

Water Utility: Bansalan Water District (Bansalan WD)

Bansalan, Davao del Sur, Philippines

Contact Details: General Manager: Paul, J. Arches
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Services Provided: Piped water, , , ,
Utility Type: , Government with separate reporting for WS&S, , , , ,
Private Sector Involvement: None, , , , , ,
Source of Raw Water: , , , Groundwater,
Treatment Method: , Disinfection, , , , ,

Water Supply System description:

Production capacity = N/A		Distribution network = 61 km		Storage capacity = 167 m3
Area of Responsibility		Present Service Area		
Area (sq km)	49	39		
Population	52,326	28,422		
No. of Towns = 16		Population served = 20,250		
<u>No. of connections:</u>	Domestic (Households) = 3,372	Non Domestic = 179	Total Connections = 3,551	
Typical service connection length = m		Connections with operating meter = 3,551		
System input volumes:	Produced by W.U. = 0.9 million m3/year	Bulk water imported = zero		
Water consumption:	Metered cons. = 0.7 million m3/year	% Unmetered cons. = N/A		Ave. meter inaccuracy = N/A
Water Sales:	Domestic = 0.6 million m3/year	Non Domestic = 0.0 million m3/year		Bulk Water sales = zero
<u>System Performance:</u>	No. of connections with intermittent supply = 36		Typical duration of supply = 18.0 hours / day	
No. of pipe breaks in distribution system = 1,672 / year		Typical water pressure in mains = N/A		
Chlorine Residuals:	Tests required = N/A	Tests carried out = N/A	Tests passed = N/A	

Human Resources (Staff)

<u>Type of employment:</u>	Permanent staff: salaried Government employees, , , , ,			
<u>No. of staff (FTE):</u>	Corporate Services = 19	Water Supply = 15	Other = zero	Total = 34
<u>Staff Training:</u>	No. Trained = N/A	Training days = N/A	Training costs = N/A	

Customer information

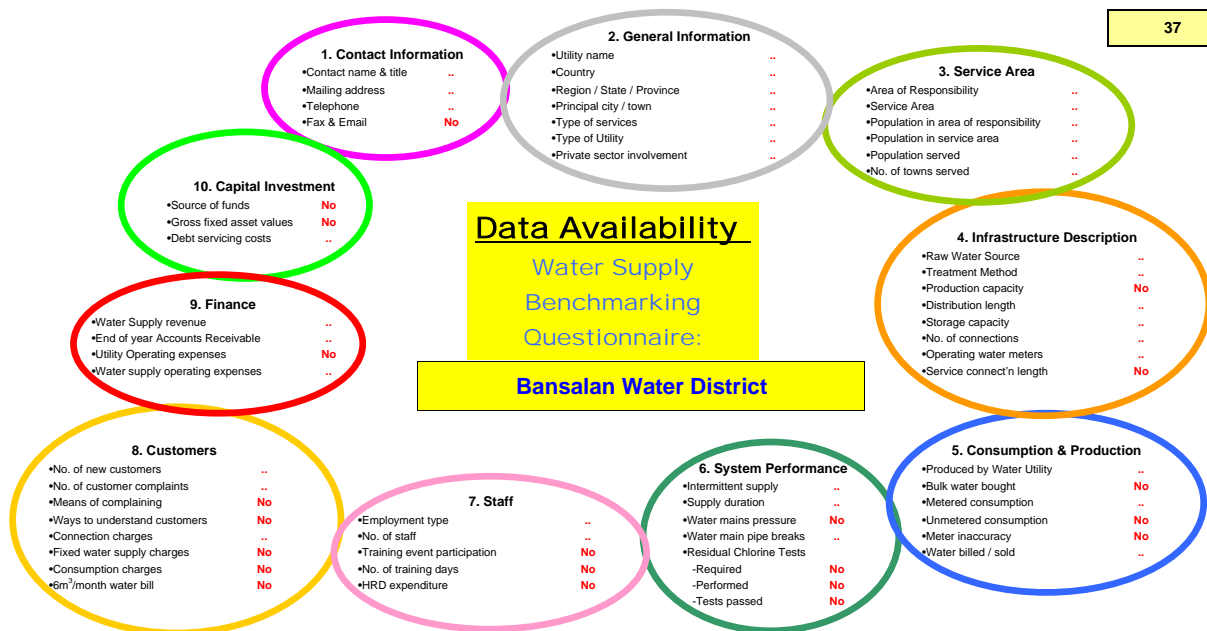
Customer interaction:	New connections = 181 / year	Customer complaints = 2,672 / year
Complaint method: , , , ,		
Understanding customers by: , , , ,		

Charges & Fees

<u>Typical connection charge:</u>	Domestic = 2,100PHP / conn. (38 US\$ / conn.)		Non Domestic = N/A	
<u>Fixed water charge:</u>	Domestic = N/A	Non Domestic = N/A		Bulk water sales = N/A
	N/A	N/A		N/A
<u>Water consumption tariff</u> (typical of all towns and in each category):	Tariff Block 1	Tariff Block 2	Tariff Block 3	Tariff Block 4
Domestic	From - To (m ³)			
	Price (PHP / m3)			
	(US\$ / m ³) .			
Non Domestic	From - To (m ³)			
	Price (PHP / m3)			
	(US\$ / m ³) .			
Bulk Water	From - To (m ³)			
	Price (PHP / m3)			
	(US\$ / m ³) .			
Water bill for household consuming 6 m ³ /month =				N/A N/A

Finances

<u>Revenue:</u>	Water Sales	Other water related	Subsidies & grants	Total	Year end Accounts Receivable	
	PHP / year	15,730,501	zero	zero	15,730,501	1,934,808
	US\$ / year	\$281,808	zero	zero	\$281,808	\$34,662
<u>Operating Expenses:</u>	Water supply	Other services	Company Overhead	Total		
	PHP / year	zero	zero	zero	10,768,704	
	US\$ / year	zero	zero	zero	\$192,918	
<u>Water Supply Operating breakup:</u>	Labor	Electricity	Chemicals & materials	Contracted out	Other expenses	
	PHP / year	3,927,920	974,458	1,353,172	zero	4,513,154
	US\$ / year	\$70,368	\$17,457	\$24,242	zero	\$80,852
<u>Investment funds source:</u> , , , , ,						
<u>Fixed Assets value:</u>	Water supply	Other services	Company Overhead	Total	Debt Servicing Costs	
	PHP	zero	zero	zero	35,767,918	852,864
	US\$	zero	zero	zero	\$640,772	\$15,279



Calculation of Overall Performance Indicator (OPI)

Customer Indicators	Value	Rank
Service Coverage in existing service area (%)	71.2%	(25 / 45)
Meter coverage (% with operating water meter)	100.0%	(1 / 46)
Customer complaints / 1000 connections	752.5	(2 / 41)

Water Supply Systems O&M	Value	Rank
Supply Continuity (% of time water available)	75.0%	(46 / 47)
Residual Chlorine tests passed (%)	#N/A	
Total Unmetered Consumption (% of metered cons.)		
Infrastructure Leakage Index [ILI]	#N/A	

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Overall Performance Indicator (OPI) = - 0.38
 Number of Standardized Indicators available = 8
 Overall Ranking = (39 / 47)

Human Resource Indicators	Value	Rank
Total water related staff / 1000 connections	9.6	(30 / 38)
Investment in staff training (days / staff)	#N/A	
Ave. cost of employment / staff (% of per capita GNI)	192%	(25 / 37)

Financial Indicators	Value	Rank
Operating Cost Coverage (water sales only)	1.46	(10 / 43)
Unit water cost (US\$ / m ³ of system input)	\$0.22	(40 / 43)
Water system asset value / Prod'n capacity (US\$ / m ³ /day)	#N/A	
Debt servicing ratio (% of total operating revenue)		

Financial Indicators: Annual expenses & revenue

<u>Operating Cost Coverage</u>		<u>Expenses</u>	
Operating Cost Coverage (water sales only)	1.46	Overhead expenses / Total Operating expenses ratio	#N/A
Operating Cost Coverage (total revenue)	1.46	Labour costs / Water operating expenses	#N/A
		Electricity costs / Water operating expenses	#N/A
		Chemical & other materials costs / Water operating expenses	#N/A
		Contracted out services costs / Water operating expenses	#N/A
<u>Revenue</u>		Unit water cost	(US\$ / m ³ of metered cons.) 0.28
Water sales revenue / Total revenue ratio	1.00		(US\$ / m ³ of system input) 0.22
Subsidies & Grants / Total revenue ratio	0.00	Debt servicing ratio (% of total operating revenue)	5.4%
Revenue Collection period (months)	1.48		
Unit water price - ave. (US\$ / m ³ of metered cons.)	0.41		

Fixed Assets

Corporate Fixed Assets / Total Fixed Assets	#N/A
Water system asset values	
Asset value / Total water related assets	#N/A
Asset value / Prod'n capacity (US\$ / m ³ /day)	#N/A
Asset value / pipe length (US\$ / m. pipe)	#N/A
Asset value / Customer (US\$ / conn.)	#N/A

System Input

Production capacity utilization (%)	#N/A
Bulk water imported (% of total system input)	0%
System Input Rate (litres/person/day)	116
(m ³ /connection/month)	20.0
System Input / Distribution ratio (m ³ /day per km pipe)	39.0
System Input / Storage ratio (m ³ /day per m ³ storage)	14.1
Supply Continuity (% customers with continuous supply)	99%
Supply Continuity (% of time water available)	75%

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OPI Ranking = 39 / 47

Human Resource Indicators

<u>Human Resource Utilisation</u>		<u>Human Resource Development</u>	
Overhead staff ratio (% of total FTE staff)	56%	Staff Training participation rate (% staff)	#N/A
Water supply staff ratio (% of total FTE staff)	44%	Staff Training duration rate (days / staff)	#N/A
		Investment in staff training (% of direct labour costs)	#N/A
		Investment in staff training (% of total operating costs)	#N/A
Total water related staff / 1000 connections	9.60	<u>Human Resources Costs</u>	
Direct water supply staff		Ave. cost of employment / staff (% of per capita GNI)	1.92
Staff / 1000 connections	4.20	Contracting out services / in-house Labour costs ratio	#N/A
Staff / 1000 m ³ /day system input	6.40		
Staff / 100 km of pipework	24.70		

Distribution

Distribution / customer (m. pipe per connection)	17.1
Storage / customer (m ³ per connection)	0.00
Residual Chlorine	
Sampling compliance (%)	#N/A
Tests passed (%)	#N/A
Non Revenue Water (UFW)	
% of System Input	21%
m ³ / km / day	8.0
m ³ / connection / day	0.14
NRW adjusted for continuous supply (% of System Input)	#N/A
Unbilled Authorized & Unauthorized Cons. (% of metered cons.)	#N/A
Unmetered cons. due to meter inaccuracies (% of metered cons.)	#N/A
Total Unmetered Consumption (% of metered cons.)	#N/A
Infrastructure Leakage Index [ILI]	#N/A
Mains failures ratio (breaks / km pipe / year)	27.50

Water consumption

Bulk water exported (% of total metered cons.)	0%
Average domestic water charges (% of per capita GNI)	1%
Metered consumption rate	
- Domestic (litres/person/day)	86
- Total Cons. (litres/person/day)	92
	(m ³ /conn/month)
	16
Total consumption - metered & unmetered	
	(litres/person/day)
	#N/A
	(m ³ /conn/month)
	#N/A
Domestic share of total metered consumption (%)	94%
Non Domestic share of total metered consumption (%)	7%

Demography

Average town / city size (persons / town)	3,270
Population density in area of responsibility (persons/sq.km)	1,077
Population density in existing service area (persons/sq.km)	738
Average Household size (persons / domestic connection)	6
<u>Customer Interactions</u>	
Customer complaints / 1000 connections	753

Connections

Service Coverage in area of responsibility (%)	39%
Service Coverage in existing service area (%)	71%
Domestic / Non-Domestic connections ratio	18.8
Domestic / Non-Domestic consumption rate ratio	14.4
New connection growth rate (% / year)	5%
New domestic connection cost (US\$ / connection)	38
New domestic connections (% of per capita GNI)	1%
Meter coverage (% with operating water meter)	100%
Billed unmetered consumption (% of metered cons.)	0%

Water Sales & Production Information

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