

THE POWER OF THE PRIVATE SECTOR: HOW SOLAR IRRIGATION IS EMPOWERING FARMERS IN TANZANIA

If you combine improved access to small-scale solar irrigation (SSSI) with modern agricultural technologies and successful partnerships with the private sector, you have a recipe for changing Tanzania's agricultural sector. The WE4F East Africa Regional Innovation Hub (EA RIH) and Energy for Impact (E4I) have teamed up for a project to support smallholder farmers in rural Tanzania to boost their food production and incomes by leveraging the private sector.

Background

Agriculture is a key sector in Tanzania, it accounts for almost 29% of the country's GDP and about 80% of Tanzanians are involved in the sector. In rural areas, solar-powered irrigation systems (SPIS) have become a key technology for many smallholder farmers, due to low operating costs. WE4F and E4I have partnered in Tanzania to help create awareness and up-take of SPIS solutions, ultimately empowering farmers to produce food efficiently, regardless of the weather.

Project Description

This partnership aims to improve food production and incomes for rural farmers in 15 districts of Tanzania. This will involve:

1. Creating awareness of the benefits of small-scale solar irrigation systems in rural Tanzania.
2. Linking farmers to local financial institutions and solar equipment suppliers to increase the uptake of SSSI in rural areas.
3. Offering comprehensive agricultural extension services to farmers, disseminating information on farm technologies, supporting rural adult learning and assisting farmers in developing their technical and managerial farming skills.
4. Documenting experiences and lessons learnt to help develop policy briefs for decision-makers, project developers, funding agencies, and the private sector.

Anticipated Impact

Connecting rural farmers with the private sector in Tanzania will strengthen the uptake of small-scale solar irrigation systems. This will help farmers to produce food in a more climate-friendly, energy- and water-efficient way, thus boosting productivity and incomes in an environmentally-sustainable manner.

OUR TARGETS AT A GLANCE

- 300 smallholders mentored and ready to invest in SSSI equipment
- Farmer-friendly financing facility created to spur the uptake of SSSI equipment in rural areas
- Transferring Good Agricultural Practices to directly impact productivity & incomes
- Technical assistance to SSSI suppliers and distributors to reach more farmers



Small-scale solar irrigation systems installation/E4I

Agricultural Finance	100 SSSI equipment sold to smallholder farmers through credit from SSSI suppliers and local financial institutions and 3 solar irrigation equipment companies supported with promotion activities to access farmers
Capacity Development	300 farmers trained and supported to improve their farming practices and business management
Climate Change	300 smallholder farmers use energy or water efficient technologies to adapt to the consequences of climate change
Food Security	3,000 farmers reached by the project's awareness raising activities
Policy	2 policy briefs prepared and shared with policy and decision makers for call for action to support SSSI in Tanzania

What has been achieved so far?

E4I has undertaken three studies aimed at providing crucial data to inform the project's implementation structure. Partnership discussions are underway with six financial institutions to engage on improved access to finance for SSSI equipment suppliers, as well as end-users. E4I signed a memorandum of understanding with three solar irrigation equipment suppliers: **Simusolar, AG Energies, and Davis & Shirliff**. A memorandum of understanding has also been signed with VisionFund Tanzania Microfinance Banking to work together on increasing awareness and making solar irrigation more affordable for smallholder farmers.

Three hundred and six lead farmers have committed to participate in the project by acquiring water pumps. As part of the awareness creation activities on small-scale solar irrigation products, E4I is collaborating with selected pump suppliers to design and produce information and awareness leaflets and videos on the functionalities of the pumps and associated good agricultural practices.

To stimulate interest in irrigation, **eight demonstration farms have been identified to be used to highlight the difference between an irrigated farm and a non-irrigated farm.**

Several consumer awareness creation events on SSSI have already taken place, including roadshows.

Looking Forward

This project is expected to facilitate:

1. Awareness creation through the design, production, and distribution of informational materials.
2. Linkage of farmers with solar equipment companies and suppliers with financial institutions to create a culture of collaboration and instill confidence.
3. Enhanced knowledge management by documenting experiences and lessons learnt that could be used for future programming in the field of small-scale solar irrigation systems in rural areas of Africa.

Boosting food production through SSSI/E4I



FACTS

- Agriculture in Tanzania accounts for almost 29% of the country's GDP
- Declining costs in solar panel prices and new business models have made solar-powered water pumps more accessible and affordable to rural farmers
- Scaling the use of solar water pumps can contribute to many of the Sustainable Development Goals

Funded by: Water and Energy for Food (WE4F) Grand Challenge, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the European Union

Main Implementer:
Energy for Impact (E4I)

Main Partners:
Federal Ministry for Economic Cooperation and Development (BMZ)
European Union (EU)
Ministry of Foreign Affairs of the Government of the Netherlands
Swedish International Development Cooperation Agency (Sida)
US Agency for International Development (USAID)

Duration: Nov 2020-Dec 2022

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More about the global initiative Water and Energy for Food (WE4F) Grand Challenge: <https://we4f.org/>

Further information about the project: <https://we4f.org/>

As at September, 2021