

LET'S TALK PRODUCTIVE USE OF ENERGY FOR FOOD SECURITY AND ECONOMIC EMPOWERMENT

Encouraging a supportive policy environment for the productive use of clean energy for the food and agriculture sectors is key for market development and uptake of PUE technologies.

Background

Productive use of energy (PUE) technologies have the potential to increase the impact of electrification through increased value addition, employment and income generation, especially in agriculture. PUE technologies, such as pumps, mills, oil presses, dryers or cooling systems, that are powered by renewable energy. The application of PUE has the potential to increase productivity, to make users more resilient towards the impacts of climate change, and to reduce postharvest losses through processing and storage. Despite the benefits that these appliances bring, market conditions are still unfavorable in many East African countries. This includes barriers, such as taxation, import duties, missing standards or limited access to finance for manufacturers and users. Identifying such barriers on a national and regional level and bringing them into the discourse of public entities (ministries, authorities, standard offices) is the first step to create a more enabling environment.

Project in a Nutshell

In partnership with GOGLA, we aim to achieve the following:

1. Establishing working groups of PUE actors and stakeholders on regional and national levels
2. Development and implementation of a roadmap of priority actions needed to realize an enabling environment
3. Facilitation of engagement to bring the action points into the relevant public entities
4. Facilitation of knowledge generation on PUE applications

FACTS

- In Kenya about 100 specialist companies are active in the PUE space
- While solar panels are exempt from VAT and import duty in Uganda, many solar components are not
- The same solar pump model costs on average 2.4 times more in Ethiopia than in Kenya
- 14 % of the population is electrified through an off-grid solution in Rwanda



Productive Use of Energy Technologies: Milling and pumping. Photo: GIZ/Kilian Blumenthal

| | |
|-------------------------------|---|
| Exchange formats | Setting up of working groups in each of the target countries as well as on regional level Organization of a workshop in each of the target countries |
| Market assessments | National market assessment for each of the target countries |
| Action plans and guide | PUE action plans for each of the target countries Regional policy guidelines |

What has been achieved so far?

GOGLA has connected with different national renewable energy associations in the target countries to bring in their local expertise. National and regional working groups have been established, in which different PUE actors and stakeholder discuss about challenges and market conditions.

Looking Forward

1. **Encouraging a positive and supportive enabling environment** for the productive use of clean energy in food production and agricultural/agribusiness-based activities in the target countries.
2. Increasing the **availability of PUE technologies** and solutions in target countries and within target communities.
3. Increasing **awareness and adoption of PUE technologies** and solutions in target countries and target communities
4. **Establishing a sustainable marketplace** allowing customers to access PUE products and services for agriculture and agribusiness value chains and enabling PUE players to reach and support their clients in the same
5. Enhancing **government engagement on policy and enabling environment** issues for PUE.
6. Documenting **global best practices** that are easily replicable in many markets.

Solar Cold Storage. Photo: Adrian Kenya



NATIONAL ASSOCIATIONS

- In each of the countries, GOGLA works together with the national renewable energy associations to implement the project activities. This improves the capacity of the associations and the sustainability of the project.
- They are involved in market assessments, managing the working-group meetings and facilitating the exchange with policy makers.
 - Energy Development Association (ESEDA) in Ethiopia
 - Kenya Renewable Energy Association (KEREAA)
 - Energy Private Developers (EPD) in Uganda
 - Uganda Solar Energy Association (USEA)

Funded by:

"Water and Energy for Food (WE4F)", a project of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the European Union

Main implementer:

Global Off-Grid Lighting Association (GOGLA)

Partners:

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

Duration: November 2021 – March 2023

Contact: we4f@giz.de

Photos:

Page 1: GIZ/Kilian Blumenthal
Page 2: Adrian Kenya

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

As at November, 2022