

# Water Utility Management Models for Small Towns

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# Background

**Presentation based on two studies**  
funded by WSP/World Bank and  
AusAID (*Water Supply & Sanitation  
Performance Enhancement Project – WPEP*)

- Management Models for Small Towns  
Water Supply in the Philippines (2003)  
– *to examine factors of success for  
different management models (14 case  
studies)*

# Background

Presentation based on two studies funded by WSP/World Bank

- Performance Improvement & Benchmarking of Small Towns Water Utilities (2004) – *to promote use of benchmarking as a management tool to improve utility performance. (20 water utilities)*

# Background

## *Small towns in the Philippines*

- 1,600 cities and towns of which *95% have population below 100,000*
- *Urban town centers normally comprise 20% of town population*
- Of about 2,000 piped water supply systems more than *90% have less than 5,000 connections*

# Background

## *Water utility management models serving small towns*

- LGUs – Local government units
- Water Districts
- RWSAs - Rural water and sanitation associations
- Cooperatives – multi-purpose cooperatives
- Private sector

# *Water utility management models for small towns*

- **Local Government Unit** model
  - involves direct management of an urban water supply system by any level of local government (provincial, municipal, barangay or village)

# *Water utility management models for small towns*

- **Water district model**
  - originally designed to operate on commercial lines
  - now subject to government control and regulation
  - classified as a government - owned and controlled corporation

# *Water utility management models for small towns*

- **Rural waterworks & sanitation associations are**
  - non-profit, community-based water user associations
  - governed by a board of directors elected by the general assembly
  - members hold no equity.

# *Water utility management models for small towns*

- **Water cooperatives** are
  - community-based associations
  - governed by a board of directors elected by the general assembly
  - members contribute equity

# *Water utility management models for small towns*

- **Private Sector model**
  - small water supply system run as a business
  - with profit as the primary consideration

# *Water utility management models for small towns - Conclusions*

- Community-based management models (**RWSAs & cooperatives**) are successful in smaller systems when given support to
  - operate like small businesses (metering, billing & collection, commercial accounting)
  - professionalize management thru training
- Key is the provision of professional support
- Local knowledge & community involvement reduce costs

# ***Water utility management models for small towns - Conclusions***

- **Water districts** provide better alternative for the larger towns with
  - strong financial management
  - better institutional performance
  - good technical & professional capacity
- LWUA provides technical, financial and institutional support to water districts

# *Water utility management models for small towns - Conclusions*

- Direct **LGU water supply management** has proven ineffective due to
  - constraints imposed by government financial and management systems
  - inadequate local funding capacity
  - shortage of technical and managerial expertise
  - low tariffs resulting in low revenues, subsidies

# *Water utility management models for small towns - Conclusions*

- Most **private service providers** are discouraged by conditions in small towns such as
  - low population densities and high per capita investment costs
  - high risks and low profits
- The few private companies providing urban water supply are in towns with population above 100,000 in affluent areas

# Benchmarking of Small Towns Water Supply- Comparisons

**Coverage:** *range (19%-100%); average (62.5%); Asian Cities \*(79.0%)*

**Availability:** *range (2.5 – 24 hrs); average (20.1 hrs)*

**Consumption:** *range (61-205 lpcd); average (114 lpcd); Asian Cities (165 lpcd)*

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\* *Water in Asian Cities, ADB, 2004 (18 cities)*

# Benchmarking of Small Towns Water Supply- Comparisons

**UFW:** *range (6%-59.7%); average (24.3%);  
Asian Cities (34.0%)*

**Operating ratio:** *range (0.59 – 1.39);  
average (0.92); Asian Cities (1.05)*

**Accounts receivable:** *range (0.3-4.7  
months); average (1.6 months)*

# Benchmarking of Small Towns Water Supply - Comparisons

**Average tariff (Php/m<sup>3</sup>):** *range* (3.23 - 21.90); *average* (11.35); *Asian Cities* (13.34)

**Production cost (Php/m<sup>3</sup>):** *range* (1.54 - 15.21); *average* (7.77)

**Staff/1000 connections:** *range* (4.3 – 13.9); *average* (7.6); *Asian Cities* (8.3)

# Benchmarking of Small Towns Water Supply *(20 water utilities)*

Utility Model	Coverage (%)	Availability (hours)	Consumption (lpcd)
Water districts (9)	69	22	101
LGUs (3)	45	18	120
RWSAs/Coops (7)	64	19	128
Private (1)	43	16	107
<b>Average</b>	<b>63</b>	<b>20</b>	<b>114</b>
Non water district (11)	57	18	124
Water districts (9)	70	22	101

# Benchmarking of Small Towns Water Supply *(20 water utilities)*

Utility Model	UFW %	Operating Ratio	Accounts receivable (months)
Water districts	22	0.84	1.2
LGUs	46	0.92	2.6
RWSAs/Coops	16	0.97	1.8
Private	41	1.39	1.6
<b>Average</b>	<b>24</b>	<b>0.92</b>	<b>1.6</b>
Non water district	26	0.99	1.9
Water districts	22	0.84	1.2

# Benchmarking of Small Towns Water Supply *(20 water utilities)*

Utility Model	Average Tariff (P/m <sup>3</sup> )	Production Cost (P/m <sup>3</sup> )	Staff/1000 connections ratio
Water districts	<b>17.02</b>	<b>10.95</b>	<b>8.2</b>
LGUs	<b>4.46</b>	<b>1.97</b>	<b>7.6</b>
RWSAs/Coops	<b>7.46</b>	<b>6.30</b>	<b>6.5</b>
Private	<b>8.25</b>	<b>6.82</b>	<b>9.3</b>
<b>Average</b>	<b>11.35</b>	<b>7.77</b>	<b>7.6</b>
Non water district	<b>6.71</b>	<b>5.17</b>	<b>7.1</b>
Water districts	<b>17.02</b>	<b>10.95</b>	<b>8.2</b>

# Benchmarking of Small Towns Water Supply – *Some Findings*

- General characteristics
  - similar to small businesses: Php7-8 million annual revenues going mostly to O&M
  - focused to keeping costs low as opposed to increasing revenues
  - tapping internally generated surplus, hence expansion and capital expenditure are modest.

# Benchmarking of Small Towns Water Supply – *Some Findings*

- The overall performance of water districts are better than that of non water districts given their advantage of having access to technical, financial and institutional assistance from the Local Water Utilities Administration

# Challenges facing water utilities in small towns

- Low coverage and low rate of expansion (5% average increase in connections/year)
- Alternative sources of water push the price of water downwards in areas where utilities operate
- Low tariffs barely enough to cover O&M costs
- Difficult access to financing for small water utilities from available sources

# Challenges facing water utilities in small towns

- Difficult access to technical and management expertise and skilled labor (for planning and O&M)
- High susceptibility to political intervention (tariff setting, disconnection, staff recruitment, etc.)
- Ad hoc demarcation of areas of responsibility does not allow for clear accountability for coverage and other service targets.

# Facing the challenge – Focus for action

- Recognizing the dominant role of small water utilities in the present water market
- Supporting improved technical and management capacity among small utility staff
- Rationalizing tariffs and establishing mechanisms for fair tariff reviews

# Facing the challenge – Focus for action

- Finding solutions to address the financing bottlenecks for small utility expansion projects
- Improving sector planning and delineation of areas of responsibilities
- Systematizing performance reviews
- Institutionalizing rule-based sector oversight and redress

***Thank you !***