



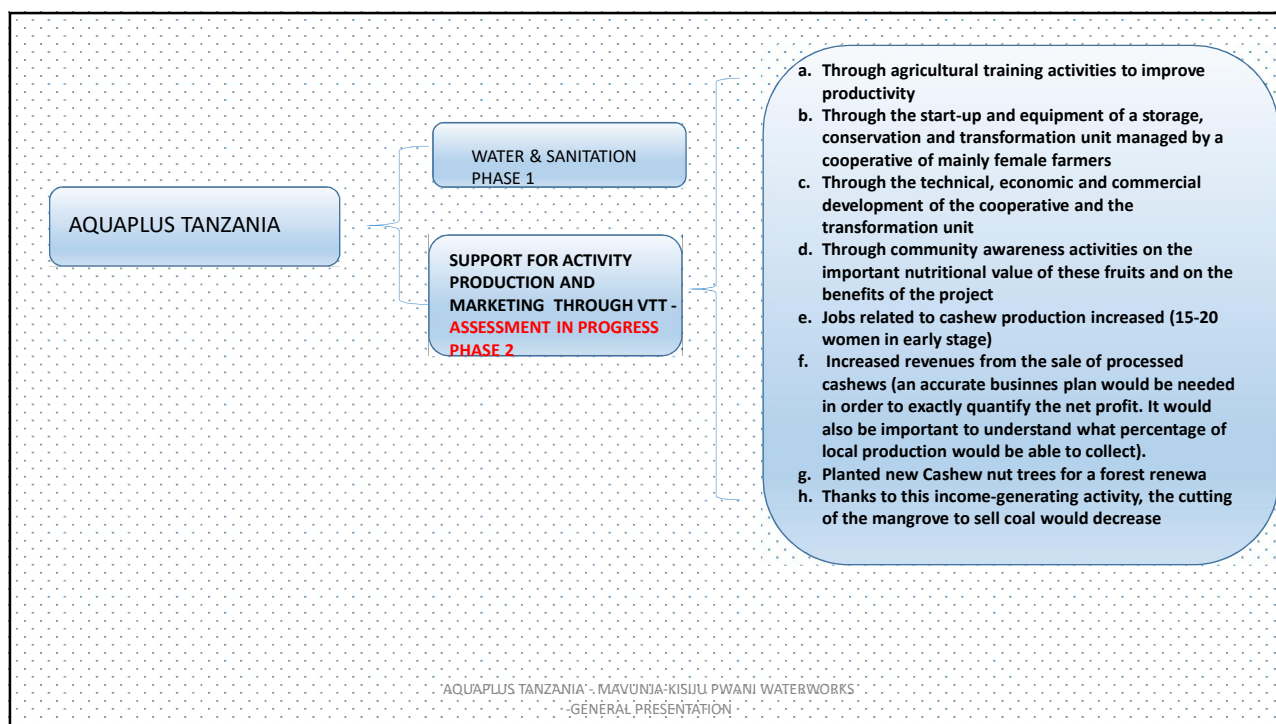
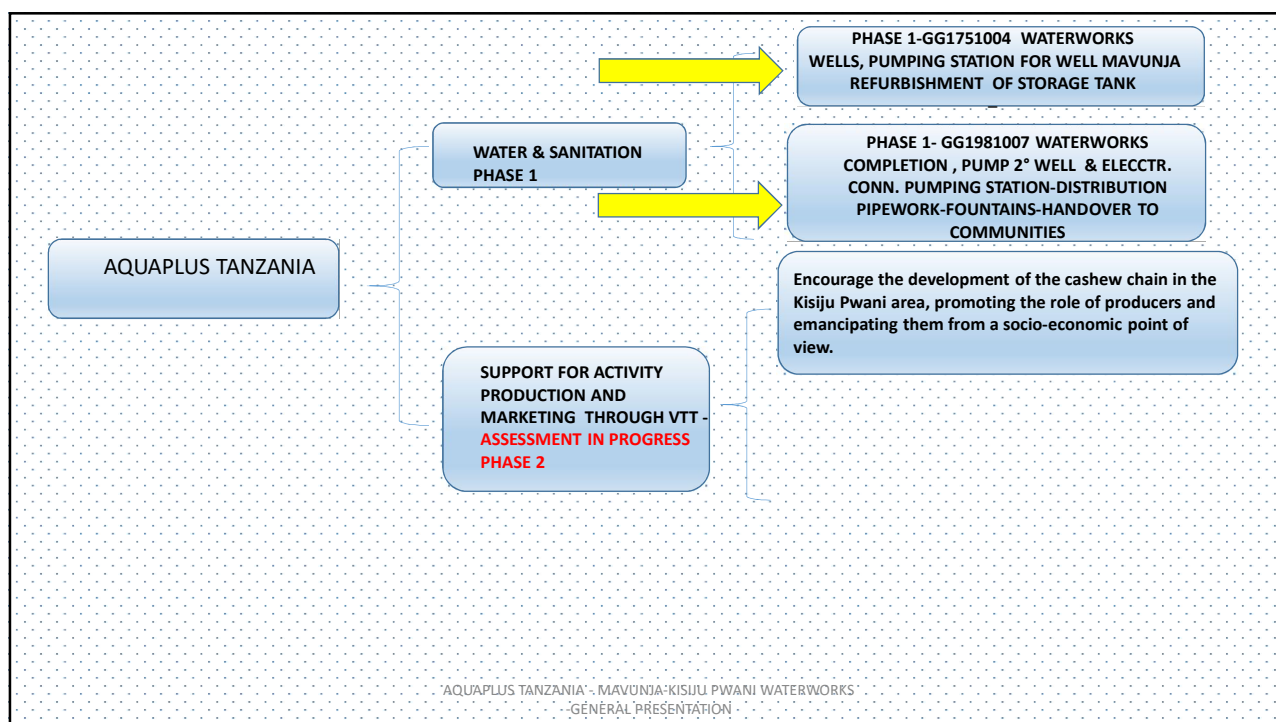
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

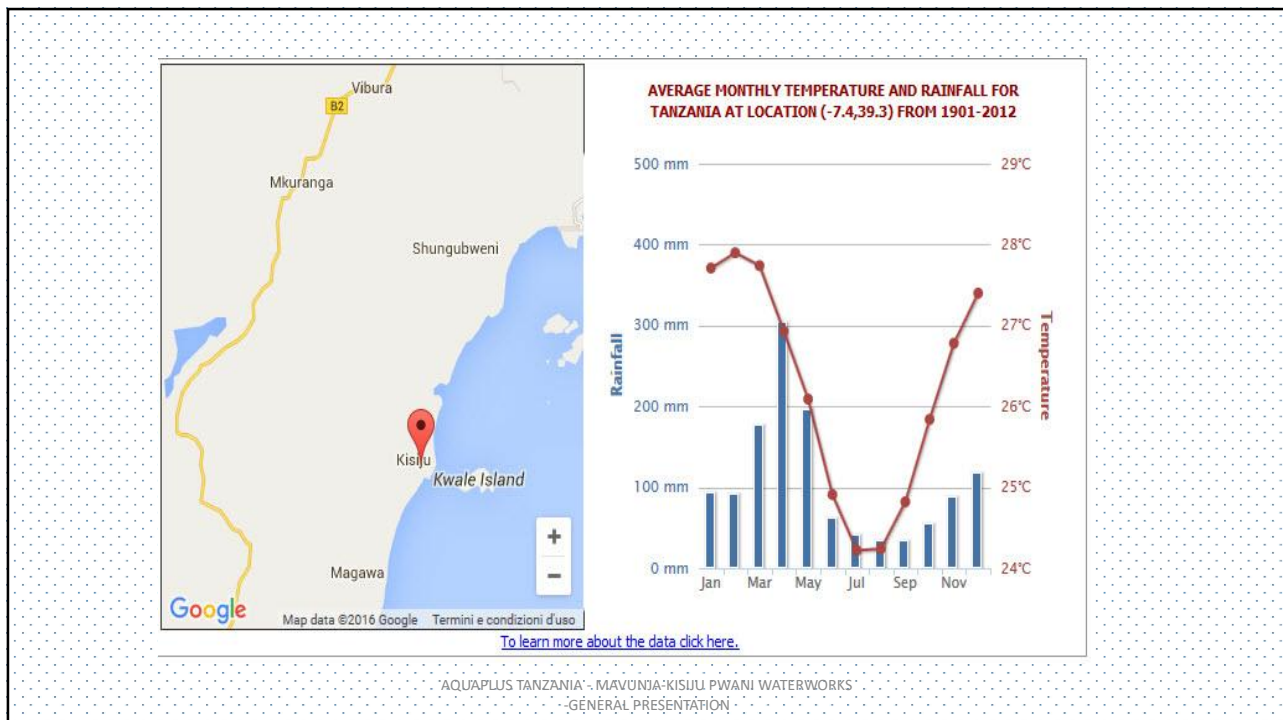
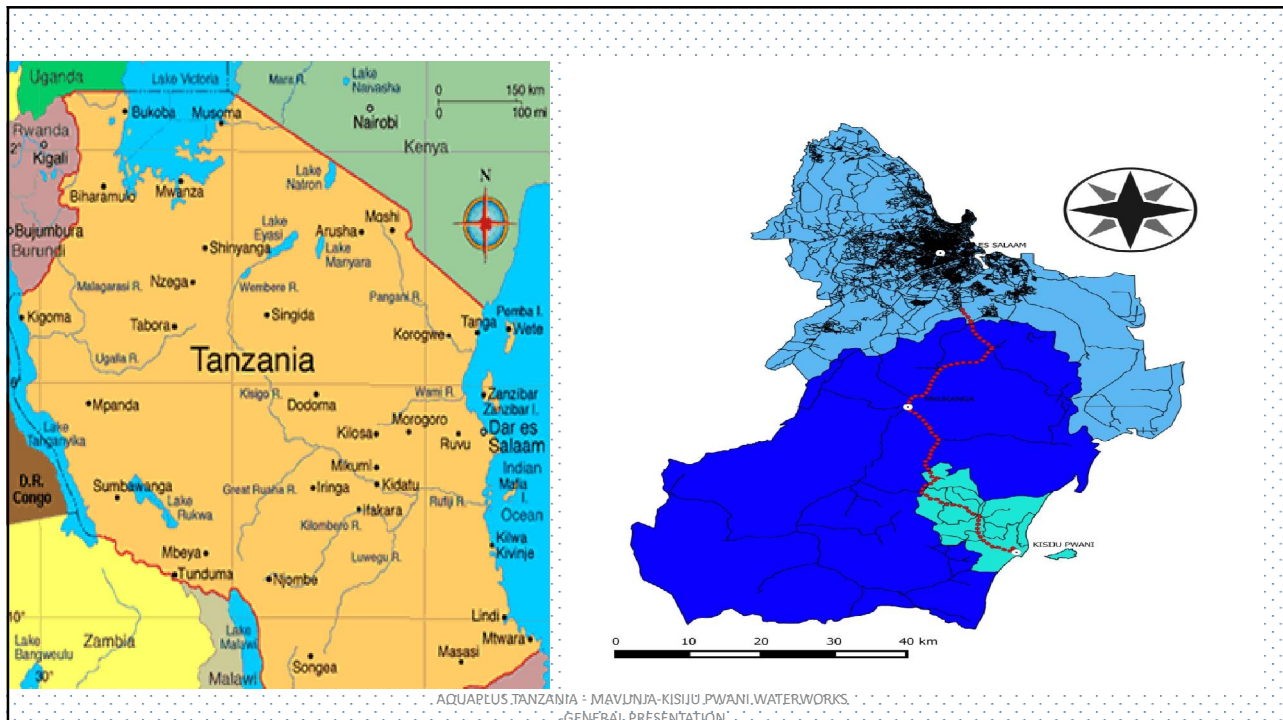


AQUAPLUS Tanzania general project description:

- **GG 1751004- Phase 1 WATERWORKS (GENERAL PRESENTATION)**

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-





ACTIVITY PHASE GG 1751004 - 1 JANUARY 2018 / JANUARY 31ST 2019

(Wells refurbishment: nr.1 and new nr.2 drilling / pumping system 1st well/ Storage Tank refurbishment)

Water supply: with the maximum involvement of organizations and local institutional work

1. Mobilization of the yard and operational planning activity verified with the Local Authorities and with the District of Mkuranga to which the Communities belong.
2. Upgrading of the existing Mavunja well, water and flow analysis, pump installation, closure and connection to the pumping station.
3. Surveys and identification of a new area and construction of a new well that would allow satisfying the required flow;
4. Definition of the lay-out for connecting the two wells to the pumping and control station which feeds the submerged pumps in the two wells with photovoltaic panels (connection to the power line recently completed is also provided);
5. Construction of a water pipe (4,400 m) that connects the wells to the pumping station and from the latter to a 70 mc tank from which the distribution network for the villages will start; two additional tanks 4 and 5 cb.mt. for Mavunja village.
6. Construction of a first fountain with a plastic tank for temporary supply at the end of phase 1 for the village of Mawunia;
7. Training of local workers during the activities thanks to the VSDA social facilitators who will manage the animation and communication meetings for the community and the Project Manager supervision

"AQUAPLUS TANZANIA" - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

Old water plant built during the 80's, used for a while until the early 2000's.

- pit (Kitomandoni)
- accumulation pool
- pump chamber (just a small brick house)
- adduction 4 inch' pipe
- Tower tank capacity 70 cb.mt
- two distribution points not far away.



"AQUAPLUS TANZANIA" - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PHASES 1 Water Supply Project (GG 1751004-1981087)

Development of a Water
System for Mavunja and Kisiju
Pwany

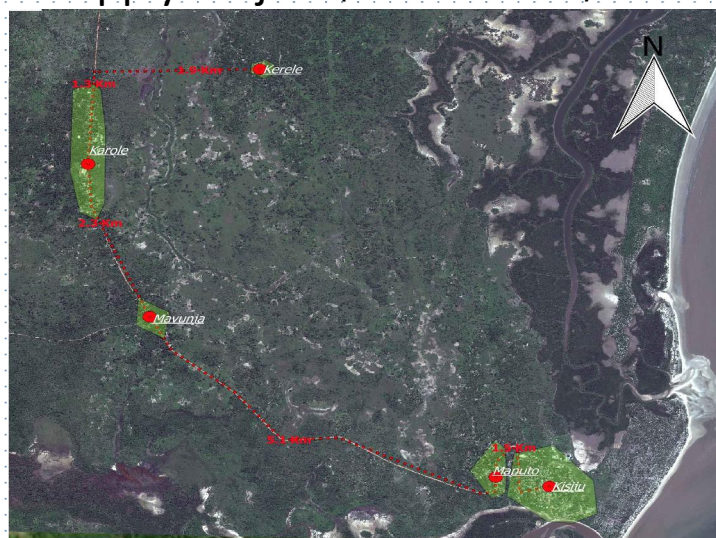
Beneficiaries: Nr. 7.400

Nr.2 Wells max.production

250.000 L/day

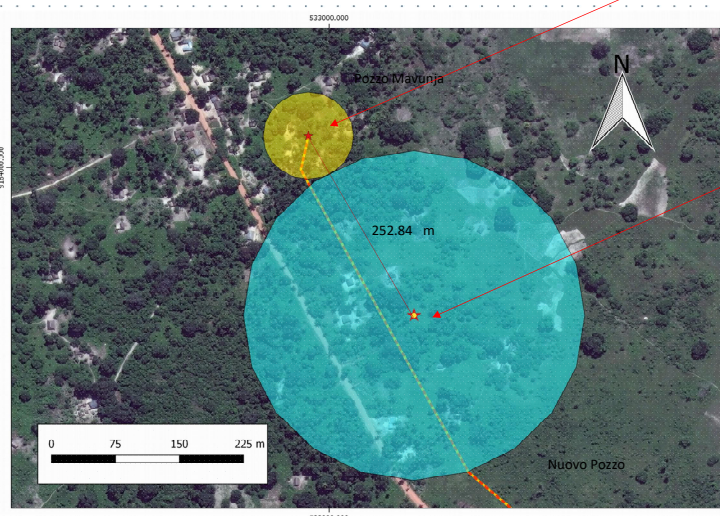
GG 1981087: Sustainable plan

185.000 L/day



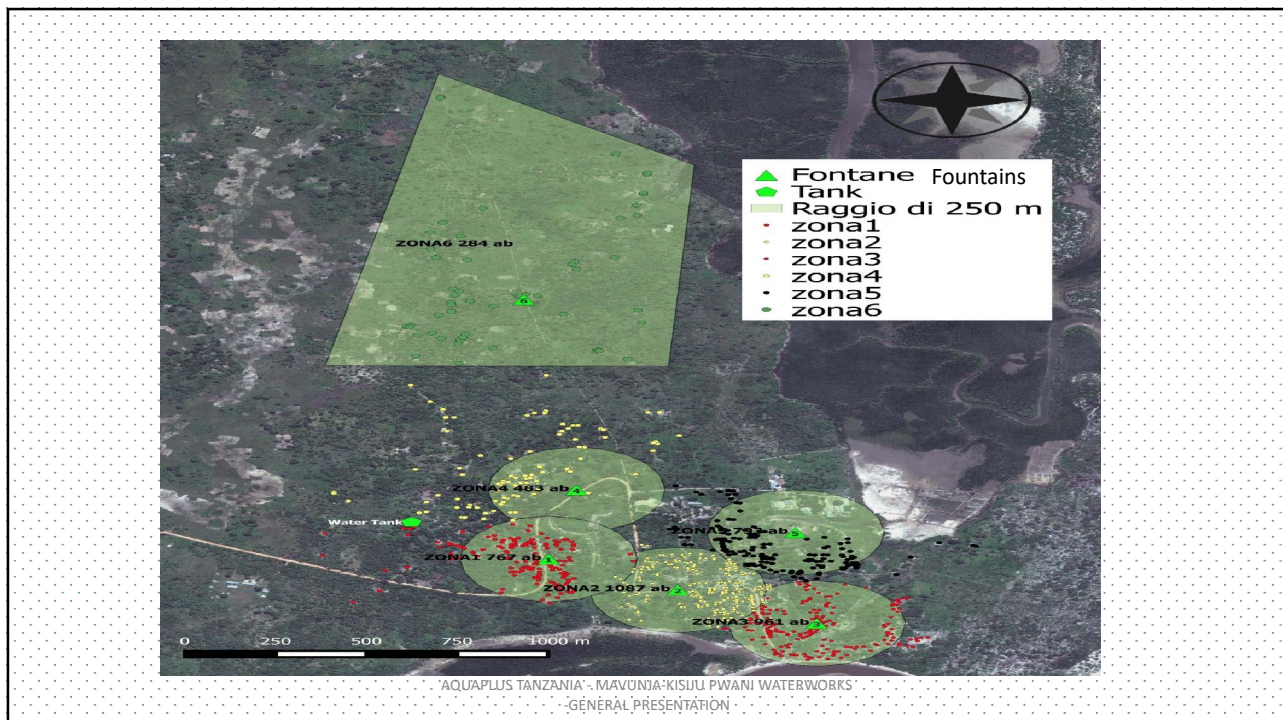
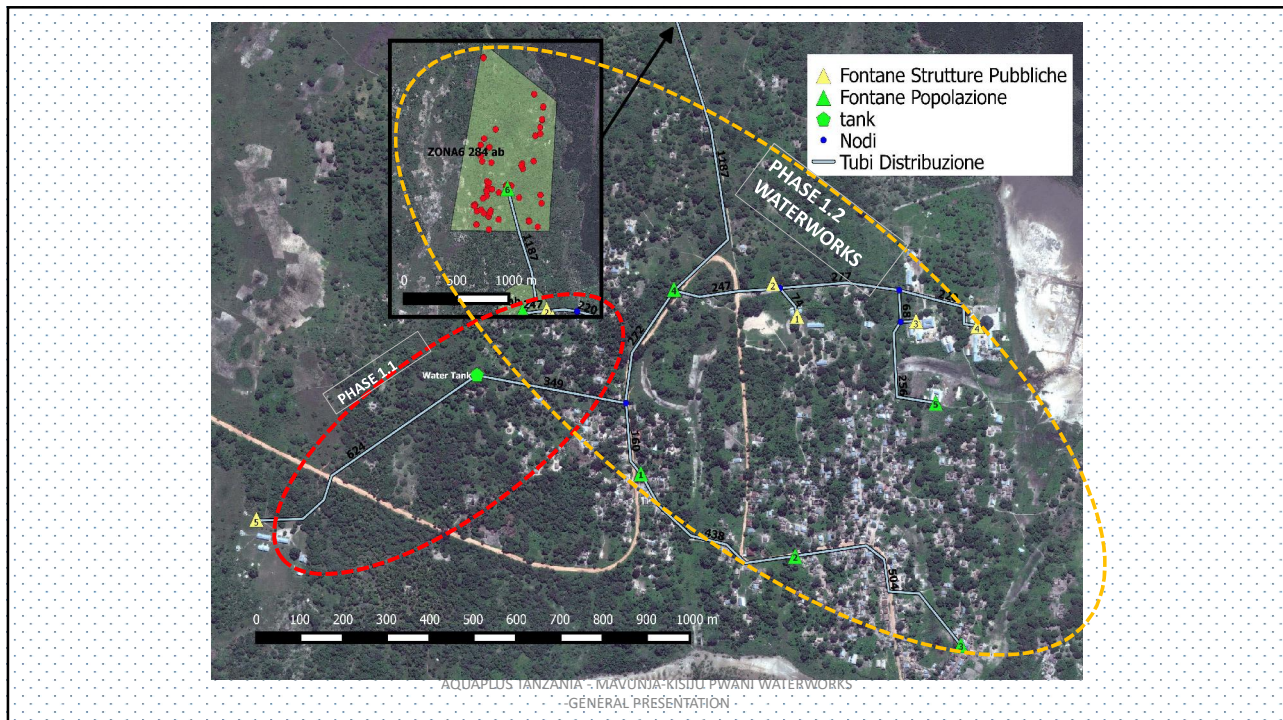
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

Existing borehole flushed and
qualified and connected to
pump station GG 1751004



New well drilled
under GG1751004.
GG 1981087 Well
equipped with
pump, electrical
connection to
pumping station.

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-





Flushing of 1st well in Mavunja refurbished

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-



Water flow test Mavunja well

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-



Geo-electric survey of the soil in which the new Mavunja well will be drilled. The study is used to characterize the layers of the soil and the presence of the aquifer.

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
- GENERAL PRESENTATION -



Excavation of the new Mavunja well.

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
- GENERAL PRESENTATION -



Old well of Mavunja reconditioned and new well just dug

AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PUMP STATION COMPLETION WORK- JANUARY 2018



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

TANK INTERNAL REFURBISHMENT DECEMBER 2018



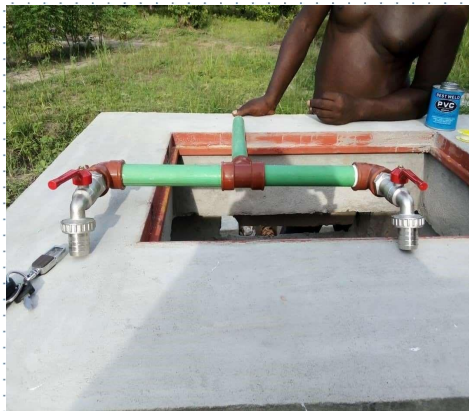
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

WATER TANK -RESTORATION OF THE TANK AND LAYING OF NEW EXTERNAL PLASTER



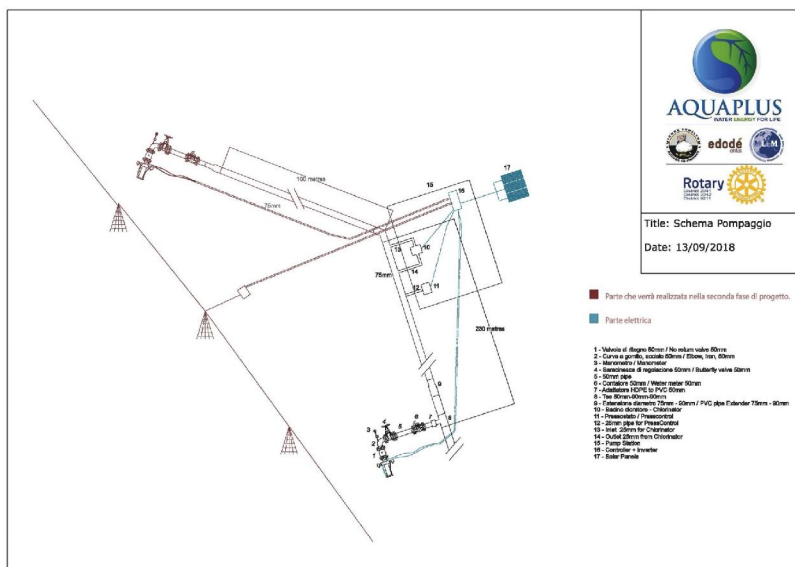
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

TWO TAPS STANDARDS PIPE CONNECTION



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

The pumping station is powered by photovoltaic solar panels and integrated with electricity from the electricity grid in the absence of sufficient solar energy.



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PUMP STATION: DECEMBER 2018



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PUMP STATION COMPLETION JANUARY 2019



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-



-AQUAPLUS TANZANIA- MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PUMP STATION JANUARY 2019



-AQUAPLUS TANZANIA- MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

PUMP STATION COMPLETED



POSTER ON THE MAIN GATE OF PUMP STATION



DOOR OF PUMP HOUSE PLANT

PHOTOVOLTAIC PANELS INSTALLED AND
CONNECTED TO INVERTER

'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

COWSO CONSTITUTION MEETING -APRIL 2019



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

ACTIVITIES GG 1981087 – May to December 2019

Waterworks completion: Pumping Station connection to new well, pump, photovoltaic panels, inverter- Chlorination plant- Electric connection to HV national grid (TANECO); substation transformer HV to LV, connecting line to pump station – water distribution pipework, fountains, latrine, awareness and training completion

1. Connection from storage tank to water distribution points, construction of Fountains and Latrine, awareness-raising activities for the use of water, training, testing and delivery of systems to Local Communities
2. Completion of the functionality of well nr. 2 with the installation of the submerged pump, the pumping and control station, photovoltaic panels
3. Installation of a chlorination plant for water disinfections
4. Water distribution network (5,000 meters) to the water supply points (Fountains);
5. Realization of 16 Fountains equipped with one/two/4 taps each, valves and counters for water distribution control: nr. 2 Mavunja, 14 Kisiju (10 public, 2 schools, 2 hospitals, 1 mosque, 1 Salvatorian Mission)
6. The Fountains are distributed in homogeneous areas to enable optimal distances from the housing and to enable the inhabitants to have access to water at a distance of 250 mt. max 300 meters from their homes;
7. Connection of school and medical clinic;
8. training of local workers during the works execution
9. Sensitization of users, awareness and proper use of water through the social VICOPA facilitators, who will manage the animation and communication meeting with the staff of MLFM under the supervision of the Rotary Milan and Dar-es-Salaam North;
10. Commissioning of installed equipment and system equipment and operational delivery and administrative local communities in accordance with predetermined procedures and agreed upon by the two local communities and the Mkuranga District.

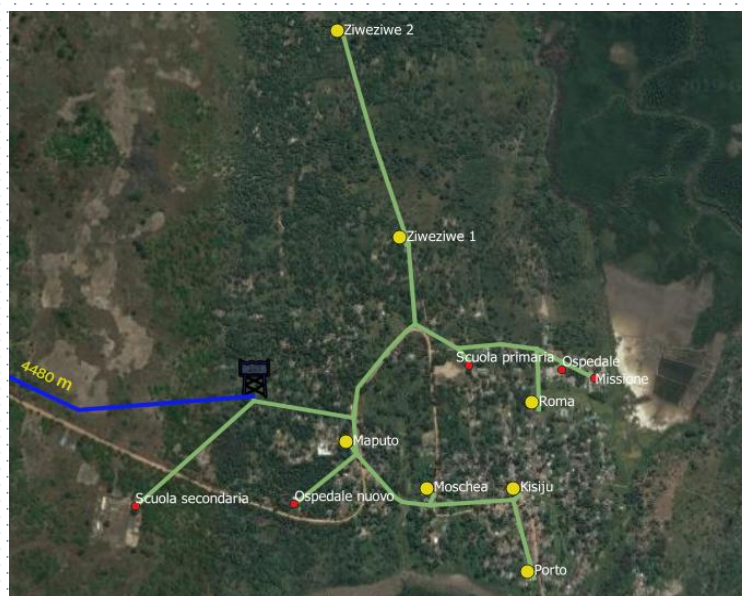
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

Altimetric survey with theodolite –May 2019



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

FAUNTAINS DISTRIBUTION SCHEME



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

TANK REFURBISHED AND NEW FONTAIN AND WATER SALES IN KISIJU- MAY 2019



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

The Mavunja fountain-attendant during his activity: he records the takings, quantity of sold water, and fills as well the cans with water.



The Mavunja people waiting in queue for water collection from the fountain.

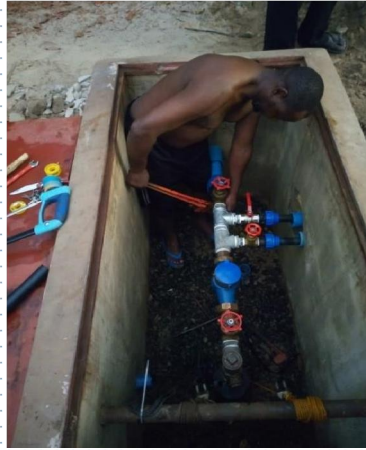
'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
--GENERAL PRESENTATION--



WORKS IN
PROGRESS FOR
PIPES LINE AND PITS

'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
--GENERAL PRESENTATION--

INSPECTION PITS



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

CONCRETE BASEMENT FOR MAVUNJA TANK AND TWO TAPS FOUNTAIN-
SEPTEMBER 2019



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

AWARENESS CAMPAIGN IN SCHOOLS-SEPTEMBER 2019



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

AWARENESS CAMPAIGN IN SCHOOLS-SEPTEMBER 2019

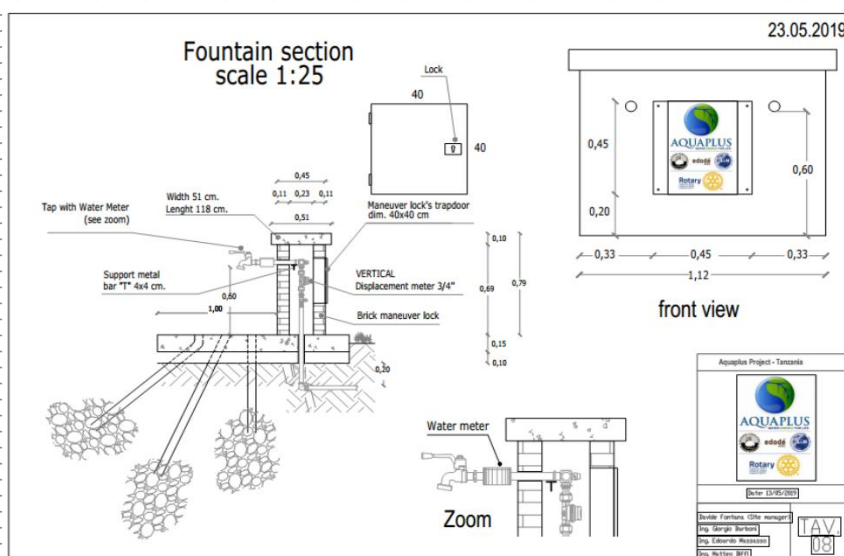


AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

ELECTION OF MEMBERS OF THE WATER COMMITTEE-SEPTEMBER 2019



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

FOUNTAIN CONSTRUCTION –SEPTEMBER 2019



'AQUAPLUS TANZANIA' - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

NEW INTEGRATED PHOTOVOLTAIC PANEL SYSTEM FOR THE TWO WELLS-NOVEMBER 2019



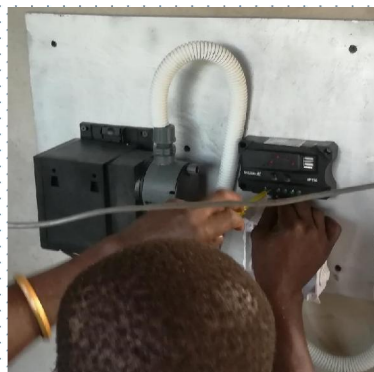
AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

FLOW TEST OF NEW WELL-NOVEMBER 2019



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

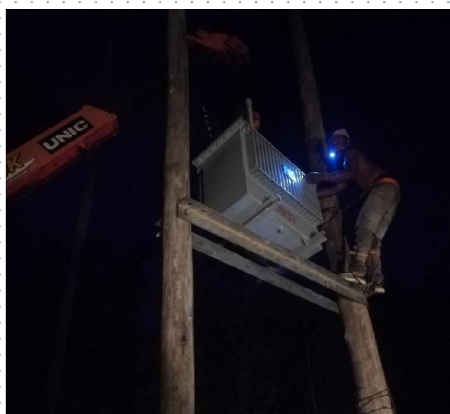
CHLORINATION PLANT INSTALATION-NOVEMBER 2019



500-litre tank located inside the pumping station, in which liquid chlorine is mixed with water. Through a dosing pump, this solution is injected into the pipeline from the new well to the Kisiju tank. This pump works with a solar panel installed on the roof of the pumping station.

-AQUAPLUS TANZANIA- MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

TRANSFORMER FOR PUMP PLANT CONNECTION TO THE MAIN HV GREED TANESCO-NOVEMBER 2019



-AQUAPLUS TANZANIA- MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

HOSPITALS AWARENESS CAMPAIGN



AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

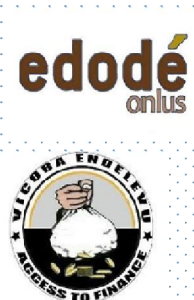


AQUAPLUS TANZANIA - MAVUNJA-KISIJU PWANI WATERWORKS
-GENERAL PRESENTATION-

WHAT ABOVE HAS BEEN POSSIBLE THANKS TO
 ROTARY INTERNATIONAL ORGANIZATION,
 DONORS, COOPERATING ORGANIZATIONS
 AND PARTICULARLY FOR
 THE CLOSE COLLABORATION AND SHARING
 OF CHOICES, DESIGN WITH THE
 COMMUNITIES OF MAVUNJA-KISUU PWANY
 AND AUTHORITIES OF MKURANGA DISTRICT

THE REAL CHALLENGE WILL BE THE SUSTAINABILITY OF THE PROJECT
 OVER TIME

AQUAPLUS TANZANIA - MAVUNJA-KISUU PWANI WATERWORKS
 -GENERAL PRESENTATION-



AQUAPLUS TANZANIA - MAVUNJA-KISUU PWANI WATERWORKS
 -GENERAL PRESENTATION-