



auma
AC 01 1
Com No: 13106580
No: 480884 92673
Mod: T9180/601
ACS: T911-280 - 5000
3 - 220V
P: 1,8kW
Profibus DP/ IP67

Nur öffnen wenn spannungslos
Open only when mains are off
Seulement ouvrir si hors tension

Ortsbedienung
Local control
Commande locale

Fernbedienung
Remote control
Cde. à distance

2031 341



Presentation at the SEDAPAL training center in Lima, Peru

Photo: © E. Dertli, 2010



Valve chamber with flowmeter

Photo: © J. Baader, 2010

PM training modules – the example of Lima, Peru

Project title	Water loss reduction in marginalized areas of Lima
Name of areas	Comas (Sector S86) and Breña (Sector S25), Lima, Peru
Non-revenue water (NRW)	37.5% (SEDAPAL, 2008)
Project period/ status	2008 - 2010

Background

Drinking water is a scarce resource in Peru, particularly in its capital Lima, which is situated in a desert region on the Peruvian coast. Environmental pollution and insufficient water resources aggravate the provision of adequate drinking water. Furthermore, the water supply system records real water losses of up to 50% of the water fed into the network caused by leaking pipes and insufficient maintenance.

SEDAPAL, a state-owned enterprise, is in charge of providing the districts of Lima and Callao with municipal services, such as drinking water supply and wastewater services, and is a key stakeholder in the Peruvian water and sanitation sector.

Process development - The training centre approach

Pressure management (PM) has been identified as an efficient solution to reduce water losses in Lima and Callao. Besides the technical installation of PM technology, the aim of this project is to enhance the managerial and operative capacity of the utilities in question.

Generally, it is important to train local practitioners on how to operate PM systems so that they can learn how to maintain technical components and how to measure the benefits of such an investment by themselves. Technical and educational materials have been made available for staff. Furthermore, local trainers at the SEDAPAL training centre have received instruction. Moreover, a memorandum of understanding has been drafted between SEDAPAL, the national association of water and sanitation sector utilities (ANEPSSA) as well as the network to enhance the capacities in the water and sanitation sector (SFCS) in order to ensure a sustainable transfer of PM knowledge on a national level. Under this agreement, the SEDAPAL training centre will be integrated into the SFCS network and utility staff throughout Peru will be trained in the management and technical operation of PM.

The installation of the technology and training SEDAPAL's staff in two pilot areas of Lima serve as best practice example. Ideally, future trainings will be tailor-made for different target groups:

1. Management and planning division:

- long-term planning and design
- financing of PM installation
- economic, environmental and social benefits.

2. Operational staff:

- technical instructions on PM
- maintenance and operation of PM technology
- electronic management
- PM as part of the water and sanitation supply system.

Achievements and impacts

The following achievements and impacts have been made:

- experience and knowledge gained in the course of the project has been accurately documented and made available to local and national training centres and networks
- development of PM training modules (in Spanish)

- capacity development for utility staff through training sessions and workshops
- train the trainer approach at SEDAPAL training centre
- PM training modules integrated into the national SFCS network
- project results and experiences are available for water utilities throughout Peru
- potential for replicating the project
- the project contributes towards the development of the Peruvian water and sanitation sector
- development of a financing model in order to guarantee the future dissemination and implementation of PM within the country.

Lessons learned

Within the framework of this project, it was important to build upon both national and local structures and networks in order to reach out to water utilities and staff nationwide. The establishment of understanding for PM solutions in local water supply systems will be stimulated by training sessions on PM technology as an integral part of water and sanitation utility training modules. However, this allows water utilities to learn about PM technology and consider if there is potential for replicating PM measures within their own system.

References

- SFC website: www.vivienda.gob.pe, visited July 2010.
- SEDAPAL website: www.sedapal.com.pe, visited July 2010.