GLOBAL GRANT

AFFORDABLE WASH FOR WAU
South Sudan

THE ISSUE

South Sudan is both one of the world’s newest states, and one of its poorest and armed conflict has displaced many persons. Following a 2018 peace agreement, people have begun to return to their villages but life remains extremely difficult. A recent report of UNICEF South Sudan indicates that only 40% of the population have access to safe water and only 10% have improved sanitation. To collect water in rural areas from an improved water source, women and children often have to walk 1 km or more, such that collecting water is a risk for violence against women and girls. Open wells are often contaminated resulting in water-related diseases.

PROJECT DESCRIPTION

The project location is Jir river county near Wau (in the west of the country) where thousands of people now collect water from open handdug wells and where there is much open defecation. This project will improve the Water, Sanitation and Hygiene (WASH) situation through a range of low-cost technologies that, after training, will be produced by local artisans and entrepreneurs. This will start a sustainable supply chain of affordable WASH technologies. Water will be for domestic use (drinking, cooking, washing) but also for productive use (livestock, kitchen gardens, small-scale irrigation).

The project will apply “the SMART approach” which combines affordable technologies with innovative approaches. This concept has proven to be successful in other African countries where it is disseminated by SMART centres. These centres train local people in SMARTechs (Simple, Market-based, Affordable, Repairable Technologies) like groundwater tube recharge, manual well drilling, rope pumps, handheld water filters, SaTopan latrines and others. Manual drilling of wells is possible in the project area since water levels are relatively shallow 10 to 20 meters. By combining manual drilling and locally produced hand pumps cost of wells in this area can be in a range of $600 to $1000.

The Ministry of Irrigation and Water Development and its Department of Rural Water Supply is in favor of the SMART approach. This was confirmed in 2019 when the Deputy Minister of Water Mr. Peter Mahal opened the SMART Centre in Juba and mentioned the huge need to reduce cost of rural water supply by means of the local production of well drilling and handpump technologies.

LEAD CLUBS

Rotary E-Club of WASH (D9980) - International Partner
Rotary Club of Wau, S. Sudan - Host Partner

TARGETS

- 2,000 people with access to an improved water source
- 2,000 people with improved sanitation
- 50-100 families have water for productive uses including food production

FUNDING

Estimated $65,000 (GLOBAL GRANT)

TIMING

Global Grant due date: May 31, 2021
Fundraising: Summer-Fall 2021
Implementation: Early 2022

PRIMARY AREAS OF FOCUS

This project will focus on SDG6 by improving access to WASH Water

Some existing handpumps will be rehabilitated but the main activity will be drilling new (tube) wells. Where there is a risk that the shallow wells dry up, a rainwater infiltration system (a tube recharge) will be installed. Where water from shallow wells is contaminated, the water for drinking will be treated with locally assembled household water filters.

Sanitation

Masons will be trained in producing low-cost and safe latrines with options that include ‘microflush’ mechanisms (SaTopan) and Ecological Sanitation latrines. Latrines will be installed at families who are willing to dig the pit and provide the superstructure.

Hygiene

Communities will receive training on safe hygiene practices. One way to disseminate information is through local faith leaders who, after a training, can pass on information regarding local and affordable solutions and can then monitor how families practice what they have learned.

MAINTENANCE

A main challenge in rural water supply is the maintenance of hand pumps. Normally there is a Community-Based Management (CBM) system so the community is responsible for fund raising for maintenance of the pump. This project will apply an innovative approach, being a Family-Based Management (FBM). The well is installed at premises of a family who has the convenience of water near the house and the option to use water for livestock, garden irrigation etc. This will give opportunities to grow more food for the family, where surplus can be sold to the local market so generate some income. Neighbors of this family can pump water for domestic uses. Experiences with this approach in other countries like Zambia result in pump functionalities of 95% whereas functionality of pumps with CBM are around 65%. Maintenance and repairs of a rope pump cost $20 - $40 per year. Because of the local production, spare parts are affordable and available.

IMPACT

Convenience and safety: Since water is at or near houses, women and girls spend less time to collect water and there is less risk of gender based violence.

Increase of food security: With water for watering animals and small scale irrigation there will be more food security especially in the dry season.

Reduction of rural poverty: Investigations indicate that having water at premises increases family incomes with $100 to $300 per year.