

Third International Conference **CONSOLFOOD2020**
Advances in Solar Thermal Food Processing

22-23-24 January 2020

INSTITUTE OF ENGINEERING; UNIVERSITY OF ALGARVE; CAMPUS DA PENHA; FARO-PORTUGAL

Promoting Solar Cooking in Northern Sri Lanka

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**SF Innovations
York, UK**

Traditional cooking in low income household



Stage 1: Identify most appropriate cooker

	Parabolic	Panel	Box
Cost	High	Low	Medium
Useful life	Long	Short	Medium
Can it be built locally?	No	Yes	Yes
Heat trap	Required	Required	Built in
Speed	Fast	Slow	Slow
Follow the sun	Every 15 min.	Every 2 hours	Every 2 hours

Solar Box Cooker



Stage 2: Identify Local partner to make Solar Cookers

Criteria

Established charity

Some previous experience of Solar Cooking

Access to local craftsmen to make the cooker

Good contacts

EMACE Foundation met these requirements

Stage 3: Reach Agreement

Main terms

We fund the building of 50 Solar Box cookers

EMACE

Make them locally providing employment

Provide suitable training material

Demonstrate them to suitable organisations

Provide training to end users

Review and feedback on project after 6 months

Stage 4: Manufacture



Stage 4: Serial numbered for tracing



Stage 4: Testing



Stage 4: Local demo



Stage 5: Distribution



Stage 6: Training at a youth leadership course



Stage 6: Training after a church service



Stage 6: Training at an empowerment workshop



Stage 6: Training at local village council



Project review

- **Participants were impressed with results**
- **Positive about**
 - **Drying spices and leaves for medicinal purposes**
 - **Using for baking**
- **Unless encouraged, participants will revert to traditional methods**
- **Estimated take up less than 10% after 1 year**

Possible way ahead

- **Build and promote solar powered dryer**
- **Support a local entrepreneur as a solar power champion**
- **Establish a local 'solar power research hub'**