RAINWATER HARVESTING: SUCCESS AND LESSONS FROM KIRUHURA DISTRICT

Ashabrick N. Bamutaze, ATC 2014

Introduction

The Appropriate Technology Centre for Water and Sanitation (ATC) carried out a baseline survey in 2012 on functionality of rainwater harvestings systems in Uganda. This survey indicated a high level of success of rainwater harvesting in Kiruhura district compared to the other seven districts included in the study i.e., Rakia, Masindi, Adjuman, Lira, Soroti, Kamwenge and Kamuli. The success in Kiruhura did not imply absence of challenges. Like elsewhere, even in Kiruhura there were cases of leaking tanks, poor alignment and leakage of gutters, limited storage and poor quality of harvested water. However, these challenges did not deter people from using their rainwater harvesting systems and thus functionality stood above 95%.

Factors behind the success story in Kiruhura

The Acting District Water Officer attributed success to; locational factors, co-funding initiative, committed and objective leadership, effective mobilization, sensitization, motivation, involvement of all stakeholders and community cooperation.

The government introduced co-funding for rainwater harvesting as an approach to encourage practice uptake and in 2006 when Kiruhura was established as a new district, it embraced co-funding. The people openly welcomed the initiative since they live in the dry corridor with limited safe water options. The campaign to promote rainwater harvesting was accelerated by the fact that Kiruhura district is allocated UGX 670m under District Water and Sanitation Conditional Grant (DWSCG), which has been used effectively to promote rainwater harvesting.

In the first year of operation, the District Water Office had 9 masons trained in the construction of ferrocement tanks by Kigezi Diocese Rainwater Harvesting Centre. After training, these masons were deployed by the district to construct tanks in every sub-county. In order to avoid poor workmanship, sub-county chiefs were restricted to only use those trained masons under close supervision.

Kiruhura district uses a transparent procurement system that involves the community beneficiaries i.e., individual beneficiaries are directly involved in the process of procuring materials needed to construct their tanks. These beneficiaries are exposed to the Bill of Quantity (BOQ) items and places where materials needed for construction of their respective tanks would be purchased. The beneficiaries are also encouraged to witness and monitor delivery of BOQ items at the site before construction starts. For their roles, beneficiaries exhibit a high level of cooperation which has catalysed project success i.e., they are open to accept, take up responsibilities, own and contribute towards rainwater harvesting.

At the sub-county level, the extension workers i.e., Community Development Officer (CDO) and Health Assistant (HA) are absorbed in the rainwater-harvesting program as focal persons for water programs. The District Water Office facilitates them to monitor activities at community level especially where construction is going on. The Assistant District Water Officer in charge of mobilization works closely with the CDO and HA to supervise and monitor rainwater-harvesting activities on top of other activities undertaken by the District Water Office. Such duties include routine monitoring during which communities are taught about safe water chain, operation and maintenance of their rainwater harvesting systems and environmental sanitation.

Rainwater harvesting is always given a slot during the quarterly district advocacy meetings; this platform is used to mobilize and sensitize communities. During sensitization, emphasis is put on the advantages, cost for tanks with varied capacities, materials needed and labour costs. The message is taken to communities through Local Council One (LC1) chairpersons who are rotationally invited to attend the advocacy meetings.

What is lacking elsewhere?

From interactions, it is evident that other districts contract out all the work i.e., contractors solely handle all the work relating to construction of rainwater harvesting tanks and this compromises the power of the beneficiary. When all work is contracted out and beneficiaries are not directly involved in the implementation they become observers in the process. When the facility is handed over, the beneficiaries are faced with challenges relating to ownership, operation and maintenance of the facility.

Districts “do not have enough money”. This is often given as a reason for failure to effectively promote rainwater harvesting at district level. However, the case of Kiruhura showed that what is lacking in other districts is realistic budgeting among dilemmas. For example, a 6000ltr ferrocement tank budgeted at UGX 1.5m for the case of Kiruhura was budgeted at UGX 1.8m for the other thirteen districts from the western region (under Technical Support Unit 8). The cost of a tank matters because when it is high it becomes hard to save money to do other software activities like mobilization and facilitation of extension workers.

The success of rainwater harvesting in Kiruhura is a lesson for other districts to borrow a leaf. The success can be replicated in other districts at cost lower than what is currently used by Kiruhura District Water Office. This can be done by adopting low cost tank technologies like the EMAS tank, which provide more volume of water at a reduced cost. The Appropriate Technology Centre for Water and Sanitation is popularizing the EMAS tank through regional hands-on trainings and demonstration. Rainwater harvesting can be promoted under self supply initiatives but there is need to expose low-income earners to saving and microfinance options, organize them in self-help groups for support to be able to meet the cost of rainwater harvesting tanks.

Contact: Appropriate Technology Centre for Water and Sanitation
Upper Kauga, Prison Road, Mukono,
P.O Box 748, Mukono- Uganda.
E; atc.mwe@gmail.com
W; //www.atc.washuganda.net

APPROPRIATE TECHNOLOGY CENTRE
FOR WATER AND SANITATION