IRC Supporting water sanitation and hygiene services for life

Millennium Water Alliance

BRIEFING NOTE February 2018

Endline Evaluation for the Millennium Water Alliance-Ethiopia Programme Self-supply Acceleration Pilot

FINDINGS

Proof of concept

- Household-led Self-supply is a feasible approach and community members are receptive to a range of improvements from the most minor to major investment works.

Support and investment

- To establish critical mass, repeated visits to households are required after initial demand creation.
- Peer to peer demand creation allows for impact outside of programme implementation areas.
- Leveraged investment by households shows a ratio between household and programme investment of 1:1.4

Key recommendations

- Continue with support to woreda staff and the private sector to allow for scaling up and maintenance of a critical mass of early adopters.
- Provide greater suport to households on technology choice, basic installation and maintenance, as well as contamination risks.
- Target remote and/or disadvantaged households and consider consensus on appropriate support (including subsidy).
- Consolidate support at woreda level with regional government engagement, especialy with respect to potential integration with monitoring systems.

Supporting water sanitation and hygiene services for life

This briefing note focuses on outputs, outcomes and results of the household level Self-supply acceleration pilot, funded by The Conrad N. Hilton Foundation. The report includes lessons learnt and recommendations on key issues for success in the next phase of the MWA-EP programme and will be of interest to both policy makers and practitioners looking to integrate multi-stakeholder capacity building activities into their WASH support services, both in Ethiopia and beyond.

The MWA-EP pilot initially focused on both household and group-led approaches to Self-supply, although later activities focused on building the enabling environment for household Self-supply only. An endline survey was devised to evaluate whether the pilot was successful in achieving the overall strategic objective: *proof of concept of an approach to Self-supply acceleration in the five target woredas (Dera, Farta and Este woredas in Amhara, as well as Omonada and Dugda woredas in Oromia).*

Photo: IRC

EVALUATION AIMS

The aim of the evaluation was to answer the following questions using a mixture of quantitative survey and qualitative Key Informant Interview (KII) methods:

1. *How many privately owned Self-supply facilities were constructed or improved during the project timeframe, and how many people benefited? To what degree (level of technology, level of protection) were facilities built or improved?*

2. *How has microbial water quality (E. coli) changed during the project timeframe, and can this be related to project interventions?*

3. *How much public/NGO investment has been made in Self-supply Acceleration, and how much household investment has been leveraged by this investment?*

4. *How many households have taken Micro-finance institution (MFI) loans or used other sources of finance to make these investments?*

5. *What is the degree of engagement of private sector businesses in providing products and services for Self-supply?*

The evaluation also considered the extent to which planned outputs, outcomes and intermediate objectives were achieved, along with critical reflection on the approaches taken as well as adaptations and adjustments made by partners during implementation.

PILOT ACTIVITIES

Six primary activities were undertaken by the implementing partners; CARE (Dera, Farta and Estie woredas), World Vision (Omonada woreda), Catholic Relief Services/Meki Catholic Secretariat (CRS/MCS) (Dugda woreda), Aqua for All (A4A), Water.org and IRC (all woredas). These were:

1. Demand creation through promotion/awareness raising
2. Provision of technology options and advice
3. Private sector strengthening
4. Establishment of financial systems to provide loans for Self-supply through microfinance organizations
5. Support for government policies including water quality surveillance
6. Establishment of a monitoring system.

Accross each woreda, a set of guidelines were developed to plan and implement these activities with local government staff.

CORE FINDINGS

There was good evidence from the household surveys and feedback from woreda government staff that mixed use Self-supply at household level is appreciated and widely taken advantage of by households and their neighbours. Proof of concept for self supply acceleration approaches was therefore established, although further support to communities, the private sector and woreda level government is recommended to maintain progress.

The total number of new or upgraded family wells in the five project woredas was 731 (57% were newly constructed and 43% were upgraded against a revised target of 1,100). The majority of improvements seen were in the lower cost categories of the Self-supply ladder although a number of higher cost investments were made as well. The number of loans issued was substantially lower than planned and those loans that were extended required considerable advocacy and influencing work.

Well ownership amongst female-headed households was found to be very low. Only 6% of the new or upgraded facilities surveyed were owned by women or woman-headed households (the comparable figure was 9% for the baseline survey). Overall, it is estimated that around 23% of households may be female headed. Increased support to those whom the market cannot, or will not, reach should therefore be considered, including the use of targeted subsidies.

FINDINGS BY ACTIVITY

Demand creation

All partners demonstrated high quality community engagement activities and engaged in follow up work with households that had expressed an interest in Self-supply. Community engagement is labour-intensive process as it involves both spending time with individual households and participating in repeat visits to track progress and assist with technology choice and installation. *As shown by the household surveys, 94% of households received follow up support after Demand Creation events, while 57% had three or more visits.* Where most successful, partners had the active support of Woreda staff, as well as kebele level officials and health workers. Successful community sensitisation also involved efforts by artisans who promoted their services to households.

A key best practice example was the drama performances commissioned by CARE and performed by South Gonder Zone artists, which included music, role play and songs about the benefits of improved water supply. These proved extremely popular and resulted in over 1,000 people registering their interest in Self-supply improvements. There was also regional interest in rolling out the approach from local officials.

The most significant challenge faced by all national partners was the newness of the Self-supply concept to both themselves and the communities, as well as to woreda level government staff. Subsidy issues were central to this challenge. The weight of the subsidy precedent had to be dealt with to successfully create demand in a subsidy free context. Partners therefore had a "harder sell" in both raw financial terms as well as in the immediate benefit they were bringing to the community (no subsidy).

Technology introducton

The range of technology options offered by the Self-supply Acceleration approach is designed to be flexible enough to allow all households to potentially make a positive modification to their water supply service, no matter the financial situation of the household, or the available technology options. As such, after demand creation, households should be able to make an informed choice about the best technology choice at their particular point on the Self-supply service level ladder in relation their financial means. Pitching the most appropriate technology options to households therefore is a critical step of any Self-supply Acceleration activity.

A review of interventions by technology type compiled by the evaluation team across woredas in South Gondor (from level one at the most basic to level six, which includes Afridev Pumps) revealed that with respect to new wells, 20% were in the brackets of 4 to 6, while 80% of new wells were with technology types 1 to 3. The number of reported rope pumps installed at family wells by implementing partners was 11 in Dugda, 10 in Omonada and 9 in Farta. The end-line survey team saw several instances of functioning rope pumps installed by local artisans under the programme and the quality of build and installation was generally good (figure 2). User satisfaction was also high (figure 4) with anecdotal reports of disease reduction and improvements in health, although it was also the case that the water quality of the small number of samples collected was generally poor (which indicates the likely need for better decontamination and source protection).

Levels of investment per capita for the programme are hard to estimate accurately and would be distorted by the inclusion of two extremes: the smaller number of more expensive options and use of own labour for well construction (minimum cost). However, if the average investment for upgrading and new construction of the 731 wells is considered, then the average investment per household would be 124 USD. NGOs formally invested 25,000 USD per Woreda in the later part of the programme, but initial activities were funded from other budget lines. *By considering a total population of 118,644 in the 23 intervention kebeles from five woredas then of the average investment per capita was 1.63 USD for the programme.*

FIGURE 1 WATER USE FROM FAMILY WELLS (SAMPLE OF 49 WELLS)

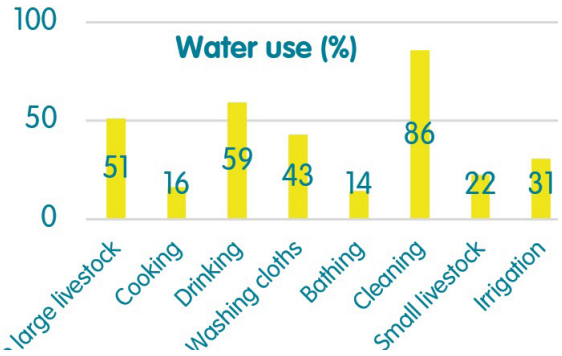
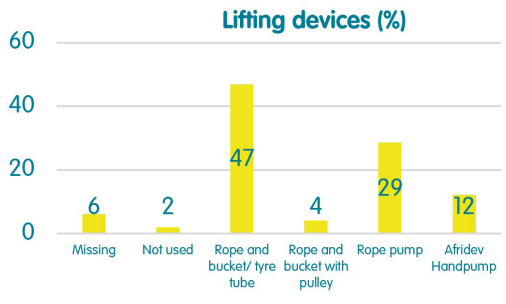


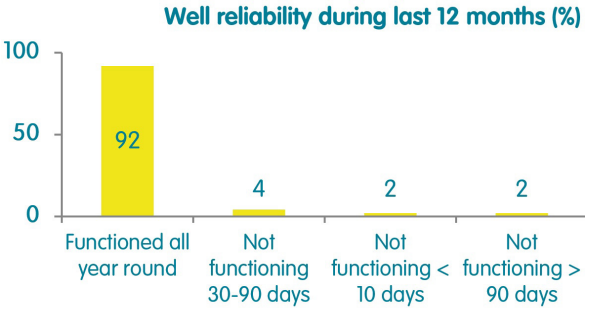
FIGURE 2 LIFTING DEVICES EMPLOYED ON FAMILY WELLS (SAMPLE 49 WELLS)



Private sector strengthening

The aim of private sector strengthening was to develop vocational business skills while also promoting the potential of the local Self-supply market for goods and services. Recipients of the training and coaching activities included artisan collectives, rope pump manufacturers, carpenters, spare parts suppliers, store-owners and maintenance engineers, and well diggers. A further aim of the training was to encourage proper registration and financial management practices in those businesses. *Overall, the immediate results of the private sector strengthening were solid, with recipients of trainings still in business and generally optimistic about the market for Self-supply services.* The end-line team saw several instances of successful and proactive business practices, including significant independent promotion

FIGURE 3 WELL RELIABILITY SURVEY (49 HOUSEHOLDS)



of Self-supply to communities outside the programme woredas. It was especially notable that the Challenge Fund entrepreneur promotion activities (especially Roboth Metal and Wood) led to independent Self-supply installations occurring outside the registered lists, and are making significant gains and improvements in their business operations and services. This is demonstrative of increased demand and recognition of that demand as a potential customer base.

The main challenge for the private sector was (and still is) a consistent market demand for Self-supply goods and services and, ultimately, profitability. The latter is linked to the aforementioned issue of subsidy and a related willingness of households to pay full market cost for hardware. For example, the profit margin on rope pumps was considered to be low in relation to their cost and the price households could or would afford to pay for them. Adding to this is the fact that a rope pump is a fairly time-consuming item to construct and the sourcing of some critical construction components is restricted to single supplier in Addis Ababa. Although rope pumps are an appropriate technology choice in both form and function, without the further development of their component supply chain they may remain a relatively low volume sales item.

Microfinance

Two microfinance institutions began to provide loans for Self-supply through the programme: Amhara Credit and Saving Institute in Amhara and Metemamen in Dugda woreda of Oromia. Both MFIs received assistance from Water.org to conduct market assessments, product development and other supporting activities, based around the Water Credit model. *During the project period, a total of 25 loans were provided to households either for upgrading or new construction of wells.* Loans were offered on a yearly basis from 4,500 to 25,000 Birr and an interest rate of 18% across the board. There was no variation in the rates and terms offered to potential loan customers and practices mirrored those already well-established in the more mainstream agricultural sector.

FIGURE 4 BENEFICIARY SATISFACTION SURVEY (49 HOUSEHOLDS)

Due to the low numbers of loans made and their relatively recent timing, it is difficult to present conclusive findings beyond recommending that more time is required to investigate the appropriateness and efficacy of microfinance in these areas. However, end-line survey interviews with key informants revealed a mixed response to the provision of loans to members of the community and mixed attitudes to debt and finance that undoubtedly had an impact on the ability of microfinance to make more significant inroads.

Government support and monitoring systems

Government support under the MWA Self-supply Acceleration programme included capacity building, formation of the Self-supply Acceleration Steering Committee, and guidance on the formation of a strategic plan to implement Self-supply Acceleration activities in an on-going manner. The ultimate aim, as defined by the mid-term review, was to embed permanent capacities and activities into woreda staff duties at kebele level, to improve cooperation and collaboration between relevant woreda departments and, thus, to provide a demonstration example for other woreda administrations that Self-supply Acceleration is a feasible approach that they may wish to replicate. The approach taken by all partners was to support

woreda staff in their functions and provide additional resource, guidance and capacity in their dealings with community members who wished to improve their household services. This included costs and logistical support for woreda staff to attend demand creation events (transport) as well as costs for training and related material. supply facilities is much less than individual household-led Self-supply facilities. *In all woreds, the Self-supply Task Forces were set up and in operation, meeting at least quarterly, and the Self-supply focal person was actively engaged with them to assist coordination of their activities.* In two out of three woredas, government staff also engaged in monitoring of the Self-supply households, often via kebele health extension workers, which was demonstrative of increased collaboration between water and health departments. It was commonplace among partners to acknowledge that political support was the key to the success of Self-supply Acceleration activities. *At the woreda level, the lateral coordination among different departments, including the implementing partner, could be considered as one of the more positive outcomes of the programme, although collective responsibility for Self-supply Acceleration activities is better than a single focal point taking up the responsibility across NGO and woreda organisations.* More active participation of woreda task forces and the integration of Self-supply Acceleration into other WASH and health related activities should also be explored. There is also a need for increased coordination and focus at regional and national levels to demonstrate the success of Self-supply Acceleration approaches with an aim of potential scaling up is necessary to consolidate and build on the lessons from the pilot.

Recommendations of the endline evaluation

- **Formulation of technical guidelines on incremental improvements, and lobbying for a household level of supply to be regarded by government as acceptable coverage.** This is especially important in two respects. The first is to ensure that households know how to progress up the ladder and undertake lower level improvements safely and effectively, inclusive of making improvements to water quality. The second is to recognise and monitor household supply to further establish the approach at scale and open up the possibility of targeting harder to reach and more vulnerable households.
- **Inter-Ministry discussions and consensus on levels of subsidy, so that all programs offer a similar level of incentive which maximises long-term beneficiary numbers.** This relates especially to highly disadvantaged and/or remote households, whom the market (private sector) is unwilling to reach.
- **Development of strategies which target the poor and families not within access of functioning community water supplies.** This can be via subsidy – but also relates to specific demand and awareness creation activities, peer-to-peer learning and the promotion of SSA as a way to counter weaknesses in the community water approach.
- **Continued lower level support to the present focal woredas/ kebeles and design of gradual phasing out of outside support over three years.** The momentum built up in the programme woredas should not be lost by a rapid removal of support, especially when the SSA approach depends heavily on an initial period of demand creation and support to businesses to create an environment where SSA can be undertaken more easily
- **Expansion into new woredas with adjustments in approach to reflect remaining challenges**. The timing of demand creation activities should be linked to the time of year when communities have sufficient funds to act on commitments.
- **Work with woreda and regional level government to build up their leadership support for triggered woredas, including integration of activities into budgets and monitoring.** The functioning of the woreda level SSA task forces should be revisited and reenergised to encourage collaboration between kebele level health workers, water officers and their respective monitoring and health promotion activities. At a regional level, commitments to SSA should be given additional focus and political profile.
- **Agreement on modus operandi for scaling up of introduction of Self-supply to all relevant areas of the region.**
- **Ensure that the support given to the businesses and artisans under the programme is not undone by a lack of follow-up support, where required**. Development of further links to Ethiopia Water Technology Institute and new ones to the proposed Smart Centre to ensure continued technical and business support for SMEs is recommended.

FURTHER READING AND REFERENCES

Mekonta, L., Terefe, B. and Butterworth, J., 2016. *Self-supply in seven woredas. Report of baseline survey for Millennium Water Alliance Self-supply Acceleration pilots.* Available at: https://www.ircwash.org/resources/self-supply-seven-woredas

Butterworth, J., Sutton, S. and Mekonta, L., 2013. *Self-supply as a complementary water services delivery model in Ethiopia.* Water Alternatives, 6(3): 405-423

FDRE, 2011. The national WASH implementation framework. [online] Addis Ababa: FDRE. Available at: www.cmpethiopia.org/media/full_wash_implmentation_framework_wif/(language)/eng-GB [Accessed 5 May 2016].

IRC, 2013. *Guidelines for developing a Self-supply Acceleration plan for your area.* [pdf] Available at: www.ircwash.org/sites/default/files/self_supply_planning_guidelines_03062014.pdf [Accessed 6 May 2016].

Mekonta, L., Butterworth, J., Wegari, Z., Gebremedhin, B., Jaleta, M., Tizazu, M. and Hailu, T., 2015. *My water, my business: monitoring Self-supply in rural Ethiopia.* Poster. [pfd] Available at: www.ircwash.org/sites/default/files/my_water_my_business_monitoring_Self-supply_in_rural_ethiopia.pdf [Accessed 6 May 2016].

MoWE, 2012. *National policy guidelines for Self-Supply in Ethiopia: Guidelines to support contribution of improved Self-supply to the WASH GTP/ UAP.* Federal Democratic Republic of Ethiopia/ Ministry of Water & Energy, Addis Ababa.

MoWIE, 2014. *Manual for accelerating Self-supply program.* Ministry of Water, Irrigation and Energy, Addis Ababa.

Sutton, S., Butterworth, J. and Mekonta, L., 2012. *A hidden resource: household-led rural water supply in Ethiopia.* IRC

About IRC Ethiopia and the Millennium Water Alliance

IRC Ethiopia is a subsidiary of the international think-and-do-tank IRC that is headquartered in The Hague, the Netherlands.

Our vision is the same as the national government and shared by the wider WASH sector: a successful One WASH National Programme that delivers on the objective of universal access to improved water, sanitation and hygiene services.

IRC has worked with key stakeholders in Ethiopia since the 1990s to improve delivery of water and sanitation services. Equipped with extensive, in-depth knowledge of the country and a growing portfolio of activities, IRC established a legally registered office in Addis Ababa in 2015. IRC is member of the Millennium Water Alliance.

The Millennium Water Alliance is a member organisation in which member NGOs bring their strengths and share ideas on effective approaches, for maximum efficiency and long-term effectiveness in order to offer sustainable solutions through advocacy, shared knowledge, and collaborative programming.

About this briefing note

This report is based on the MWA endline survey carried out by IRC to document household led-self supply acceleration implementation by MWA partners on behalf of the MWA-EP, with additional inputs from Dr. Sally Sutton, the Millennium Water Alliance, Aqua for All, and implementation partners CARE, CRS/MCS, World Vision and Water.org.

Golagul Towers Building
Bole sub city, Woreda 4
House no. 275/276
Addis Ababa, Ethiopia

ethiopia@ircwash.org
www.ircwash.org/ethiopia