



# ARUA TECHNICAL INSTITUTE RAGEM // TRAINING COURSE ON OPERATION AND MAINTENANCE OF SOLAR POWERED PIPED WATER SYSTEMS

## BACKGROUND

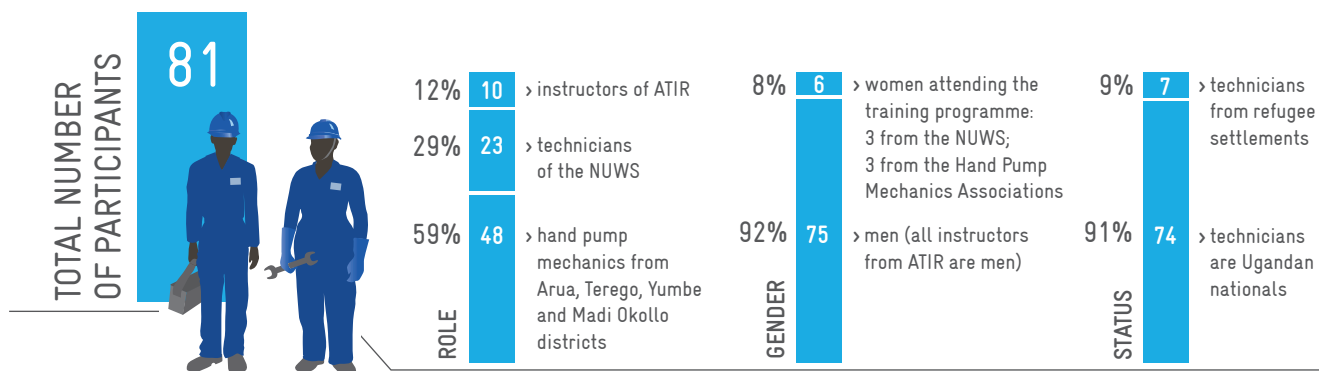
The Training Programme at Arua Technical Institute Ragem (ATIR) is supported by the GIZ programme Water Supply and Sanitation for Refugees and Host Communities in Northern Uganda (WatSSUP). The WatSSUP programme is implemented under the special initiative on forced displacement of the German Federal Ministry for Economic Cooperation and Development (BMZ) in line with Germany's commitment to international burden and responsibility sharing under the UN Global Compact on Refugees. The WatSSUP programme cooperates with the Ministry of Water and Environment (MWE) for its implementation in the Ugandan water sector.

In the framework of the WatSSUP programme, ATIR has gained the capacity to train technicians under an improved curriculum for the hybrid course on "Operation and Maintenance of Solar

Powered Piped Water Systems". The training content equips the learner with hybrid skills in electromechanical installation, welding and plumbing through a practical learning approach. ATIR is currently the only training center in West Nile offering such a course. The training programme started in August 2021 and ended in July 2022.

## PROFILE OF PARTICIPANTS

The target group/beneficiaries for this training are technicians from the Hand Pump Mechanics Associations of Arua and Yumbe; technicians from the Northern Umbrella of Water and Sanitation (NUWS); and instructors from ATIR under a Training of Trainers (ToT) programme.



THE REPUBLIC OF UGANDA  
Ministry of Water and Environment



german cooperation  
DEUTSCHE ZUSAMMENARBEIT

Implemented by:

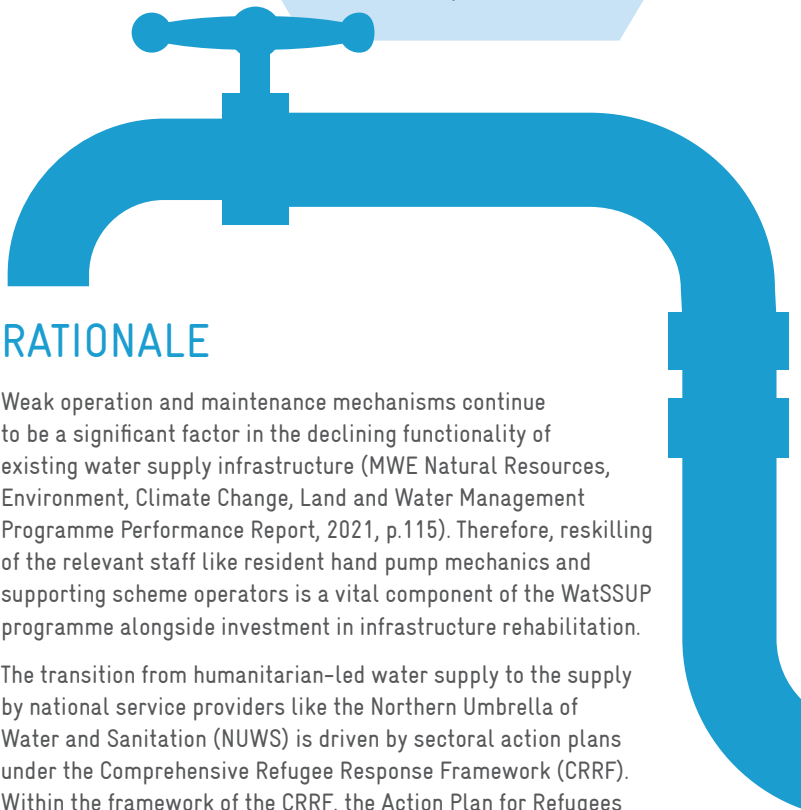




**EXPERIENCE** // My name is Victoria Onzia, 36 years old and I am a hand pump mechanic from Terego district. I am also a member of the Arua District Water and Sanitation Association (ADWASA) and I have participated in the practical training at ATIR since August 2021. I have acquired a broad range of skills that have greatly improved my work technique and exposed me to more complex water systems that I wasn't able to handle before. The training also improves my way of living since I can now earn more money through the additional work I can do independently or as part of my team. For example, my team and I have completed our first repair and maintenance contract for the Northern Umbrella of Water and Sanitation. I am now more confident to respond more adequately to community WASH needs.



Participants installing solar modules during the training at ATIR.



## RATIONALE

Weak operation and maintenance mechanisms continue to be a significant factor in the declining functionality of existing water supply infrastructure (MWE Natural Resources, Environment, Climate Change, Land and Water Management Programme Performance Report, 2021, p.115). Therefore, reskilling of the relevant staff like resident hand pump mechanics and supporting scheme operators is a vital component of the WatSSUP programme alongside investment in infrastructure rehabilitation.

The transition from humanitarian-led water supply to the supply by national service providers like the Northern Umbrella of Water and Sanitation (NUWS) is driven by sectoral action plans under the Comprehensive Refugee Response Framework (CRRF). Within the framework of the CRRF, the Action Plan for Refugees and Host Communities, called the Water and Environment Sector Refugee Response Plan (WESRRP) of 2019 promotes management of water and sanitation infrastructure in refugee settlements by national water utility companies. Based on the WESRRP framework, MWE has appointed national public water utilities to take over operation and maintenance (O&M) of water supply systems in the refugee settlements. The NUWS as the public water utility in this context is thus tasked with a responsibility of maintaining reliable, efficient and sustainable water supply to the refugee communities. One of the key elements in achieving this is an adequately skilled workforce of technicians for O&M tasks.

Through practical skills acquisition, the technicians in the training programme will be equipped with the necessary skills to take on operation and maintenance assignments for piped water systems on behalf of the NUWS as well as district local governments in their locality. This contributes to the overall WatSSUP programme objective towards sustainable water and sanitation service delivery in refugee settlements and host communities.



Training participants installing a reservoir tank outlet at ATIR.

