



Philippine Institute for Development Studies  
*Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas*

## Paradigms of Decentralization, Institutional Design and Poverty: Drinking Water in the Philippines

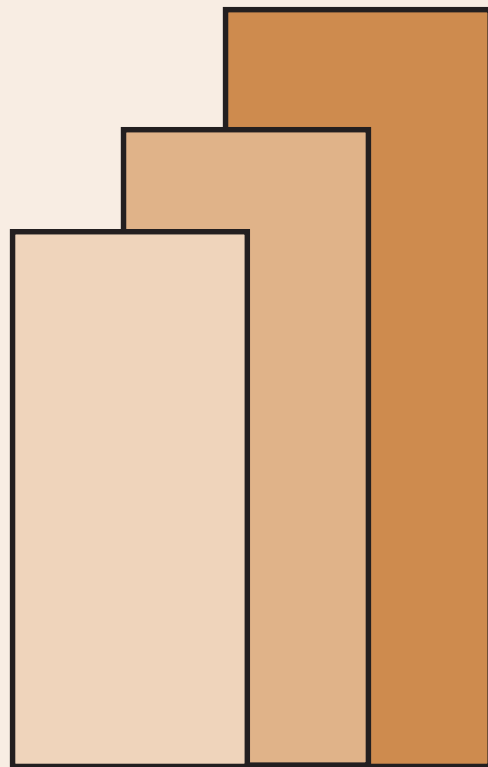
*Satyajit Singh*

**DISCUSSION PAPER SERIES NO. 2006-19**

The *PIDS Discussion Paper Series* constitutes studies that are preliminary and subject to further revisions. They are being circulated in a limited number of copies only for purposes of soliciting comments and suggestions for further refinements. The studies under the *Series* are unedited and unreviewed.

The views and opinions expressed are those of the author(s) and do not necessarily reflect those of the Institute.

Not for quotation without permission from the author(s) and the Institute.



October 2006

For comments, suggestions or further inquiries please contact:

**The Research Information Staff**, Philippine Institute for Development Studies  
5th Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines  
Tel Nos: (63-2) 8942584 and 8935705; Fax No: (63-2) 8939589; E-mail: [publications@pids.gov.ph](mailto:publications@pids.gov.ph)  
Or visit our website at <http://www.pids.gov.ph>

## Paradigms of Decentralization, Institutional Design & Poverty: Drinking Water in the Philippines

Satyajit Singh

Reader, Department of Political Science, Faculty of Social Sciences, University of Delhi

---

### Abstract:

This paper looks at the different paradigms of decentralization for drinking water supply in the Philippines and its effectiveness in poverty alleviation. As centralization and decentralization are not definitive concepts, but defining features, there are bound to be different pathways to decentralization. Indeed, within a defined national path, there could be different ideological constructs of decentralization. These different paradigms create different institutional arrangements that are situated in the specific ideological construct of the time and place of its creation. With a shift in paradigm, say from one that can be classified as deconcentration to another that can be called democratic devolution; there would be key changes in the institutional designs for service provision. These different institutional designs of decentralization have different outcomes in the common quest of poverty alleviation. Empirical evidence points out that while new institutions would come up for fresh projects, the existing programs and projects that were crafted from an earlier paradigm continue at the same time. If the paradigm change has moved forward on the decentralization axis, then the adoption of newer institutions would have a better outcome in poverty alleviation. This paper calls for due attention of policy makers to address the concern of institutional transformation as one moves towards more progressive decentralization paradigms. The empirical evidence is provided from the Central Visayas Water and Sanitation Project from the province of Oriental Negros.

Keywords: Decentralization, Drinking Water, Oriental Negros, Paradigms of Decentralization, Decentralization and Service Delivery, Institutions and Development, Institutional Design for Decentralization, Linkages between drinking water and poverty, Politics of Decentralization

Acute poverty coupled with poor delivery of basic services has constrained development in rural Philippines. Rural development programs over the last few decades have not been able to achieve much due to the centralized decision making of the government and lack of focus on community participation and local capacity. The world is discovering that community participation can play a pivotal role in assisting public institutions to help alleviate poverty and catalyze development. The local government provides an institutional framework to facilitate

community participation for better local governance, provision of basic services and efficient targeting of the subsidies to the poor. It is for this reason that developing countries, including the Philippines, are reforming their centralized institutions and putting greater attention to create an enabling framework for decentralization. While the transition from a paradigm that is based on centralization to one that emphasizes decentralization has been fairly smooth, there is a lot more that needs to be done to craft and sustain decentralized institutions to help alleviate poverty.

The provision of adequate and safe drinking water supply is a basic service that directly translates to health benefits to help the poor sustain their livelihood. This paper looks at the case of drinking water supply in the Philippines and its role in poverty alleviation. As centralization and decentralization are not definitive concepts, but defining features, there are bound to be different pathways to decentralization as we have seen for centralization. Indeed, within a defined national path, there could be different ideological constructs of decentralization as we move along the decentralization axis in different time and place. These can be called paradigms of decentralization and these keep changing as we progress or regress on the decentralization axis. These different paradigms create different institutional arrangements that are situated in the specific ideological construct of the time and place of its creation. With a shift in paradigm, say from one that can be classified as deconcentration to another that can be called democratic devolution; there would be key changes in the institutional designs for service provision. These different institutional designs of decentralization have different outcomes in the common quest of poverty alleviation. Empirical evidence points out that while new institutions would come up for fresh projects, the existing programs and projects that were crafted from an earlier paradigm continue at the same time. If the paradigm change has moved forward on the decentralization axis, then the adoption of newer institutions would have a better outcome in poverty alleviation. In a scenario where a more progressive paradigm has been adopted, continuing with an earlier institutional arrangement would limit the desired outcome towards poverty alleviation. This paper calls for due attention of policy makers to address the concern of institutional

transformation to help institutions of an earlier paradigm adapt to the more progressive paradigm of poverty alleviation. The empirical evidence is provided from the province of Oriental Negros.

#### Institutions and Development:

Whether it is a debate on the social contract of the state emerging from a description of the state of nature by Hobbes, Locke and Rousseau; or the debate on industrialization and the 'little community', between Tonnie's, Dewey and Durkheim on the one hand and Marx, Engels, Spencer, Comte and Weber on the other; or the debate on the state versus the market; the quest for appropriate institutions to help alleviate poverty in developing countries is not new. At a time when the role of state is rapidly undergoing change and can affect the livelihood and security of the poor the concern is to build democratic, accountable and responsive state institutions.

The discipline of politics and administration has concentrated much of its efforts on macro structures, policies and institutions and how these affect village-level economy and politics. There have largely been studies in theory and ideology, economy and society, government and institutions, and political processes whether democratic or of other forms. Studies on local processes and change, though not absent, have mostly been confined by the structure of analysis drawn from macro influences. For instance, studies of peasant societies have largely been confined to analyzing protest, which has been seen to be the outcome of wider changes in state and economy. This understanding of politics and change is critically linked in these studies to the overarching colonial state and the oppressive structures of power and domination that characterize peasant societies. The nature of the state being intrinsically linked to the interests of feudal, capitalistic or worker's powers is thus central to the ordering and understanding of collective life. However, given that the democratic state is in itself undergoing rapid transformation and is 'under construction', its character being carved out by changes in society and contemporary politics, it becomes essential not only to study power and protest, but also institutions, their transformation and change, and how they affect social and developmental outcomes.

The French philosopher Jean-Jacques Rousseau made a distinction between the nature of man and the institutions that a society harbors. Rousseau, like Thomas Paine after him, took a novel position that men were good, but the social institutions were bad, leading to bad social outcomes. Others like Thomas Hobbes and James Madison were sceptical of human nature, and thus established institutions to prevent people from undermining governance. March and Olsen advocate a more autonomous role for institutions. 'Political democracy depends not only on economic and social conditions but also on the design of political institutions.' For them macro institutions such as the bureaucracy, the legislature, and the judicial system are not only arenas for contending social forces, but they also 'collections of standard operating procedures and structures that define and defend interests. They are political actors in their own right (March & Olsen, 1984).'

Hence, programs adopted due to political exigencies at a particular time and place, such as the Local Government Code of 1991 in the Philippines, become an institution that unleashes a particular form of political process – one by which the Council of Mayors can demand greater administrative and fiscal devolution from the central and provincial governments. If on the other hand, the code was not to their satisfaction then the Council of Mayors would have to align themselves with the Congressmen, the President and central ministries to bring about suitable constitutional amendments. This is not to say that macro structures and relations of power are not important, rather that political outcomes are not just a function of the distribution of resources or power, but also of the distribution of preferences or interests among political actors, and the constraints imposed by the rules of the game or institutions. To put the argument simply, the organization of political life makes a difference.

The renewed interest in institutionalism in recent years is to understand better the process of transformation taking place in the country today. It provides interesting insight into the dynamic world of policy and process, and how national, state and local institutions and politics affect it. Such an approach could help restructure the theoretical foundations that are based on commonly applied notions of political and economic structure, its institutions and governance,

and the causal links between society and polity as running from the former to the latter, i.e. class, culture, religion etc. affect politics but are not significantly affected by politics. An epistemology emphasizing micro-politics and institutions is important because local democratic processes and institutions are beginning to play a significant role in determining social and economic privileges and opportunities.

One may ask the question whether different institutional arrangements lead to different outcomes. The literature on governance attempts to answer this question with respect to macro institutions for instance a constitution – codified or not; democracy – consensual or Westminster style; or human rights – implemented or not; unitary or federal state; and the like. There is little literature on micro structures and processes from an institutional perspective that give us a sense of different outcomes from a comparative assessment of different micro institutions in a similar setting. Within the constraints of conducting such a study, this paper will attempt this exercise. However, it first needs to be clarified what we consider to be the key reasons emerging in the policy literature that argues in favour of decentralization. This has a bearing in what we consider to be good outcomes of institutional design.

#### Why Decentralize?:

The question that needs to be asked is why decentralize the provision of public goods that it critical for rural livelihoods? What lies behind this new partnership between central government and local grass-root organizations? Why do centralized states agree to decentralized modes of governance? The literature in public policy has various arguments. The first relates to externalities. Policy is about getting the right incentives (not just monetary) to internalize externalities (take into account all the ramifications of individual actions). The social contract that governs the market economy is made of formal or informal norms that are conducive to efficiency. As Putnam (1993) points out, this social capital cannot be legislated by the centralized state. A decentralized structure can better internalize the externalities. The second relates to information. Dreze & Sen (1995) and Stiglitz (1999) point out that a centralized authority does not have an unlimited ability to collect information and monitor agents. Local

actors are better informed about resource endowments, technology & fiscal capacity. It is therefore best to shift decision-making at the lowest possible level under direct control of the citizens. The third relates to democratization. There is an increasing demand for greater democratic systems from local constituencies. After the market, democracy is the new found mantra in a globalizing world. The policy literature highlights that participation by stakeholders has a profound effect in the quantity and quality of service delivery (Dreze & Sen, 1995). Similarly, the political literature points out that decentralization is a way by which the centralized state can reconnect with social groups from which they have become increasingly distanced (Manor, 1999).

#### Water, Sanitation and Poverty:

Improved drinking water and sanitation has a direct impact on poverty. Safe drinking water directly translates into better health and time savings for the poor and their family members. Improved health reduces the loss of income for adults and time savings for children provides them with opportunities to study and acquire skills for future employment. Investments in water also help to alleviate gender disparity as women and girls traditionally had the responsibility to make provisions for water. Improved sanitation helps reduce health risks for all and in addition protects the poor from degrading social and physical surroundings. Improved water and sanitation provides a direct link to better educational attainment as the children have better health, families have better income and can therefore provide them with better nourishment. These improvements could lead to the setting up of enterprises to benefit from the improved infrastructure. It is also seen that the improvement of water services leads to an increase in savings of households due to less expenses for the procurement of water. Improved water and sanitation is therefore a critical requirement for human development along with health and education. The World Health Organization (WHO) points out that \$ 1 invested in water and sanitation translates into benefits worth \$ 6 due to these multiplier benefits (Hutton & Haller, 2004). In case the improvement of water and sanitation leads to institutional reforms of local governments and adoption of mechanism facilitating and strengthening participatory

development then this institutional, technical and democratic capacity would have an impact across sectors and lead to better social outcomes for the poor.

#### Drinking Water Paradigms in Oriental Negros:

In this paper we will consider two paradigms for providing drinking water. The first that was evolved in the seventies and led to the formation of the Local Water Utilities Association (LWUA) and the second which was authored by the Central Visayas Water and Sanitation (CVWS) Project in the mid-nineties. Their effectiveness in providing drinking water will be critically examined and the paper will call for a shift in the paradigm towards a greater demand driven approach that is based on a substantive interpretation of democracy.

To begin, let us briefly understand the National Government Policies and the role of the key players in the drinking water sector. As per the National Government policies, Level 3 or piped water supply services have to be supplied on the principle of full cost recovery for capital and operation and maintenance (O&M). This level of service has traditionally been provided by the LWUA. For Level 2 (public taps and standposts) and Level 1 (handpumps) the Public Works and Highways wing of the Department of Local Government, the Water and Sanitation Coordination Office (WASSCO) under the President's National Anti-Poverty Commission, and the Provincial government provide grants to Municipal governments. RA 6716 requires the formation of Barangay Waterworks and Sanitation Association (BWSA) to ensure the provision of adequate, potable and accessible water supply to its members through the proper operation and maintenance of Level I and Level II facilities. While capital grants are provided for drinking water services, there are no capital grants for sanitation infrastructure but restricted funding for inducing sanitation coverage.

There are about 600 Water Districts in the country. Prior to the setting up of LWUA, piped drinking water was supplied by the Rural Water Supply Associations (RWSA). They were supported and financed by the Rural Water Development Corporation (RWDC), a government body that was dissolved and its functions transferred to LWUA. However, the financial viability requirement has led to the neglect of RWSAs. Under LWUA, the newly formed Water Districts



have to operate in a business like manner and generate enough revenue from its water services. This income is used to meet operation expenses, debt service and reasonable reserves for rehabilitation of services. The incentives are so structured that this public agency is responsive to the centre rather than beneficiaries. In the Philippines they are structured to disburse capital funds from the centre, raise loans and run a financially responsible utility rather than focus on equity, sustainability, outputs and outcomes of the investment. This is a supply driven mechanism where technology is chosen on the basis of incentives to the professional managers rather than the needs of the people. The existing incentives have led to an over-emphasis on the technological super-structure rather than the economic and social sub-structure through which people relate to and use water. The adoption of such technologies in the Philippines has ensured that the far-flung areas where the poor inhabit are not covered by safe drinking water. Even though sanitation is one of the mandates of the water districts and its integration with water is critical to ensure social and health benefits of good drinking water services, this is an area of complete neglect by the water district. The focus on cost recovery makes it difficult for the water districts to provide water supply services to the poor (though there is a token cross-subsidy on the basis of volume used and differential rates between residential and commercial units). This has led to some water districts to relinquish their exclusive right to provide water supply services in their franchise area (Water Districts usually have a Certificate of Public Convenience or Certificate of Conformance), which grants them exclusive right of water service to a municipality. In some cases, the water districts have retained control of its franchise area while encouraging other service providers, e.g., RWSAs, Water Cooperatives or Private Sector, to develop separate water supply systems in low-income areas, which their economies do not permit. However, in most cases the existence of the water districts acts as an institutional barrier and restricts options for the poor to develop the level of service according to their needs.

The water districts that evolved in the seventies were institutions that were in vogue in the early seventies and were backed by multilateral agencies such as the World Bank. In many other developing countries, like India, these public sector utilities found that they worked in an

environment where the central and state governments curbed their independence in fixing tariffs, awarding contracts and appointing key officials. This led to a situation where even public sector lending institutions were weary of lending capital funds to these water boards and they were left to function like line departments of the state governments that insured their capital, operation and maintenance funds. In the Philippines, as the central and provincial governments had limited resources, the LWUA was allowed to set tariffs for the water boards and raise capital from the market. The LWUA has been supported by funds from the World Bank and the Asian Development Bank.

The Sibulan Water District was created by the Provincial Water District Act of 1973 and there are at least three other water districts in this province (Region 7). The aim was to create an independent and professional organization to provide drinking water in the province. The Board of Directors consists of five members, drawn from the business community, the civic sector, the education sector, the professional sector and a member representing women's interest. The Board is appointed by the Mayor for a period of six years and they function independently of the Mayor and his office. The Board in turn appoints the staff of the Water Districts as per the criterion laid down by the Civil Service Commission. The Water District of the country meet twice a year on a regular basis to discuss issues related to water supply. There is also a Visayas region water districts association for Region 6, 7 & 8 that meets to discuss regional issues. The Water District is not a line department of the Central or the Provincial Government, nor do they have a cadre of professionals that shift from one water district to the other. Yet, under LWUA they have evolved certain systems and standards for water supply and they have been able to raise and repay huge loans for inception and expansion of their water works over the years.

In the nineties, the Australian International Development Assistance Bureau (Ausaid) initiated the CVWS Project and instead of supporting the LWUA, decided to set up – Water Cooperative Societies and Water Associations. In its own way it was promoting the process of decentralization. The decision in favour of an association or a cooperative was left to the local communities. The funding was in the form of grant with the bulk amount coming in from the

Ausaid and part funding from the provincial and municipal governments along with a contribution from the beneficiary communities. The project has a clear poverty focus as the objective of the project was to improve ‘the health and living condition as well as the economic status of poor communities in Region VII through improved water supply and sanitation.’ This was to be achieved through an increase in coverage, sustainability and by strengthening agencies to meet its objectives. Hence, while the service level that was being provided was of Level 3, there was no question of full capital cost recovery only recovery of operation and maintenance costs. Hence, it was expected that they would function very differently from the water districts. This project is also very different from the ongoing Local Government Units Urban Water and Sanitation Project (LGUWSP) of the World Bank designed to support a program of investment in LGU-managed water utilities that is based on a loan and does not have a poverty focus. The LGUWSP has a target of 250 municipalities.

In the CVWS Project, the area of operation of these associations and cooperatives were within Municipal boundaries. The Cooperatives need to register and get a licence from the Cooperative Development Authority that acts as a regulatory structure. A similar regulatory structure exists for associations in the form of Registrar of Societies. The distinguishing feature between a cooperative and a society is that there has to be an initial capital amount that is put up by the members of the co-operative. Cooperatives can also share profits among members unlike associations. There are also tax benefits that are can be claimed by cooperatives. However, given that all consumers are members of the cooperatives, there is little in terms of profits that can be made for the members would insist on keeping tariffs as low as possible. Structurally, a cooperative would be less willing to expand its pipelines unless there is a market to be tapped. Even though an association would keep in mind the costs of expansion, it may be willing to extend its pipelines if supported by a grant from the municipalities or the barangays. In two of the five projects studied, the local governments have decided not to hand over the project to an association or a cooperative, but to manage it themselves. In La Libertad this was done after an allegation of the association misusing the funds transferred to it for paying the contractors –

apparently the money disappeared from the accounts! In Vallehermoso the association ran the project for only one month before the Mayor took it back as it was a major source of revenue for the local government (it was difficult to get the exact figures from this project for this municipality as the municipal records do not keep separate accounts for different projects. In the nearby municipality of La Libertad, the total local revenue that was generated was about PhP 3 m, and over PhP 1 m was from drinking water). See Table 1 for select information on the different projects examined in Oriental Negros.

#### Emerging Issues and Shifting Decentralization Paradigm:

There are a few issues that emerge from a critical examination of the CVWS Project. They point out that a sustainable and equitable provision of drinking water and sanitation services require a shift in the decentralization paradigm for the following reasons:

##### *Economies of Scale:*

Given that this project was designed after the enactment of the Local Government Code in 1991 that provides a policy infrastructure for the management of drinking water by the local government, there are a few issues associated with this institutional design marked by a flow of funds to community and user groups by-passing the local governments. Irrespective of the directive in the Local Government Code, it can be argued that an efficient and sustainable delivery of a public good like water requires a local government oversight. Yet there are a few institutional, capacity and fiscal issues that need to be addressed for effective governance at the local level.

There is also the issue of technologies and economies of scale. Drinking water technologies that require economies of scale beyond the boundaries of the municipality which are economically efficient and affordable are not addressed. Inter-Municipal collaboration or joint projects on the basis of availability of sustainable source are not considered (this may be a reason for a high per capita cost of the CVWS Project. In India, the per capita capital cost of piped water scheme for a 1,000 HHs would be close of PhP 2,200. In comparison, the per capita

cost of the CVWS Project is about PhP 7,000). These can become critical in water quality affected areas where communities may have no option but to rely on seasonal springs and rainwater harvesting. The CVWS projects that were studied had an average of about 950 connections, and the project designs were limited by the municipal boundaries giving little flexibility to economical technological options. Like excessive centralization, excessive decentralization limits the options of safe delivery of drinking water services. An effective design of decentralization needs to clearly mark out the specific roles of the different tiers of the government and provide a mechanism for resolution of territorial conflicts related to drinking water. Some areas that may require provincial and national government oversight could relate to addressing concerns about environmental issues and ensuring that there are adequate safeguards to ensure safe drinking water quality standards.

*Addressing Poverty and Other Public Goods Concerns:*

Given that the CVWS Project has a poverty focus, it is to be seen if the technology that was adopted and the institutions that were created help in the effort towards poverty alleviation. It needs to be appreciated that as one moves to a higher level of service, there is an increase in the per capital cost as well as in O&M. Within a given fiscal constraint, a higher level of service would restrict the outreach of the project due to the high unit cost and also restrict the ability of the poorer sections of the society to connect to the service level even if there is access due to the constraints imposed by the high O&M costs. Within areas of access, the issue of affordability is addressed with the setting up of stand-posts that can be shared by a cluster of habitations. In some cases the O&M costs are brought down further by cross-subsidy. This mechanism provides a more reliable level of service to the poor and for the service provider a broader revenue base.

One may have little to argue with this model in the case of drinking water projects that do not have a poverty focus. For a water and sanitation project with a poverty focus, in a context where nearly a third of the population in the municipalities still does not have access to safe drinking water and about half the population does not have access to sanitary toilets, a focus on piped water supply and providing connections on the basis of ability to pay rather than some

social criteria is questionable. As per the national government guidelines, level 3 service should be provided on the basis of full cost recovery. Hence, a project with a poverty focus that is funded by a grant should not be providing a level 3 service, but concentrating on level 1 & 2 to achieve full coverage for water and sanitation. Only if the basic level of service was achieved could there be any justification for providing level 3 service on the basis of grant funding.

It is estimated that the cost of providing safe drinking water to meet the Millennium Development Goals (MDGs) would cost US\$ 2.08 m annually for SE Asia, while meeting the MDGs with piped water will cost US\$ 15.55 m for the region (Hutton & Haller, 2004). As per these estimates of the WHO, the difference in costs in providing safe drinking water and providing safe piped water supply is about seven and a half times more. This additional cost will come without an increase in the multiplier benefits of providing water. In the Philippines, the utility model of providing piped drinking water supply at the cost of exploration and appreciation of alternate technologies to piped water supply puts pressure on fragile fiscal base of the government. This fiscal burden affects the ability of the municipality to execute other welfare schemes targeted at the poor.

The inherited technological and institutional infrastructure of the CVWS Project and the manner in which the incentives are structured restricts the role of the associations and the cooperatives as a limited service provider. There are no incentives in these institutions to extend the pipelines to the far flung areas in the municipality and address the needs of the poor. Hence they function very much like a water district without the responsibility of repaying back the capital cost. The responsibility of accepting a public grant on behalf of all the citizens of the municipality (and not just the association and cooperative members) and working for a larger public mandate for water and sanitation in the municipality is not understood by them. To transform these associations to a professional water and sanitation agency requires a larger mandate that is not possible without local government oversight and an allocation of targeted subsidy.

Critical to the removal of poverty is the following of a livelihood paradigm that aims at asset creation. Central to asset creation is the provision of public goods and the access to these goods by the poor. In order to effectively deal with issues of equitable access to drinking water, sustainability of water resources and reducing the vulnerability of the poor due to uncertainties like natural disasters and ecological and economic calamities, there is a need to develop the local government's fiscal foundations and policy framework to ensure that the public goods element of water are addressed. As a public good like water is critical for the life and livelihood of every citizen, it is seen that in Sta. Catalina and in La Libertad, the local government had to move in to put on track a bankrupt cooperative that had shut down for three years and an association that misused the public funds to such an extent that there was no money to pay the contractors. In Pampolana, Vallehermoso, the municipal government firmly supports and facilitates the functioning of the water associations. In Sianton, the local government would like to play a greater role but is restricted in doing so by the association that is engaged in a long court battle asserting its independence.

A critical financial issue that is not addressed in the design of these projects relates to the financial risks. While the accounting models that have been handed over to the cooperatives and associations calls for the accounting of depreciation costs and the maintenance of adequate reserves for the same, there is no provision for insurance against natural disasters and calamities. Such a risk for a private body is enormous. There is a need to create an insurance market to mitigate these risks that would affect life at the community level.

Even though municipalities such as Sta. Catalina and Pamplona have evolved mechanisms of working together with the associations, there are unclear rules of oversight by the Municipality. The regulatory structures like the Registrar of Societies and the Cooperative Development Authority are too distant from the concerns of water and sanitation in the municipality. They can only deal with organizational matters and ensure democratic elections but cannot address concerns of livelihoods and access to water. Even on organizational matters they

have no oversight on salary and incentives to board members and employees that can ensure that bankruptcies like Sta. Catalina and misappropriation as in La Libertad do not happen again.

In Sibulan, one of the two sources of water has traces of arsenic. As against a permissible level of .05 ppm, the groundwater source was found to contain the level of .07 ppm. The Sibulan water board claims that as the water from the two sources, groundwater and spring water, are mixed in the pipeline, the arsenic level drops to the level of .02 ppm that is within the permissible limit. While it would take a hydrological engineer and a water quality expert to figure out whether the contamination level can be evenly spread to .02 ppm across the pipelines, given the different areas that they serve and the topography and gradient of the land, this is a case that calls for state regulation and intervention. While the Sibulan board wishes to hush up the case and the Sibulan water manager prepares a file to ensure that she is not made a scape-goat, it is clear that the monthly repayment installments and the limited access to capital restricts the options of the Sibulan board to mitigate the health risks. It is prudent that the two sources be detached, the people are informed about the health risks in the contaminated area and provided with arsenic removal technologies.

The local government structure provides a constitutional and institutional policy infrastructure to scale up what are identified as local, decentralized and community initiatives in resource and water management (Brillantes, 2003). The rational option seems to be an alignment with the local government system in a way that local government and community interface is strengthened. It also ensures that an integrated approach to water and sanitation is adopted that addresses the concerns of all in the municipality rather than just members of the association and the cooperatives. The local government structure would also ensure that transitions from an earlier paradigm to a more progressive one that advocates a more substantive democratic participation would be possible to bring about greater efficiencies in the delivery of drinking water and sanitation.



*Demand Driven Approach and Substantive Democracy:*

In these projects it is seen that the planning, technological choice, contracting and construction were carried out by professional agencies without empowering local communities to take these decisions themselves. The water districts, associations and cooperatives see their primary function related to the O&M of the water scheme that was handed over to them. They even shy away from addressing concerns of proper drainage at the public stand posts that are transferred to the communities. As such, they are locked in a framework that has been handed over to them and they have little capacity to think beyond the logic of the structure that has been provided to them. Even though the Governing Board of these associations and cooperatives are created democratically on the basis of elections, there is no substantive democracy in the form of sharing information and responsibilities with the communities through regular meetings, barangay level associations or groups representing women's concerns.

While sanitation was a stated objective of the project, this is an area of complete neglect. At the moment the people have a choice of either the pour flush latrine or a modern cistern. There was not much that was done about sanitation in terms of informing people of various technologies or creating institutional mechanisms for creating and sustaining a supply-chain for latrines. It is reported that some hygiene education was conducted at the commencement of the project, but that has not been sustained at the community or school level. In India democratic devolution has created innovative models of community monitoring of sanitation that help reinforce basic hygiene and sanitation messages in a manner where peer pressure acts as a catalyst to sustain safe hygiene and sanitation practices leading to better health outcomes.

There are no records or systems in place for water quality testing and an action plan for remedial measures. Water was tested at the source at the time of project construction and that is all that is mentioned about this aspect officially. There is no water testing at the household level that is supplied with piped water and no focused approach to handling of water at the household level. If an epidemic were to occur, the fiduciary responsibility would rest with the local government. However, the most vulnerable are the poor and those who live in far-flung areas

who are neglected by both the municipality and the association (or cooperatives). They have no basic information about the quality of drinking water quality they have access to. The least that can be provided to them is information and access to simple household or community level water purification devices along with safe hygiene and sanitation messages. These are some public concerns of water and sanitation that an association or a cooperative bestowed with public funds cannot shy away from.

Most of these concerns can be addressed through an adoption of a demand driven approach to water and sanitation. People's participation, empowerment and ownership are fundamental to the concept of demand driven approach to drinking water and sanitation. Such an approach being adopted by water and sanitation programs since the mid-nineties in countries like India amount to fiscal transfers to the local governments and the communities are entrusted with the responsibilities of community mobilization, planning, technological choice, procurement, contracting, hygiene and sanitation education, monitoring and evaluation and taking steps to ensure the sustainability of the project. This takes away the design, execution and management of the project from professional managers and empowers the local communities through networks with professional groups and non-governmental organizations to run the project in a democratic manner in the true spirit of devolution. This approach of democratic devolution has ensured about 40 – 60 percent cost and implementation savings in India compared to projects undertaken by the water boards (World Bank, 1999). A transparency in the everyday activities of the association not only ensures direct accountability but also ensures a democratic safeguard to ensure that the affluent do not capture subsidies that are meant to address concerns of poverty as has happened in the CVWS Project.

#### La Libertad Project:

Based on the discussion above, it can be concluded that a local government managed water supply and sanitation project would be able to better address concerns related to the public nature of water and sanitation. However, situating a drinking water service delivery within a

local government model is not enough for there is a need for further institutional development to ensure a suitable choice of technology for a safe, sustainable and equitable delivery of drinking water in the municipality. The La Libertad municipality was selected for a closer examination for it has raised resources for another piped water project covering four barangays and 382 households. Of the 7,019 households, about 1,231 households or about 18 percent of the total number of households have piped water connections (level 3) and 814 households have access to public faucets (level 2) which adds up to about 30 percent of the population. The remaining 70 percent of the population depends on wells and springs, of which about  $\frac{3}{4}$  depend on spring sources. It is estimated that nearly a fourth of them do not have access to safe drinking water. The level 1 service in this municipality is provided by 4 deep wells, 132 shallow wells, 62 covered dug wells, 253 open dug wells, 57 springs and a sole rainwater harvesting unit. It is little wonder that this province of 25 municipalities recorded 26,023 cases of diarrhea-related deaths in 2001 (Provincial Government of Negros Oriental, 2003). Even through the monitoring of drinking water quality has been devolved to the municipalities, they do not have the necessary professional, technical and infrastructure facilities to ensure safe standards. Given that the basic level of safe drinking water was not achieved in this municipality, the provision of level 3 service to a rich minority of the population has been an abuse of the subsidy earmarked for poverty alleviation.

With respect to sanitation, about 4,200 households or about 60 percent have access to pour flush latrines and sanitary latrines. However, nearly 80 percent of these toilets have unlined pits which coupled with a high rainfall results in bacteriological contamination of groundwater and spring sources. Between the lined sanitary pits and the unlined pour flush toilets there are no safe technological options of latrines that are available to the people. There is a greater need of information, expertise and the creation of a supply chain to ensure better health outcomes. Effective inputs in the safe disposal of human faeces would ensure that the water sources are not contaminated and lead to better health outcomes. However, the present institutions that rely of civil engineers for managing water and sanitation focus on a top-heavy water system at the cost

of sanitation. Diarrhea-related deaths take place due to water contamination, but water contamination takes place due to the unsafe disposal of human faeces. The root of the problem needs to be addressed before one begins to choose level 3 service over level 1 and 2. The neglect of safe sanitation leaves the poor vulnerable.

Given that the IRA is the only secure means of funding capital works for drinking water in the municipality (apart from raising loans for level 3 service that has reached a saturation point for this municipality) there is little option for the municipality than to concentrate on level 1 and level 2 service along with a focused approach on sanitation in order to meet the MDGs of safe water and sanitation. As against a total income of PhP 35,507,007.37 in the year 2003, as much as PhP 31,896,954.78 were from the IRA. Of this 15,255,559.41 were for staff costs and another 8,724,932.67 for maintenance and other operating expenses, leaving an operating income of 11,526,515.29 that could be spent for developmental work. In case the Municipality was to earmark 20 percent of its developmental funds for water and sanitation over the next decade it would go a long way in providing full safe sanitation coverage and drinking water coverage for level 1 and level 2. This level of service would be within reach of the poor as it would amount to a monthly operation and maintenance cost with PhP 15 per month. Once this level of service is made then the local government could access funds for level 3 service on the basis of full capital and O&M recovery. The present CVWS project has only ensured that a capital subsidy of over PhP 6,000 per household has been grabbed by the rich. There is a need to design inclusive institutions that can debate alternate technologies and to ensure that subsidies are properly targeted and technological options other than piped water supply are selected to ensure that the vulnerability of the poor due to water and sanitation is reduced.

#### Institutions and Outputs:

It is seen that different institutional structures work within their own logic and shape technological choices that have different social outputs. The design of institutions, its funding, and participation of various actors in these institutions influence the service delivery. In the case

of public goods like water that directly impact people's life and livelihood, the design of these institutions has a critical bearing on access or denial to this critical resource to the poor. Drawing upon the literature in public policy that calls for decentralization, there is a need to ensure that issues of externalities, information and democratization are addressed in the design of decentralization programs in developing countries. Figure 1 below attempts to visually depict a decentralization axis and points to certain paradigms of decentralization. It is seen that the Sibulan water district and the Sianton association are situated somewhere between being managed like a public agency and a market institution. While they present an institutional arrangement that is different from centralization, they are outside the local government structure. Sta. Catalina and Pamplona are parallel bodies that are managed as public institutions, but outside the local government structure. La Libertad and Vallehermoso work as local government institutions and can address concerns related to the public nature of water very well. There are no institutions in Oriental Negros that can be categorized as democratic devolution. We have seen earlier that as decentralization is not a definitive concept it will be difficult to design an authoritative structure for it. The challenge would be to design institutions that can effectively manage the transition to democratic and devolutionary decentralization.

The fundamental aspects that are critical to catalyze the transition towards democratic decentralization for drinking water projects are community mobilization, participatory planning, choice of technology, social and gender safeguards, community procurement and contracting, participatory monitoring and evaluation, and preparing a participatory sustainability plan. These issues are completely ignored in the water districts and the CVWS Projects. Here the professionals selected a water source, selected a technology, constructed the project and handed it over to the cooperatives and associations after giving them some training in operation and maintenance. The CVWS projects are participatory to the extent that the community wanted this project in a context where the choice was this project or nothing. It is also participatory as the project is now managed by the cooperatives and associations. However, participation without empowerment cannot adequately address the concerns raised with regard to centralized delivery

of services. The cost efficiencies and better social outputs due to democratic devolution have been demonstrated in projects in India.

It may be argued that while direct decisions can be taken by rural communities, in the urban context it can be argued that it is best to leave the business of drinking water to the professionals. While this may be the case, there is a need to institute certain mechanisms to ensure that the roles of policy, implementation and regulation are not combined in one institution for it creates perverse incentives and leads to inefficiencies. For instance the design could be checked for quality from an independent body, the procurement policies could be made transparent with the involvement of citizen's representatives in the procurement process, the service provider could broaden its professional expertise and hire experts in sanitation and hygiene education, the utility could be made directly accountable to the people on issues of water quality and respond to their demands judged by mechanisms such as citizen's report cards and public hearings. This would ensure a substantive democratic accountability as against representative democratic accountability that is tested once in five years.

The key aspects to catalyze the transition towards democratic devolution is a mechanism to ensure the creation of a democratic design for drinking water projects that will adequately address concerns of equity and safeguards for the poor. It calls for an alternate pedagogy of knowledge where the values and biases of the professionals are questioned and their interests in perpetuating particular forms of technologies and institutions understood. The attempt to democratize knowledge and hold the professionals accountable for their advice and action would bridge the gap between the received wisdom of the professionals and the reality they confront. It would ensure that political and social choices are made democratically and not be part of a discourse that the poor and the marginal cannot comprehend or negotiate with. It is a mechanism that will ensure outputs and create a policy framework that is receptive to a demand driven approach and can address concerns of poverty alleviation and those related to public goods nature of drinking water.

### Conclusion:

The literature on decentralization has generally been prescriptive, focusing on how decentralization ought to be done and influenced by normative notions on decentralization. Several strands of theory, particularly on fiscal federalism and liberal democracy, have provided a largely normative argument for decentralization, without focusing on all the critical requirements for decentralization – political, fiscal and administrative autonomy. In most cases, these preconditions or processes are lacking, underdeveloped or badly designed for deliberate sabotage. Further, in the context of a vibrant democratic polity, it needs to be appreciated that the process of decentralization is grounded in a state-specific dynamic political economy. While economists and public administrators prefer to discuss decentralization outside a dynamic political context, an understanding of the process and politics of decentralization in specific state, sector and local context enriches the literature on decentralization. However, a few challenges towards effective decentralization for drinking water still remain. First, to design institutional development to ensure that local government institutions have a central role to play in the delivery of drinking water; are able to address concerns related to the changing paradigms of decentralization; are aware of concerns related to the public nature of water and sanitation and can evolve mechanisms to resolve conflicts and promote equity, especially among different strata of society and in gender relations. Second, there is a need to ensure that the process of decentralization remains focused on the need for sustainable livelihoods that ensures the sustainability of the natural resource base. This can be done by democratizing the planning and management of drinking water services. This calls for a direct participation at every stage of the management of the project following the principle of substantive rather than direct democracy. Third, that the provincial and national governments clearly redefine and identify their role in providing an adequate fiscal base and linkages to professional and managerial capacity that is critical for the local governments to effectively manage their new responsibilities.

Acknowledgements:

This research was facilitated by the Asia Scholarship Foundation, Bangkok that is gratefully acknowledged. The author will like to thank the Philippine Institute of Development Studies for offering me a position as a Visiting Fellow to conduct this study. At the PIDS, I will like to thank the President Josef Yap, and other fellows including Rosaland Manasen and Eliseo Ponce; Virginia Miralao and Monette Jimenez of the Philippine Social Science Council; Alex Brillantes, Remigio Ocenar and Julio Armador at the National College of Public Administration and Governance, University of Philippines, Mark Hayllar of the City University of Hongkong, and Ranulfo Gargio of the Department of Interior & Local Government (DILG). In Oriental Negros I am grateful to Ulrike Lipkow, GTZ Adviser, Judith Alpurto, PPDO Office, Dumaguete, Jocelyn S. Limkaichong, Municipal Mayor, La Libertad, Mayor Joniper A. Villegas, Vallehermoso, Engr. Jona Duhaylungsod, Sianton, Lina Dagodog, Sta. Catalina, Engr. Ulysses Abcede, Pamplona, Engr. Teresita Mendez, Sibulan Water District and many others who helped facilitate this study. I am thankful to Josef Yap, Eliseo Ponce, M. Ballesteros, Celina Reyes, Michael Manglangit from PIDS, Engr. Antonio B. Magtibay from LWUA and Mariano Gabito, Additional Director, DILG for their comments on this paper. The usual disclaimers apply.

References:

- Asian Development Bank, *Asia Water Watch 2015: Are Countries in Asia on Track to Meet Target 10 of the Millennium Development Goals?*, (in association with UNDP, UN-ESCAP& WHO) Philippines, ADB 2006.
- Brillantes, Alex B. Jr, *Innovations and Excellence: Understanding Local Governments in the Philippines*, Centre for Local and Regional Governance, Manila, National College of Public Administration and Governance, University of the Philippines, 2003.
- Dreze, Jean & Amartya Sen, *India: Economic Development and Social Opportunity*, New Delhi, Oxford University Press, 1995.



- Hutton, G. & L. Haller, *Evaluation of Costs and Benefits of Water and Sanitation Improvements at the Global Level*, Geneva, World Health Organization, 2004.
- Manor, James, 1999, *The Political Economy of Democratic Decentralization*, Washington D.C., The World Bank, 1999.
- March, James G. & Johan P. Olsen, 1984, 'The New Institutionalism: Organizational Factors in Political Life', *The American Political Science Review*, Vol. 78, pp. 734-749.
- North, Douglas, 1986, 'The New Institutional Economics', *Journal of Institutional and Theoretical Economics*, No. 142, pp. 230-7.
- Provincial Planning and Development Office, *Central Visayas Water and Sanitation Project: Project Feasibility Report*, Central Visayas Regional Development Council, Republic of the Philippines and Australian Agency for International Development. Separate reports for Municipality of Pamplona, Sianton, Sta. Catalina, La Libertad and Vallehermoso prepared in collaboration with Sinclair Knight and Partners, 1996.
- Provincial Government of Negros Oriental, *Provincial Water Supply, Sewerage and Sanitation Sector Plan: Negros Oriental*, German Technical Cooperation and Water Supply and Sanitation Program Management Office, Department of the Interior and Local Government, Philippines, 2003.
- Putnam, Robert, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton, N.J., Princeton University Press, 1993.
- Stiglitz, Joseph, 1999, 'Whither Reform? Ten Years of the Transition', Paper presented at the *Annual World Bank Conference on Development Economics*, April, The World Bank, Washington D.C.
- World Bank, *India Water Resources Management - Rural Water Supply and Sanitation*, South Asia Rural Development Series, New Delhi, Allied Publishers, 1999.

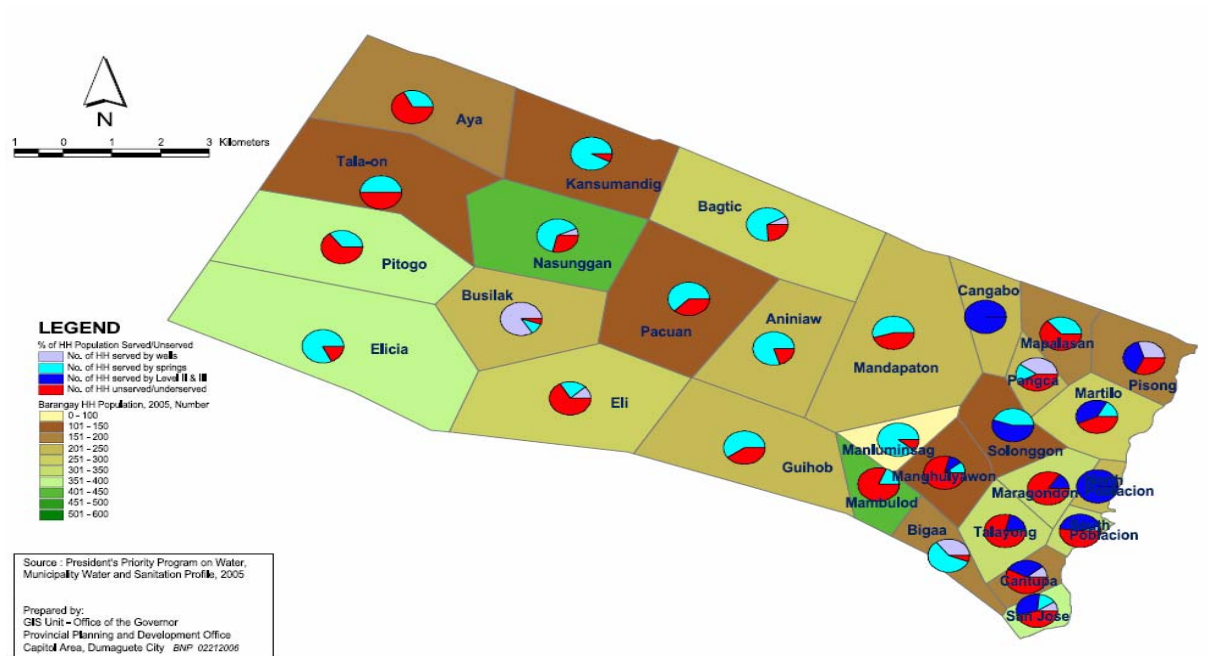
Table 1: Different Institutional Arrangements for Drinking Water Supply in Oriental Negros

Municipality	Institutional Arrangement	Cost of Project P million	Water System	Year of Operation	Barangays Total Pop. Pop. Covered	Staff	Water Rates Per cu m	Other Projects
Sianton	Association that has Initiated moved towards Registering as a Co-Op. No links with LG. Fighting a long case in court to retain its independence from LG.	12.116	Spring source, 2 Pump house, 250 cum reservoir, gravity PWS	In phases 1992-4	26 barangays, 9,596 HHs Covered - 9 barangays, 1,183 HHs	Manager Bookkeeper Meter Reader 4 Pump Operator Plumber 2 Caretaker Total 10 Plus 7 Board of Directors	Standposts P 3.75 per mth Domestic Upto 10 – P50 11-20 – P 5.50 21-30 – P 6 30-up – P 6.50 Commercial Upto 10 – P75 Rest as domestic Above 50–P200	Afforestation for source protection P100-plantation P100-survival P200 after 5 yrs Planters harvest fruits.
Sta.Catalina	Co-operative Society With close links with MuG. Water works had shut for some time a couple of years back due to bankruptcy. Revitalised with LG support of P 300,000 & Provincial funding to rehabilitate pump	7.136 GoA – 2.404 GoP – 3.825 Pr G - 0.386 LG- 0.483 Com - 0.036	Spring source, pump, reservoir	MOU 1993 Operation 1997 Bankrupt 2002 New Mgt May 2005	Covered 600 + HH	Manager Cashier Bookkeeper BOD Secretary Meter Reader 2 Pump Operator Plumber 2 Total 9 Board works voluntarily	Standposts Upto 25 –P120 Domestic Upto 10 – P75 21-30 – P 8 31-40 – P 8.5 40-up – P 9 No commercial users; same for schools, police etc	Outstanding debt of P 650,000
La Libertad	LG management. The water work was not handed over to the association as TF misused, contractor not paid.	6.283	Spring source and reservoir. No pump so cheap O&M	Operation 1992	29 barangays Pop 29,979 HH 5,805 Covered 8 barangays 1,000 + HHs	Collecting Clerk Plumber 3 Meter Reader 2 Total 7	Upto 10 – P30 Additional – P 3	Of the local income of P 3 m, over P 1 m comes from water charges.

Pamplona	Water association with close links with LG.  Well managed - Bank balance of P 250,000 + cash reserve for retirement fund	8.646 GoA – 2.455 GoP – 3.838 Pr G – 0.889 LG – 1.419 Com – 0.044	Spring source 11.4 km away Reservoir 6 km away, PWS. Gravity scheme – low O&M.	MOU 1996 Operation 1998	16 barangays Pop 27,971 HH 5,144 Coverage 7 barangays 1,500 HH Standposts 500 HH	Engineer Accountant Cashier Billing Clerk Meter Reader 2 Plumber 2 Posting Clerk Guard Total 10	Upto 10 – P 55 11-20 – P 8 21-30 – P 10 Standposts Upto 10 - P 120	Every year pipeline is extended. Encouraging barangays to provide funding for extension.
Vellehermoso	Water association could only work for 1 month. Mayor thought this was the only source of income for Municipality Municipal Water District Office created with cap on salaries – 55% of rev.		Borewell, Reservoir, PWS	MOU 1995 Operation 1997	Coverage 3 barangays 432 HH Mu G has three other schemes serving 134 HH	No clear idea of staff as they also take care of other schemes	Upto 10 – P 30 11-20 – P 4.50 21-30 – P 6 31-40 – P 7 41-50 – P 9	Problem with material – difference in standards New project P1m; Loan for augmentation P 3 m
Sibulan	Water District Close link with LG. Good professional backing from 67 water districts – bi-annual meetings.	LUWA 1982 given loan of P 3.7 m 1999 loan of P19.3 m from ADB. Another loan Of P 23 m from ADB in 2003.	Rehabilitation of spring source, pump, reservoir that was built in 1935, ground water pump & laying of pipes & connections.	Since 1935	15 barangays Pop. 31,206 6,264 HH Coverage 10 barangays 3,362 HH (out of 2,318 HH in these 10 barangays) More connections due to more housing colonies – target now 5,000 HH by 2008.	Gen Manager Adm Assistant Accountant 2 Customer Ass 2 Cashier Plumbers 4 Meter readers 2 Pump operator 2 Clerk Store Keeper Guard 2 Total 19 9 regular & rest casual.	Upto 10 – P 140 11-20 – P 15.35 21-30 – P 17 31-40 – P 20 41 up – P 24 Commercial Upto 10 – P 280 11-20 – P 30.7 21-30 – P 34 31-40 – P 40 41 up – P 48	Arsenic of .07 ppm found (permissible level .05) in ground water. Spring does not have arsenic. As water is mixed piped water has .02 ppm of arsenic.

Source: Provincial Planning and Development Office (1996).

Map 1: Water Supply Coverage



Map 2: Sanitation Facilities and Service Coverage

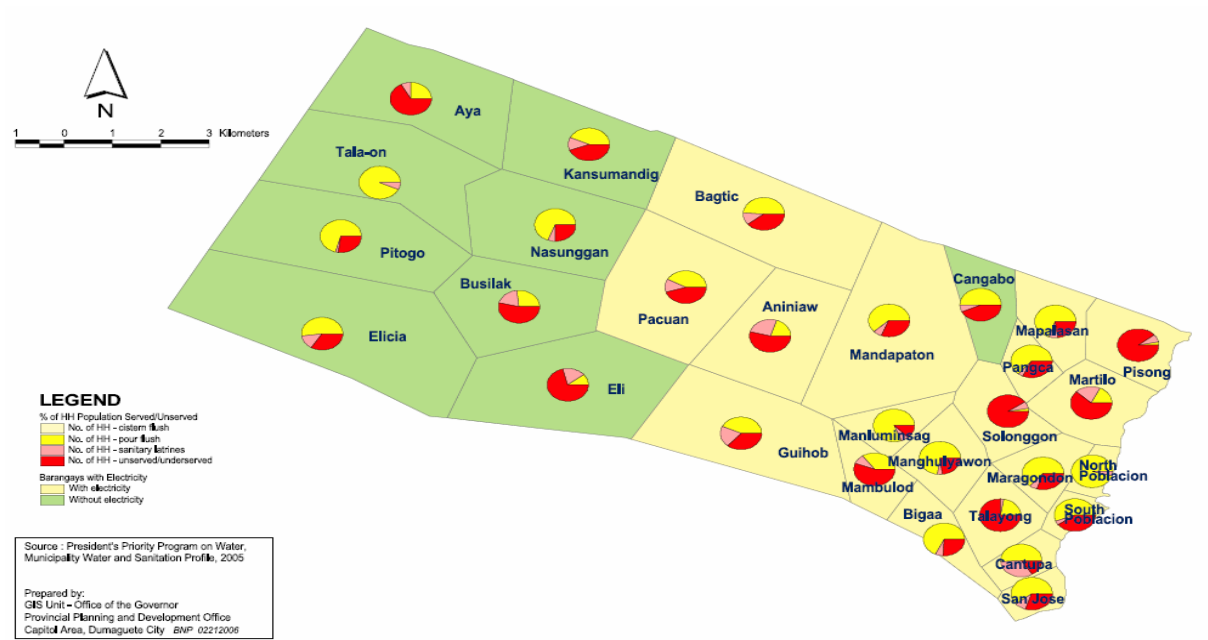


Figure 1: Decentralization Axis

