



Issue 137 March 7, 2014 | Focus on Multiple-Use Water Services

The IRC International Water and Sanitation Centre defines Multiple-Use Water Services (MUS) as an approach to water services that considers the multiple needs of water users, who take water from a number of sources, and communities' own priorities as the starting point for investments in new infrastructure, management arrangements, and the rehabilitation of existing infrastructure.

This issue features two new USAID-sponsored reports on the topic, links to the revised MUS Group website, the Winrock MUS YouTube channel, case studies from Burkina Faso, Ethiopia, Nepal, and Sri Lanka, and other studies and websites.

We welcome your suggestions for future issues of the Weekly. Topics for upcoming issues include World Water Day 2014, WASH and nutrition, behavior change, community-led total sanitation, household water treatment, and menstrual hygiene management.

USAID-SPONSORED REPORTS

Freshwater Conservation and WASH Integration Guidelines: A Framework for Implementation in Sub-Saharan Africa, 2013. J Edmond. ([Link](#))

The sustainability of freshwater resources and safe drinking water projects depends on the appropriate conservation of the broader watershed. Preserving free-flowing river systems, intact wetlands, and groundwater recharge areas is essential for maintaining ecosystem resilience and protecting water, sanitation, and hygiene (WASH) infrastructure against the impacts of natural disasters and climate variability.

Water and Conflict Toolkit, 2014. USAID. ([Link](#))

This toolkit is intended to help USAID and its partners understand the opportunities and challenges inherent to development programming in conflicts where water is an important issue. This document: 1) explores the relationship between water, conflict, and cooperation; 2) highlights lessons learned from relevant development and peace-building programs; 3) discusses options for programming based on past USAID and development community experiences; and 4) provides a Rapid Appraisal Guide to support officers in identifying and evaluating the conflict risk and peace-building potential of water programs.

GENERAL/OVERVIEW

The Case for Investing in MUS, 2013. MUS Group. ([Link](#))

This presentation establishes why MUS is needed over a series of 10 slides. It explains the approach, the costs and benefits, what it will take to establish multiple use services, and next steps.

Five Principles for Multiple-Use Services at the Household and Community Levels, 2013. B van Koppen. ([Link](#))

The CGIAR Challenge Program on Water and Food Multiple-Use Water Services project study on over 7,000 households in eight countries provides important lessons from the implementation of MUS projects at the household, water systems, and institutional level. This document covers the five principles of MUS, provides examples of types of MUS, key findings, and lessons learned.

Multiple Use Water Services Toolkit for Planning and Provision, n.d. MUS Group. ([Link](#))

This toolkit reflects the outputs of the exchanges of the MUS Group by synthesizing the commonalities, and the minor differences, into one concise set of generic guidelines on “how to do MUS.” The toolkit focuses on what makes MUS different from other conventional water service approaches.

Multiple Uses of Water Services in Large Irrigation Systems, 2013. D Renault. ([Link](#))

The Mapping Systems and Services for Multiple Uses of Water Services (MASSMUS) methodology is a special module that addresses multiple uses of water. The recognition of MUS is obviously the first important step, but then one needs to know how to go about it, how to assess its importance, and how to improve water management for the benefit of all users and uses. This is where methodology such as MASSMUS is critical for proposing a framework to tackle MUS in a water system.

New Water Models for Winrock International. IDEO.org. ([Link](#))

IDEO.org partnered with Winrock International to help simplify and articulate a process for MUS, a holistic approach to providing sustainable water services that improves health and livelihoods.

Water Assessment Indicator Sheet, 2014. WASHTech Project. ([Link](#))

This package of 18 scoring sheets allows the user group to assess the applicability of any water supply technology in a context where it has already been introduced. They can help evaluate the successes, failures, opportunities, and barriers related to new water supply technologies.

The Zimbabwe Bucket Pump. An Update, 2014. P Morgan. ([Link](#))

The “Bucket Pump” is a water lifting device that uses a tubular bucket to raise water from a tubular well—known as a tube well. Bacteriological studies revealed that the quality of water drawn from tube wells fitted with tubular buckets was a significant improvement on water drawn from wider diameter wells.

CASE STUDIES

Burkina Faso – Households’ Motivations for Investing in Multiple-Use Water Services in Rural Burkina Faso. *Johns Hopkins University Global Water Programs*, Dec 2013. S Marks. ([Link](#))

In rural Burkina Faso, demand is high for wells that provide sufficient water for domestic and productive purposes. With assistance from Winrock International, well owners are investing in upgrades that will improve the quality, reliability, and quantity of their water supply. Through their investigation of the drivers that motivate households to invest, researchers uncovered the unexpected role that women's entrepreneurship plays in spurring demand for enhanced wells.

Ethiopia – Addressing Livestock Needs in Multiple Use Water Services, 2013. IRC International Water and Sanitation Centre. ([Link](#))

As part of the MUSTRAIN project in Ethiopia, various approaches to water harvesting, multiple use of water, and ecological sanitation have been studied. Here the impact of watershed management approaches on livestock is evaluated while identifying options for addressing broader livestock needs (especially drinking and feed) as part of an integrated approach to MUS.

Ethiopia – Innovative Approaches for Extending Access to Water Services: The Potential of Multiple-Use Water Services and Self-Supply, n.d. M Adank. ([Link](#))

This chapter assesses the strengths and weaknesses of the conventional community management model in Ethiopia, and then discusses the potential of two complementary approaches for water service delivery recently promoted under Ethiopia's Universal Access Plan: MUS and self-supply.

Ethiopia – Self-Supply Family Wells for Multiple Use Water Services, 2013. IRC International Water and Sanitation Centre. ([Link](#))

Family wells are promoted by the Ministry of Water, Irrigation and Energy under the Self-Supply Approach and under the household irrigation strategy of the Ministry of Agriculture with its "one family, one well" target. Family wells are usually dug by the owners, and all other costs are borne by the household. Subsidies for hardware are avoided. Households use their family wells for a range of purposes: household irrigation, livestock watering, and domestic uses. Most improvements of the family wells increase water quality, safety of the well, convenience, and water availability. Technical advice on how to upgrade existing wells is not easily accessible to households, nor is financial support.

Nepal – The Economics of Optimal Small-Scale Water Projects: A Case Study in the Koshi Basin Region of Nepal, n.d. A Skodyn. ([Link](#))

Villagers in the mountainous regions of the Koshi Basin in Nepal face continual challenges due to too much water in some months, and far too little water in other months. To find out what water-related projects would be most desired in these villages, community interviews were held in five villages located at different elevations in the Koshi Basin. Next, a grounded theory method and a sustainable livelihoods framework were used to analyze the community interview transcripts to answer the research question, "What is water unavailable for in these villages, and which water-related solutions would the villagers value the most?"

Sri Lanka – Irrigation Systems as Multiple-Use Commons: Experience from Kirindi Oya, Sri Lanka, n.d. M Bakker. ([Link](#))

Irrigation systems are often recognized as common pool resources supplying water for agricultural production, but their role in supplying water for other uses, notably fishing, homestead gardens, domestic water supply, and micro-enterprises is often overlooked. The importance of non-agricultural uses of irrigation water in livelihood strategies has implications for irrigation management and water rights, especially as increasing scarcity challenges

existing water allocation mechanisms. This paper identifies the multiple uses of water in the Kirindi Oya irrigation system in Sri Lanka, examines who the users are likely to be, and explores implications for water rights and management policies.

WEBSITES

Akvopedia Multiple Use Services – ([Link](#))

This website provides an overview of MUS.

Millennium Water Alliance: Multiple Use Water Services – ([Link](#))

The Millennium Water Alliance has adopted MUS as an institutional strategy to meet the WASH needs of users in rural and peri-urban areas of developing countries.

MUS Group: Multiple Use Water Services – ([Link](#))

The MUS Group is a network of some 14 core organizations and over 350 individuals. The group has been operating since 2003 as a platform for learning, synthesis, and joint advocacy around MUS.

Winrock Water – ([Link](#))

Winrock Water provides an electronic means of obtaining and sharing information and ideas in the field of water resources.

Winrock MUS YouTube Channel – ([Link](#))

Winrock videos on MUS from various countries.

WASHplus Weeklies will highlight topics such as Urban WASH, Indoor Air Pollution, Innovation, Household Water Treatment and Storage, Hand Washing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus Knowledge Resources Specialist, at dacampbell@fhi360.org.



About WASHplus - WASHplus, a five-year project funded through USAID's Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and indoor air pollution (IAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit www.washplus.org or email: contact@washplus.org.