WATER FOR SOUTH SUDAN
National NGO, Wau, South Sudan
International NGO, Rochester, NY USA
# TABLE OF CONTENTS

Mission, Overview, & History  3

Projects

Well Drilling & Well Rehabilitation  4
Motorized Water Storage & Distribution  5-6
Integrated Resource Management & Sustainability  7
Hygiene Education  8
Sanitation Project  9
Monitoring and Evaluation  10
Coronavirus Hygiene Awareness Campaign  11
Water Savings  12

Assets

Drilling Equipment  13
Fleet Vehicles  14
Compound  15-16
Future Projects  17
Accomplishments and Media  18
Offices and Contact Information  19
MISSION

Deliver sustainable quality-of-life services to and with the people of South Sudan by efficiently providing access to clean, safe water and improving hygiene and sanitation practices in areas of great need.

ORGANIZATION OVERVIEW

Water for South Sudan (WFSS) is a registered national non-governmental organization (NNGO) in South Sudan with an Operations Center in Wau, Western Bahr el Ghaza, and a satellite office in Juba, Central Equatoria. WFSS is also a registered International NGO with an office located in Rochester, NY, USA. WFSS empowers communities to develop by implementing water, sanitation, and hygiene (WASH) programs: new well drilling, well rehabilitation, hygiene education training, sanitation, and water storage and distribution.

Hiring local leadership and staff in South Sudan helps develop the nation of South Sudan and supports stability across the country. Eighty-eight staff members (100% South Sudanese) make up the team in South Sudan and receive ongoing training to build the capacity. Our country director Ajang Abraham Agok leads operations from our compound in Wau.

Support for WFSS programs comes from individuals, educational institutions, faith-based and civic organizations, and foundations in 59 countries. WFSS seeks to grow our programs and further our impact by collaborating and partnering with foundations, other NGOs, the Government of South Sudan, and international funders seeking to aid development in South Sudan.

HISTORY

2003: Founded as 501(c)(3) US not-for-profit in Rochester, NY by Salva Dut
2005: Drilled first water well in South Sudan
2014: Launched hygiene education team
2015: Initiated monitoring and evaluation program
2017: Established well rehabilitation team
2018: Implemented sanitation project at the Zogolona Primary School
2018: Purchased two new drilling rigs
2019: Launched second drilling team
2020: Obtained NNGO registration status in South Sudan
2021: Partnerships with UNICEF, Oxfam, ACF, and IOM
2022: Established Water Insitute of South Sudan in partnership with Eco-Civ
2022: Partnerships with (Jimmy) Carter Center and Norwegian Church Aid
**WELL DRILLING**

Water for South Sudan (WFSS) has consistently delivered water, sanitation, and hygiene (WASH) programming since 2005 when. Local leadership has navigated country changes without interruptions to work. WFSS works in the Upper Nile, Bahr el Ghazal, and Equatoria regions. To date, the organization has drilled more than 505 wells with an annual goal to drill a minimum of 40 new wells.

Before WFSS drills a well, access to clean water is extremely limited in rural villages—residents often only have access to a contaminated source. WFSS works with local governments and community leaders to determine the placement of wells. The goal is to create sustainable systems, incorporating well maintenance and training as part of new well construction. WFSS trains one to two people in each village on simple well maintenance and repairs and connects villages to local supply chains to help acquire spare parts if needed.

WFSS's wells have a borehole diameter of 20 centimeters with slightly smaller casings. WFSS drills wells up to 100 meters (300 feet) deep. The team incorporates design upgrades to create a more durable structure and better protect the aquifer.

The drilling team requires three to four days to drill a new well. All wells drilled by WFSS must go through water testing analysis to be deemed safe for human consumption. WFSS aims to drill 40 new wells each season.

**WELL REHABILITATION**

In response to the need to improve the sustainability of water sources, WFSS launched the well rehabilitation program in 2017. The purpose of this program is to bring WFSS’s older wells to a higher design standard with repairs to broken parts, upgrades to cement well platforms, and new animal watering troughs.

The rehabilitation team is always ready to respond to repair requests of wells drilled by other organizations. The team visits the broken well and employs necessary measures to return the well to full functionality. Rehabilitating these wells provides a sustainable and reliable water source for years to come. The team has rehabilitated more than 215 wells and aims to rehab at least 40 wells each drilling season.
WFSS completed this community-wide project during the 2020-21 operating season in Pinydit village, South Sudan. Solar-powered technology pumps water into the raised water storage tank; gravity allows water to flow through underground pipes to five water kiosks within the county: school, market center, garden, health clinic, and animal trough. This project provides daily access to clean water to more than 10,000 people.
Purifying tablets must be added regularly to the tank to keep the water clean. Training a tank maintenance person and additional community members to understand the number of chemicals needed to ensure the safety of the stored water is vital to the project's success.

The maintenance person cares for the tank and maintains the well, solar-powered pump, batteries, and backup generator. Trained personnel respond to community requests for repairs and maintain connections with local supply chains for needed parts.
INTEGRATED WATER RESOURCES MANAGEMENT

Water is one of the most basic human needs. Water management underlies the most fundamental development challenges with impacts on agriculture, education, energy, health, gender equity, and livelihood. Water is under unprecedented pressure as growing populations and economies demand more of it. Groundwater sources deplete faster than can be replenished, and worsening water quality degrades the environment and adds to costs.

WFSS, with its near twenty years of expertise and with the help of international donors, is gearing toward integrated water resources management by initiating groundwater quality monitoring, environmental conservation, and irrigation systems to enhance food security in the region. The team conducts regular groundwater quality monitoring and afforestation to prevent desertification, improve the water cycle, and support irrigation for food security; these efforts improve living standards for communities in South Sudan.

SUSTAINABILITY

WFSS aims for sustainability in all we do. Before project implementation, WFSS consults with local governments; village elders make final decisions in the placement of wells, which become assets owned and managed by the people that use them daily. WFSS trains community members to maintain and do simple repairs of wells, leaving behind spare parts, ensuring their long-term sustainability. If a well breaks down, the village reports this to their county leaders, who call WFSS directly. If additional support is needed, WFSS is available to assist the community.

We now use diesel-powered concrete mixers as part of our continuous improvement, resulting in more robust concrete well platforms and drainage channels. Wire mesh is also used within the structure to prevent the concrete from crumbling. WFSS is now using longer-lasting stainless steel riser pipes, replacing galvanized steel. We also rely on scientifically proven drilling methods, measuring the PH and viscosity of mud to adjust the polymer needed in each well.

WFSS requires all communities to build a security fence around the wells to protect the water source from contamination and prevent the concrete's crushing.
Launched in 2014, the WFSS hygiene teams address the critical need for hygiene education in South Sudan. Working alongside the drilling and rehabilitation teams, hygiene team members train community members using the participatory hygiene and sanitation transformation (PHAST) program. This program engages local individuals and encourages women to participate in the training. WFSS continuously improves and strengthens the hygiene training program to ensure we meet the community’s needs.

The hygiene education training is a two-day long program. The four primary areas of hygiene training are handwashing, water safety, safe disposal of feces/stools, and disease prevention. Trainers educate a minimum of four males and four females from each village or school to share the information with others in the community.

Hygiene training session begins
Handwashing is vital to improve health
Practicing teeth brushing
Learning how to keep the well clean
SANITATION

Sanitation services and hygiene education are a critical need across the country, particularly for schools. To mitigate this need, WFSS completed its first school sanitation project in 2018 at the Zogolona Primary School.

In planning our first school latrine project, sustainability was a cornerstone of the design and the site selection. WFSS builds sustainable latrines over a septic system that the community maintains with regular septic pumping. The Zogolona school works with a local company to pump the septic tank.

Before implementing the project, the community created a plan to keep the latrine clean, and the school was required to establish a hygiene club. The latrine design also includes a mandatory handwashing station outside the facility. The school ensures soap and water for handwashing are available daily. The latrine design allows for future expansion for additional toilet facilities.

Since the completion of the first school sanitation project and hygiene education, the school now receives daily meals from the World Food Programme, received sports equipment from UNICEF, and repairs to classrooms by the Peace Corps. Plans for a second school sanitation project for the 2021-22 season are in place.

During the 2021-22 operating season, as part of the new partnership with UNICEF, WFSS establishes temporary latrines in Warrap state (funding from the United Nations Central Emergency Response Fund, EU, and FCDO).
WFSS is committed to ensuring its sustainable projects and providing long-term solutions to the people it serves. The organization strives to improve efficiencies through regular and deliberate evaluative activities to examine goals.

The Monitoring and Evaluation (M&E) program focuses on all of our programs. Annual visits to previously drilled or rehabbed wells include:

- Determine the well status and functionality and make necessary upgrades;
- Retest the water to ensure it is still safe for human consumption;
- Meet with hygiene educators to assess the community's behavior change;

WFSS utilizes M&E data to improve processes and procedures for future WASH projects.
COVID-19 HYGIENE AWARENESS CAMPAIGN

OVERVIEW OF 2020 ACTIVITIES:
Knowledge of and access to information about the COVID-19 pandemic is limited in South Sudan. In April 2020, UNICEF asked our team to provide hygiene awareness training to communities and towns in Wau, South Sudan. This project aimed at preventing the virus from spreading to communities throughout the country, where access to healthcare is limited or nonexistent.

Using data from the World Health Organization (WHO) and personal protective equipment, our team communicated detailed information about the virus and its symptoms. WFSS also shared the importance of being prepared for quarantine, best practices for handwashing, and social distancing. The training was administered in four languages: Arabic, Dinka, Luol, and English. The team trained 18,000+ residents of South Sudan.

As part of the COVID-19 campaign, the WFSS team delivered handwashing supplies to 25 Primary Health Care Centers (PHCCs) throughout Jur River County. While visiting these centers, the team identified ten centers lacking access to water. To address this need, the team rehabilitated six existing wells and drilled four new wells. Additionally, WFSS trained 52 health workers on coronavirus Infection Prevention and Control (IPC).

CURRENT COVID-19 EDUCATION:
WFSS now includes COVID-19 hygiene information as part of the hygiene education training implemented in each village.
WATER SAVINGS

Empowering communities to raise and secure a “water savings fund” further strengthens the long-term sustainability of the new water source. As part of the motorized water storage and distribution system project, the community of Pinydit established a water savings committee to cover the costs of the maintenance operator’s pay and supplies.
**DRILLING EQUIPMENT**

**PAT 431T**
WFSSF has two PAT drill rigs built for sandier terrain. The 431Trig has a pull-back of 10,800 pounds and torque of 2,660 pounds per foot. The nominal depth of the rig is 200 meters.

**PAT 501**
The larger PAT drill rig owned by WFSSF is the PAT 501. This rig has a pull-back of 14,100 pounds and torque of 3,920 pounds per foot. The nominal depth of the rig is 300 meters.

**DR 150**
The Deep Rock 150 is the larger of the two Deep Rock drill rigs owned by WFSSF. The Deep Rock 150 drill rig has a pull-back of 16,000 pounds and 5,000 pounds per foot torque. The nominal depth of the rig is 300 meters.

**DR 100**
WFSSF has two drill rigs equipped for deep rock terrain. The Deep Rock 100 drill rig has a pull-back of 8,835 pounds and a torque of 660 pounds per foot. The nominal depth of the rig is 150 meters.

**Compressors**
WFSSF has two compressors transported by a tipper truck:
- Atlas Copco XAHS 186 has a flow rate of 370 cubic feet per minute (CFM) and a pressure of 12 bar
- Atlas Copco XAHS 500CD C6.6 has a flow rate of 504 CFM and a pressure of 12 bar.

**Borehole Development Compressor**
The borehole development compressor is hand-started with a 10 HP YANMAR diesel engine with 3600 RPMs. It is a 3-cylinder piston compressor with a max pressure of 10 bars.
FLEET OF VEHICLES

All vehicles are owned by Water for South Sudan.
COMPOUND

The WFSS compound is owned and operated by the organization. Twenty-four-hour security ensures the safety of our equipment, supplies, and staff. The construction of the multi-use building was completed in 2019 and contains a kitchen, offices, and training rooms.
WFSS maintains all vehicles on-site in the compound garage. Solar panels, batteries, and a satellite dish ensure continuous lights and internet access for our staff.
FUTURE PROJECTS

WFSSF is exploring the following to increase access to clean water:

**Water filtration:** Options to treat nearby water sources will provide families with clean water for their daily needs.

**Microfinance projects:** To contribute to the sustainability of wells, these projects will help villages plan for and manage repairs.

**2nd compound in Juba:** An additional compound will allow our team to serve a more significant number of South Sudanese over a larger area and pursue collaborations and partnerships across the country.
ACCOMPLISHMENTS

571 wells drilled, daily serving 325K+ people

321 older wells repaired or rehabilitated

678 hygiene programs, 5,424 educators trained

18K+ people trained on COVID-19 hygiene education

2 sanitation project serving 800 students

2 water distribution systems daily serving 15k+ people

*Data as of August 31, 2022

SOCIAL MEDIA

waterforsouthsudan.org
@WaterforSoSudan

linkedin.com/company/water-for-south-sudan-inc
youtube.com/waterforsouthsudan

@WaterforSoSudan
@waterforsouthsudan
OFFICES AND CONTACT INFORMATION

Water for South Sudan Foundation, NNGO, South Sudan
Wau Office: contact@waterforsouthsudan.org +211925875000/+211916989786
Juba Office Simon Riek, Program Manager/WASH Engineer simon.riek@waterforsouthsudan.org, +211915558337

Foundation Leadership
Salva Mawien Dut, Chief Strategy Director salva.dut@waterforsouthsudan.org +211925882216
Ajang Abraham Agok, Country Director ajang.agok@waterforsouthsudan.org +256786168865

Stella Ganun, Human Resource Officer stella.ganun@waterforsouthsudan.org +211916347398/+211927635832
Ben Lopidia WASH Manager ben.lopidia@waterforsouthsudan.org +211920044897/+211916374667

Akot Makuach, Logistics Officer akot.makuach@waterforsouthsudan.org 926838838/0916616664, UG 0775152336
Ater Akol Thiep, Technical Advisor ater.thiep@waterforsouthsudan.org +256775231861

Water for South Sudan, INGO, PO Box 25551, Rochester, NY USA, (585) 383-0410
Lynn Malooly, U.S. Executive Director lynn.malooly@waterforsouthsudan.org
Andrew Gilchrist, Donor Database Associate andrew.gilchrist@waterforsouthsudan.org

Jennifer Cook, Office Administrator jennifer.cook@waterforsouthsudan.org
Gary Prok, Operations Support gary.prok@waterforsouthsudan.org

Elissa Rowley, Dev & Comms Director elissa.rowley@waterforsouthsudan.org
Adriana Mancini, Communications Coordinator adriana.mancini@waterforsouthsudan.org

WATER IS THE FIRST STEP TO TRANSFORMING LIVES

1. Well drilled and hygiene training completed in rural South Sudanese village
2. Individual and community health improves
3. Women grow gardens and take produce to market; the economy improves
4. Children no longer walk miles each day for water and are able to attend school
5. Stability across the country of South Sudan