# Parabolic Reflector Solar Cookers





**Why to choose this solution?**
Parabolic reflectors are among the most powerful solar cookers. They can be used for frying and fast cooking, and they complement other types of solar cookers that more suited for slow cooking. Like all solar cookers, there are no fuel costs or emissions from using it, and there are economic, health and environmental advantages particularly beneficial for women.

**Savings per day or production:**
Savings on wood fuel and charcoal.

**Cost in money and in own time to construct:**
It costs USh 700,000, (USD 195). No fuel cost.

**Lifetime:**
10-15 years with proper care.

**Maintenance needed:**
Wiping of the reflective material.

**Resources needed in use:**
Requires sunlight and cooking pots to use.

**Problems and limits:**
When there is no sun, it is intended to be integrated with cooking solutions that can work at night or during rains. It is generally more expensive than panel and box cookers, and requires more storage space.

**Where and how can you get it or make it?**
Available in stores in various villages. Solar Connect Association, Renewable Energy Centre, Bihaarwe, Masaka, Mbarara Road, Opposite Igongo Hotel, Mbarara, Uganda. T: +256 772 665 894, E: scacooking23@gmail.com

**Skills needed to produce, install. maintenance, use:**

**How to use it:**
The cookers come with assembly instructions. Training on how to use them is recommended. Proper safety

such as sun glasses/sun protection and hot pads are recommended. Set matte-black cookware on pot stand. Point the cooker to the sun to collect and concentrate sunlight onto the cook pot. When cooking longer period, the cookers needs to be periodically reorientated towards the sun.

**How to maintain it:**

**Climate effect (if any):**
Solar cookers produce no polluting gas and carbon emission, and there is reduced deforestation in the region.

**Where it is used and how many users are there?**

**Why is it successful?**
The cooking time is fast, like traditional stovetops. High temperatures (120â€“230 Â°C) allow for food to be fried, grilled, and boiled. There is no need of collecting or buying fuelwood. With its safe design, the cooker can be used over many years. The cost is low compared to the expense one would otherwise spend on firewood and/or charcoal as cooking fuel over time.

**If you can make it, a short description, typical problems, materials needed:**

**How to make it (if possible):**

**How is it delivered and by whom?**

**Successful financial model**
Several organisations have provided seed funding for Solar Connect Association (SCA) to promote, produce and market different types of solar cookers since 1994, which resulted to a market expansion. SCA produces different models of solar cookers, but the parabolic cooker is traded from China. SCAâ€™s fulltime employees are mostly women and include village women marketers who are trusted in their communities. They raise awareness through demonstrations and help SCA to generate revenue from sales that covers all expenses, which is reinvested to grow the business.

**What policies and strategies helped the success?**

**More info:**
https://solarcooking.fandom.com/wiki/Category:Parabolic_solar_cooker_designs, https://solarcooking.fandom.com/wiki/Solar_Connect_Association

**Sources:**
Solar Connect Association, Renewable Energy Centre, Bihaarwe, Masaka, Mbarara Road, Opposite Igongo Hotel, Mbarara, Uganda. T: +256 772 665 894, E-mail: scacooking23@gmail.com

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