Multiple-use water services to address real-life water needs

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Research Highlight #8

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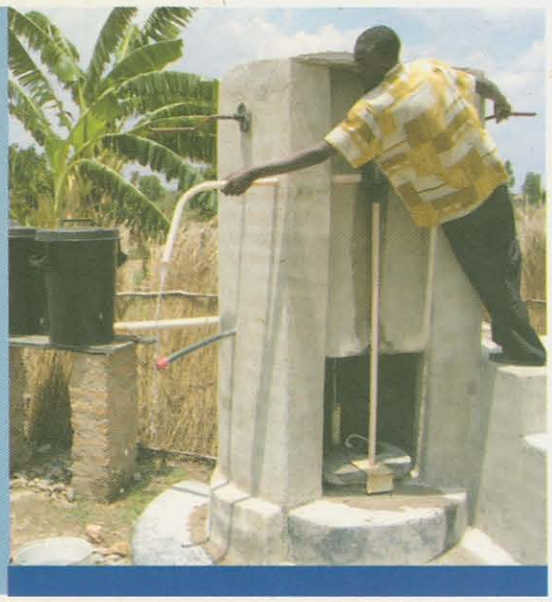
Recognising real-life water needs

Poor communities in rural and peri-urban areas diversify their livelihoods by farming in backyard gardens, keeping livestock, processing crops or running micro-enterprises such as small restaurants or brick making. Only with an adequate water supply can real-life multiple water needs be met—most conventional water supply systems fall short. Systems are typically designed for a single use only—either for domestic use or a single productive use such as irrigation. Yet, in reality, villagers invariably use these schemes for multiple purposes. Water supply systems designed for multiple uses from the outset, can make a difference to the lives of poor communities by improving food security and income as well as health and well-being. In addition to alleviating poverty, multiple use approaches also reduce unpaid workloads and enhance gender equity.

Dissolving sectoral boundaries to integrate water supply services

For a community to manage its own water resources effectively, water needs for domestic and productive use must be identified, and the services integrated: "It is we, the water professionals, who have created the barriers between us, and it is we who must break them down", said Roberto Lenton of the Global Water Partnership at the Session on Multiple-use Water Services at the Fourth World Water Forum in Mexico.

The Challenge Program on Water and Food (CPWF) is stimulating such innovative partnership across the domestic and productive water sectors and initiated the action research project, 'Models for implementing multiple-use systems for enhanced land and water productivity, rural livelihoods and gender equity' (or 'the MUS' project). The project works in forty sites in eight countries in five CPWF benchmark basins: Bolivia and Colombia in the Andes, Ethiopia in the Nile basin, India and Nepal in the Indus/Ganges basin, Thailand in the Mekong basin and South Africa and Zimbabwe in the Limpopo basin. Through systematic comparison of methods and regular exchanges of experiences amongst these sites, the project aims to develop widely applicable models, tools, and guidelines on implementing and up-scaling multiple-use water services.



Generating new knowledge through Learning Alliances

As a first step, the MUS project developed a common research framework that identified the key conditions needed to implement multiple-use water services at the community level and to up-scale multiple-use services through intermediate and national level support structures. In each country, Learning Alliances are formed from the local to national levels to pilot-test how these conditions can be created. These partnerships 'learn-by-doing'. By synthesizing lessons from process documentation, evaluation, and impact assessment, important knowledge is generated on how multiple-use water services can be successfully implemented in different environments.

The project also engages in global policy dialogue at events like the World Water Forum or Stockholm Water Week. At the Fourth World Water Forum, expert panelists of the Topic Session reiterated that, "We cannot do rural water supply projects without considering productive uses…..we should realize this in the same way that we learnt that sanitation had to be integrated with water supply in the 1980s," (Ede Jorge Ijjasz, Global Manager Water and Sanitation Project, World Bank).

Scaling up multiple-use systems in South Africa

Links from local to global level formed through Learning Alliances are critical for up-scaling multiple-use systems. In South Africa, the NGO AWARD works in Bushbuckridge Municipality, a poor farmer homeland. It pilot-tested a methodology for participatory planning of multiple-use water services in 11 wards, as part of the broader Integrated Rural Development Plans of the Municipality. Strategies formulated at the meeting included investing in water storage infrastructure, rainwater harvesting technology and building technical and institutional capacity to maintain and repair water distribution infrastructure for multiple uses. This methodology will be replicated by other wards of Bushbuckridge and Local Governments elsewhere. At national level, the Department of Water Affairs and Forestry supports multiple-use water services.

At the national level, South Africa's Department of Water Affairs and Forestry is the first government department to draft national guidelines for multiple-use water services. This work is being carried out in collaboration with AWARD, IRC and other MUS partners. According to Barbara Schreiner, Deputy Director General, Policy and Regulations, Department, South Africa:
"This is really about local economic development – but from a bottom up rather than a top-down perspective. In essence, we are taking IWRM to the next step and looking at its potential for poverty eradication."

Photo: Robert Yoder

Multiple-use system in Nepal

Project information

CPWF Project
Models for implementing multiple-use water supply systems for enhanced land and water productivity, rural livelihoods and gender equity

Partner organizations

- International Water Management Institute (IWMI)
- IRC International Water and Sanitation Centre
- International Development Enterprises (IDE)
- Khon Kaen University, Thailand
- Mekelle University, Ethiopia

For the full list of partner organizations visit www.musproject.net

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