

CAPACITY  
DEVELOPMENT

INSTALLATION

# Enhancing the Role of Solar Irrigation for Poverty Reduction Near Mt. Kilimanjaro

## Summary

<b>Country</b>	Tanzania
<b>Implementer</b>	Climate Action Network Tanzania (CAN TZ)
<b>Target groups</b>	Smallholder farmers
<b>Duration</b>	02/2021 – 08/2022
<b>Type of energy use</b>	Irrigation

## Challenge

Agriculture continues to be the main part of Tanzania's economy. The sector is responsible for over a quarter of the country's GDP and contributes to over 65% of jobs nationally. The sector is dominated by smallholder farmers cultivating small pieces of land between 0.6 and 3.0 acres each. For these smallholder farmers traditional irrigation, which utilizes water from river diversions or natural springs, has historically been a major means of ensuring food security and income. However, the situation has changed significantly in recent years as farmers in the project areas are no longer able to rely on traditional irrigation schemes except during rain seasons. This is largely because rain falls have become shorter and more unreliable, thereby making it impossible for rivers and streams to flow continuously throughout the year supporting the traditional rain-dependent farming activities.

## Impact Logic

The project leverages a combination of two approaches. The first approach focusses on the installation of new solar-powered water pumps at boreholes. Geological surveys are carried out to identify the best location for the installations and afterwards solar-powered irrigation systems are set up at three villages. The second approach puts the

focus on traditional water irrigation schemes. Information on the existing canals and waterways is collected in order to decide how to best revive and integrate them into the overall irrigation schemes for each location. Additionally, throughout the project farmers are actively involved and trained in the maintenance of the solar PV installations to promote sustainability of the project. Farmers also receive training for agribusiness development to adapt their work to changing climate conditions.

## Innovative Project Elements

The project adopts a gender sensitive, bottom-up, participatory and inclusive approach. The project was initiated by members of the local community, thus local ownership is very high. Furthermore, a joint Project Steering Committee (PSC) is formed to provide local administration to the project by reviewing and approving project work plans on a quarterly basis. The PSC is comprised of members from the local Hai District Council, Pangani Water Basin Board (PWBB), Climate Action Network Tanzania (CAN TZ), and representatives of farmers/water user groups from the project villages.

## FURTHER INFORMATION

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

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