



October 2005

Operational Research on Decentralized Wastewater Management & its Dissemination

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This Pilot and Demonstration Activities (PDA) demonstrated appropriate technologies for managing domestic wastewater, recycling the nutrient, and optimizing water at household level.

Snapshot

Project site	Kathmandu Valley, Nepal
Cost	US\$ 50,000
Status	Completed
Approval date	May 2003
Completion date	October 2005
Category	Urban
ADB officer	Keiichi Tamaki
Partner	Environment and Public Health Organization

Report card

Completed in October 2005, this PDA

- Demonstrated water optimizing techniques, such as rainwater harvesting techniques, reed bed treatment systems, and proper use of Ecosan toilets to reduce water demands
- Increased awareness on water optimization through flyers on the rainwater harvesting system sent with the water bill to every household and "Jalpari"—a short film on water optimization which aired on Nepal Television
- Department of Urban Development and Building Construction (DUDBC) and Nepal Water Supply Corporation (NWSC) installed their own rainwater harvesting system
- Propelled rainwater harvesting into the national agenda
- Developed a model reed bed treatment system at Thimi
- Developed an Ecosan toilet design which has now gained popularity in Siddhipur, where ENPHO plans to expand the project

Read the [final report](#).

Description

Chronic shortage of drinking water and turning of all rivers into sewer canal are among the big problems in Kathmandu Valley. While several studies on water optimization and wastewater management have been proposed, few have been implemented to date. Also, the plans and programs implemented in the past were centralized and large-scale, hence, local authorities could not implement them.

Local authorities should be responsible for improving their environment. One means of doing this would be to introduce projects that involve local communities, thereby promoting sustainability and reducing capital investment. Demonstration projects that serve as operational research and awareness-building platforms should be launched.

Expected outcomes

- Introduction of appropriate technologies for community scale waste and wastewater management
- Increased public participation in the implementation of the new technologies
- Increased household awareness, knowledge and skills re: water optimization and waste recycling technique
- Dissemination of all techniques at national and regional level

Related

- [More on water and sanitation](#)
- [Nepal and ADB](#)
- [Pilot and Demonstration Activities](#)
- [School-led Gender Sensitive Water Supply and Sanitation in Kapilvastu](#)
- [Final Report \(November 2005\)](#)
- [Progress Report \(August 2004\)](#)
- [Proposal \(October 2002\)](#)

Sourced from <https://www.adb.org//results/water-pda-operational-research-decentralized-wastewater-management-its-dissemination>