

WATER OPERATORS' PARTNERSHIP BETWEEN

PDAM Tirta Raharja

Bandung Area – Indonesia

**Empresa Metropolitana de Abastecimiento y Saneamiento
de Aguas de Sevilla**

(EMASESA) Spain

TARGETED IMPROVEMENTS ON

Metering and Billing | Non-Revenue Water Reduction (NRW)

MENTEE

PDAM Tirta Raharja
Bandung Area — Indonesia
Public District Water Utility

MENTOR

EMASESA
Empresa Metropolitana de
Abastecimiento y Saneamiento de
Aguas de Sevilla — Spain
Public Water and Sanitation Utility

GENERAL DATA

570,000
WATER USERS
(2013)



1,070,000
WATER USERS
(2013)

80,000 M³/
DAY
URBAN DRINKING WATER PRODUCTION
(2013)



876,000 M³/
DAY
URBAN DRINKING WATER PRODUCTION
(2013)

MOTIVATIONS

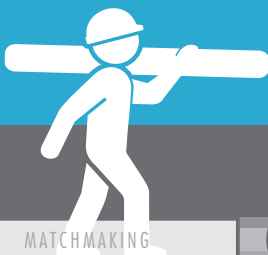
Implement new working methods
and practices
Expand the horizon of operational staff
Improve relations with Ministry of
Public Works

Exercise social responsibility
Expand international activities
and reinforce visibility
Network with donors and other utilities

SUPPORTING THIRD PARTY

The Asian Development Bank (ADB) made funds available to the Ministry of Public Works of Indonesia to start a series of seven WOPs between international and Indonesian utilities. The Ministry invited prospective utilities in Indonesia to present their requests to participate. ADB then paired the utilities with interested mentors from around the world, including PDAM Tirta Raharja with EMASESA.

TIMELINE



2010
March
ADB gives funds to Ministry of Public Works, which approaches PDAM Tirta Raharja to engage in a WOP.

July to November
PDAM Tirta Raharja and EMASESA initiate cooperation; Diagnostic visit in Bandung.

March
Signature of MoU between operators, Ministry of Public Works and Bupati Regency Bandung (utility owner).

2011

FORMATION

March to November
Joint development of pilot project via email (identification, design, data interpretation).



2011
November
Visit to survey implementation of pilot project.

IMPLEMENTATION

July
PDAM Tirta Raharja exposure visit to EMASESA.



November
WOP evaluation with all stakeholders in Jakarta.

2011



2012

EVALUATION

2012 ...

COST



ASIAN DEVELOPMENT BANK
(THROUGH THE INDONESIA MINISTRY OF PUBLIC WORKS)

PDAM TIRTA RAHARJA (MENTEE)
EMASESA (MENTOR)

US\$ 50,000

STAFF TIME

— US\$ 50,000 —

APPROACH

An initial diagnosis conducted by the mentee prior to the WOP identified non-revenue water reduction as a key objective, which influenced the Ministry during the selection process. Classroom training was used, along with on-the-job training in the pilot area. The operators drafted a two-year work plan and EMASESA supported actively the achievement of its objectives. Since the end of the WOP, managers of both operators have had regular follow-up by email.

An additional US\$ 32,000 was invested by the mentee in the pilot project. This cost was not included in the official cost of the WOP.

IMPROVEMENT TRACKS

Metering and Billing: Replacement of class B with class C meters, to improve billing accuracy.

 As a result of improved meters, the Indonesian operator improved billing accuracy by 11%.

Non-Revenue Water Reduction: Setting up of two District Metered Areas (DMAs) and introduction of new water balance software.

 Reduction of NRW from 38% to 22% in DMA 1 (Cingcin Permana Indah) and 64% to 48% in DMA 2 (Banjaran Kota).

 Organizational change resulted in the establishment of a dedicated NRW unit.

Cross-Cutting

 Heightened staff motivation to work together for performance improvement.

 Work regimes changed to scale up and sustain improvements beyond the WOP.

 Gained the political support of national ministries to access funds and reallocate internal budgets.

CHALLENGES



Financing: funds not initially available for development of pilot DMA. Bandung had to request extra funding from the Ministry.

Communication: difficulties to communicate in Indonesian/English/Spanish. A translator was hired.

Trust: prior to the first visit, operator staff did not know each other and were unsure what to expect.

SUCCESS FACTORS



Flexibility of mentor: ability to adjust activities and to allow time to build trust (no push towards results).

Willingness to change: readiness to adapt existing processes and adopt new ones.

Financial leverage: following initial savings of pilot DMA, further funds were allocated to develop more than 20 DMAs (through internal budget reallocation and Ministry funds).

Focus on learning: both utilities agreed that first learning the processes/techniques was necessary in order to achieve sustainable results.

WHAT THEY SAID



“This is not a consultancy service. If we were only trying to achieve a specific target, I would bring in my own staff. A WOP is more about the process than the final result”

Dario Maurino, Urban Projects Advisor, EMASESA

“WOPs go beyond technical knowledge. It’s about changing the spirit of the staff.”

JHendriati Bahar, Head NRW unit, PDAM Tirta Raharja

“At the end we realized that our processes were not so different and that we could learn from each other. The most important thing is to be able to overcome the cultural hurdles. At the end of the day, we all deal with water.”

Moises Roldan, Technician, EMASESA



Global Water Operators' Partnerships Alliance



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UNESCO-IHE
Institute for Water Education

WATER OPERATORS' PARTNERSHIPS

WOPs are peer-support arrangements between two or more water and sanitation operators, carried out on a not-for-profit basis with the objective of strengthening operator capacity.

BEWOP

Boosting the Effectiveness of Water Operators' Partnerships (BEWOP) is a 5-year research, operational support and outreach initiative aimed at boosting the effectiveness of Water Operators' Partnerships around the world.

Launched in September 2013, BEWOP is a collaboration between leading water sector capacity development institute, UNESCO-IHE, and UN-Habitat's Global Water Operators' Partnership Alliance, the organization leading the global WOPs movement.

This project has been made possible by the support of the Dutch Ministry of Foreign Affairs (DGIS).

This factsheet is part of a series summarizing WOPs cases being studied in order to draw lessons and guide better practice.

FIND OUT MORE

BEWOP.org | [#BEWOP](https://twitter.com/BEWOP)

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