

Using the Revolving Fund Approach to Scale-Up Rainwater Harvesting in Uganda

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Abstract/Summary

Rainwater harvesting is a component of Self-Supply and its financing has been the wide spread desire for people. With challenges associated with Conventional approaches and the sense of ownership and control bestowed to rainwater harvesting many individuals, private companies and Institutions value the technology for its convenience. In order to promote Rainwater Harvesting in water stressed areas in the country, the Government of Uganda through NGOs nationwide using subsidies of 60%. Lessons from this type of financing have been that: the biggest percentage of funding is external and demand is externally driven; high subsidies make it difficult for the beneficiaries to judge which tank size they can afford. The project failed to scale up beyond the pilot areas due to: Poor advocacy and marketing; Limited public funding of 60% subsidy; inability of rural beneficiaries to raise the huge cost of the tank at once and the high cost of credit financing from Financial Institutions. Rainwater Harvesting using a Revolving Fund Approach is a proposed solution to contribute to SDG 6 where beneficiaries in rural areas are empowered to choose technology type they can afford to finance at affordable terms.

Introduction

This paper is intended to focus on challenges faced by donors and Governments as far as Rural Water Supply is concerned. The lessons derived from the challenges and the step of using a Revolving Fund Approach as a possible solution to rural water financing, which Uganda Muslim Rural Development Association (UMURDA) is implementing at the moment lessons learnt, the challenges faced, recommendations and conclusion.

In Uganda Rural Water Coverage had stagnated at 64%¹ over the last three years. This calls for innovative initiatives to close the gap.

A Self-Supply Study conducted in 2005 in 9 districts in Uganda found that the conventional protected supplies were not sustainable in all situations and the apparent continued popularity of the traditional sources they were designed to replace continued to flourish. The study found plenty of evidence that 75%² of water sources were of Private and Community initiatives shared with not charge. There was also barriers to encouraging self-supply source improvement such as official discouragement off what are regarded as poor quality supplies; lack of mechanisms to support individual ventures and generally lack of awareness by Professionals in what people already do for themselves

The study proposed support to: low cost incremental source improvement technologies ; private sector supply owners to develop water sources for the common good; Private Sector Operators for management and maintenance dealing with households directly not through committees ; Artisans be given training, equipment and access to credit.

The findings stimulated debate amongst stakeholders at National Workshop organised by UWASNET in November 2005. This increased awareness that both ground water and rainwater harvesting could offer household level solutions.

¹ Sector Performance Report 2014

² Carter et al 2005

After the Study, the Ministry of Water and Environment and African Development Bank (ADB) Piloted Self-Supply in (2006-2008) Nationwide using NGOs (NETWAS, UMURDA, Busoga Trust, ACORD, COWESER and WEDA)³

This was a demonstration of what can be done. The NGOs encouraged households to improve their own water supplies, with no, or very low subsidies. UMURDA worked mainly on communal sources, with a particular emphasis on springs, whilst WEDA worked more with privately owned supplies, especially shallow wells⁴.

A study for Enterprise Works⁵ in 2009 identified about 30 distinct rainwater harvesting products⁶ ranging from 20 litres to 10,000 Litres.

Government supported this technology and in 2006, District Local Governments were allowed to construct demonstration RWH facilities and train masons from their Water and Sanitation Conditional Grant. RWH was first included in national safe water coverage estimates in 2006. In 2008, a rainwater harvesting training centre was opened in Kabaale. This centre trained 8 UMURDA masons in Tank construction in 2008 and UMURDA has since trained 28 local masons in the districts of Kamuli, Iganga, Bududa, Manafwa and Namayingo.

The pilot was successful and the Ministry of Water and Environment established an *Appropriate Technology Reference and Development Centre* in Mukono district to promote rainwater harvesting alongside other technologies. Indeed, the popularity of DWH as a viable technology option for rural water supplies continued to grow within institutions and among individuals.

However, the Pilot failed to be scaled up because of a number of reasons: There was limited public funding of 60% subsidy to trigger its up-scaling; inability of beneficiaries to raise 100% cost of the facility at once; high cost of credit financing from Financial Institutions; poor advocacy and marketing for RWHs; limited capacity at Local Governments and community levels to embrace the technology.

After preparing for implementation of 60:40 ratio, the President of the Republic of Uganda directed the review of the strategy of subsidy and donations of RWH because it was not sustainable. The conditional grant that was being used on RWH was stopped forthwith.

The Rain Water Harvesting financing was reviewed in order to address the gaps in the strategy. The positives of the review were that RWH has been on practice for quite long, a wide choice and types of tanks is available, yet Operation and Maintenance of tanks is perfect; there was a number of NGOs that were capacity built in the technology also SACCOs⁷ were becoming popular and could manage the Revolving Fund. The challenges of the technology that it required a huge initial pre-finance that the rural people could not afford; the Government and Development Partners do not have enough resources to finance 60% subsidy for each deserving household across the country.

The proposed solution was to use NGOs to promote Rainwater Harvesting using a **“REVOLVING FUND APPROACH”** The tank beneficiaries are empowered to choose a technology type they can afford to finance at affordable terms. The re-payment period is spread out for a minimum period of one year.

Context, aims and activities undertaken.

UMURDA is one of the 4 NGOs⁸ that entered into partnership with the Ministry of Water and Environment (MWE) to promote the RWH project using a Revolving Fund Approach in 4 districts⁹ respectively.

The MOUs were signed spelling out the roles and responsibilities of each party in the implementation of the project and to introduce the concept of how the project will be planned, implemented, managed and operated.

³ Network for Water and Sanitation, Uganda Muslim Rural Development Association; Agency for Cooperation and Research in Development; Wera Development Association

⁴ Accelerating Self Supply (A Case Study from Uganda 2010) Kerstin Danert and Sall Sutton

⁵ Danert and Motts 2009

⁶ Jerricans (20), moulded plastic drums, steel drums; cement jars; plastic tanks; above and ground lined tanks; above and ground ferro-cement tanks and flexible membranes.

⁷ Savings, Credit and Cooperative Organisations

⁸ 1. Busoga Trust, 2. Katosi Women Development Trust 3. Sheema Development Agency and 4. Uganda Muslim Rural Development Association

⁹ 1. Luuka 2. Mukono 3. Sheema and 4. Namayingo

2 Project Financing

The project started in 2015 when the Ministry of Water and Environment (MWE) contributed UGX¹⁰ 77,000,000 (USD¹¹ 22,000) and UMURDA contributed UGX 25, 000,000 (USD 7,140)¹² . 85% of the funds is for Tank Construction, 10 % for operational cost and 5% to construct tanks for the vulnerable ones. UMURDA is providing tanks of capacity 6,000- 20,000L to beneficiaries on “**credit**” and the credit repayments are being returned and given to other community beneficiaries.

UMURDA developed a Rainwater Harvesting Credit Policy to guide in Provision and management of the Revolving Fund effectively without **Riba**¹³

Application Forms and Loan Agreement for both households and Institutions to acquire the credit were designed.

ACHIEVEMENTS

After the National project Launch in Mukono in April, 2015, UMURDA has carried out a number of activities including Stakeholders Planning meeting in Namayingo district which resolved the project be implemented on the mainland and Sigulu Islands was to be considered later because of the high costs of local material and transportation. The project was launched in the district with the main objective of carrying out advocacy for the Revolving Fund Approach.

Six local Masons were selected and trained in Ferro-cement tank construction to capacity build the community in practical skills of construction, Maintenance and marketing of the tanks. There is a continuous sensitisation of communities using the Mass media and Local Leadership about the approach and to show to them that it is intended to promote access of WASH for all including those in water stressed areas.

Tank Construction: The exercise of Tank construction started with the issuance of Application Forms to the would be beneficiaries to understand the terms, fill them in and return them for verification. The assessment include:

- i) Whether the Applicant is recommended by Local Council one and is a bonafide resident of the area.
- ii) Next of keen in the family has witnessed the signing of the Applicant.
- iii) Has Iron roofed house that can attract a tank of 6,000L and above depending on the number of family members.
- iv) Whether the house has a Facier Board.

After verification the Application Form is forwarded to UMURDA Management for Approval /Disapproval. When approved the Applicant is invited to discuss the Terms of the Agreement and then sign.

Revolving Fund Management.

After signing the Loan Agreement a File is opened up and a Client is issued with an invoice showing the total loan and a Ledger Account is opened to track repayments. Acknowledgement receipts are issued from the Office on every repayment made. The Agreement outlines the Loan amount (Cost of the tank including 5% operational cost), duration of the Loan and repayment schedule. Periodically funds collected is banked by the Administrative Assistant and banking Slips submitted to the Finance Office.

The funds collected from clients is for re-cycling to operationalise the Revolving Fund strategy.

Tank Construction.

When Applicant avails local material and confirmed by the Field Officer the external material are delivered to the site and arrangement is made to start work.

The technology being promoted by UMURDA is Ferro cement tanks and the external material a part from cement no single hardware stockist can have all the assorted items and they are not common in the

¹⁰ Uganda Shillings

¹¹ 1USD= 3,500 UGX

¹² UMURDA contribution (a Motorcycle, labour and training of Masons).

¹³ Free money received without working for it in Islam.

district and other material need fabrication. So procurement is done by UMURDA’s experienced Project Officer who is conversant with specifications with support from the Coordinator.

MAIN RESULTS.

- 1) The district stakeholders have contributed to the dissemination of information about RFA differentiating it from the conventional and subsidy methods.
- 2) There is increased awareness about the RFA as a result of using Radio Talk Shows reflected from calls requesting for Application Forms and more information.
- 3) Six Local Artisans were selected from within the district and trained in skills of Ferro cement construction.
- 4) There is demand for RWH tanks in the district resulting from advocacy and marketing of Ferro cement tanks.
- 5) Over 100 people picked Forms and 70 Applicants returned the forms, 26 Applicants fulfilled the minimum requirements and 22 have received tanks on credit payable in periods of 12 months.
- 6) More applicants are in the process of fulfilling the minimum requirements tank construction.
- 7) 22 Tank beneficiaries have been trained in O&M of the tanks, hygiene and sanitation at household levels.
- 8) Clients are re-paying the credit to UMURDA according to the schedule agreed up on in the Loan Agreement and so far UGX 7,136,200 has been paid and it is being recycled.
- 9) 5 Tanks for the vulnerable ones have been constructed
- 10) More Application forms are being picked and others brought back requesting for Loan Agreements for Revolving fund

The **external** or **internal** factors that have significantly influenced the achievements include:

- i) Willingness by beneficiaries to purchase tanks on credit because of the challenges they have in accessing water in the district.
- ii) Commitment and experience of UMURDA in constructing quality tanks.
- iii) Support from district Local Leadership to participate in promotional activities such as Radio Talk Show and launch.
- iv) MWE released funds to UMURDA to start giving Tanks on credit to clients.

Main results and lessons learnt.

The external or internal factors that have significantly influenced the achievements of these outputs positively include:

- i) Willingness by beneficiaries to purchase tanks on credit because of the challenges they have in accessing water in the district.
- ii) Commitment by UMURDA
- iii) Experience in Rainwater tank construction by UMURDA

Support from ATC, TSU4 and district Local Leadership.

Lessons Learnt

a) Grass thatched houses and Rural Growth Centres

The Revolving Fund Approach only targets individual households that have iron roofed houses and have the capacity to pay; it ignores communities’ capacity to pay for a larger capacity tank of 250,000 Litres or more.

b) Training of Masons in Kenya:

UMURDA and Busoga Trust sponsored their masons to go and train in Kenya so that they can be able to construct tanks of 250,000 and 500,000 L. This would enable Institutions, households in rural growth Centres and those with grass thatched houses to get tanks that can supply them with water and they pay as they use the water.

c) Demand for RWH Tanks.

Many house-holds are now aware of the advantages of RWH tanks and are able and willing to invest

in them to make improvements to their own water supplies as reflected from the number of Application forms picked and the requests from other districts where UMURDA is operating with different programmes.

d) Income Generating Activity

Those who got tanks use them as an income generating activity by selling water to get money to pay the credit and for attaining food security thereby improving their lives.

e) Lake Victoria Shores

People near Lake Victoria are the ones demanding highly for the tanks because are some of the pockets of the district which are particularly difficult to serve with the main conventional technologies. Many boreholes which UMURDA constructed with support from GOAL have been submerged and abandoned. Water is salty and hitting dry wells is very common.

f) Donations Culture

Water users are used to conventional water facilities which in most cases are put in place with high subsidies or as a donation and they think the tanks are also for free.

g) Economic Activities.

Many of the clients of RWH tanks are those that have economic activities that need water such as Brewers of alcohol, bars and hotel owners, poultry and animal rearing.

h) Happy Clients

Those who got the tanks are happy because they have access to safe and clean water and they seriously guard it under key and lock.

i) UMURDA Accessibility

It is easy for people who need tanks to approach UMURDA for a credit for the tanks than going to the Financial Institutions to get cash loans to finance the construction of tanks.

CHALLENGES

1. Rain Water Harvesting tanks using a Revolving Fund Approach is considered that it is for those who are well off because 80% of those who have got the tanks have solar in their homes.
2. Many of the tank clients claimed the money is got from farming and were requesting the re-payment period of 12 months to be increased to 24 months to include the farming seasons.
3. The project is not focusing on RWH tanks of bigger capacities that can cater for people in Rural Growth Centers and schools of more than 400 persons.
4. There is lack of a GPS to capture the tank codes.
5. The Work plan is not followed as funds are not released timely and as requested.
6. The project has no funds to construct a 250,000 and 500,000 L tanks for the Communities and Institutions even for piloting them in Uganda.

Recommendations

1. There is need of investing more in marketing of tanks through Massa media and advocacy.
2. There is need providing of large scale tanks of 250,000 – 500,000 Litres at Institutional and community levels in the district and they pay as they use.
3. The Government should support UPE schools to get rainwater harvesting tanks or come up with guidelines for UPE schools to contribute to the construction.

Conclusion

Given the poverty levels in Uganda Revolving Fund Approach is one of the strategies to be used to promote RWH which is the future solution to tackling water crisis in rural areas especially in water stressed areas

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References

1. Accelerating Self Supply (A Case Study from Uganda 2010) Kerstin Danert and Sally Sutton.
2. Self-Supply: A Fresh Approach to Water for Rural Populations (Water and Sanitation Programme (WSP) and Department for International Development (DFID)).
3. Strategy for Up-Scaling Domestic and Institutional Rainwater Harvesting Using A Revolving Fund Approach In Uganda (A paper presented by UMURDA in ROTARY WASH INTERNATIONAL SUMMIT 2016 District 9211) in Uganda

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