

Solar Cooker Report Mauritania April 2014

Solar Clutch has teamed up with Lutheran World Federation to introduce solar cooking to refugees entering Mauritania from the civil unrest in Mali. The influx of refugees from the crisis in Mali has



intensified the need for an alternative cooking method. Efficient cook stoves are also being implemented as well as the new technology of solar cooking.

A group of 10 trainers made up of 6 women and 4 men were trained in the basic mythology of solar cooking and how to retrain others. We demonstrated how to set up cookers and the various hindrances to solar cooking. Social uptake by the local people was a significant topic of discussion as much of the success of solar cooking rests in this area. Issues of large families as well as cooking methodology are the main deterrents that must be overcome in this technology for it to be accepted in rural areas. Refugee and IDP camps are much better locations for positive uptake since the people are in crisis and open to try new things and change old cooking habits. The students were acutely aware of the need for an alternative cooking method and the problems of social acceptance so they will be working on these issues in the days ahead.



The test was to see if we could cook local Mauritanian food. Beef was prepared in one pot in chunks, ground beef in another pot with spices, chicken in another, fish in a third. A pot of vegetable sauce was prepared Mauritanian style with all the proper spices to make it tasty. Hands on practical teaching is the best way to learn and to teach others in the rural areas. Since most of the refugees cannot read this “show and tell” method of teaching works the best.

Now if we just sat and watch the food we will definitely be wasting our time so it is crucial to do something interactive during the cooking period. Each of the students took a turn teaching the rest of us as if we were in the village or camp. Soon their natural talent for play acting took over and they began to act out the drama between husband and wife that would ensue when the wife became freed up to leave her food unattended in the solar cooker. We all laughed and enjoyed our teaching time and reinforcement of the material because these students did such a wonderful job of entering fully into the subject at hand. An hour and half into the training time we stopped to check on the food. We found the rice, couscous, spaghetti, fish, and ground beef were already finished cooking. The larger portions of food we knew needed more time to become well cooked and tender so we reoriented the cookers and closed them up for another 1.5 hours.

In addition to teaching and re-teaching the material we made a local cooker out of a cardboard box, glue and aluminum foil. The students proudly took their picture with it and set it up to heat water. We also tested a locally produced plastic bag to see if it would withstand the heat of a cooking pot. Success came on all sides. The local bag withstood the heat very well so now we have a potential local source of cooking bags. Also the food all came out well cooked and tender. We fed 17 people and had food to spare. One of the chauffeurs said this was the best tasting food he has eaten. I am sure our lady cooks are top notch chefs as well as the fact that the lower cooking heat of the solar oven preserves more of the original flavor of the food hence the better flavor.

We spent some time evaluating each of the foods and what was done correctly and what changes we might want to do in the future. Over the week end each of the students will take home a cooker and supplies to cook on their own. Sunday when we return to start again we will see what they were able to accomplish. On Sunday we plan to cook cakes and yeast bread.

On Saturday we did a visit to the local cardboard/carton factory where sheets of the basic cardboard can be purchased to make local cookers. Pricing varies but material is available to make cookers. Good quality aluminum foil was located in the local supermarkets and came from the United Arab Emirates.

So it is possible to produce local cookers from readily available material.

On Sunday we focused on baking. We baked two cakes from mixes found in the supermarkets. We also baked bread and a pizza. We tested the cakes using different amounts of water to see what the results would be. The cake with less water cooked more quickly but expanded less. The other cake was moist and came out well done although it took an extra 30



Mauritanian Pizza!!!



min of cooking. The bread needed to rise more and the students confessed to each other that no one had ever baked bread before so that lack of experience affected the results. The bread was cooked but was not fluffy and expanded. This is why it is important to practice before trying to demonstrate out in the rural areas. The pizza came out beautifully done and the dough was tender....better in fact than the pizza we had eaten from the bakery for lunch!

The students shared their week end success with solar cooking and/or lack of success at home. Some actually brought samples of food they had cooked the day before. One lady had cooked camel meat and after 4 hours it was very well done. Normally cooking camel meat takes a very long time and consumes a lot of wood. So all in all the group did very well taking this technology home and putting it into practice.

After a month or two of practice the students will focus on three areas of the country where the need is great for solar cooking. They will have to adapt the cooking to the foods and social demands of the local people.

This has been a very successful training and I am confident that they will continue to advance this technology in Mauritania. It may take a few years for it to be accepted but the conditions are right for this to happen.

I wish them all the best and hope to continue our co-operation in this effort.

Steve Harrigan

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