USE OF THE COOKIT BY HANDICAPPED WOMEN IN MALI

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ABSTRACT

Information is given on the use of a simple solar cooker, the CooKit, by physically handicapped women in Bamako, capital of the Republic of Mali. They are all members of AMAFH (Association Malienne des Femmes Handicapées), a well organized association.

In total 140 of these women, many of them polio victims, followed one of the four 2-day CooKit trainings. At the end of the course all participants received a CooKit with pot. They like to use the CooKit and after some months they expressed their wish to obtain a second one. When this paper went to the press, preparations had started to organize a CooKit training for 18 blind members, at their request.

Keywords: CooKit, physically handicapped women, Mali

1. INTRODUCTION

The KoZon Foundation works mainly South of the Sahara in francophone Sahelian countries (Burkina Faso, Mali, Niger, Chad) where 95% of the population cooks their food on a wood fire. In Mali we are cooperating with the AFIMA (Association des Femmes Ingénieurs du Mali) since 2001. One of the objectives of this association is to show and demonstrate the CooKit in different regions of the country to explain that solar energy can be employed for cooking. All activities are supported by making use of publicity through television and radio. Through this publicity members of the AMAFH learned of the CooKit and thought that it might well be a handy tool for them. To try this out Handicap International financed a training for 20 of them. The outcome was positive and, at the suggestion of AFIMA, a meeting was organized in December 2004 with a representative of KoZon, who happened to be in Bamako at the time. It was proposed that three 2-day trainings, for 40 members each, would be organized by the AMAFH, financed by KoZon. The result was that before the rainy season, which started in June, 140 members of AMAFH had been trained in using the CooKit and all of them had received one CooKit for free to use at home (Fig. 3 and 4).

2. THE COOKIT



Fig.1 CooKit with pot in a plastic bag

The Solar CooKit (Fig.1) was developed by Roger Bernard (Fr) and SCI (Solar Cookers International). It is a panel cooker made of a piece of cardboard (120 x 91 cm) covered with aluminium foil. It is put together into a shell-like shape and, orientated to the sun, it can cook the contents of a black pot which is enclosed in a high-temperature plastic bag.

Why does KoZon work with the CooKit?

- 1) it is the cheapest available solar cooker known so far in Africa, pot and plastic bag included it costs somewhere in the range of 10 to 15 US\$, depending on where it is made;
- 2) it is light and foldable and when not in use takes hardly any room;
- 3) KoZon distributes it in a cotton bag, so when stored, it can hang on the wall or from the rafters (against termites);

- 4) except for frying, with a good sun everything can be cooked or baked in it;
- 5) food does not burn in the CooKit;
- 6) orienting it every 15 minutes is not necessary;
- 7) it is easy to copy.

In the four countries where KoZon has started projects the CooKits are made locally by hand. In Mali this is done by a group of five members of the AFIMA.

The content of the pot in the CooKit can be 5 litre or less. In the Sahel countries women always ask if the CooKit could be enlarged so they can use their much larger cooking pots. Regrettably this is not feasible because the enlargement of the reflective surface would have to be exponential. Even the parabolic and the papillon cookers, although taking much bigger pots than the CooKit, have their limits. Box-cookers need smaller pots as well although they can take two and can also be used as an oven for open dishes. The only thing that we can advise concerning the CooKit is to use more than one.



Fig.2 pot carried in high-temperature plastic bag, CooKits in the background

3. TRAINING

The four training sessions were given by two members of AFIMA. The first day they showed how to prepare the food and put it in the CooKit. While the sun did its work they demonstrated how to open and fold it, gave details why the pot was painted black and why a high-temperature plastic bag had to be used. The AFIMA always ties the bag on top of the pot. For handicapped women this makes it easier to carry (Fig.2), although hard on the plastic. However the bags are reasonably strong and can be replaced so this should not be a real problem.

The trainers explained what kind of food could be cooked in the CooKit, and how to prepare it for solar cooking. The AFIMA slogan is: "cooking in a piece of cardboard, you have to see it to believe it" and those who had not yet seen it before could indeed not believe their eyes when the pots were opened. It was also very much appreciated that it is possible to prepare in the CooKit the extremely strong and sweet tea which people drink in Mali.

The second day the participants did the solar cooking themselves and were thrilled that it worked.

4. THE WEATHER

It was lucky that during the CooKit training days: "le soleil était au rendez-vous" (the sun was present) because unfortunately in the Sahel solar radiation is sometimes tempered by a dry dusty fog. For solar cooking a blue sky, with at most some sailing clouds, is necessary. Even at high temperatures, > 42° C, without a blue sky solar cooking is too slow to trust that the food will be done. Except for heating water where it does not matter how hot it gets. This is also why in these regions, where people often live for less than a dollar a day, women hesitate to spend the little money they have on a tool that is depending on sunshine and cannot always be used when needed.

During the rainy season July-September solar cooking is often not practicable, especially in the CooKit made of cardboard.

5. <u>IMPORTANCE OF A GOOD PARTNER</u> ORGANIZATION

The AMAFH, created in 1994, is directed by a board of ten members. Only women with a handicap can be members of the association irrespective of their religion or ethnic group. AMAFH recognizes that there are a lot of prejudices in the traditional societies in Mali which are unfavourable for the emancipation of handicapped

women. These women/girls often stay at home without any possibility to go to school or find work. Parents (which can be father, mother, sisters, brothers, uncles, aunts) of these handicapped women cannot always find a husband for them. So their life is not an easy one within the extended families. The main objectives of AMAFH are to improve the living conditions of their members, help them in finding schooling or work, to make them autonomous in their social and economic context.

The president of the board is a dynamic woman, moving around in a wheel chair or in her chauffeur driven car. She is well educated, runs a cybercafé and wants to better the lives of her handicapped sisters who don't have the possibilities she has. The AMAFH board is quick in administration matters and correspondence, a project proposal is written within a week, and after a training the narrative and financial reports are ready in a few days and sent to KoZon. Because of these fast actions we were able to find a donor rather quickly and the trainings asked for in December 2004 were all finished and reported by June 2005.

There came new requests of blind and deaf members for a solar cooking training.

For the 18 blind members of AMAFH we found a Dutch institute for blind and partially sighted persons, which accepted to finance a CooKit training provided that 2 days, also financed by them, should be added and be focussed explicitly on ways for the participants to find work or income generating activities. This fits flawlessly the objectives of AMAFH.

6. OPINION OF AMAFH MEMBERS ON THE COOKIT

The handicapped women said that one of the advantages of the Cookit is that they don't have to move so much when working with it. Some put the CooKit on a table to increase accessibility. Others who can move more easily place it on the ground as was done during the training. There is no risk of burns or accidentally causing a fire which might happen when preparing food on a wood or charcoal fire. Only a very few have the means to cook with gas. The food in the CooKit does not get burnt and they can do other activities while the sun does the cooking. They also like that, even as handicapped women, they are helping to preserve the environment. Cooking with the CooKit, preparing "sauces" or other dishes, gives them the feeling of some autonomy in regard of their family members. Some of them prepare small dishes to please their husbands (chicken, meat, eggs, and cakes).

During the monthly general meetings of AMAFH, members who have been trained tell about the way they use the CooKit and the different dishes they have prepared, ideas are exchanged.

7. REQUEST FOR A SECOND COOKIT

Questions about the possibility to obtain a second CooKit came up several months after the first trainings. The idea was that they could cook rice in one and "sauce" in the other. Also if they sell something, like hardboiled eggs, they can prepare a lot more besides not having to buy firewood or charcoal. In Bamako the AFIMA sells the CooKit plus pot for 7500 Fcfa (~14 US\$ 1), upcountry they sell it for 5000 Fcfa (~ 9 US\$). KoZon informed AMAFH that we would subsidize the second CooKit and asked if members would be able to pay 2500 Fcfa (~ 4.5 US\$), but only 35 said they could pay that sum. In a developed country this is barely credible, but it is the reality. Poorer women who prepare food for often more than ten persons, get daily from their husbands about 1000 Fcfa (~ 2US\$) to buy ingredients and firewood. If they save a few Fcfa's (5 or 10 or may be even 25) they may keep them. They spend this on locally made



Fig.3 Happy girl with her CooKit

cosmetics and other little things and one can easily understand that 2500 is nearly impossible to save in this way. The president of AMAFH wrote me: You know, in Mali women in general are poor and the handicapped women are the poorest among the poor (*Tu sais au Mali les femmes sont pauvres en général et les femmes handicapées sont les plus pauvres parmi les pauvres*).

After some deliberations the members of AMAFH who wished to possess a second CooKit said that they might be able to save and pay 1500 Fcfa (~ 3US\$). AFIMA graciously agreed to sell these CooKits for the upcountry price of 5000 Fcfa. KoZon happened to receive 2 donations from persons celebrating a jubilee and could use this money to pay the difference of 3500 Fcfa (~ 6US\$). So in the end all the 140 participants of the trainings had a chance to obtain a second CooKit.

In the project budget for the blind members 2 CooKits are already included and KoZon will propose in our future projects to do the same.

8. CONCLUSION

Apparently the Cookit has been accepted by the handicapped women as being a useful tool.

Next question is to find out if the CooKit is really adopted. This would mean that it has become a fixed tool in the households and, weather permitting, solar cooking is included in the daily planning.

An answer to this question could be given when some months (October/November 2006) after the 2nd rainy season an evaluation of the use of the CooKit by the participants of the trainings would be carried out. Because it is well known that after a period when one cannot do a certain activity it needs an extra impulse to integrate it again in the list of daily household chores. If such an evaluation would give positive answers from the members of AMAFH it would mean that they really would have adopted the CooKit.



Fig.4 after training all participants received a cotton bag with a folded CooKit, a thermoresistant plastic bag and a black painted pot

(1) 1US\$ ~ 550 Fcfa

The pictures were made in Bamako by a paid photographer for AMAFH and adapted to this article by the author.