

Solar Cookers

Eco Tech
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Introduction of our works

- Legally a limited corporation, but the concept is more like a 'workers co-op'.
- A workers co-op (workers cooperative) is an entity where the workers jointly fund and operate by themselves
- People oriented projects
 - More emphasis on environment and releasing social burden, than profit
- Social helpfulness
- Working with a mission, a new style of work



The Businesses of Eco Tech

- **Sales and Construction of natural energy related systems and hardware:** solar energy systems, solar power water heater, solar cooker, micro wind power generator, Morzine water pumping windmills, Bio gas plants.
- **Sales and Construction of Housing related systems and hardware:** rainwater utilizing systems, rainwater tanks, solar heat storage, Izena convector floor heating, wooden pellet stoves, Ishii method septic tanks



What is a Solar Cooker?

- A solar cooker is a cooking device utilizing solar power
- An estimated 500,000 is used worldwide; NGOs are working to spread this in India, China and others.
- UNICEF estimates that 200,000,000 Solar Cookers can potentially be spread worldwide



Significance of Solar Cookers (1)

- Contributes to prevention of Global Warming
- Contributes to slowdown of deforestation and lack of fuel wood

According to estimations of UNICEF, use of Solar cookers can reduce 36% of world's fuel wood use, and prevent 35 million tons of wood from being used.

- Contributes to Health

Solar heated water at 65 degrees can prevent most of water borne diseases where 80% is caused by contaminated water; Also prevents inhale of smoke from the wood fuels.



Significance of Solar Cookers (2)

- Generation of Time

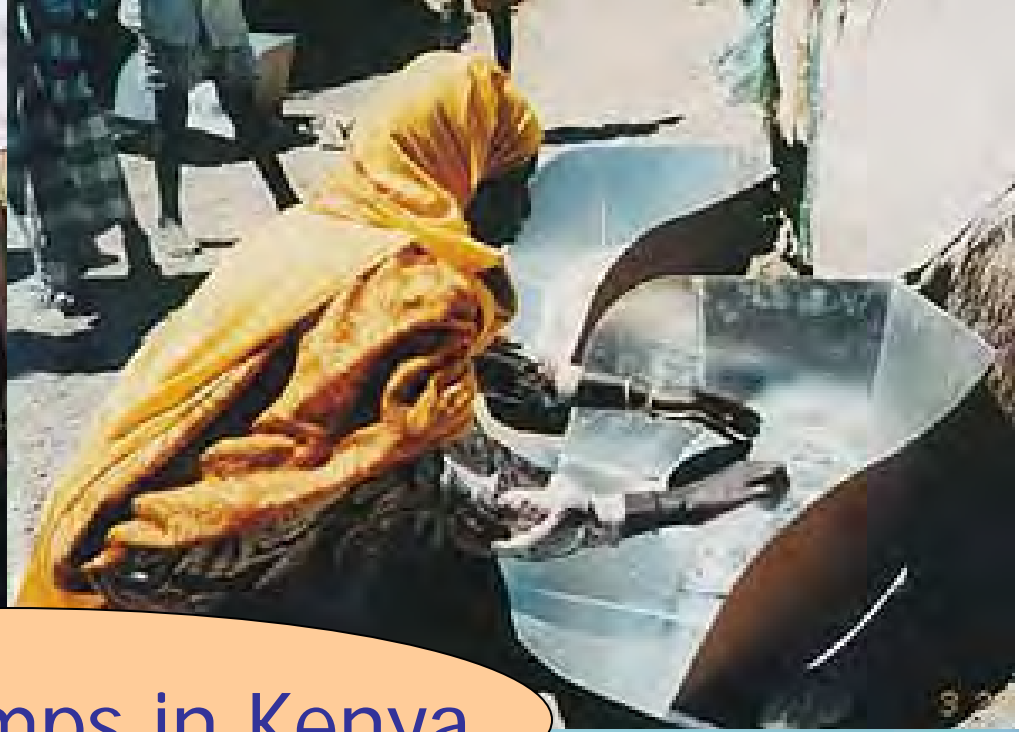
Releases women and children from hard work and time consumed for firewood collection and maintaining the fire

- Contributes to addressing Income Gaps

Solar cookers are low cost solutions; Used cardboard boxes which could easily sustain for several years (some 10 years) , and save on fuel cost: which helps low income households spend more on other necessities.

- Environment Education

Solar cookers are used in environment education classes in developed countries



Refugee Camps in Kenya





Nepal
Solar Cookers made out of
Bamboo baskets



Solar Cookers constructed in a high school for girls in Afghanistan by a German NGO



At the refugee sites of Haiti





Jammu Kashmir, India

Temperature
rises up to
400c

A village 100% run
on solar cookers
(run by July Ladakh,
NGO)





Various Types of Solar Cookers

- **Hot Box Type**

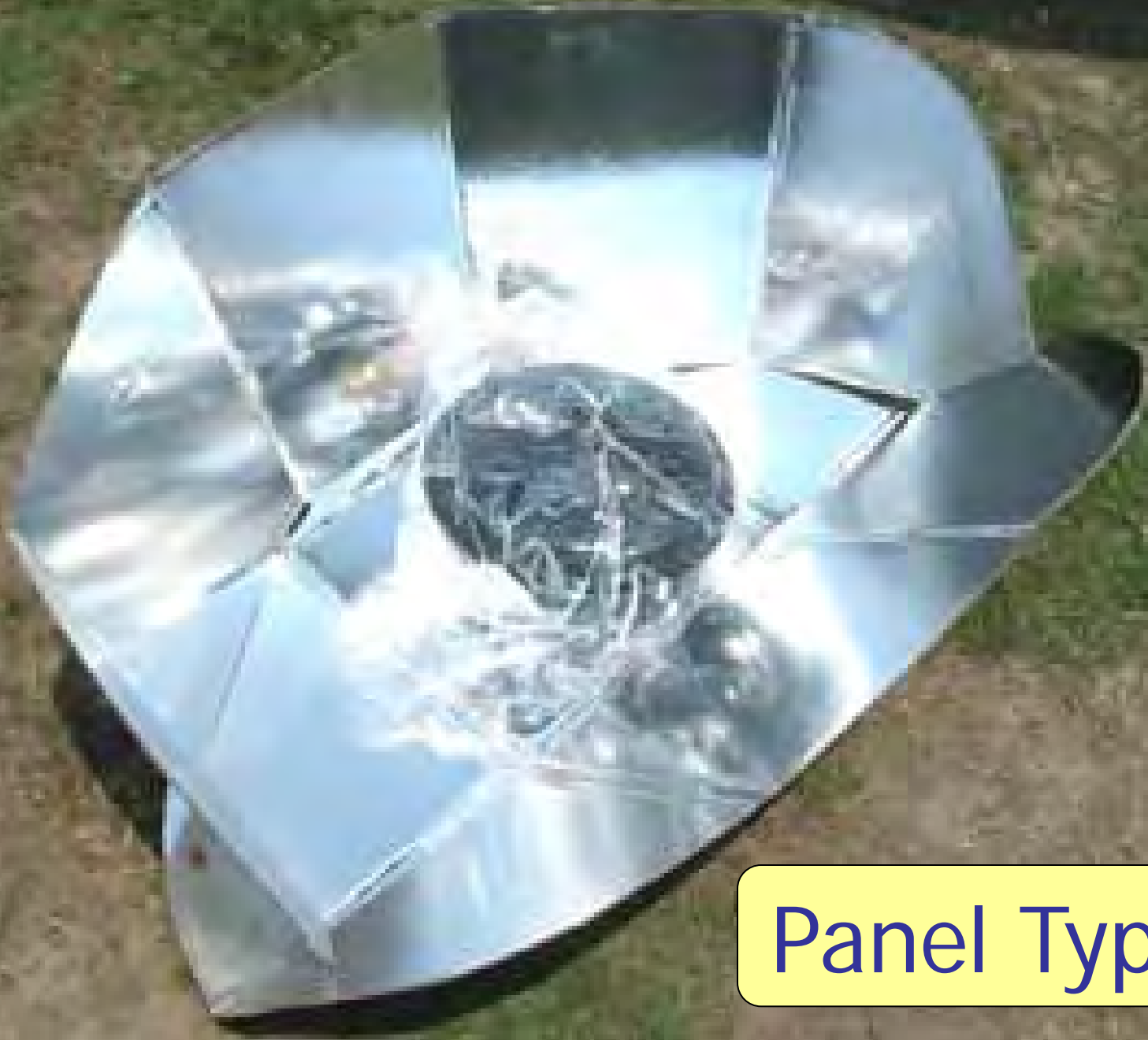
Raises temperature by collecting sunlight. Suitable for hot pots; mid to high temperature. Also called solar ovens.

- **Parabola Type**

Heats the bottom of the pot by reflection of sunlight. Enables high temperature in short time.

- **Panel Type**

A Combined type, having features of both Hot Box Type and Parabola Type. Simple structure and low cost.



Panel Type

Hot Box Type



Eco Box Solar Oven

- *Materials: Sunlight collecting board (cardboard with Aluminum sheet)
- *Lid: Transparent Polycarbonate
- *Size: 500 × 500 × 480
- *Weight: 860g
- *Storage: Foldable
- *Retail Price: US \$ 33 (incl.tax)
- *Optional Stand: US \$ 21
- *Manufactured by: Shizenokaze

Parabola Type

'Karupika'

Materials :

Reflecting Mirror

(Aluminum vapor high reflecting panel board)

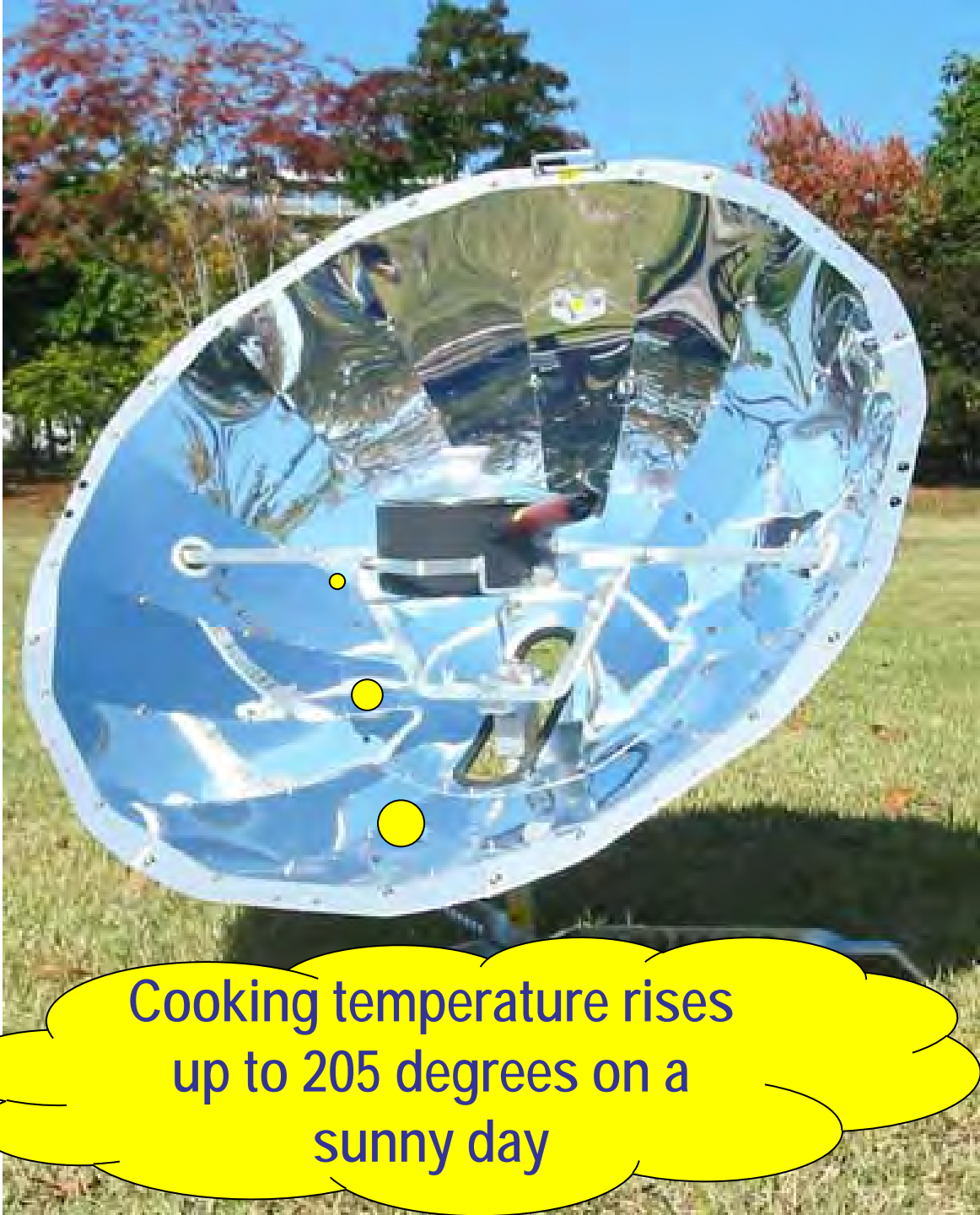
Size : Parabola diameter
800 mm

Weight : 3.08kg

Manufacturer :

Kobo Amane

Retail Price : US\$327



Cooking temperature rises
up to 205 degrees on a
sunny day



Parabola Type



Sunny Cooker

Foldable Type

Time for assembly: 5-10 minutes

Retail Price: US\$432 (incl.tax)

Manufacturer: Ogawa Crown

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黒ケトル付

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鍋等を乗せます。

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します。

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固定します。

支柱
反射クロスを三脚に
取り付けます。

三脚
安定して反射クロス
を自立させます。

[総重量] 約**3.5**(kg)

[梱包容積] **305×820×120**(mm)

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