

OPERATION AND MAINTENANCE OF WASH INFRASTRUCTURE WEBINAR SERIES

Tuesday, March 2, 2021

9:00 - 10:00 AM ET



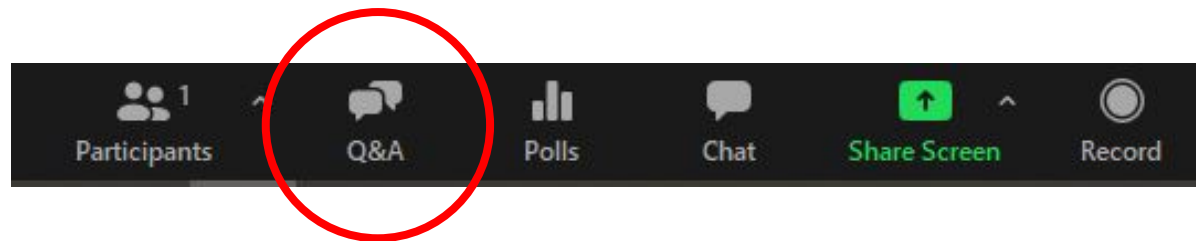
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FROM THE AMERICAN PEOPLE



PRO-WASH
Practices, Research and Operations
in Water, Sanitation and Hygiene

BEFORE WE BEGIN...

- Introduce yourself in the chat box with your name and where you're calling from
- Post your questions in the **Q&A box** at the bottom of your screen (do not include your questions in the chat box)



PRESENTERS



Jude Cobbing

Senior
Specialist,
Water
Infrastructure
and Governance



Nicole Weber

Acting Director,
PRO-WASH



Petros Birhane

Chief of Party,
USAID Lowland
WASH Activity





Photo by: Save the Children

FACILITATING BETTER MANAGEMENT AND DELIVERY OF WATER SUPPLY SERVICES

USAID Lowland WASH Activity
Petros Birhane, Chief of Party

BACKGROUND - ETHIOPIA

- 105+ million people
 - 85% live in rural areas
- Average national rural water supply coverage = 68% (OWNP-II)
 - Afar: 44.6%
 - SNNPR: 50.7%
- GTP II targets for rural water supply
 - Coverage = 85%
 - Service level = 25 l/c/d, within 1km
 - Reduce non-functionality rate to 7%



CHALLENGES - SUSTAINABLE O&M OF RURAL WATER SERVICES

- Investment focused on building new infrastructure
- O&M is largely through community-based scheme management
- Low local government capacity
- Limited private capacity
- Lack of standard study and design guideline
- Poor construction quality



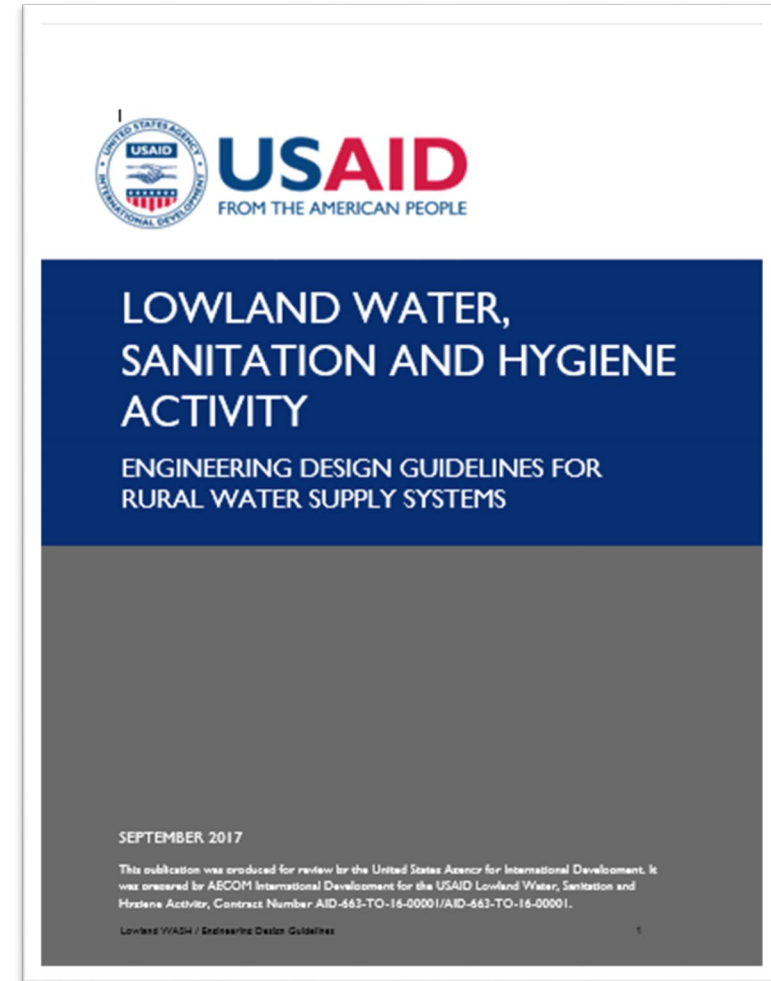


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INITIATIVES BY LOWLAND WASH

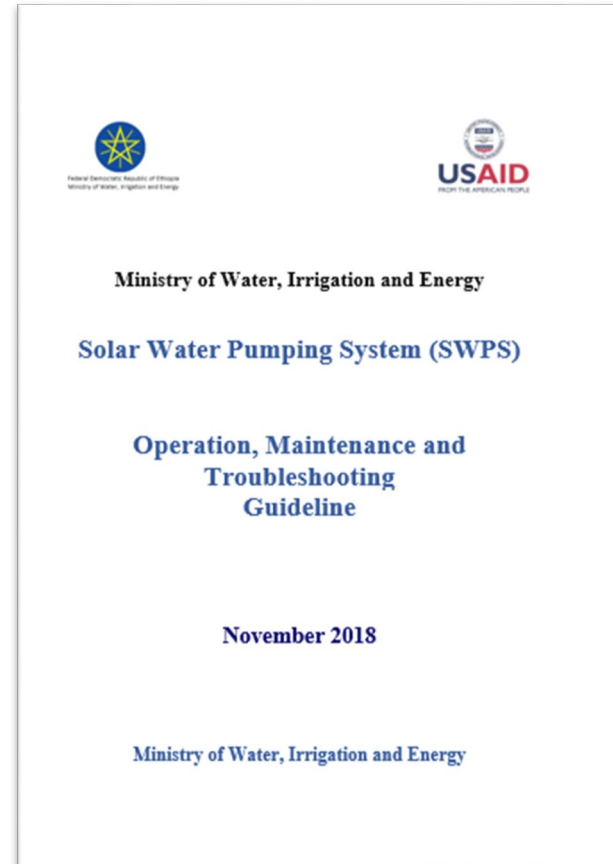
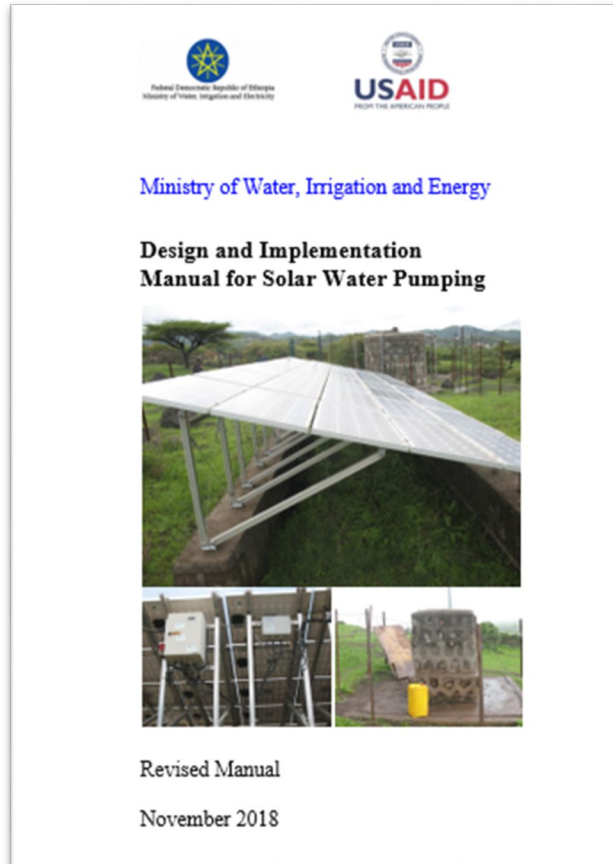
ENGINEERING DESIGN GUIDELINE

- Supported development and use of Engineering Design Guideline
- Design criteria (service level in line with GTP-II), drawings, BoQs, specifications, and report templates
- A design tool (Epanet for distribution systems analysis and spreadsheet for Demand Vs Supply analysis, pressure main sizing, reservoir sizing, pump and genset sizing)
- Trained national and regional government staff, and sub contractors



PROMOTED SOLAR WATER PUMPING

Developed/Refined Manual and Guidelines



Delivered Trainings






CAPACITY BUILDING TO EWTI

Delivered TOT Training to the Staff



Developed Training Curriculum for Technicians

Federal Democratic Republic of Ethiopia
Ministry of Water, Irrigation and Electricity


ETHIOPIAN
WATER
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Solar Water Pumping System (SWPS) Operation, Maintenance and Trouble Shooting (OMT)

Lesson Plan

Session 1: Solar Water Pumping System OMT (Day 1)

 Total session = 5:45 hour

Objective

- To increase understanding on the need for Operation, Maintenance and Trouble Shooting for SWPS
- To increase understanding of and outline activities needed for proper operation of a SWPS
- To enable engineers and technicians to conduct routine and preventive maintenances on SWPS

Learning outcomes

- Trainees will know the procedures that need to be implemented on the daily operation of a SWPS
- Trainees will know how to conduct routine and preventive maintenances on SWPS

Total time: 3:45 mins

Target Audience

- Water technicians and engineers

PROFESSIONALIZATION OF WASHCOS

- How was it done?
 - Members elected by the community
 - At least 40% women
 - Clear roles and responsibilities
 - Clearly defined tariff
 - Proper financial management, saving at local bank account
 - Linked with WWOs
 - WASHCO paying WWOs technicians for additional maintenance support needs



AMS PILOT

- How does it work?
 - Store asset inventory of water supply services
 - Updates information through mobile applications (Afar and Somali)
 - Collects real-time data through remote monitoring sensors on boreholes (Afar and Somali)
 - Provides comprehensive maintenance tracking system
 - Generates reports

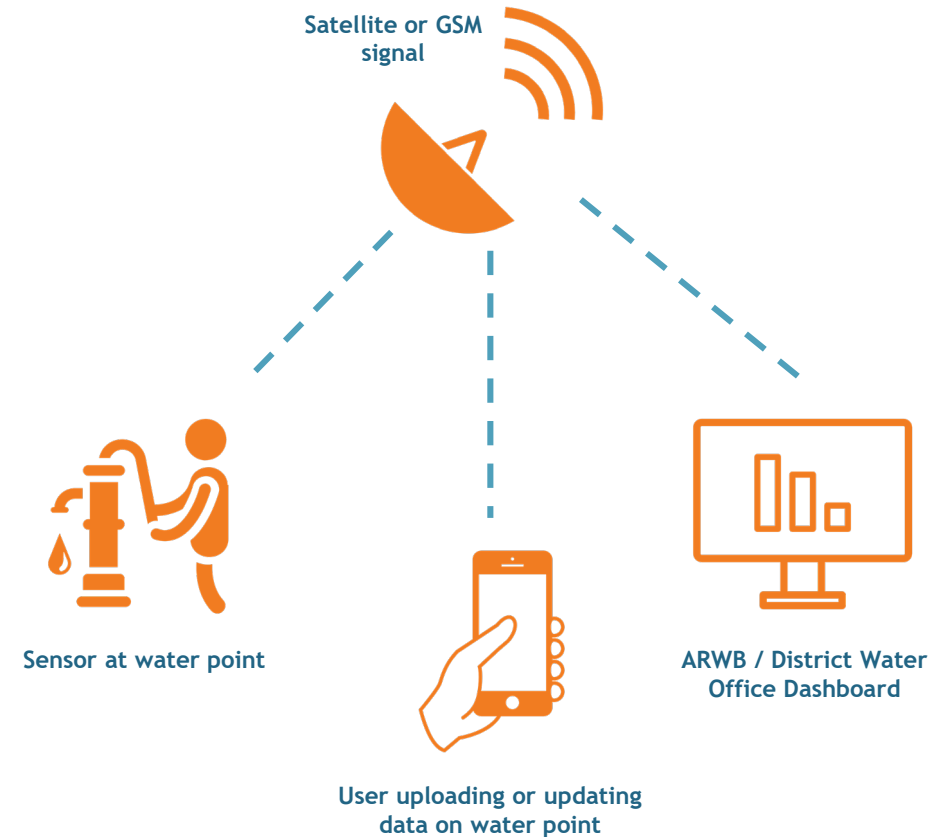




Photo by: Save the Children

ACHIEVEMENTS AND LESSONS LEARNED

ACHIEVEMENT

- Designed and constructed 130 rural water supply facilities benefiting over 250,000 people
 - 12 are solar powered
 - More than 95% meets the CQC requirement
- Facilitated establishment and training of WASCOS at 130 water services
- Supported operationalization and use of AMS in three lowland regions
- Supported MoWIE in the development of national study and design guideline for rural water supply services



LESSONS LEARNED

- Study and Design Guideline
 - Facilitated faster and smoother assessments, study and design reviews and approvals (saves time and cost)
 - Contributed to improved construction quality
 - High uptake and interest from local government staff
- From rapid assessment after 2 years of service, it was found:
 - Around 95% WASCOs indicated having tariffs
 - More than 60% WASHCOs indicated positive bank account



Q&A Session

Thank you!

Join us for our other webinars:

Tuesday, March 16, 2021
9:00 - 10:00 AM ET

Tuesday, April 6, 2021
9:00 - 10:00 AM ET

Tuesday, April 20, 2021
9:00 - 10:00 AM ET

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