

Performance and problems of water districts: selected experiences

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Water districts are local service providers that operate Level III water systems¹ in areas of the Philippines outside Metro Manila. In 2005, there were 580 water districts in the country (World Bank 2005, NEDA n.d.). In 2007, they served 6.9 million people or 76 percent of the 9 million people serviced by all local water service providers.² In terms of population coverage, therefore, water districts are the dominant local water service providers.

While water districts are clearly important, the percentage of the national population serviced by them remains low. In 2007, the

number of people they covered formed only 8.9 percent of the estimated 77.6 million total population of the country outside Metro Manila (NCSB 2008). Furthermore, in the same year, the people serviced by all local water service providers formed only 11.6 percent of the same population. The coverage of local water service providers, in general, and water districts, in particular, therefore, has to increase to attain sufficiency in local water supply.

In late 2008 and early 2009, the Philippine Institute for Development Studies (PIDS) and the United Nations Children's Fund (UNICEF) conducted a study on local service delivery in education, health, and potable water in Dumaguete City, Negros Oriental, and the

¹ Level III water systems are piped potable water sources with a private water point such as a house connection.

² The other local service providers were local government unit (LGU) utilities, rural water and sanitation associations (RWASAs), barangay water and sanitation associations (BWASAs), cooperatives, and private utilities.

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province of Agusan del Sur. Their locations in reference to the entire Philippines are shown in Map 1. In the case of potable water, the activities included a review of some water districts operating in the study sites. This review assessed the performance of water districts as well as the problems and issues they face. It also provided recommendations on how to address these problems and issues.

This *Policy Note* summarizes the results and findings of the aforementioned study on potable water, particularly those related to the performance and problems of water districts in Dumaguete City and Agusan del Sur. It is hoped that this *Note* will provide useful data and information for the improve-

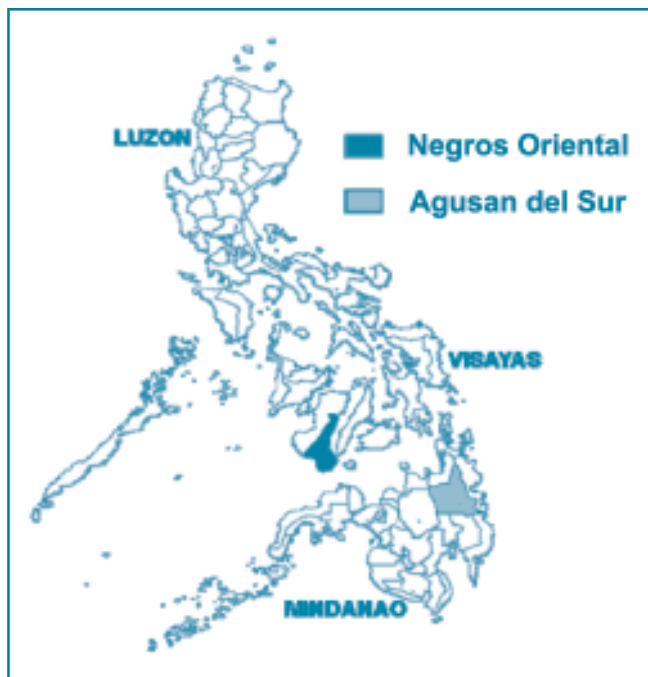
ment of these water districts as well as other similarly situated water districts in the country.

Background and performance of water districts

There were three water districts covered by the study: the Dumaguete City Water District (DCWD) in Dumaguete City in the province of Negros Oriental, and the Bayugan Water District (BWD) and Prosperidad Water District (PWD) in the province of Agusan del Sur.

Dumaguete City is the capital of the province of Negros Oriental. Bayugan is a first class municipality in the province of Agusan del Sur while Prosperidad is the province's capital.

Map 1. Map of the Philippines highlighting Negros Oriental and Agusan del Sur



Dumaguete City Water District (DCWD)

The DCWD provides potable water to the Dumaguete City area. For water source, it operates 15 pumping stations around the city. In 2006, it had 19,419 service connections, including 17,591 households, 256 public taps, 1,571 commercial establishments, and one consumer classified as others. Households, therefore, formed around 90 percent of the customers of the water district.

Based on information from key informants, in 2008, the DCWD had an estimated annual gross revenue of P98 million, annual total cost of P89 million, and annual net profit of P9 million. Financially, therefore, the water district is a positively earning business operation.

In 2007, the DCWD served 19,239 households or 96 percent of the total of 20,012 households in the city serviced by all types of water systems and 89 percent of the overall total of 21,582 households in the city. The water district, therefore, supplied water to about 9 out of 10 households in the city which is a remarkable performance in terms of household coverage.

The present tariff structure of the DCWD, as shown in Table 1, is as follows. A minimum charge³ for the first 10 cubic meters or less of water consumed is set at P120.00 for residential/government users. This charge varies from P150.00 to P240.00 for various types of semicommercial and commercial users. A commodity charge, which differs among types of users, is then applied for higher levels of consumption, with the charge increasing as the volume of water use rises every 10 cubic meters.

The DCWD tariff structure indicates that for the same consumption levels, semicommercial and commercial users pay more than residential/government users. Hence, this structure is a socialized pricing scheme where large commercial users pay more to subsidize the low-consuming but numerous residential/government users.

Bayugan Water District (BWD)

The area of jurisdiction of the BWD is the municipality of Bayugan in Agusan del Sur. Its sources of water are the natural springs in a watershed located about 6 kilometers from



The Dumaguete City Water District building illuminates at night.

the poblacion. During the dry season when spring water is at a low level, the BWD pumps water through its pumping station located in another area about the same distance from the poblacion.

Of the BWD consumers, an estimated 80 percent are households while the rest are commercial establishments, commercial (industrial) establishments, and municipal and barangay local government units (LGUs). Based on information from key informants, in 2008, the BWD had an estimated annual gross revenue of P15 million, annual total cost of P18 million, and an annual net loss of P3 million. The BWD, therefore, is a negatively performing business enterprise.

³ Minimum charge is for ½ inch diameter pipe connection and increases up to 2 inches of connection. Commodity charge is the same regardless of connection size.

Table 1. Current tariff structure of the Dumaguete City Water District

Category	Residential/ Government	Semicommercial A	Semicommercial B	Semicommercial C	Commercial
Minimum charge (first 10 cubic meters or less)	P120.00	P210.00	P160.00	P150.00	P240.00
Commodity charge (consumption in cubic meter)	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter
11–20	13.50	23.60	20.25	16.85	27.00
21–30	16.50	28.85	24.75	20.60	33.00
31–50	20.00	35.00	30.00	25.00	40.00
51–up	24.00	42.00	36.00	30.00	48.00

Source: Dumaguete City Water District

Table 2. Current tariff structure of the Bayugan Water District

Category	Residential/ Government	Commercial A	Commercial B	Commercial C	Commercial (Industrial)
Minimum charge (first 10 cubic meters or less)	P204.80	P358.40	P307.20	P256.00	P409.60
Commodity charge (consumption in cubic meter)	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter	Pesos/ cubic meter
11–20	22.40	39.20	33.60	28.00	44.80
21–30	24.95	43.65	37.40	31.15	49.90
31–40	28.15	49.25	42.20	35.15	56.30
41–up	32.00	56.00	48.00	40.00	64.00

Source: Bayugan Water District

Although the area of jurisdiction of the BWD is the entire municipality of Bayugan, it currently services only 9 out of 43 barangays, mostly located along the national highway. As of 2008, the water district provided water to only 2,325 households which formed 13.6 percent of the total households in the municipality.

The tariff structure of the BWD shows a minimum charge for the first 10 cubic meters of water of P204.80 for residential and government consumers and higher rates for different types of commercial and commercial (industrial) consumers (Table 2). After that, all types of consumers pay a commodity charge which increases as the rate of

water use rises every 10 cubic meters. The commercial consumers pay less than twice while the commercial (industrial) consumers about twice the commodity charge paid by residential and government consumers.

As in the case of the DCWD, therefore, the tariff structure of the BWD is a socialized pricing scheme where residential and govern-

ment users are subsidized by commercial and commercial (industrial) users. Comparatively, the rates of the BWD are about three-fourths more than those of the DCWD. This, despite the fact that Bayugan is economically way behind Dumaguete City, with its water users having a relatively much lower ability to pay for water.

Prosperidad Water District (PWD)

As in the case of the two aforementioned water districts, the coverage of the PWD is the entire municipality. Its sources of water are the springs located in watershed areas around Prosperidad. Its consumers include households, local government units, and commercial establishments. About 80 percent of the consumers are households.

It is estimated by key informants that in 2008, the PWD had an annual income of P6 million, total cost of P5.4 million, and net profit of P0.6 million. The water district is thus a positively earning operation although its annual profits are relatively modest.

Although the PWD covers the entire municipality, like the BWD, it operates only in 7 of the 32 barangays of the municipality at present, including the poblacion and its nearby barangays. The water district has connections to only about 17 percent of the households in the municipality.

The current tariff structure of the PWD indicates a minimum charge of P171.00 for residential and government consumers and

Table 3. Current tariff structure of the Prosperidad Water District

Category	Residential/Government (½" pipe)	Commercial (½" Pipe)
Minimum charge (first 10 cubic meters or less)	P171.00	P342.00
Commodity charge (consumption in cubic meter)	Pesos/cubic meter	Pesos/cubic meter
11–20	18.25	36.50
21–30	21.75	43.50
31–40	25.90	51.80
41–up	30.40	60.80

Source: Prosperidad Water District

P342.00 for commercial consumers for the first 10 cubic meters or less of water (Table 3). Thereafter, all consumers pay a commodity charge which increases as the rate of water use increases every 10 cubic meters. Commercial users pay about twice the commodity charge paid by residential and government consumers.

Like those of the DCWD and BWD, the tariff structure of the PWD is therefore a socialized pricing scheme. It is worth noting that while the tariff rates of the PWD are lower than those of the BWD, they are also significantly higher than those of the DCWD. This is so even though, as in the case of Bayugan, the ability to pay for water of the users in Prosperidad is significantly lower than that in Dumaguete City.

Problems facing water districts

Focus group discussions among households in the service areas of the three water districts

in Dumaguete City and Agusan del Sur indicated that price, quality, and access problems confront the water districts, as summarized below.

Dumaguete City Water District

- In general, households perceive price, quality, and accessibility as factors affecting their demand for water from the DCWD.
- Richer users of DCWD water think that its price is just right while poorer users think it is significantly high.
- Nonusers of DCWD water assert that they would likely apply for connection if the price is significantly lowered.
- Users of DCWD water believe that it is of good quality. Nonusers argued that it has a chlorinated and rust-like taste.
- Users of DCWD water think that it is highly accessible at most or all times of the day and year.



A concrete water reservoir of a water district in the Philippines.

Bayugan Water District/Prosperidad Water District

- In general, households also perceive price, quality, and accessibility as factors influencing their demand for water from the two water districts.
- Both users and nonusers of these two water districts' water think that the price of water is significantly high given their ability to pay.
- Nonusers of the water districts' water said that they would likely apply for connection if the price is significantly lowered.
- Users of the water districts' water believe that the water quality is relatively poor and needs to be significantly improved.
- Users of the water districts' water perceive water accessibility to be poor at certain times of the day and year.
- Absence of service in their localities is a major reason why households do not use the water districts' water.

Other issues facing water districts

In addition to price, water quality, and access considerations, institutional key informants identified other issues facing the three water districts as follows:

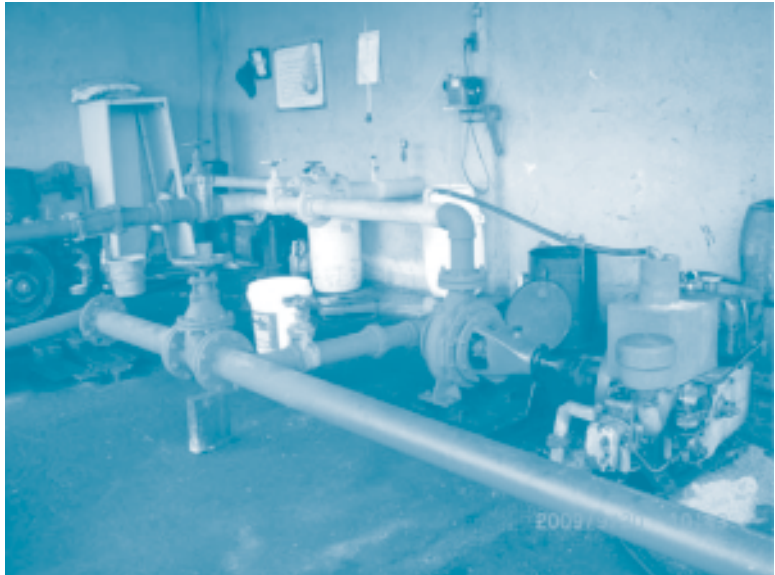
- Receding water table – uncontrolled and intensive drilling by various users has made underground water scarce.
- Denuded watersheds – deforestation and other destructive human activities have reduced the viability of watersheds.
- Natural calamities – flooding, drought, and other manifestations of climate change affect water availability and quality.

- Limited financing – limited financing has constrained possibilities for operation, repair and maintenance, and expansion.
- High exchange rate – purchase of imported equipment is limited by the high dollar to peso exchange rate.
- Political interference – as government corporations, many aspects of water district operations are politically influenced.
- Poor coordination – water districts and local water-related government units oftentimes fail to consult each other.
- Inadequate policies – national policies, plans, and programs for the development of water districts and potable water in general are limited at best.

Conclusions and recommendations

The following conclusions may be drawn from the review of the performance of and problems faced by the three water districts in Dumaguete and Agusan del Sur:

- The water districts are either well-earning, moderately earning, or negatively earning business enterprises.
- The well-earning water district has a high level of service coverage while the moderately earning and negatively earning ones have low coverage.
- The moderately and negatively earning water districts actually impose higher prices for their water to users with low ability to pay.
- Other than price, water quality and access are important considerations for the water districts.
- The water districts also face other issues,



Set-up of a pumping station of a water district in the Philippines.

both man-made and natural, which impede their provision of water to users.

To address said problems and issues faced by the three water districts as well as other similarly situated water districts in the country, the study recommends the following measures:

- The tariff rates of water districts, particularly those serving economically worse-off municipalities, must be reviewed. The rates should consider the ability to pay of water users.
- Water districts should provide more public taps in economically depressed areas to make water accessible to the poorest of the poor population in these areas.
- Pertinent national and local government units should strictly monitor the water produced by water districts to ensure that quality and health standards are met.

- Loans and other forms of financial assistance for some water districts should be considered, particularly for expansion in order for them to increase coverage.
- Uncontrolled water drilling should be stopped. LGUs should initiate and enforce laws to curtail illegal water drilling and manage underground water use.
- The national and local governments should strictly monitor and enforce all laws and regulations pertaining to watersheds and protected forest areas.
- Better weather and climate change forecasting should be implemented to mitigate the ill effects of natural disasters, including on potable water supply.
- Government financial and other assistance should be considered so water districts can purchase necessary and imported equipment.
- Pertinent national and local laws should

be established and enforced to curtail political influence in water districts and government corporations in general.

- Coordination among local agencies in water service delivery should be improved through better consultation and cooperation among them.
- A coherent and coordinated policy, plan, and program for local water service delivery should be implemented in the near future. 📄

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