

PILOT PROJECT: Nyakigyera (Sweet Water) Resilient Systems Project.

OBJECTIVE: To conduct research and development of programs geared towards improving financial sustainability of the rural water supply systems that ACTS has built over the past 30 years by piloting a Community-Based Management Plus 2 Model of Operational Management. The CBM2 Plus Model blends a volunteer and financed model of management structure in order to improve the viability of sustainable water supply.

Our goal is to test the efficacy of this model when we return to Nyakigyera GFS (Sweet Water) in November 2021 to refurbish and enhance the system with upgrades, as well as bring our Water And Sanitation Hygiene (WASH) program into the area.

CHALLENGES AND LEARNINGS

Access to water is a human right that is embedded in the constitution of Uganda. Water is also an economic and social good within the context of rural Uganda, where the Operational and Maintenance (O&M) of the service should reside in the hands of multiple stakeholders (government, public, and NGO). The construction / installation of the Gravity Flow Schemes requires both financial and In-Kind contributions from all stakeholders (NGO, District, and Community), however, the ongoing Operational and Maintenance of ACTS water schemes has (to date) solely resided with only the public stakeholder (communities). This model has been ineffective in producing sustainability results. Given that these schemes are built to provide services to remote, rural communities that comprise the bottom 40% of Uganda's poor, it is not unreasonable that they lack the resources to provide for O&M needs of large infrastructure.

This is not a challenge that is unique to ACTS alone. Evidence that this is not a unique challenge to ACTS is the development of a National Framework for O&M of Rural Water Infrastructure in Uganda (2020). This was developed in response to a need to find a way to improve the operational sustainability of rural water systems. The idea was to develop a structure of sound management to ensure the sustainable utilization of water and environment resources. The goal of the framework is to ensure that once water facilities are put in place they "continue giving a service to the intended users".¹

Hence, the national experience in Uganda with rural water systems is consistent with our own challenges experienced over the years of building water infrastructure. The ongoing predominant challenge remains Operational & Maintenance sustainability. On a sample audit of our systems, 45% of the sample was performing at a functional level less than 70%. Nyakigyera GFS was one of those systems, with one of the lowest functionality levels at 20.8%.

Using this last year's best program outcomes, and combining research with learnings, we are shaping a pilot that works to improve sustainability, as well as effectively positions ACTS within the national framework for O&M of rural water infrastructure.

¹ National Framework for Operational and Maintenance of Rural Water Infrastructure in Uganda, July 2020, pg.iv

We would like to pilot a new model in Nyakigyera.

THE PILOT: Nyakigyera as a test case.

Field assessments have identified common issues related to governance that impact O&M sustainability, and the history of water supply systems in developing countries includes an evolution of approaches to managing rural water supply systems to address these issues. We believe that as we return to the piped water schemes that ACTS has built over the past 30 years, it is the perfect time to integrate 3 strategies into our approach that will bring us into alignment with progressive management models for sustaining rural water service delivery:

1. **CBM2 Plus:** While the ongoing governance of the infrastructure continues to reside with community-based governance committees, they will continue to receive external support from ACTS on a reasonably regular basis. We will professionalize the functions of the Central Water Committee through training and remuneration of one or more technical positions within the management structure (e.g. Caretaker and Treasurer). These roles will play an active role in monitoring, and can potentially be supplemented by the Revenue Collection Account after the first or second year).
2. **ACTS obtains an Area Service Provider agreement** with the District to provide post-construction support (e.g. refresher training, technical support, monitoring, supply of parts and more substantial repairs), which is reinforced by external agencies, such as local government or an Association of Water Users. Such support and professionalisation can result in improved management performance and the capacity to better resolve technical and other challenges before they become critical; service levels are generally improved under this model.
3. **Option to Explore:** the idea of creating [A Water Cooperative](#) management structure that can offer the added benefit of income generating activities. ACTS will support the formation and registration of The Water Cooperative as a CBO, with the Central Water Committee as it's governing body, and train and enable them to pursue the following income generating activities under the structure of the cooperative:
 - Soap making. We conduct soap making workshops for members of the cooperative. This has generated an unexpected, positive outcome from participants in our soap making workshops in 2020, hence, it is feasible to turn this into an income generating activity for the cooperative.
 - Selling tippy-tap kits at subsidized prices. This is an initiative that we took to after our Covid relief response in 2020 in order to influence handwashing at the household level. The benefits of this could continue under the cooperative.
 - Making and selling reusable sanitary towels. This is critical for the girl-child; enabling her to attend school, and not be marginalized from other activities during menstruation. Our sanitation team has been trained how to make these products, and will replicate the training for Sanitation committees, which can also operate under the management structure of the cooperative.

This model of governance is supported by **Participatory Hygiene and Sanitation Transformation (PHAST)** approaches taken to work with both communities and institutions to improve clean water and sanitation coverage. Simply put, the ACTS team engages community members in a process of identifying behaviours that contribute to waterborne disease (typhoid, diarrhea, worms) and other communicable health poverty related issues, and then works to change those behaviours under the influence of the community members themselves--while we go about improving infrastructure.

This concept paper is proposed to address the ongoing challenges to sustainability of our water schemes and program outcomes, as well as to position ACTS as a qualified Area Service Provider that fits within the structure of the National O&M framework. As an Area Service Provider, ACTS could potentially take on the responsibility of all Gravity Flow Schemes in the District, thereby, scaling the scope of our program reach. Assessment of other GFS catchment areas may provide us with the opportunity to bring our approach (PHAST) and our model (Water Cooperatives with a CBM2 Plus support structure) to new areas.

We are approaching Isingiro District (where Nyakigyera GFS is located) about the option of having a Performance Management Agreement with them to enable us to do all of the above. Seed funding for this pilot project in Nyakigyera will enable us to test the results of adding these 3 strategies to our existing approach.