

AUGUST 2015

# Enhancing benefits from water, sanitation and hygiene interventions

Summary report

## At a glance

### Background on Ethiopia

Both water and food security identified in policy as critical national priorities

Domestic water supply and agricultural development in different ministries (Ministry of Water, Irrigation and Energy and Ministry of Agriculture) and national programmes

### RAIN project activities

Five woredas in three regions: Kamba and Dita woredas in SNNPR ; Kalu and Kelala in Amhara Region; Assosa in Benishangul-Gumuz

Partners: woreda governments, Millennium Water Alliance (MWA), WaterAid Ethiopia, World Vision, Catholic Relief Services (CRS), Water Action, Ethiopian Evangelical Church Mekane Yesus (EECMY) of Southwestern Synod and IRC

The Coca-Cola Africa Foundation (TCCAF) has provided funding support under the Replenish Africa Initiative (RAIN) for Millennium Water Alliance Ethiopia Programme (MWA-EP) partners to 'deepen' their water, sanitation and hygiene interventions. The extra support was used to experiment with new interventions to enhance the benefits of projects in existing programme areas.

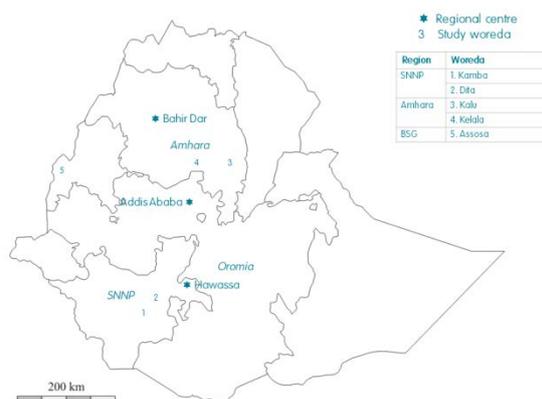
One way this was accomplished was by extending projects to supply water for productive as well as domestic uses through an approach called Multiple Use water Services (or MUS). This summary of experiences and lessons learned, based upon two more detailed case studies from southern and northern Ethiopia, aims to share findings and support the further development of integrated approaches to improving water and food security.

## Deepening water, sanitation and hygiene interventions through activities promoting multiple uses

In February 2013, three main partners in the Millennium Water Alliance Ethiopia Programme (MWA-EP) – Catholic Relief Services, World Vision and WaterAid Ethiopia – came together to discuss how to ‘deepen’ their water, sanitation and hygiene (WASH) interventions in certain geographic areas. One of the approaches to be tested was the Multiple Use water Services (MUS) approach.

Following a workshop to discuss experiences and guidelines from earlier MUS work (by the MUS group [www.musgroup.net](http://www.musgroup.net)), these three INGOs worked with their local partners to develop concepts for local implementation. They elaborated their ideas further during scoping visits accompanied by IRC. Implementation was carried out from mid-2013 to mid-2014.

In January 2014, a further training in MUS approaches based on the emerging experiences from the programme was organised for all MWA-EP partners. In June and July 2014, progress in the targeted woredas was reviewed during follow-up peer review field visits. This summary and two related case studies are based on observations made and discussions during those visits.



RAIN project sites included five woredas across three regions: Kamba and Dita woredas in the Southern Nations, Nationalities, and Peoples’ Region (SNNPR); Kalu and Kelala in Amhara Region; and Assosa in Benishangul-Gumuz. However, due to water scarcity and limited opportunities to develop multiple uses around rural point water sources (wells and boreholes) that are typically equipped with handpumps, there proved to be low potential for MUS activities in Benishangul-Gumuz.

RAIN project interventions included the protection and development of a range of water sources – streams, springs and shallow groundwater – for domestic and productive uses. Spring capping projects were the most common form of intervention. These include both ‘on-spot’ springs, at where users collect water to carry home and ‘gravity-based’ schemes with piped distribution to public water.

The MUS approach takes the reality of multiple uses of water as the starting point for the planning and design of new or rehabilitated infrastructure. This means stepping outside normal organisational mandates which tend to focus on either domestic water supply or irrigation and productive uses, but not both. In Ethiopia, despite its name being the Ministry of Water, Irrigation and Energy, household and small-scale irrigation developments fall under the mandate of the Ministry of Agriculture. To an extent, roles are more integrated at woreda level, but policies, programmes and budgets largely remain separate. In this project, MWA-EP partners sought to ‘break down the silos’ between water for domestic and productive uses to build integrated water supply systems for both.

In SNNPR, productive use of water was on a limited scale, being largely confined to making effective use of overflows at storage tanks and water points for gardening. These kinds of add-ons to mainly domestic water supply schemes have been termed ‘domestic-plus’ MUS schemes (see Adank *et al.*, 2013). In Amhara, larger numbers of irrigators were supported through a community-needs approach, resulting in schemes closer to what has been termed ‘MUS by design’. In all cases, priority was given to domestic water supply users, who formed the bulk of beneficiaries from the schemes that were developed or improved.

Additionally, at some sites school gardens and women’s entrepreneurship groups were established (e.g. in Kamba) and toilets were constructed at schools and health posts.

## Achievements

Local implementing partners – notably the Ethiopian Evangelical Church Mekane Yesus (EECMY) in SNNPR working with WaterAid and Water Action in Amhara working with CRS – were able to develop context-specific approaches to MUS through RAIN-supported trials at multiple field sites (see Box 1 and Box 2 for examples). These partners now plan to replicate their MUS approaches in future interventions.

### BOX 1 CASE STUDY FROM KAMBA, SNNPR

The scheme developed at Wayita is typical of the approach taken to MUS through the RAIN funded spring developments in Kamba. The scheme involved developing a community-managed system with a pipeline to convey water from a capped spring to convenient public taps. The main water use is domestic, but gardening has been added to make good use of the overflows near storage tanks and water points.

Mr. Salfako Bonkole says he provided part of his land willingly when it was needed for construction of a community water point in Wayita. He remembers using water from distant rivers and streams for domestic use and livestock watering, so he is happy to see water delivered to people closer to their homes. He says the new water point has given him a double opportunity: clean drinking water close to his home and overflow water to grow vegetables, sugar cane and seedlings like coffee.

Training has also extended the MUS approach wider within the MWA to partners that were not directly engaged in the RAIN project. MUS approaches have been more strongly involved in the MWA-EP's second phase (2014–2017) as a result and project monitoring systems have been strengthened to capture multiple uses.

### BOX 2 CASE STUDY FROM KALU, AMHARA

The RAIN project has supported the development of seven spring development schemes in Kalu woreda. Different interventions have been integrated at each site. In Bossana kebele, for example, an upgraded irrigation scheme serving 67 families has been combined with soil and water conservation measures to protect the catchment area as well as promotion of household water treatment and storage. Interventions at other sites included livestock watering facilities and mediating negotiation over access to water between different user groups.



---

## Lessons learned and recommendations

- **Extending benefits to more beneficiaries.** Limited water availability and land ownership patterns are the major constraints to developing MUS schemes that include irrigation. In some of the project locations such as Kamba, beneficiaries of additional water for irrigation were few since the available water was limited to overflows at storage tanks and domestic water points. These were mainly the landowners where such facilities were sited, providing a form of compensation to these families. If facilities could be sited on communal land there would be greater potential for community garden irrigation projects that could reach more people.
- **Planning for MUS is needed at almost all sites.** ‘Doing more’ by deepening WASH interventions to address wider food and water security issues through a MUS approach could potentially be in conflict with other valid priorities, such as reaching all households with basic access to water and sanitation or improving the sustainability of water supply systems. In practice, multiple uses of water often appear related to all of these issues in complex and context-specific ways. The safety of basic communal water supplies at some sites in Kamba, for example, was found to be undermined by a lack of cattle watering facilities. This led to muddy, unsanitary conditions around domestic water collection points. Conversely, cattle troughs provided next to water points in some schemes in Kalu remained unused. The additional benefits derived from overflow irrigation by landowners (and caretakers) of domestic water points provided a further incentive to keep systems running in good order. In Kalu, there were examples where development of domestic water supplies was at the expense of irrigated farmers who lost access to water. These examples illustrate the importance of addressing context-specific MUS needs in water scheme planning in rural Ethiopia.
- **Looking beyond local areas to understand linkages.** There is a clear need to look beyond the immediate location of project implementation sites. Increased use of water, whether for more domestic water supply or more irrigation, reduces the availability of water downstream. At sites in Kalu, for example, water resources from springs are contested between irrigators and domestic water uses, so careful mediation is required. In Kamba, problems beyond the intervention sites related to water supply from a failed deep well scheme and poor sanitary conditions around handpump schemes were also related in different ways to managing multiple uses. In the case of the failed deep well scheme, families were resorting to use of a rainwater harvesting pond for drinking water and sharing it with livestock. The handpumps were sitting in seas of mud as they are also used for livestock watering without adequate provisions made.
- **Water resources are not always the main constraining factor for multiple uses.** Leakage in the water supply schemes and inefficient management also contribute to limiting the amount of water available and can potentially cause conflicts over water use within communities.
- **Gaps in national policy and guidelines.** National policy is clear in providing priority to domestic water supply requirements over livestock and irrigation water needs. However, implementation of this policy is hampered by limited availability of local information on water supply and demand, and a lack of guidelines around questions of scale. Taking the example of springs in Amhara for example, over what distance should the priority to domestic water uses be extended? If such springs are used only for domestic needs they might serve more and more distant communities than if they are developed locally for multiple uses including irrigation. Such issues can be addressed through investing in collecting better data on patterns of water supply and demands while facilitating local negotiations. While MUS is gaining recognition in policy and the water sector, there are few guidelines for these kinds of practical challenges faced in implementation. Bridging gaps between the multiple line ministries involved in water supply and irrigation is a further need.
- **Maximising impacts of RAIN project pilots.** Awareness of MUS approaches increased within the participating organisations but also among other MWA-EP partners. These organisations have either taken on MUS as a new approach or enhanced their practice of it. Ongoing dissemination of these lessons seeks to promote the uptake of the pilot activity findings.



## CONTACTS

- Mr. Melkamu Jaleta, Coordinator, Millennium Water Alliance-Ethiopia Programme.  
[melkamu.jaleta@mwawater.org](mailto:melkamu.jaleta@mwawater.org)
- John Butterworth, Ethiopia Country Director IRC, [butterworth@ircwash.org](mailto:butterworth@ircwash.org)
- Lemessa Mekonta, IRC Associate.  
[mekonta@ircwash.org](mailto:mekonta@ircwash.org)
- Marieke Adank, Programme Officer, IRC.  
[adank@ircwash.org](mailto:adank@ircwash.org)

### About RAIN

The Coca-Cola Africa Foundation (TCCAF) has provided support under the Replenish Africa Initiative (RAIN) for Millennium Water Alliance Ethiopia Programme (MWA-EP) partners to 'deepen' their water and sanitation interventions. The extra support was used to enhance the benefits of water and sanitation systems in existing programme intervention areas of three leading international NGOs: Catholic Relief Services, WaterAid Ethiopia and World Vision.

One way this was accomplished was extending projects to supply water for productive as well as domestic uses. The approach is called Multiple Use water Services (or MUS).

## FURTHER INFORMATION

- The Multiple Use water Services (MUS) group website includes guidelines and further case studies on the approach. [www.musgroup.net](http://www.musgroup.net)
- IRCs website includes case studies on MUS in Ethiopia from different projects and partners [www.ircwash.org/ethiopia](http://www.ircwash.org/ethiopia)
- A chapter by Marieke Adank and colleagues in the book Achieving Water Security provides further background on MUS in Ethiopia [www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8606.pdf](http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8606.pdf)

### About this summary report

This summary was prepared by John Butterworth, Lemessa Mekonta, and Marieke Adank at IRC Ethiopia.

IRC is a Millennium Water Alliance member and supports the MWA-Ethiopia Programme in its documentation and knowledge management activities.

Project implementation in Kamba (and Dita) woredas in SNNPR was by the Ethiopian Evangelical Church Mekaneyesus of Southwestern Synod (EECMY-DASSC-SWS) with technical support from WaterAid Ethiopia. In Kalu and Kelala in Amhara, Catholic Relief Services implemented activities with its partner Water Action. In Benishangul-Gumuz, activities were implemented by World Vision.