The Community Managed Project (CMP) approach and potential to promote multiple uses of water

Case studies of multiple use of water in Ethiopia (MUStRAIN case 7)

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 Community Managed Project (CMP) approach is presented as a way of up-scaling multiple use water services.

Community Managed Project (CMP) approach at a glance

Main features:
The Community Managed Project approach (CMP) is among the rural water supply service provision modalities acknowledged by the government of Ethiopia. End users (communities) have strong voices and choices on planning, implementation, operation and maintenance of water supply facilities. The approach to date has focused mainly on hand dug wells equipped with Afridev hand pumps and spring development. The facilities usually include water points with faucets, washing basins, shower rooms and cattle troughs.

Implementation:
The CMP approach is promoted at the federal level by the Ministry of Water and Energy with support of the COWASH project. Regional and district (Woreda) level water bureaux and offices lead on planning and support, micro-finance institutions (MFIs) provide banking services to get funds to communities, and communities with support of the local private sector construct their own water systems.

Options for multiple use of water:
Many community members benefit from the cattle watering facilities. Where the well or spring has sufficient capacity (beyond 15 litres per capita per day - lpcd), there is no objection to additional productive water uses such as irrigation. In practice however, productive use is normally limited to the overflow from the water points which is used by farmers with nearby land.

Challenges for uptake:
Often farmers are not used to irrigation, and they may be criticized by the community for using water destined for domestic supply for irrigation.

Introduction

The Community Managed Project approach (CMP) is one of the rural water supply service provision modalities currently included in the One WASH National Programme (OWNP) in Ethiopia. It is an approach that gives the facility users the mandate to plan and manage the implementation of the facilities, including the procurement of works, services and goods. The user-representative water committees (WASHCOs) manage the facility construction from the beginning to the end, so there is no handover of the facilities after completion, unlike projects managed by the local authorities (at district level) or by NGOs.

Funding of the facility involves routing grants (from donors or government) via micro-finance institutions (MFIs)[a], with additional user community' contributions put into a separate community MFI account. In addition to contributions in kind (local materials) and labour, the communities contribute around € 40 to 120[b] per scheme in cash. This is used for operation and maintenance of the facility as per the CMP fund management guidelines[1].

[a] At the time of editing, November 2013, it was proposed that funds cease to be routed through MFIs, but rather pass through the districts and the Commercial Bank of Ethiopia.

[b] Currency conversion according to www.xe.com (May 2013): EUR 1 ≈ ETB 23.9.

Implementation

The CMP approach evolved from the Community Development Fund (CDF), with bilateral support from the government of Finland. The CDF approach was tested under the third phase of Rural Water Supply and Environment Programme (RWSEP) from 2003-2006[c] in Amhara Region and was also introduced to Benishangul-Gumuz Region in 2008. Because of the approach's multi-dimensional benefits, as assessed by different partners and stakeholders[2, 3], the government of Ethiopia later mainstreamed CMP in the major policy implementation guidelines such as the WaSH Implementation Framework (WIF) and the OWNP.

The CMP is now implemented at scale. It has facilitated the implementation of about 5,000 community-managed water supply schemes in Amhara Region, serving a population of about 1.5 million since 2004 with funding from Finland, UNICEF and the region[4]. The approach is also being implemented in Oromia, SNNP and Benishangul-Gumuz Regions.

Specific to CMP is not only the transfer of funds to communities through intermediary financial institutions, but also the delegation of full responsibility for contract management and procurement to the community. Engagement and capacity building of the private sector is a related supporting activity to create independent technical services in WASH facility construction and maintenance for the community.

CMP is coordinated at regional level by the COWASH office in the Bureau of Water Resources, accountable to the Ministry of Water and Energy. At lower levels, one focal person is assigned at the sub-regional (zonal) water resources office. At district level, the Woreda (district) WaSH Team (WWT) consists of representatives of the local administration, and water, agriculture, health, education, finance and economic development offices.

The roles and responsibilities of each have been detailed in the CMP approach implementation manual[2].

- COWASH staff at national and regional levels are mainly working on capacity building and technical assistance.
- WWTs take practical steps in the process, such as plan approval, project agreement signing, and fund transaction authorization.
- WaSHCOs, the central stakeholders, are responsible for project planning, implementation, operation and maintenance including the entire contract management as well as procurement with the close support from the district authorities (WWT).

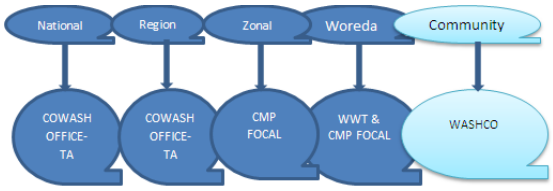

Figure 1. Governance levels in CMP (Ethiopia).

Funds are allocated for CMP implementation along two routes:

1. Funds for capital investment in facility construction go through Micro Finance Institutions (e.g. the Amhara Saving and Credit Institution - ASCI).
2. Funds for capacity building, such as training, and other operational costs for the support to the communities follow the usual government budget flow

[c] All dates are noted using the international (Gregorian) calendar.

channels to reach the region, sub-region and district levels.

The cash contribution from the community is saved at the district microfinance institution at an annual interest rate of 5%.

Technologies in CMP

Though there is no hard and fast guideline that confines CMP to a specific technology, to date the approach has mainly focused on two water supply technologies: hand dug wells and spring development. This may be based on the community's capacity to manage only simple and low-cost schemes, as the planning and contract management of more complex water supply schemes such as motorized deep wells is more challenging.

The hand dug wells (up to 30 m deep) constructed under CMP are usually internally lined with concrete rings, equipped with masonry or concrete head works (i.e. apron, parapet, drainage, stairs) and installed with an Afridev type hand pump. This is one of the commonly used hand pumps and relies on manual leverage to lift water through the development of a vacuum and positive displacement.

Figure 2. Afridev hand pump[5].

One of the peculiar features of the water supply facilities constructed under the CMP approach is the source protection. A multi-purpose buffer zone is created to protect the source from land degradation and potential contaminants. At the same time, the buffer zone may provide income generation for communal purposes through harvesting perennial crops and animal feed such as hay.

Community water supplies are ideally constructed on communal land, where both the water facility and the land belong to the community, so that relatively large areas around water sources can be kept as protection zones. By restricting access to people and animals, the buffer zone is protected from land degradation, hence preventing erosion that may lead to gully formation that would endanger the infrastructure. At the same time, the water source area is protected from anthropogenic contamination as upstream sources of contaminants can be trapped and groundwater recharge is enhanced locally. In this way, locally protected buffer zones can contribute towards improving both water quantity and quality, thereby increasing water supply sustainability[6].

Figure 3. Source protection (buffer zone) at Araya spring in Yilmana Densa.

The protection zone may also give an opportunity for the community to construct another water source later if an additional water source is required. This may be because of population growth or the failure of the exiting water supply facility.

In case no communal land is available, the community water supply sometimes has to be constructed on private land. This can be achieved through negotiation with the land owner, e.g. providing substitute land, privileges as a guard to take care of the facility or other options depending on the actual situation in the area. On private land it is hard to get more than a 4-5 m radius protection zone around the water source.

Springs developed as part of CMP interventions have different components, such as:

- A spring box, compulsory for capping,
- A collection chamber, to provide a buffer between a more or less continuous supply from a natural spring and peaks in daily water demand,
- A water point with faucets,
- A laundry basin,
- Shower rooms (separate for male and female),
- A cattle trough.

CMP in Yilmana Densa district

Yilmana Densa is a district in the west Gojam sub-region of Amhara Region. Its capital town of Adet is 42 km from Bahir Dar on the way to Mota from Bahardar. Yilmana Densa has eight urban (including five small towns) and 28 rural wards with a total population of 214,852 (19,169 urban and 195,683 rural) according to the 2007 national census, when the five small towns Ambatina, Tsiyon, Senkegna, Mesobo and Adet Zuria were considered as rural.

According to the district water resources office, mid-2012 access to rural water supply was 81%, defined as the number of users that can potentially be served by the existing facilities. Coverage calculated as the actual number of people using the facilities, was 63%: a total of 549 hand dug wells with hand pumps, 41 springs and one drilled well served 125,024 out of the 199,592 total population of the 28 rural wards. The only NGO working on WASH in the district is World Vision.

As part of the capacity building objectives of the CMP approach, the project had trained 17 artisans, during 61 days, in construction and maintenance of the hand dug wells and spring in the district of Yilmana Densa. Until mid-2011 the artisans had been working under individual contracts from the WaSHCOs, with support from the district authorities, without competition. However, after complaints from other local contractors interested in the business, since mid-2011 the artisans were subjected to competition, so they organized themselves into associations (microenterprises).

Lewut microenterprise

One of the established microenterprises of trained and licensed artisans is Lewut microenterprise. The enterprise was set up with 32 and is now reduced to 20 as some of the members, especially the university graduates, got other business.

In 2005 *Mr. Alemu Worku* was trained, both theoretically and practically, on hand dug well construction and spring development, as well as on maintenance and promotion of WASH facilities.

As an individual, he has constructed 20 wells and one spring since then. Currently Mr. Worku works as the chairman of Lewut microenterprise. He finds the business attractive and profitable.

Avola spring in Senkegna, Yilmana Densa

The Avola spring is located in the ward of Senkegna, very close to Adet town, at an altitude of 2204 m. The facility has one water point with four faucets, one laundry basin with four compartments, each fitted with faucet, one cattle trough, two shower rooms

(for men and women), and a masonry collection chamber for overnight storage.

Figure 4. Functioning water point at Avola spring in Senkegna, Yilmana Densa.

Figure 5. Laundry basins in good working order at Avola spring in Senkegna, Yilmana Densa.

Figure 6. Shower rooms at Avola spring in Senkegna, Yilmana Densa. It is not clear whether these are actually used by the community.

Figure 7. Cattle trough in use at Avola spring in Senkegna, Yilmana Densa.

The spring was developed in January 2006 as part of the practical training for artisans under CMP. The major maintenance undertaken so far was replacement of the gate valve and some faucets. All components were operational during a field visit in March 2013. Discharge of the spring could not be measured because of its capping, necessary to protect it against advancing gullies[7].

Figure 8. Source protection (buffer zone) at Avola spring in Senkegna, Yilmana Densa.

The facility is, as all communal water supplies, managed by the local WaSHCO with five members (two women and three men) elected from the user community. The committee has not been changed since the construction of the spring seven years earlier, though they are supposed to serve only for two years (unless re-elected). The spring is used by between 54 (design) and 300

(according to informants) households as main source for domestic water supply. Though exact quantification was difficult, if the higher number is correct, with an average of five cattle head per household, a total of about 1,500 cattle is estimated to drink from the system. Six individual households immediately downstream of the spring use the overflow for irrigation.

Each household is charged € 0.03 (ETB 1) every three months for domestic and cattle water use. Additionally, a fee of three euro cents per person is charged for use of the shower. Another source of income for the community is the sale of hay (cattle feed) from the source protection area, the buffer zone. The total costs and benefits of the Avola water system can be roughly estimated as follows:

Table 1. Estimated costs and benefits of the CMP water facilities at Avola spring in Senkegna, Yilmana Densa[7].

Item	Amount (€)
Grant Government of Finland	1406
Community contribution	431
Total investment	**1837**
Annual salary guard	42
Maintenance 1st	61
Maintenance 2nd	63
Total operation costs 2006-2012	**418**
Annual water sale	50
Annual hay sale	63
Total income 2006-2012	**791**

Based on these estimates of operation costs and income, without considering investments, the balance would be € 373. In reality the situation is more favourable as the WaSHCO has the equivalent of € 618 cash in its account.

Six households use the overflow from the spring at their farmland adjacent to the spring. Before the system was constructed this was not possible as the flow did not reach these fields. The farmers were inspired by the overflow that now arrived close to their land. They now practice furrow irrigation without any technical support from experts or technicians on irrigated agriculture.

The farmers are sometimes criticized for their irrigation practices by the people who use the spring system only for domestic purposes. However, no impact of the irrigation users on the protected spring can be observed, as they are all downstream of the spring and use only the overflow. Moreover, other households in the community could probably easily access groundwater through shallow wells at their compounds as the depth to groundwater is around 9 - 12 m. The main challenge farmers raised is that hand dug wells might collapse during excavation. This could be addressed with advice by the district water office experts.

One of the irrigators at Avola spring, *Mr. Amsalu Mine* cultivates irrigated banana, potato, tomato and garlic in his yard. The farmer uses some of the produce for household consumption, and the remaining for sale.

Figure 9. Mr. Amsalu Mine's irrigated field at Avola spring in Senkegna.

Table 2. Gross income[d] generated by Mr. Amsalu Mine from the sale of irrigated crops.

Produce	Sale (€)
Sugar cane	12.50
Tomato	7.52
Onion	7.10
Total	**27.20**

Mr. Asmamaw Agez, another irrigator, started to practice irrigation three years ago, producing mainly potato, garlic and onion. He invested € 21 in seed and used only compost as fertilizer. The farmer cultivated 500 m^2 land with onion and garlic and sold the surplus after family consumption € 125. The income from irrigation is used for schooling of his children.

Figure 10. Mr. Asmamaw Ageze in his irrigated field (potato, onion and garlic).

Araya spring in Kudad, Yilmana Densa

The Araya spring, located in the ward of Kudad at an altitude of 2,233 m, was developed in February 2005 by artisans under training by the CMP. The Araya spring has the usual components: laundry basins, shower rooms, collection chamber, two animal troughs (a large one for cattle and a smaller for goats and sheep), and a water point with four faucets. The facilities are used by 130 households.

Figure 11. Overview of facilities at Araya spring in Kudad, Yilmana Densa: water point with 4 faucets, shower rooms in the background right, laundry basin in the foreground.

During the field visit in May 2013 the gate valves to control the flow to cattle troughs and shower rooms were damaged and needed replacement. Similarly, only one out of the four faucets of the laundry basin was functional. Users made their own adaptations, e.g. simply blocking the water flow to the cattle trough, but obviously the facilities cannot be used according to the design.

Figure 12. Water point without faucet at Araya spring in Kudad, Yilmana Densa.

[d] Based on recall, not on actual book keeping. Inputs could not be estimated.

Figure 13. Cattle trough at Araya spring in Kudad, Yilmana Densa.

Apart from the health benefits of the WASH facilities, the community profits from income generated from cattle, drinking from the cattle trough.

Ms. Yirgu Belete takes water from Araya spring two and sometimes three times a day, for domestic uses (she has 2 sons and 3 daughters) and for cattle. Previously this family and others used an unprotected spring. Ms. Belete states that currently nobody goes to unprotected sources; not even for cattle watering, let alone for domestic uses. According to her, the protected source has good water quality.

Figure 14. Ms. Yirgu Belete at the cattle trough near Araya spring in Kudad, Yilmana Densa.

The major sources of income for the local WaSHCO are from selling water (ETB 1, ~€ 0.04/month/household), user fees for the shower (when it was still functional), credit services, and the sale of hay (animal feed from the protected areas around the water source). The WaSHCO usually keeps these funds at hand for credit services to community members. Every member of the community who is sharing the water facilities is entitled to a 200- 300 ETB (~€ 8- 13) credit from the WaSHCO at an interest rate of 5% per month.

The total costs and benefits of the Araya water system can be roughly estimated as follows:

Table 3. Estimated costs and benefits of the CMP water facilities at Araya spring in Kudad, Yilmana Densa[8].

Item	Amount (€)
Grant Government of Finland	1152
Community contribution	448
Total investment	**1600**
Annual salary guard	65
Maintenance	?
Total operation costs 2005-2012	**521**
Annual water sale (12 ETB/hh)	522
Shower service (ETB 20/month till 2011)	70
Hay sale (ETB 1000/year)	335
Total income 2005-2012	**927**

Based on these estimates of operation costs and income, without considering investments, the balance would be equivalent to around € 406, which matches the current account balance of the WaSHCO that is € 418, to be used for credit services. In addition it has € 138 in cash, totalling € 556.

Shine Mender hand dug well in Senkegna, Yilmana Densa

The hand dug well at Shina Mender in the ward of Senkegna (at an altitude of 2,213 m)

was said to be some 16 m deep and operational since 2010. The well is internally lined with concrete rings, has drained head works, and is equipped with an Afridev type hand pump. The pump was functional at the time of the visit in March 2013, though its handle was reported stolen and replaced with a wooden handle. Some cracks at the well head could be observed; this needs to be repaired as it is potentially dangerous for contamination.

The pump has a lock, to prevent children from pumping it unnecessarily, and a fenced area around the water point and also its protection area (buffer zone). No additional facilities have been constructed. Users take turns in keeping the key, so that they do not have to spend money on a guard[9].

Figure 15. Afridev-type pump at Shine Mender hand dug well, repaired with wooden handle.

The facility is used by 38 households for domestic water supply only. Every household take about 60 litres of water daily and contributes some € 0.04 (1 ETB) per month, as well as 5% (€ 0.21) interest for credit facilites[11]. The latter amount has to be paid even if the member does not take the € 4 loan. Currently, the WaSHCO has a capital of € 167 in cash. The community would like to have an additional hand dug well as the current one is a bit far for some of the households. As the existing well with equipment had cost € 542[9] (excluding € 209 for the pump), the WaSHCO uses the € 0.21/ month/household for credit services as an additional source of income to save for a new well.

Koma #1 hand dug well in Debremawi, Yilmana Densa

The Koma #1 hand dug well in the ward of Debremawi (at an altitude of 2335 m) was constructed in 2004 and has a depth of 11 m. It has the usual basic structure of concrete ring lining, head works, drainage and an Afridev type hand pump. A permanent guard looks after the facility and keeps the key with him. The facility looked well protected and in working order during the field visit.

Figure 16. Afridev-type pump at Koma #1, with Priest Zelalem Admas, secretary of its WaSHCO.

The well is used by 83 households, who experience water shortage in the dry season and sometimes turbidity during rainy season. Every household is allowed to take 40 litres of water per day (with an Ethiopian average of five persons per household this is well below the target of 15 lpcd) and pays a monthly fee of € 0.08 (2 ETB). This income is mainly used for the salary of the guard. So far only € 12.50 was spent on maintenance of the facility[10].

Figure 17. Buffer zone of Koma #1 hand dug well, Debremawi, Yilmana Densa.

Initial investment for the facility only was € 703[8Error! Bookmark not defined.], matched by a total of € 52 (15 ETB/ household) cash contribution and the equivalent of € 156 in labour and local materials during the construction. In addition, the hand pump was estimated to cost € 209. In addition to cash, the community also contributed local materials and labour, totaling 30% of the investment.

Water quality

The district water resources office is responsible to disinfect communal water sources, ideally twice a year, unless some contamination is suspected. The district uses a revolving fund for spare parts supply and chlorine for water source disinfection.
In reality, disinfection happens less frequently, i.e. the Shina Mender hand dug well was treated two times since its construction three years earlier[11] and the Koma #1 hand dug well in Debremawi only three times in its nine year life span[12].

For springs, the collection chambers are cleaned manually. At Araya spring this is done every six months, but no disinfection is conducted after cleaning. As people physically enter the storage for cleaning, the collection chamber may easily get contaminated. Once worms were observed at Araya spring and the system was disinfected with a chlorine product. Otherwise, no bad smell or unattractive taste has been encountered so far at this spring.

Exploring the potential for Multiple Use Services

As CMP is an approach to rural water supply that gives more responsibility for project planning, implementation, operation and maintenance to the user communities, it offers the users options to adapt the design and accommodate multiple use of water. The way the water source is protected with a buffer zone is different from facilities constructed under other approaches. This helps to sustain the water source all year round[11].

The priority area for the district water office is domestic water supply; irrigation is the duty and responsibility of other institutions[12]. However, if there is sufficient or excess overflow at the downstream sites, the water office does not deter communities from using the water for irrigation. The national standard for access to rural water supply is based on 15 lpcd. Therefore, excess water according to the water office means quantities (in litres per day) beyond 15 multiplied by the number of users. In practice this amount is not calculated in actual use; it is foremost a guiding rule during the design phase. Thus, any user can access the overflow downstream of the water points.

Technical constraints

In reality, it is not so easy to upgrade existing CMP water systems to multiple use water services. The technology currently in use has its limitations.

Community hand dug wells equipped with Afridev type hand pumps restrict use of the

facility for productive purposes for the following reasons:

- *Water yield*. On average Afridev hand pumps give 0.25 l/s, which makes them suitable for 250 to 300 beneficiaries (50 to 60 households), according to the 15 lpcd national rural water supply standard. Therefore the facility needs to operate four to five hours per day to serve as per the design. If the pump has to operate beyond these hours, mechanical wear and tear will reduce its lifespan. Moreover, many hand dug wells have water shortage for domestic use[2], meaning there is no excess water for additional uses.
- *Communal facility*. The water point is usually located on communal land or on private land provided for communal use. Hence the flexibility to use water from a communally owned facility for private productive purposes is limited.
- *Distance*: Related to the location of the water point, transportation of the water for irrigation can be a challenge.

Summarizing, communal hand dug wells equipped with Afridev hand pumps are not practicable for multiple use water services mainly due to the limited water quantity, followed by lack of flexibility for individual use. Furthermore, the design of the facility itself is focused on a single water use.

Spring-based water supply facilities under the CMP approach usually include a collection chamber with overflow facility, often used for irrigation by the surrounding households. Though this is an indication of the demand, there is no standard or specific design that accommodates the use of overflow for productive uses and income generation. Hence only farmers who have land adjacent to and downstream of the overflow use the water for irrigation, without any technical assistance from the designers of the facility.

Up-scaling

The experience of CMP implementation shows that the applied technologies of spring development and hand dug wells installed with Afridev type hand pump are simple to use. Local communities can manage the planning and implementation, while artisans can readily construct it. However, these technologies restrict additional productive use of water. Upgrading the water facilities for multiple uses, such as motorized wells and springs with distribution is complex and makes their management at community level hardly possible.

In addition, the communal nature of these water supply sources and facilities (except some spring systems) make them less convenient for other uses than domestic water supply. This holds true for communal water supply projects managed by the district or NGOs as much as for CMP.

However, if the water source is sufficient and there is consensus among the users, it may be possible to promote 'MUS-by-design' (multi-purpose water schemes) and 'domestic-plus' as part of the CMP approach. This option can work for spring systems, where upgrading of the water supply facilities to accommodate irrigation is possible when the overflows are deemed sufficient.

Conclusion

The CMP approach is aimed at improving WASH services through strong engagement of users and the private sector to ensure a strong sense of ownership and hence sustainability. The design of the facility suits this objective and is mainly domestic water

supply. When the water source is sufficient (usually with springs and not with hand dug wells), cattle watering facilities are common additional components in the design.

At the same time, just because the CMP approach builds capacity and successfully engages the private sectors and user communities from the onset, it offers opportunities for end users to pinpoint their needs to be incorporated in the design. Hence, the CMP approach can be used to introduce and promote multiple use water services from project initiation through planning and implementation to the operation and maintenance phase. This has potential, albeit practice is limited to date, enabling users to maximize their benefits from the proposed WASH facilities.

The MUStRAIN project

The goal of the MUStRAIN project is "to address the critical water problems in water scarce rural areas of Ethiopia by collaboration, implementation of innovative and alternative solutions and exchange of knowledge and mutual learning". Scalable approaches to water harvesting (RWH) and shallow groundwater development (Self-supply) for multiple use services (MUS) have been the focus.

MUStRAIN brings together the strengths and builds partnerships of a consortium of Dutch-based organisations (IRC International Water and Sanitation Centre, RAIN Foundation, Quest and Water Health) and Ethiopian partners and experts with complementary interests in the sustainable development of approaches to MUS. MUStRAIN is led by IRC and funded by the Partners for Water (PvW) programme.

MUStRAIN aims to promote update of Multiple Use services in different contexts within Ethiopia, by documenting replicable water access/MUS models. In eight case studies cost-benefit relations are analysed, as well as opportunities and challenges for implementation.

The MUStRAIN case studies are:

1. MUS from sand rivers
2. MUS and Self Supply
3. Mechanized pumping and MUS
4. Ecological sanitation for MUS
5. Greywater reuse for MUS
6. MUS and livestock
7. MUS and the Community Managed Project (CMP) approach
8. MUS and manual drilling

The methodology for the current case study (7) included a review of relevant manuals and other documentations, such as the online CMP guidelines. In addition, a field visit was carried out in the district of Yilmana Densa in the West Gojam sub-region, Amahara Region (25-28 March 2013). Informal interviews were done with technical staff at the district water office, at the regional level in Bahir Dar and at national level. Four WASH systems constructed under the CMP approach were visited and evaluated in consultation with the district water resources development office and with users.

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Abbreviations

ASCI	Amhara Saving and Credit Institution
CDF	Community Development Fund
CMP	Community Managed Project
COWASH/ Co-WASH	Community-Led Accelerated WASH
ETB	Ethiopian Birr
€	Euro
lpcd	litres per capita per day
MFI	Micro-finance institution
NGO	Non-Governmental Organisation
OWNP	One WASH National Programme
RWSEP	Rural Water Supply
WASH/ WaSH	Water, sanitation and hygiene
WASHCO	Water Committee
WIF	WaSH Implementation Framework
WWT	Woreda (district) WaSH team

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The IRC International Water and Sanitation Centre is a knowledge-focused NGO working with a worldwide network of partner organisations to achieve universal access to equitable and sustainable water, sanitation and hygiene (WASH) services. IRC's roots are in advocacy, knowledge management and capacity building. IRC was set up in 1968 by the Dutch government on request of the World Health Organization as a WHO Collaborating Centre. Currently, IRC is established as an autonomous, independent, not-for-profit NGO with its Headquarters in The Netherlands, and local representation in the countries where IRC implements programmes. IRC has profiled itself over the years with innovation and action research to achieve equitable and sustainable WASH services.

In collaboration with:

waterhealth

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