



FINANCING



INSTALLATION

# Renewable Energy for Agriculture

## Summary

<b>Country</b>	Malawi
<b>Implementer</b>	Modern Farming Technologies (MFT)
<b>Target groups</b>	Women farmers
<b>Duration</b>	11/2021 – 04/2023
<b>Type of energy use</b>	Irrigation

## Challenge

Measured by gross domestic product, Malawi is one of the poorest countries in the world. 80 % of the population make their living through farming. People mainly cultivate their fields by rain-fed agriculture, which is becoming increasingly unprofitable due to climate change and soil degradation. For alternative forms of cultivation, large parts of the population lack access to electricity and means of production, especially irrigation pumps, cold storage, and mobility. Accordingly, post-harvest losses amount to between 30 % and 40 %. Additionally, women in Malawi face further economic uncertainties, as only one percent of the women officially own land.

## Impact Logic

The members of the women's farming cooperative are the main beneficiaries of the project. By using solar-irrigated greenhouses as well as adequate cooling systems and through a resilient marketing strategy, the women are enabled to grow produce all-year-round and increase their income. The higher yields subsequently give them better access to the regional and national food trade. In the first step, a solar drip irrigation system and 15 greenhouses are installed. With these facilities, 45 women of the cooperative grow high-quality vegetables, herbs, and fruits in close coordination with potential future buyers. The women are trained in the use of a cultivation plan and deliver their produce to MFT, the implementing partner organisation,

which stores the food in a solar-powered cold store and markets it to restaurants, lodges and exporters. The women in the cooperative jointly use the facilities and share the rent evenly among the members. When the facilities are paid off, they become the property of the cooperative. During the first two years of the project, 45 women gain meaningful and sustainable jobs. This will scale up to 267 jobs by year five, impacting 1,333 people through improvements to women's income and food security. Each woman gains a yearly net income of about €627 rising to over €900, when they have completed the rent-to-own payments for their greenhouse.

## Innovative Project Elements

A modern form of agricultural production with an integrated renewable energy system, which is directly linked to marketing facilities, presents a new business model for Malawi. Furthermore, the gender-focused approach and the holistic setting of the project are innovative as they integrate renewable energy into a modern agricultural production system. In addition, the rent-to-own-approach is an innovative financing mechanism for the solar-powered irrigation and greenhouses, which allows full ownership after four years. The rent-to-own-approach is made possible by MFT facilitating access to solar-powered cold rooms and to markets of high-quality vegetables by negotiating with large retailers and through contracts on behalf of the women cooperatives.

## FURTHER INFORMATION

[www.gruene-buergerenergie.org](http://www.gruene-buergerenergie.org)

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### Registered offices

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### Address

Dag-Hammarskjöld-Weg 1–5, 65760 Eschborn  
T +49 6196 79-0

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Atelier Löwentor, Darmstadt, [www.loewentor.de](http://www.loewentor.de)

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