sustainable technical and financial capability and sound political culture that ensures development-based thinking and political will of local leaders.

Snags in policies as illustrated in various instances in the paper hinder resource management. The LGC may need amendments to enhance the powers and functions of LGUs [12]. The national policy environment characterized by multiplicity of institutions engenders concerns on jurisdiction. For a



viable management system, synergy among the various entities is needed but before any action is done, the legal and institutional framework must ensure that every one's responsibility is clearly defined in the participatory approach.<sup>[13]</sup> Lastly, the Philippine experience could provide insights for other countries that are shifting from a centralized to a decentralized management regime.

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<sup>1</sup> Paper presented at the SANREM Research Synthesis Conference, November 28-30, 2001, in Athens, Georgia, USA..

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[3] This is the smallest unit of government in the Philippines.

[4] In the case of hydrothermal projects, 80% of proceeds will go to subsidies in electricity cost of host LGUs.

[5] Please also refer to the paper of Sumbalan, and Buenavista( 2001), presented in this same conference for more details of this case.

[6] The experience of community-based organizations in partnership with DENR is that the very people in the field have limited knowledge on enhancing the partnerships with local governments and people's organizations.

[7] Local government units should also prepare project proposals with the assistance of the power producer to be endorsed by the sanggunian/regional development council. Reforestation and watershed management projects. should be coordinated and endorsed by the DENR Regional Office. The Department of Energy reviews and approves project proposals

[8] There are other agencies as well, particularly DENR, that are involved in the process. It is not clear if a permit has to be secured from DENR to conduct activities in lands outside NPC property. For lowland portion of the watershed where lands are alienable and disposable, the Department of Agriculture has jurisdiction. Thus, it becomes difficult for NPC to implement watershed management programs in such areas outside its property.

[9] The looming privatization of the NPC could improve the management regime of the Pulangui watershed. However, it has to be proclaimed first by law as critical watershed before it could be devolved to an agency, not necessarily NPC and this will also require an area management plan.

[10] Access of LGU to funds is an important issue. Access depends on the initiative of concerned LGUs to prepare proposals on watershed management projects. It is therefore imperative for LGUs to be aware of such policy, to be capable in proposal preparation, and to have the skills to negotiate with national agencies.

[11] MWSS and LWUA are two other regulatory bodies for water resources, in addition to DENR and NWRB. The MWSS was created through the Water Crisis Act of 1992. The Provincial Water Utility Act of 1973, vests ownership, supervision, and control over the local water districts. However, the Local Government Code provides that the water districts could devolve its functions, including watershed management, to the local government unit if they opt to. With that provision still in effect, the power of LGC to provide municipalities and provinces, respectively, responsibilities over water supply systems will only hold true on the discretion of the local water district.

[12] *The proposed mandatory position of ENRO and the creation of an environment board may be necessary to address technical and administrative concerns. But beyond amending LGC, other sectoral laws also need to be examined, such as the Forestry Code, to observe coherence and consistency.*

[13] *This will be debated on during the water summit in November, 2001. Policy briefs prepared by the SANREM-CRSP SEA will be used as a resource document during the water summit. Some of the briefs were also provided to the committee that amends the LGC.*