Title: Putting Women at the forefront in accelerating self supply through Domestic Rain Water Harvesting

Abstract/Summary
Domestic rainwater harvesting in Uganda is considered a self supply approach. Women groups from different districts in Uganda have been engaged in promotion of rain water harvesting through building their capacity to construct, operate, maintain and finance the systems. This age old approach is now being sought after as a solution to provide supplementary and sometimes primary water sources for households in Uganda. In rural Uganda today, rainwater harvesting is becoming more relevant in providing water for households as it provides a water source that is convenient. This case points out the efforts of Uganda Rain water Harvesting association in empowering women groups to improve access to safe water through Rain Water Harvesting and thereby accelerating self supply.

Introduction
Rainwater harvesting is an age old approach that is used to provide supplementary and sometimes primary water sources for households in Uganda. In rural Uganda today, rainwater harvesting is becoming more relevant in providing water for households as it provides a water source that is convenient. The Ugandan Rainwater Harvesting Association (URWA) was formed in order to raise the profile of rainwater harvesting in Uganda and has done so through building the capacity of common interest groups in skills to provide rainwater harvesting facilities for their households. These groups include; associations, Non Governmental Organisations (NGOs), Community Based Organisations (CBOs), youth groups, women groups and interested individuals.

One of the initiatives used to promote rainwater harvesting in Uganda by URWA is to build the capacity of women groups so as to facilitate the up take of rainwater harvesting. This case study shows how women groups have taken up skills and outlines the formation, training and outcomes of targeting women groups as a means to increase rainwater harvesting as a self supply option in Uganda. It looks at their sustainability; their challenges and seeks to inform on the existing gaps and opportunities that can be used to scale up the use of women groups in facilitating the up scale of self supply through rainwater harvesting in Uganda.

Description of the Case Study – Approach or technology
As a result of the introduction of rainwater harvesting initiative in Uganda, URWA participated in a number of pilot projects in Kabale, Isingiro, Rakai, and Kamuli funded by the Ministry of Water and Environment. As a result of these pilot projects, URWA took up the initiative of training women groups in promotion of rainwater harvesting. Four basic components as shown below:

- Selection of Representatives: Members were selected from different women groups in a district to be trained
- Training in construction, operation, maintenance and promotion of rainwater harvesting facilities.
- Financing: The initiatives involved a consortia of actors: URWA partners with a development partner e.g.: in
Rakai, Arua, Koboko Yumbe and Adjumani, the development partner was SNV the Netherlands development organisation, while in Mpigi, and Soroti the partner was WaterAid in Uganda. These partners provide funding for the trainings and a portion of the materials used in the training.

- Harnessing the role of the District local government: The district water officers worked closely with URWA to train the women groups. They also took on the role of community mobilisation, beneficiary selection and in cases of districts like Koboko, Rakai, Yumbe and Adjumani; they also contributed part of the cost of the materials and the responsibility of up scaling rainwater harvesting.

The training was the main component of the initiatives and was carried out through the following process

1. Select members from different women groups to represent their different sub counties: this was an effort done by URWA and the district local government majorly stressing the participation of the District Local Government authorities to ensure that they follow up the women and provide technical support after the initiative.

2. Mobilise communities to collect funds and apply for the facilities on a cost shared basis. The beneficiaries provided locally available materials like the hardcore and aggregates; river sand (in areas where it was readily available) water and meals for the labourers.

3. Hold advocacy workshop within the district to introduce rainwater harvesting; and raise awareness of the communities: The district facilitated the process of community awareness campaigns and ensured that there was widespread reach of the project activities and benefits.

4. The technical training is carried out, where demonstration facilities and some beneficiary facilities are constructed together with the trainees and the technical persons in the districts. Sustainability is ensured by training some staff from the district local government and the town council to ensure there is continuity of training, monitoring and supervision.

5. Training in software aspects of rainwater harvesting. This involves the development of manuals; training in operations and maintenance; training in promotion of rainwater harvesting, advocacy and raising community demands to decision makers and donors.

6. Awarding of certificates and placement the women and other trainees are awarded with certification and recognition by the partners, and planning is done for a promotional phase in which more facilities are constructed. This was done also in partnership with the District Local Governments to ensure that the women could continue providing services accepted by the communities at sub county and district level. This highlights the role of district authorities in the initiative. By including the District Local Government there is increased accountability and the levels of trust within the community members is increased to ensure that they can source the services of these women even at the end of projects and trainings.

One of the women: Robinah Nalukenge, or “Mama Senkayi” as she is commonly known to the local community she serves, has become a skilled mason and is actively promoting the construction and use of rainwater jars in the area. Her group: Tusitukirewamu Women group has gone on to construct over 50 rainwater jars in Gomba district. As a result of the planning and training, advocacy for the rainwater harvesting facilities is done and more personal initiatives are developed. Rainwater Harvesting as a self supply initiative has been greatly accelerated as a result of this venture. Indicators of the acceleration are: revolving initiative of construction and fund collection till all members have benefited: women groups direct collaboration with donors and district local governments to provide more facilities: construction of privately funded facilities.

In the particular districts the marked success due to the capacity building of women groups is:

- In Rakai district: 4 tanks were constructed in Kagamba Sub County using a revolving fund initiative from
collection of funds gained from group’s seasonal agricultural profits. In Mbale Sub County, the women group have built 5 tanks by soliciting funds from World Vision. The first tanks were constructed with funds entirely from the women’s savings and each tank
  - In Koboko district, 2 water jars and a ferro-cement tank have been constructed by the trainees. A number of community members have requested for information on rainwater harvesting which is provided by the trainees rather than sourcing for skilled persons from Kampala. The district local government ear-marked 23 million Uganda shillings for the procurement of materials like cement wire mesh and others while the beneficiaries contributed towards local materials like sand hard core and aggregates, water and meals for the labourers. In addition SNV contributed towards URWA’s professional fees (a sum of 8 million Uganda shillings); field accommodation meals and transport.
  - In Mpigi and Gomba districts: the women groups have gone on to build over 50 rainwater jars in a period of six months, funded by WaterAid through Busoga Trust. The major funding came from WaterAid to construct the 50 water jars in one Sub County. The locals again contributed local materials that were meant to subsidize the cost per jar while the district local government contributed mainly technical support and certification of the trainees.

**Lessons learned and Challenges**

The achievements of the capacity building initiative are:
  - Increased collaboration with government structures in areas where the projects collaborated with the district local government.
  - Production of income generating initiatives for both the beneficiaries and the trainees of the project.
  - Advocacy and awareness raising has been done by the community groups and is therefore considered more effective than being done by the donors or third party actors.
  - Involvement of communities in project planning and implementation enables them to control project outcomes.
  - Decreased cost of construction of rainwater facilities enabling even the marginalised groups to afford them through the various schemes existing.

**Challenges**

Despite the remarkable success recorded from the capacity building of women groups to promote rainwater harvesting, there also some challenges to this initiative. The challenges to women groups in promoting rainwater harvesting include:
  - The commitment of members to their groups: in some cases, the members are not very committed to their groups and the groups are disbanded after a period leading to low chances of skills development and replication.
  - Community willingness to collaborate with the women groups to promote rainwater harvesting: in some cases e.g. in Nebbi district the communities did not welcome the initiative of using women groups to construct facilities and this hindered the replication of the project in the area.
  - Prolonged drought seasons: as a result the relevance of the rainwater harvesting facilities was questioned and the groups did not construct facilities. The drought tends to push trainees to opt for other water sources and as a result they forget their skills.
  - Capacity to mobilize funds: in some areas the capacity of the women groups to mobilize funds is still low as a result the skills remain dormant and are eventually forgotten.
  - Lack of coordination: in areas like Arua and Nebbi the challenge of coordination was faced because the initiators of the projects did not coordinate their activities through the district local government. This hindered follow up and assurance of continuity of the project.
  - Perception of donors and district local governments: in some areas the authorities and the funding parties did not take up the use of community skills to promote rainwater harvesting but instead stuck to use of contractors and sourced skilled labour. This lead to low up take of the community initiative and the costs of the facilities remained high.
Lessons learnt

The viability of rainwater harvesting in Uganda has been proven starting with small projects that grow bigger and is steadily accelerating self supply through out the country. The emphasis of the project efforts has been to make rainwater harvesting a mainstream option of water supply, so that it will continue its spread after the project support has come to an end. Now with political will, the combination of public administration with the projects is improving the sustainability of construction of water jars and tanks in the area. Looking back, the lessons learned about capacity building of women groups to make rainwater harvesting sustainable are:

• **Involving the stakeholders**
  Involvement of relevant stakeholders right from the beginning, the ultimate beneficiaries being the most important ones. They certainly have their own views, ideas and suggestions that will help to attain the goal of sustainability. The women groups in particular are good organizations for promoting sustainable rainwater harvesting. For example, involving the district local governments ensured that the projects created collaboration between the women and the district authorities that will continue to exist and ensure that the women are technically supported.

• **Appropriate technology**
  Building of capacity of women groups in construction/operation of the rainwater harvesting systems ensures that there is continuity of the projects through skills transference and development.

• **Political level**
  Involvement of politicians in rainwater harvesting enables its inclusion on the district political agenda and eventual funding of such technologies.

• **Cost of Rainwater facilities:**
  Costs of the rainwater facilities are decisive for a massive uptake of rainwater harvesting and there are efforts to reducing these costs. It has been learned that the potential of households and local communities to mobilize their own funds for sustainability is high. With empowered women groups and locally available skills; it is easy for individuals to collect funds to acquire their own jars or tanks especially with the lowered cost of the tanks. The rainwater jars usually cost a household a sum of 350,000 Uganda shillings with out subsidy but within the groups the cost can be subsidized to 250,000 due to cost sharing and reduced labour (this cost is estimated at 125 US dollars without subsidy and 95 US dollars with the beneficiary contributions). This is easy to collect within groups that tend to take on revolving fund activities.

• **Duration of construction**
  The groups are able to construct the water jars in a period of one week. This is much shorter period compared to groups and masons in other areas. This is a best practice that should be shared in other areas so as to improve the construction of water jars in Uganda as a whole.

• **Economic activities**
  With water now at the doorstep, economic activities might be possible to improve finances in the households in order to pay back the costs for the rainwater harvesting systems and to enable the group to build more tanks faster. More so, the women groups have other activities they are involved in that help to produce funding for the rainwater jars/tanks.
**Conclusions and Recommendations**

Impact of rainwater harvesting projects:
- Clean and sufficient water available at homesteads.
- Time and energy is saved and can be invested into more productive work.
- Women and children relieved of the burden of walking long and tiresome distances in search of water. Women have now time to attend literacy classes and other development meetings.
- Improved academic performance of children at schools as they have time to attend school and do their homework.
- Improved cleanliness and general hygiene at homes.
- Reduced incidences of water related diseases.
- Reduced expenditure on water supply (in case they pay for transport), have more money to spend on necessary investments.
- Convenient and accessible water creating peace of mind for women and confidence to do productive work in order to break the vicious circle of poverty.

It can therefore be concluded that putting women at the forefront in accelerating self supply is an initiative that is relevant and easily maintainable with the opportunity for scaling up to other rural areas.

A major recommendation that Uganda Rainwater Association can make is to use the capacity building initiative targeting districts and regions so as to spread the skills out through the country and eventually other nations.

**Contact Details**

<table>
<thead>
<tr>
<th>Name of Lead Author: Baziwe Dorothy</th>
<th>Name of Second Author: Anne Kikundwa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email: <a href="mailto:dorabaziwe@gmail.com">dorabaziwe@gmail.com</a></td>
<td>Email: <a href="mailto:ugandarainwater@gmail.com">ugandarainwater@gmail.com</a></td>
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