

Institutions and water – *the vital connections*

*Dulce D. Elazegui**

Water governance encompasses economic, administrative and even political authority over water resources and services. There are various institutions at play at different levels—national, regional or local, public or private—each having its own mandate and jurisdiction in water decisions and actions. Thus, the attainment of coherent water management goals would depend on the degree of collaboration among these multiple institutions (Malayang 2002).

From this perspective, this *Policy Notes* examines issues emerging from the current institutional framework in water governance and suggests some pertinent policy and institutional reforms.

Structure of water resource governance

In the Philippines, the present water management set-up principally involves a two-tiered system of governance—national and local (Box 1)—which looks into supply and demand functions. The supply side in this case concerns

watershed management, the watershed being a vital source of water for multiple uses. The demand functions, meanwhile, refer to the regulation of water utilization and maintenance of water quality. Delineation and overlaps in responsibilities among the institutions looking into these concerns exist and may, in fact, be inevitable but they could be dealt with through adequate collaboration.

National level

The Department of Environment and Natural Resources (DENR) and the National Water Resources Board (NWRB) are the major national institutions that influence watershed and water-related decisions and actions, respectively. Watershed management is largely handled by the DENR, particularly the Forest Management Bureau (FMB). The Environmental Management Bureau (EMB), meanwhile, also under the DENR, is responsible for maintaining water quality in the country (Figure 1).

Other government-owned and -controlled corporations (GOCCs) which source their water supply requirements

*The author is University Researcher at the Institute of Strategic Planning and Policy Studies (ISPPS) of the University of the Philippines at Los Baños.

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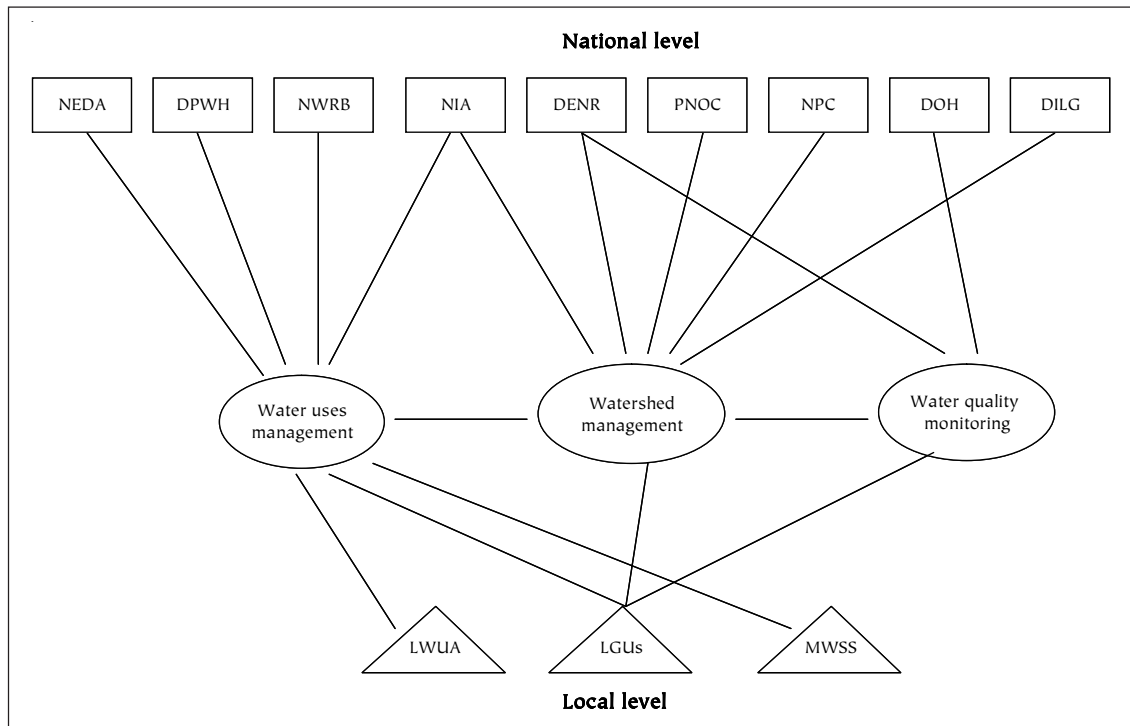
Box 1. Major government institutions governing water resources in the Philippines

Institution	Enabling Law	Mandate/Function
<i>National</i>		
Department of Environment and Natural Resources (DENR) - Forest Management Bureau; Environmental Management Bureau	Executive Order No. 192 of 1987	Primarily responsible for the management, conservation, and development of forest lands and watersheds; and maintaining water quality
National Power Corporation (NPC)	Republic Act No. 6395 - NPC Charter EO 224 of 1987	Authority to take water from any public stream, river, creek, lake or waterfall for power generation; complete jurisdiction and control over watersheds surrounding the reservoirs of plants and/or projects
Philippine National Oil Company (PNOC)	Executive Order No. 223 of 1997	Jurisdiction, control, management, protection, development and rehabilitation of watershed reserves
National Irrigation Administration (NIA)	R.A. No. 3601 of 1963	Improve, construct and administer all national irrigation systems of the country.
Department of Energy (DOE)	Republic Act No. 7638 - DoE Act of 1992	Allocate reforestation, watershed management, health and/or environment enhancement fund
National Water Resources Board (NWRB)	Presidential Decree No. 1067 - Water Code of the Philippines of 1976	Coordinate and regulate water resources management and development, and water uses
Joint Executive-Legislative Water Crisis Commission	Republic Act No. 8041 - National Water Crisis Act of 1995	Address the water crisis including supply, distribution, finance, privatization of state-run water facilities, protection and conservation of watersheds and the waste and pilferage of water
Department of Health	IRR of NEDA Board Res. No.4 of 1994	Set quality standards for water testing, treatment and surveillance and sanitary practices
Department of Public Works and Highways	IRR of NEDA Board Res. No.4 of 1994	Set technical standards for engineering surveys, design and construction of Level I water systems
National Economic and Development Authority	Executive Order 230 of 1987	Policymaking and infrastructure, coordination of activities of various sectors
National Commission on Indigenous People	Republic Act No. 8371 of 1997 (IPRA)	Formulates and implements policies for the protection of indigenous people, e.g., ancestral domain in critical watersheds
<i>Local</i>		
Local government units	Republic Act No. 7160 - Local Government Code (LGC) of 1991	Implement community-based forestry projects and manage communal forest with an area not exceeding fifty (50) sq km, and enforce forestry laws, etc.
Local Water Utilities Administration (LWUA)	Presidential Decree No. 198 - Provincial Water Utilities Act of 1973	Own and operate water supply and distribution systems for domestic, industrial, municipal and agricultural uses
Metropolitan Works and Sewerage System (MWSS)	Republic Act No. 6234	Responsible for water supply in Metro Manila

from watersheds are also vested complete jurisdiction and control over watersheds surrounding the plants and/or projects. These include the National Power Corpora-

tion (NPC) for power generation, the Philippine National Oil Company (PNOC), and the National Irrigation Administration (NIA) for water supply to agriculture.

Figure 1. Major institutions involved in water resources governance



The National Commission on Indigenous People (NCIP) under the Office of the President, through the Indigenous People’s Rights Act (IPRA), is concerned with the role of indigenous people in ancestral domains or portions necessary for critical watersheds, protected areas, forest cover or reforestation.

Meanwhile, the NWRB, to be eventually placed under the DENR,¹ acts as the government coordinating and regulatory body for all water resources-related development. It is an interagency board that regulates water distribution, resolves issues and conflicts in water resources management and development such as inconsistencies in fees and charges. For water permit application, other agencies are also involved in issuing clearances or related documents such as the DENR for the Environmen-

¹As of this writing, there is no formal declaration as yet of NWRB’s actual transfer to the DENR. What is still in effect is Executive Order 123 transferring it to the DPWH and declaring its eventual transfer to the DENR.

tal Compliance Certificate (ECC) or Certificate of Noncoverage (CNC).

Local level

By virtue of the Local Government Code (LGC), watershed-related activities of local government units (LGUs) such as provinces and municipalities are confined to community-based management (CBFM), social forestry and watershed projects. The barangays’ role depends on the discretion of the LGU executives. LGUs also have to be consulted by GOCCs in order to undertake measures that will prevent or minimize their activities with environmental implications.

Water delivery, on the other hand, is the responsibility of water districts, quasi-public corporations in one or more contiguous cities, municipalities, or provinces particularly in urban and peripheral semi-urban areas. Water districts are formed through a resolution in the concerned LGU. The Local Water Utilities Administration (LWUA) governs local water districts and reviews rates or charges estab-

lished by local water utilities. The Metropolitan Waterworks and Sewerage System (MWSS) services the National Capital Region. Local water districts also manage and maintain all watersheds within their territorial jurisdiction but they could devolve their functions, including watershed management, to LGUs. However, water rates and charges generally do not include the cost of watershed management. In rural areas, LGUs are authorized to operate their own water systems although this depends on the capacity of LGUs to sustain, financially and technically, waterworks.

The task of water quality monitoring, as mentioned earlier, is with the EMB of the DENR as well as with the Department of Health (DOH), and water districts and LGUs per their discretion. The DENR-EMB sets water quality standards but for drinking water, DOH adopts the National Drinking Water Standards (NDWS). With DOH devolved, water monitoring becomes a responsibility of LGUs, thus, subject to LGUs' funds and prioritization.

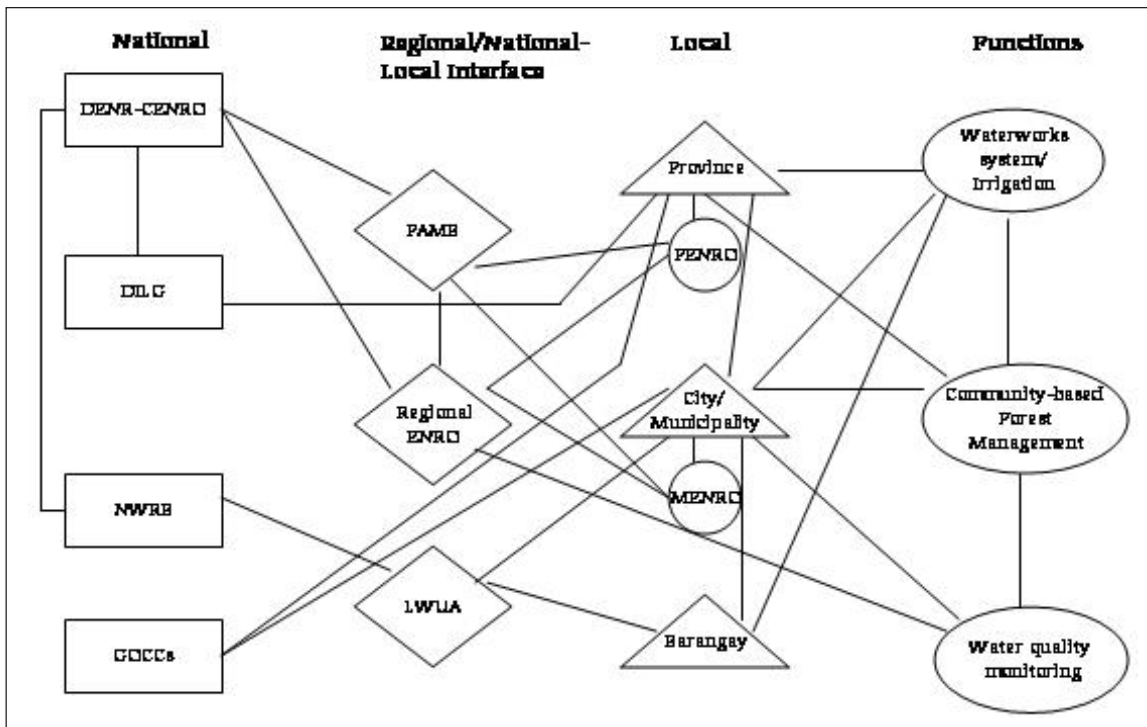
LGUs also have a role in the multipartite monitoring team (MMT) formed within the Environmental Impact System under DENR.

National-local interface

As shown, the Philippines' water management framework inevitably involves a two-tiered system of governance but national policies set bounds and limits to LGU functions such as the CBFM, waterworks system and water quality monitoring. With policies generally emanating from the central government, the interface between the national and local level institutions is critical so that the policies are properly implemented.

At present, DENR's representation at the regional level is through the Regional Executive Director. At the local level, it has the Provincial Environment and Natural Resource Office (PENRO) and the Community Environment and Natural Resources Management Office (CENRO) (Figure 2). The CENRO covers one or more municipalities.

Figure 2. National-local government interface in water resources governance



At the same time, LGUs have the option to create ENROs for provincial, municipal and city governments. In order to implement projects, meanwhile, including those in small watersheds serving as source of potable water or irrigation to the community, a Memorandum of Agreement (MOA) has to be forged among DENR, DILG and the LGU.

For the implementation of the National Integrated Protected Areas (NIPAS) Act at the local level, on the other hand, the Protected Area Management Board (PAMB), composed of DENR, LGU, NGO representatives and a community representative, is the one mainly responsible.

Co-management of certain watersheds serving local water districts is also possible between the NWRB and LWUA (Javier 1999). Similarly, devolving watershed management functions from water districts to LGUs could be done through a proclamation or a Memorandum of Agreement (MOA) between the DENR and LGUs. A MOA for the implementation of watershed projects could also be forged between GOCCs and LGUs.

Multiplicity of institutions – the missing links

Albeit the presence of certain national–local interfaces, the multiplicity of institutions is bound to pose some constraints in reconciling water and watershed management concerns.

For instance, there is no explicit mechanism to link watershed management (supply side) with water uses and water quality management (demand side). This is observed between DENR's FMB handling forest management activities and EMB handling the Environmental Impact Assessment System. Even in water quality monitoring, coordination of activities and coherence of methodologies and standards between the DENR-EMB and the DOH is not that clear either.

At the same time, the NWRB only holds office in Metro Manila and the absence of branch or regional offices makes nationwide coordination difficult. Apparently, local water districts or LGUs independently carry out their respective management functions.

The transfer of the NWRB from the DPWH to the Office of the President and eventually to the DENR as a bureau also poses some problem on how coordination would be done for projects involving DPWH. The reorganization of the NWRB is still in process.

At the local level, as borne from observations and experiences in one particular province—Bukidnon—where a major watershed is located,² there is reportedly a weak system of coordination and information gap between national and local government entities.

For instance, water districts and other GOCCs have a watershed management program such as reforestation activities. However, there are some ambiguities in implementation such as when to establish protection forest, and who determines when no tree cutting or production forest for harvesting/livelihood is allowed and what tree species to plant. There is neither a clear guideline in delineating areas for these activities and in acquiring rights or permit to cut trees. The mechanics in the sharing of national wealth between LGUs and GOCCs to enhance partnership in watershed activities is apparently missing. So is the strong coordination between ENROs under the DENR and those ENROs created by LGUs.

Towards integrated water management

Despite the recognition of the critical importance of water and watershed conservation in the Philippines, there are indeed problems in integrating these two concerns. Integrated watershed planning has been cited as the most effective way of consolidating water and land use activities, water quantity and quality management (Dixon and Easter n.d.; Fellizar 1998). Integration involves coordination of activities on both the supply and demand sides of water resources within defined boundaries such as watersheds.

²Bukidnon is the province covering the Manupali watershed, the study site of SANREM-CRSP which harnesses participatory research for better natural resource management and decisionmaking.

Coordination could be achieved through harmonious working relationship among institutions, procedural certainty and clarity, interagency consultation and cooperation in the development and implementation of policy (Boston 1992). Institutional arrangements have to clearly specify the roles and responsibilities of each party to consider site-specific interests, thresh out possible conflicts and other complications. This includes decisions on activities such as water distribution and use; resource mobilization to acquire funds, personnel, etc.


There are already initiatives towards such integration. The recently signed Clean Water Act provides for an integrated area management for water resources based on a hydrological or ecosystem approach such as the river basin or watershed approach. This could consolidate local political boundaries and provide a higher level of intervention without reducing the autonomy of local government units or agencies.

The recently concluded National Water Forum also recommends an integrated water resource management which recognizes this kind of hydrologically based approach in managing the country's water resources.

There are also already proposed amendments to the LGC in the Philippine Congress such as the mandatory creation of ENROs in all cities and municipalities, of a local environment and natural resource board, and increase in the share of LGUs in the national wealth. There is also an initiative to form the Philippine Association of Water Districts to integrate water quality monitoring activities in its watershed management program.

Towards achieving an integrated management approach, some local initiatives may be cited, in particular, those launched in the province of Bukidnon. These include the creation of the Bukidnon Watershed Protection and Development Council (BWPDC) and the formulation of the Bukidnon Watershed Management Framework Plan. The Plan serves as a guide in implementing programs in the six major watershed clusters in the province. The provin-

cial government also created its own Bukidnon Environment and Natural Resource Office (BENRO). The DENR-EMB also organized and sanctioned the Multipartite Monitoring Team (MMT) in Bukidnon to monitor compliance of the Environmental Management Plan. The Chair on Environment of the *Sangguniang Panlalawigan* (Provincial Council) heads the MMT with the PENRO as co-chair and the BENRO as secretariat.

The above provides a mechanism for a close coordination among DENR, LGUs and other sectors in the locality where communities have also been mobilized to participate in water monitoring activities. Such mechanisms may be used as basis for replication in other localities. 

References

- Boston, J. 1992. Country report - the problems of policy coordination: the New Zealand experience. *Governance: An International Journal of Policy and Administration* 5, No.1 (January): 88-102.
- Dixon, J. and K.W. Easter. n.d. Integrated watershed management: an approach to resource management.
- Fellizar, F. 1998. Operationalizing the watershed/basin approach to sustainable development. In *Watershed as a resource: state of the art, viewpoints and experiences*. Los Baños: Forestry Development Center, UPLB-CFNR.
- Malayang, B. 2002. A model of water resource governance in the Philippines. Paper presented at the Water Policy Forum on August 12, 2002, Makati City.

For further information, please contact

The Research Information Staff
 Philippine Institute for Development Studies
 NEDA sa Makati Building, 106 Amorsolo Street
 Legaspi Village, 1229 Makati City
 Telephone Nos: 892-4059 and 893-5705
 Fax Nos: 893-9589 and 816-1091
 E-mail: dde@mudspring.uplb.edu.ph; jliguton@pidsnet.pids.gov.ph

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