

Implementing Septage Management Program Through Public Private Partnership:

The Baliwag Water District Experience

Engr. MA. VICTORIA E. SIGNO
Division Manager, Baliwag Water
District

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**Water and
Sanitation Provider**

Government Owned
and Controlled
Corporation **July 01,
1989**

Non-Revenue Water
14.26% (average)

Water Rate:
PhP180.00/ US\$3.80
(first 10 cu.m)

Average monthly production is
588,160 m³. Its only source of
water is the **groundwater**.

It has a total of **104
manpower** that continuously
delivers excellent service to
29,396 service connections.
With this, it has **283:1**
concessionaire-employee
ratio.

It covered all **27
Barangays** in Baliwag, and
served 88% of the total
population

An ISO 9001:2008
certified **Category B**
Water District

It has an average
monthly
collection of
PhP 12.7M
US\$267,400

Since May 2013 up to Sept.
2015, Septage Management
Program has served **6,116
concessionaires (32.19%)**



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The Philippines

- Located in **South East Asia**
- Has a total of **17 Highly-Urbanized Cities (HUCs)**
- Has **81 provinces** and **1,494 municipalities**
- **100 Million** population
- Water Supply Coverage: **92%***
- Sanitation Coverage : **74%***



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Sanitation Condition in the Philippines

- Limited access to improved sanitation facilities
- 7.8M(8%) don't have access to sanitation facilities at all
- Less than 10% has access to sewer network
- Vast majority(80%) uses toilets connected to septic tanks
- Septic tanks are poorly designed and rarely desludged
- 90% of generated sewage is not properly treated
- Most septic tank desludgers dispose septage in the wrong way.

**based on National Sewerage and Septage Management Program*

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Legal Framework

The Philippine Clean Water Act (RA 9275)

- Provides guidelines in the protection of water resources
- Mandates the implementation of sewerage and septage management program in the Philippines
- Requires the preparation of the National Sewerage and Septage Management Program (NSSMP)



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The Philippine Clean Water Act

- Department of Public Works and Highways (DPWH) – lead agency of NSSMP
- Local Government Units, Water Districts or private service providers - major program implementers.



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And so...

**BALIWAG WATER
DISTRICT** invested in
Septage Management
Program (SMP)



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Feasibility
Study

Stakeholders'
Support

Permits and
Licenses

Capacity
Building

Procurement,
Construction
and Operation

BWD's Roadmap to Septage Management

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BWD Septage Management Program

- *Program Scope:* Collection, Treatment and Disposal of treated water and dewatered sludge



- *Treatment Plant Capacity:* 30m³
- *Facility:* Fully-mechanized system
- *Plant Operating Hours:*
Primary Treatment: 8/5
Secondary Treatment: 24/7

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Septage Financial Background

- Septage fee – bundled to the water rate (10%)
water revenue – PhP 12.7 million/mo
US\$ 267,370/mo
septage revenue – PhP 1.27 million/mo
US\$ 26,737/mo
OPEX – PhP 725,000/mo (US\$ 15,263/mo)
debt service amortization – PhP 525,000/mo
US\$ 11,053/mo
- *Return of Investment – 7 years
- Financial performance monitoring
 - Financial statement of septage treatment is ring-fenced from the water supply



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Implementation of the Program

- BWD entered into Public Private Partnership (PPP) through Service Contract



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Why Service Contract?

- Has a quick and substantial impact on system operation and efficiency
- Provides a vehicle for technology transfer and development of managerial capacity
- Often short term that allows repeated competition in the private sector
- Barriers to entry are low that only a discrete service is up for bid, which results to pressure the contractors to maintain low costs



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PPP Process

Project Preparation and Development

Project Review and Approval

Preparation of Bid Documents

Post Qualification and Bid Evaluation

Contract Award and Implementation



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Project preparation and development

- Comparative Cost Analysis between in house operation and service contract

USD 18,950/mo
(in house
operation)

USD15,265/mo
(service
contract)



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Project Review and Approval

- Presentation to the top management for their review and approval
- Presented cost comparative analysis and technical requirements



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Terms of Reference

30m³

Maintenance
of facilities

Health
provisions

22
operational
days

Chemical
Expenses

Technical
enhancement

Fuel
Expenses

Power
Expenses

Laboratory
tests

Manpower

Trainings



Contract Agreement Roles

BWD

- Owns the facility
- Responsible in the management of the overall operation
- Tariff setting
- Asset management

Private Partner

- Septage collection
- Septage treatment
- Dewatered sludge disposal
- Maintenance of desludging equipment and treatment facility



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Contract Compliance

- Performance monitoring
 - process performance
 - equipment performance
 - cost performance
 - other deliverables stated in the contract



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Challenge

Challenge	Counter measure
Administration and strong enforcement of the contract	Strict monitoring program of the contract



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Conclusion:

“Public-Private Partnership (PPP) in the form of service contract in Baliwag Water District (BWD) Septage Management is a “win-win” solution both for BWD and private partner. BWD were able to served its mandate to provide water and wastewater facility and fully recover its investment while private partner were able to generate income from this program.”



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*Thank you!
Salamat po!*



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