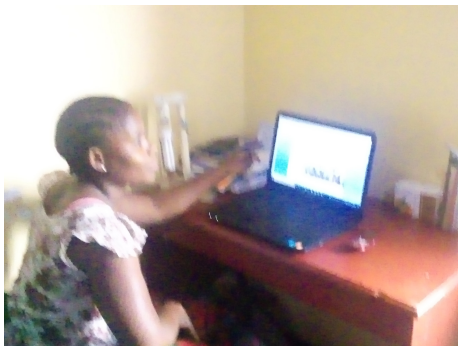
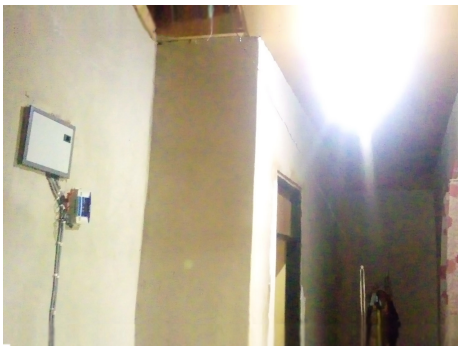
Kimaroroni Solar Home System

Why to choose this solution?
Kimaroroni is a sub village within Kwasadala village. Most of the residents are Masai and few are chagga. Agriculture and livestock keeping are main economic activities. Kimaroroni village is currently not connected to the national grid electricity though demands for electricity exist for lighting, powering basic home appliances and productive economic activities. Solar Home systems (SHS) are among other options installed to address electricity demand at household level. Almost all households around rely on solar power. Most of the SHS at Kimaroroni operates for about three to five hours a day.

Savings per day or production:
Savings of 1.0Lt. of kerosene per day for an ordinary family, which cost Tsh 3,000 per 1.0.Lt.

Cost in money and in own time to construct:
The solar cost TZS. 1,200,000/= The cost covers purchase of Battery, Inventor, Solar Panel, Electric wire ring / installation, lamps accessories etc . For this case, two solar panels one of 100 watts and the small solar panel 20 watts with amplifier are available

Lifetime:
10 -20 years but it depends on use

Maintenance needed:
Ensure safety of solar panel, battery and inventor as well as lightning system-bulbs replacement

Resources needed in use:
Enough Sun light energy

Problems and limits:
Electric short in case of misuse can happen. Unavailability of electric power once sunshine is not available and no battery to conserve energy

Where and how can you get it or make it?
The equipment were purchased from Sundar solar company and installation / fixing was done by an independent technicians. Solar panels and accessories are available all over Tanzania.

Skills needed to produce, install. maintenance, use:
Installation requires skilled person, short training required to be able to do maintenance

How to use it:
https://youtu.be/f-WXQPztdZ0

How to maintain it:
https://youtu.be/Anvgg2SenaE

Climate effect (if any):
Solar is a renewable source of energy and therefore no or negligible CO2 is released from the system.

Where it is used and how many users are there?
It is used in different parts of Tanzania. More than 10% of rural households rely on solar energy for lighting.

Why is it successful?
There is enough sun light. Also high demand for electricity especially in rural area where connection is still 24.5%.

If you can make it, a short description, typical problems, materials needed:
This technology requires a qualified technician to install it.

How to make it (if possible):
N/A

How is it delivered and by whom?
There are various solar system promoters/agents available in Tanzania where through them large percentage of the population have been sensitized. A good number of technicians have been trained, private sector has facilitated access to solar panel and associated accessories in many places of the country.

Successful financial model
Once initial cost has been settled, there is no monthly bills/payments for its use.

What policies and strategies helped the success?
National Energy Policy 2015 encourages diversification of energy sources; solar is among, Tax exemption on solar panels.

More info:
http://www.cetosudeorg.wixsite.com/cetosude

Sources:
Kimaroroni village/CETOSUDE

When was the case uploaded?
2022-03-30