







# Access to Solar-Powered Water Pumps in Laikipia

## **SUMMARY**

Country	Kenya
Implementer	SNV Netherlands Development Organisation
Target groups	Population of Laikipia
Duration	06/2021 - 05/2023
Type of energy use	Irrigation

**CHALLENGE** 

In Laikipia County, northwest of Mount Kenya, six out of ten households live predominantly from agriculture. Although the potential for this is very good in the region, only 10% of small-holder farmers can actively irrigate their fields. One reason for this is that many of them live far from the national electricity grid and the use of diesel pumps is often too expensive. Solar-powered water pumps could provide significantly higher yields through the cultivation of vegetables as well as in livestock farming. However, the high initial investment, limited availability of know-how, technologies and after-sales services are high hurdles that hinder the spread of solar irrigation systems.

# **IMPACT LOGIC**

Access to and awareness of clean and affordable energy solutions is an important pillar for the economic development of the region. An important focus of the project is therefore to work with so-called lead farmers at the local level to facilitate on-farm practical trainings. In parallel, the project also strengthens the supply side by supporting national and international manufacturers and traders to expand their distribution channels to rural areas.

To enable more people to purchase solar water pumps, the project promotes access to appropriate, affordable and flexible payment models through local credit providers or rural savings and credit groups. In the end, the economic viability of the solar pumps also depends on the buyers generating higher yields with the solar water pumps. Focussing on the highest return on investment, the project promotes solar water pumps for irrigation in horticulture farming (vegetables and pulses) and animal farming (water and fodder for animals) through training and education of small-holder farmers on best farming practices and application of solar water pumps.

#### INNOVATIVE PROJECT ELEMENTS

The project addresses barriers that hinder business and market growth for the private sector looking to promote clean energy access products. Of particular importance to the project is the cooperation with lead farmers, who provide their farms and water sources as the training and demonstration sites to stimulate demand for solar water pumps. The project further makes a targeted effort in a defined geographic space to expand local technical capacity, knowledge and understanding of one tested and proven solar-powered water pump technology and best practice in applying this technology to maximise benefits for smallholder farmers. Finally, through the integration of the local credit providers, the project also supports access to finance.

### **FURTHER INFORMATION**

www.gruene-buergerenergie.org

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