

Water Utility: Tandag Water District (Tandag WD)

Tandag, Surigao del Sur, Philippines

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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 = 29 km		Storage capacity = 200 m3	
Area of Responsibility		Present Service Area			
Area (sq km)	313	28			
Population	51,008	32,441			
No. of Towns = 9		Population served = 24,892			
<u>No. of connections:</u>		Domestic (Households) = 3,464		Non Domestic = 656	
		Typical service connection length = m		Total Connections = 4,120	
				Connections with operating meter = 4,120	
System input volumes:	Produced by W.U. = 1.0 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 = 0.5 million m3/year		Non Domestic = 0.1 million m3/year		Bulk Water sales = zero
<u>System Performance:</u>		No. of connections with intermittent supply = 412		Typical duration of supply = 24.0 hours / day	
		No. of pipe breaks in distribution system = N/A		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, , Casual/part-time: contract staff, , ,					
<u>No. of staff (FTE):</u> Corporate Services = 13		Water Supply = 9		Other = zero	
Total = 22					
<u>Staff Training:</u> No. Trained = N/A		Training days = N/A		Training costs = N/A	

Customer information

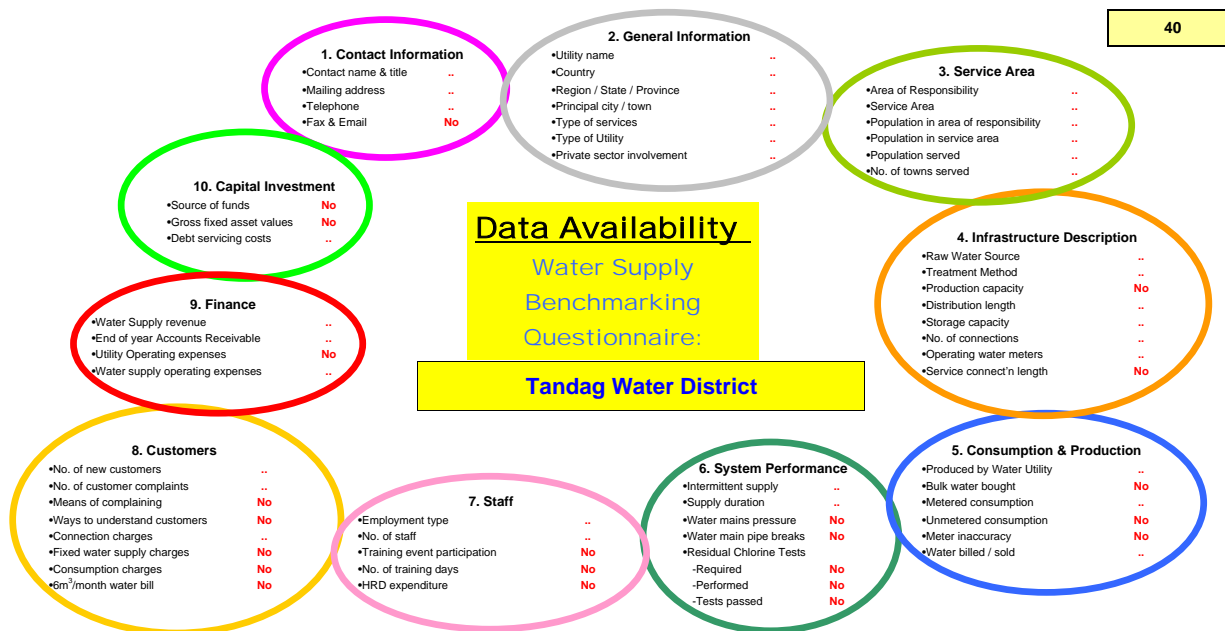
Customer interaction:	New connections = 274 / year		Customer complaints = 1,320 / year		
Complaint method: , , , ,					
Understanding customers by: , , , ,					

Charges & Fees

<u>Typical connection charge:</u>		Domestic = 2,500PHP / conn.		Non Domestic = N/A	
		(45 US\$ / conn.)		N/A	
<u>Fixed water charge:</u>		Domestic = N/A		Non Domestic = N/A	
		N/A		Bulk water sales = 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

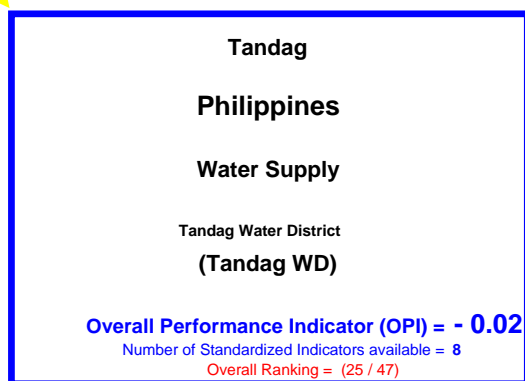
<u>Revenue:</u>	Water Sales	Other water related	Subsidies & grants	Total	Year end Accounts Receivable	
	PHP / year	14,628,432	zero	zero	14,628,432	
	US\$ / year	\$262,064	zero	zero	\$262,064	\$20,735
<u>Operating Expenses:</u>	Water supply	Other services	Company Overhead	Total		
	PHP / year	zero	zero	zero	12,497,921	
	US\$ / year	zero	zero	zero	\$223,897	
<u>Water Supply Operating breakup:</u>	Labor	Electricity	Chemicals & materials	Contracted out	Other expenses	
	PHP / year	2,507,482	1,953,308	5,318,117	zero	2,719,011
	US\$ / year	\$44,921	\$34,993	\$95,273	zero	\$48,710
<u>Investment funds source:</u> , , , , , ,						
<u>Fixed Assets value:</u>	Water supply	Other services	Company Overhead	Total	Debt Servicing Costs	
	PHP	zero	zero	zero	25,277,045	2,114,656
	US\$	zero	zero	zero	\$452,831	\$37,883



Calculation of Overall Performance Indicator (OPI)

Customer Indicators	Value	Rank
Service Coverage in existing service area (%)	76.7%	(21 / 45)
Meter coverage (% with operating water meter)	100.0%	(1 / 46)
Customer complaints / 1000 connections	320.4	(7 / 41)

Water Supply Systems O&M	Value	Rank
Supply Continuity (% of time water available)	100.0%	(1 / 47)
Residual Chlorine tests passed (%)	#N/A	
Total Unmetered Consumption (% of metered cons.)		
Infrastructure Leakage Index [ILI]	#N/A	



Human Resource Indicators	Value	Rank
Total water related staff / 1000 connections	5.3	(13 / 38)
Investment in staff training (days / staff)	#N/A	
Ave. cost of employment / staff (% of per capita GNI)	189%	(28 / 37)

Financial Indicators	Value	Rank
Operating Cost Coverage (water sales only)	1.17	(21 / 43)
Unit water cost (US\$ / m ³ of system input)	\$0.23	(41 / 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)	1.17	Overhead expenses / Total Operating expenses ratio	#N/A
Operating Cost Coverage (total revenue)	1.17	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.) 0.33
Water sales revenue / Total revenue ratio	1.00		(US\$ / m ³ of system input) 0.23
Subsidies & Grants / Total revenue ratio	0.00	Debt servicing ratio (% of total operating revenue)	14.5%
Revenue Collection period (months)	0.95		
Unit water price - ave. (US\$ / m ³ of metered cons.)	0.39		

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)	109
(m ³ /connection/month)	20.0
System Input / Distribution ratio (m ³ /day per km pipe)	94.0
System Input / Storage ratio (m ³ /day per m ³ storage)	13.5
Supply Continuity (% customers with continuous supply)	90%
Supply Continuity (% of time water available)	100%

Tandag Philippines Water Supply

Tandag Water District

(Tandag WD)

OPI Ranking = 25 / 47

Human Resource Indicators

<u>Human Resource Utilisation</u>		<u>Human Resource Development</u>	
Overhead staff ratio (% of total FTE staff)	59%	Staff Training participation rate (% staff)	#N/A
Water supply staff ratio (% of total FTE staff)	41%	Staff Training duration rate (days / staff)	#N/A
Total water related staff / 1000 connections	5.30	Investment in staff training (% of direct labour costs)	#N/A
Direct water supply staff		Investment in staff training (% of total operating costs)	#N/A
Staff / 1000 connections	2.20	<u>Human Resources Costs</u>	
Staff / 1000 m ³ /day system input	3.30	Ave. cost of employment / staff (% of per capita GNI)	1.89
Staff / 100 km of pipework	31.20	Contracting out services / in-house Labour costs ratio	#N/A

Distribution

Distribution / customer (m. pipe per connection)	7.0
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	31%
m ³ / km / day	29.4
m ³ / connection / day	0.21
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)	#N/A

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)	59
- Total Cons. (litres/person/day)	75
	(m ³ /conn/month)
	14
Total consumption - metered & unmetered	
	(litres/person/day)
	#N/A
	(m ³ /conn/month)
	#N/A
Domestic share of total metered consumption (%)	80%
Non Domestic share of total metered consumption (%)	21%

Demography

Average town / city size (persons / town)	5,668
Population density in area of responsibility (persons/sq.km)	163
Population density in existing service area (persons/sq.km)	1,156
Average Household size (persons / domestic connection)	7
Customer Interactions	
Customer complaints / 1000 connections	320

Connections

Service Coverage in area of responsibility (%)	49%
Service Coverage in existing service area (%)	77%
Domestic / Non-Domestic connections ratio	5.3
Domestic / Non-Domestic consumption rate ratio	3.9
New connection growth rate (% / year)	7%
New domestic connection cost (US\$ / connection)	45
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

Tandag Water District

