

Mfuwe Solar Cooker Workshop Report May 2009

The NGO SunFire Solutions, supported by a donation from the Solar Health & Education Project (SHEP) conducted a Solar Cooking workshop in Mfuwe, Zambia from the 18th to 21st of May 2009.

Workshop Objectives,

The Objectives of the Workshop were to sensitize Mfuwe Villagers to Solar Cooker technology and train them to cook with the sun and to introduce the Solar Parabolic Cooker

The Workshop covered important aspects such as

1. Training method of solar cooking and use of a parabolic cooker (provided by SunFire)
2. Correct usage of Parabolic Cooker
3. Demonstrations of how to cook traditional meals at different times of day
4. Correct storage and safe use of Solar/ Parabolic Cookers in rural village settings
5. The importance of boiling harvested water to maintain good health
6. The dangers of indoor air pollution from wood fires in huts and its effects on babies, children and the elderly
7. The importance of Solar Cookers for improving health and nutrition and as a tool to reduce deforestation and harvesting wood illegally
8. How to make and use in conjunction with Solar Cookers the hot basket or the retained heat cooker

Workshop Training Program

Day 1

Register attendees

Participants to discuss objectives and expectations of the workshop

Assembly of donated SunFire14 (SF14) Parabolic Cookers

Lunch food prep for solar cooked lunch

Solar Lunch

Leaders teach how to use a Parabolic Cooker

Leaders teach drinking water purification using the sun

Preparation of evening meal to be cooked in the afternoon sun

Correct storage options of cooker when not in use

Day 2

Role call and Assembly with prayers and thanks

Cooking Breakfast (eggs and Pap) with parabolic SF14

Prep of lunch food to be solar cooked

Discussion and questions on solar cooking

Lunch

Gathering and Preparation of materials for retained Heat Cooker
Constructing Retained Heat Cookers
Cook evening meal with the afternoon sun in the parabolic

Day 3

Visit village households with Solar Cookers
Boil water with each family and show retained Heat Cooker designs
Demonstrate how the retained heat cookers work in conjunction with Solar Cookers
What materials can be used to make them (common thatch grass which is plentiful in this area)

Solar Lunch

Participants cook a meal of their choice for the evening
Final demonstration on correct usage, and how to store a parabolic
Project managers are appointed/elected for "follow up" reporting

Workshop finishes with prayers and thanks

The SHEP funded Workshop was centred on a traditional village just outside the Game reserve concentrating on 9 different households.

The venue was in a house of one of the villagers that took part in the workshop. There were at least 30 participants – below are the names of the heads of the nine households that received donations of SF14 Cookers from Sunfire Solutions

Comments from the households

Mrs Lucky, "The Cookers are very useful and will help us a lot by reducing our need for firewood"

Mrs Jere "Thank you for painting our pots black so that they work better"

Mrs Mathias, "Please bring more cookers. This is a brilliant project"

Miss Upe "They are very useful for our community, thank you"

Mrs Sembele "Cookers were previously shared, now that we can make our own it will be much easier"

Mrs Musa "Some of us are very old and in charge of orphans and extended families. The solar cookers really help to make our lives easier"

Yoram Ndhlovu, "This project is beneficial for all of us, thank you"

Isaac Upe "This project is great and will really make a difference in our village and to Zambia as a whole when it spreads"

Isaac's sons " This project means good opportunity for healthier food and healthier children as it is smokeless and without dangerous ashes

Immediate Outcome of the Workshop

- All participants are now trained on how to use their Solar Cookers for boiling water AND for cooking at different times during the day
- There is greater general awareness, understanding and support for the Solar cooking's aims and objectives
- Reduced chances of human / wildlife encounters as collecting firewood is not necessary on sunny days
- Children are able to attend school more often as less time is taken from their schooling in collecting firewood.
- Sun Fire, after the SHEP workshop, has donated 31 Parabolic Solar Cookers to be installed in the surrounding villages when more people are trained by the recent trainees
- Isaac and his sons were appointed project managers and have learned how to monitor the stove's use in households: recording successes and assisting with problems
- The Mfuwe Solar Workshop will be presented as a success story at the World Solar Conference in Johannesburg in October 2009 (Director NGO Sunfire Crosby Menzies presenting)

Budget

The NGO SunFire Solutions was given \$1000 U.S. Dollars by SHEP for the training workshop. This translated into 5 million kwacha in local currency but this report is in dollars.

Below please find a break down of expenses.

- \$ 200 - Transport of leaders and participants to and from Mfuwe workshop villages
- \$ 400 - Stipend for workshop leaders and follow up for 6 months
- \$ 200 - Meals and costs for food to cook for participants /with households for 3 days.
- \$ 100 - Venues for Workshop and accommodations for leaders
- \$ 100 - Sundry costs, including training materials for participants, photographs, teaching aids, paint and lids.

Conclusion

The Mfuwe Solar Cooker project is pioneering a model for National Game Reserves with communities living in villages at the boundaries of the reserves. It sets the pace for other Game Reserves to follow to insure the safety of the villagers and the need to stop cutting firewood needed for wildlife habitats. New for solar workshops is selecting a local trainee to act a follow up manager for the newly trained cooks. This is important for the project to continue as a self-help initiative.

We found that this was the single biggest barrier to Solar Cookers acceptance in the village. Thanks to the grant from SHEP we have been able to overcome this difficulty. It would not have been possible to establish this project, as successfully without the donation from SHEP to hold the all-important workshop so the people could fully understand all facets of solar cooking.

We hope we can continue to count on SHEP's support as the demand for workshops increases with the spreading of the news of the Mfuwe workshop.

Reported by

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