Call for Expression of Interest (EoI)
Delivery of solar irrigation pumps and PAYGO solution in the Gaza province in Mozambique

March 2022

A. Background

Practica Foundation (www.practica.org) has the mission to improve skills and resources in the field of drinking water supply, irrigation, groundwater extraction and sanitation in developing countries. Practica Foundation accelerates the development and commercial introduction of innovative technologies with great potential to improve living conditions.

Solar-powered irrigation systems (SPIS) are increasingly popular amongst investors and promoters of green energy development strategies. A sustainable introduction of solar irrigation requires that sufficient water is available, that technology meets the requirements of farming systems, and that finance, services and markets are accessible. Through this RFP, Practica aims to identify an SPIS supplier that can provide an integrated solar irrigation solution in Gaza.

In Gaza province, the Limpopo sand river is featured by year-round availability of shallow groundwater in its riverbed. While rainfall and surface water schemes are increasingly unreliable, the reliable and nature-based water storage of the Limpopo River could sustainably provide sufficient water for 30,000 irrigating farmers, with the main concentration of farmers situated in the Chòkwe/Chibuto area. At the moment this water is lost to the ocean because farmers cannot access the water. In 2018, Practica Foundation and partners have developed a technique allowing local enterprises to install well points for individual farmers in an affordable way. Connecting a well point to a small solar pump and low-cost irrigation system provides a farmer with year-round individual water access for an accessible price, see Figure. 1. Pay-as-you-go (PAYGO) approaches are an inclusive finance solution that allow end-users to pay for SPIS in instalments, thereby lowering the investment barrier and risk faced by a farmer.

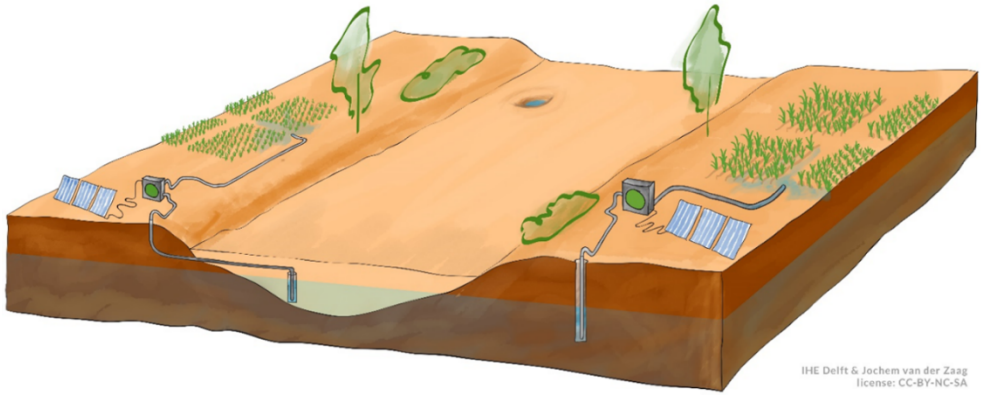


Figure. 1. Example of an SPIS configuration to be used around the Limpopo river. Pumps can be installed directly in the river, or by making use of a well.

While technically feasible, the solution has not been scaled as the technology and appropriate finance solutions are currently unavailable in Gaza. The gap between farmers and companies is too large for the market to develop spontaneously. Practica Foundation with the support of the GIZ is currently implementing a project to catalyze this development in the Gaza province. The overall objective of the project is to support the growing solar irrigation market with accessible technology and PAYGO solutions in the field. The selected supplier and other project stakeholders will benefit from intensive technical support and training by Practica Foundation on topics such as low-cost water sources, water conveyance, application and storage; and SPIS design and sizing.

B. Project components

End of 2021, Practica Foundation signed a grant agreement with GIZ to accelerate the SPIS market for smallholder farmers in Gaza province. The project components are as follows:

1. Preparation, selection of partners and stakeholder involvement.
2. Establishment and training of local drilling enterprises.
3. Solar irrigation trainings to SPIS suppliers, extension workers and other relevant stakeholders.
4. Support and demonstrate the establishment of an SPIS supply chain with the use of a PAYGO solution.
5. Planning for upscaling.

Component (4) includes the supply of 100 solar-powered pumps and irrigation system packages for usage by smallholder farmers. A voucher system will be established in collaboration with the selected supplier to grant a purchase incentive to farmers buying a pump. The sales of solar pumps will be divided into two phases. The first one starting in April 2022 in which an advantageous percentage (50-70%) of the retail cost will be covered. During the second phase, the project's contribution will decrease to (30-40%) (exact percentages to be confirmed, and will be stated in the final contract). Part of these incentives will have to be re-directed to the final price given to the farmers. Thus, representing a discount on the technology acquisition. During both phases, farmers will need to pay 3% upfront in order to assure true interest and create a sense of ownership. The target is to **sell at least 100 portable solar pumps** before December 2022. Practica will offer technical support, quality control and follow-up training to drilling and solar pump installation teams.

An example transaction procedure is shown in the flow chart below, indicating the different steps of the transaction, once a farmer has expressed interest and meet the supplier's criteria:

- The farmer pays 3% of the SPIS price upfront.
- A drilling team will construct a well (financed by the project) and the farmer receives a voucher.
- The pump supplier installs the pump and signs a service contract with the farmer.
- The supplier can claim a purchase incentive (50-70%/30-40% of SPIS price) from Practica.

- The supplier provides service to the farmers and collects the remaining (25/45%) through regular instalments.

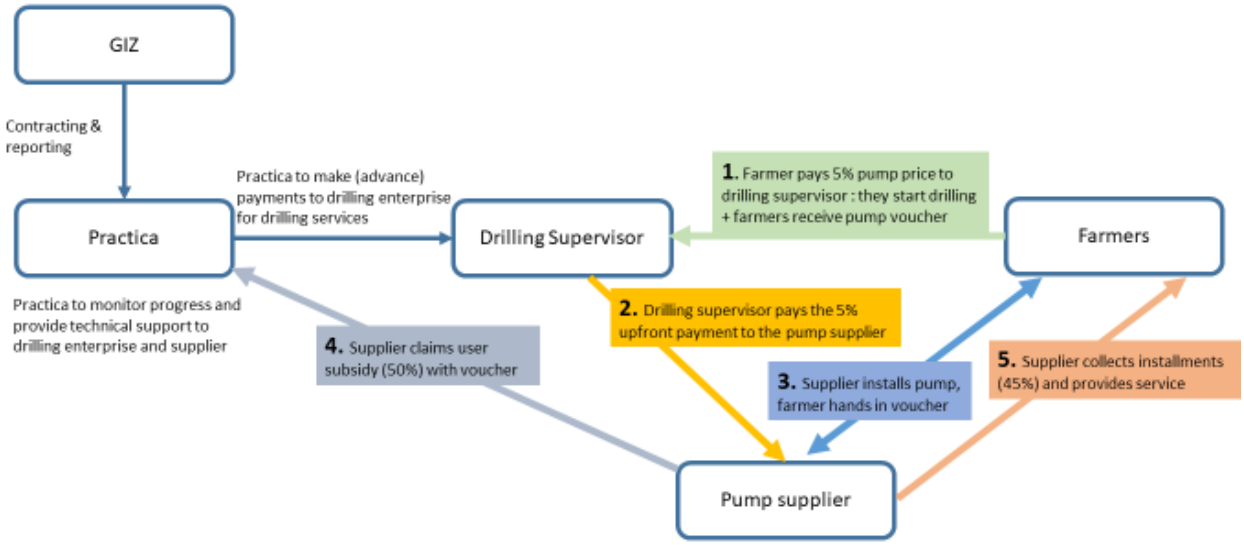


Figure. 2. Transaction procedure.

The project will facilitate a number of farmer meetings in the most promising zones. Interested farmers will be shortlisted during the meetings and visited by the supplier to assess whether the farmers fit their selection criteria. A detailed promotion campaign will be designed in the preparation phase and could include the use of flyers, radio, fixed demo models in the Gaza province (Chòkwé/Chibuto), etc. The PAYGO deal and early-bid advantages shall be clearly communicated from the beginning.

C. Participation in the Expression of Interest

Practica Foundation invites companies selling Solar-Powered Irrigation Systems (SPIS) in Mozambique to submit an Expression of Interest for the delivery of **up to 100 portable solar-powered pumps and irrigation packages through a Pay-As-You-Go (PAYGO) solution for individual smallholder farmers to be supplied in the Gaza province during 2022.**

The selected company will benefit from a subsidy per pump unit sold, financed by the German Cooperation through GIZ. To be eligible for receiving the full RFP, the company should satisfy and prove the following criteria:

1. Be a registered company in Mozambique.
2. Having sold at least 25 SPIS in Mozambique in the last 5 years.
3. Having sold products through a PAYGO solution to at least 100 clients in Mozambique in the last 5 years.

Please respond to this call by sending the documents that prove that you meet the criteria above. Max 5 pages. Documents can be in English or Portuguese. The deadline is on March 18th 2022, at 11:59 pm (CET). Please send all documents by email to aldo.zamarroni@practica.org

For more information about this call, please check the website: www.practica.org

Qualified applicants will be invited to participate in the Request for Proposal (RFP) that will follow.