

SOLAR COOKING IN EUROPE – WHY AND HOW ?

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ABSTRACT

Many Europeans have an undifferentiated picture of solar cooking in southern countries. GloboSol is trying to inform people and consult projects in a more realistic manner. Solar cooking in Europe is promoted for credibility and solidarity. It can give this technology a modern reputation which helps its acceptance by poor populations.

We present promotional activities like the participation of the 'crêperie solaire' at festivals and fairs, a one month project in a yurt in the Swiss mountains and the development of new cookers. This last activity aims at winning new groups of clients other than ecologists and people related to projects in southern countries.

Keywords: GloboSol, ULOG, Africa, Europe, box cookers, crêperie solaire

1. INTRODUCTION

For more than 20 years, the association GloboSol and its 'active unit', the ULOG group, have been promoting solar cooking in poor countries as well as in Europe. This double strategy is based on the initial experience of Mr. Ulrich Oehler, ULOG's founder, who realized that he was not being credible by promoting a tool in Botswana (the box cooker of a Canadian teacher) when he himself did not use it back home. After returning to Switzerland, he designed the series of ULOG box cookers and he started using them in his everyday life. Since then, the ULOG models became the standard for handmade box cookers; they have been copied thousands of times all over the planet.

The members of the ULOG group and GloboSol still follow the ideas of Mr. Oehler. They promote solar cooking, consult a large number of people who are setting up solar cooking projects, and try to integrate simple solar technologies in their own lives ("live what you preach").

2. THE SUN ALWAYS SHINES IN AFRICA

In our promotion work, we are often confronted with Europeans who have a rather undifferentiated picture of Africa (1). A typical opinion would be: "Wow, these solar cookers are great for the Africans. They have so much sun and they have a lot of time, too... We have to show them how to save their last trees using solar cookers." This undifferentiated picture, combined with a bad conscience about our lifestyle in the industrialized countries, has led to many poorly organized microprojects which were all too often closer to 'development tourism' than to actual help. Why is it that we so easily find ecological solutions for the **others** while we have difficulties turning **our own** lifestyle sustainable ?

It is part of our information work to show a more realistic picture of solar cooking and Africa: Africa is a huge continent with different climatic zones, different cooking habits and meals, different types of organization of the family life and different family sizes as well. In every place and situation, the compatibility of solar cooking with local circumstances has to be checked and the optimum cooker for the local environment has to be found.

We also stress the point that every project has to be seriously prepared and that learning to build and – much more important – to cook with the promoted tools are most important for the **credibility** of a project.

Nevertheless, we are convinced that solar cooking is great for many southern countries. This conviction is based on our cooking experience of many years in different countries. There is also a geographical correlation: Dry areas with a big problem of deforestation are also the more sunny areas of this planet.

3. WHY SOLAR COOKING IN EUROPE

What we try to avoid is a 'one way' thinking, where we know what is best for **them** while we are unable to organize our own life in a sustainable manner. This has two consequences:

- 1.) When we work in a foreign country, we look for a real collaboration based on friendship.
- 2.) We promote solar cooking in our own countries as well.

Even though the average number of sunshine hours is lower in central Europe than in many parts of Africa, solar cooking is easily possible during many days of the year. Solar cooking in Europe:

- is a sign of solidarity with poor countries,
- shows the will to make an effort on our side as well,
- is a way of using solar energy which is affordable for about everybody,
- teaches us to observe the weather and nature,
- is excellent for interdisciplinary school projects,
- and finally – it is fun ! There is no simpler way of cooking.

In many projects, solar cooking is presented as a *tool for the poor* to enhance the quality of their lives. As we should understand, poor people do not dream of poor people's tools, but of anything related to the rich people's lives. If we use solar cookers in Europe, we help to give these instruments a good and modern reputation. Something coming from Europe is seen as worth copying and accepting.

The best way to promote solar cooking and to enhance its reputation is therefore to cook in a visible manner. There is no better publicity than a cooker on a balcony or in front of the house in the street with an irresistible aroma.

4. EXAMPLES OF PROMOTION IN EUROPE

Three activities to promote solar cooking in Europe shall be presented; other examples are the information center, the regular construction workshops or the website.

4.1 Solar pancake shop

One strategy is not to wait until the public finds our association, but to go to meet people at fairs and festivals. Since 1997, GloboSol has had a kitchen trailer for cooking demonstrations (ref. 2 and fig. 1). It is equipped with two Scheffler parabolic cookers, one box cooker, a haybox, a kitchen sink and standard kitchen tools. Most of the time, this mobile kitchen is used as 'crêperie solaire' ('solar pancake shop'). The sales of the pancakes help cover the cost of these promotional events.

The advantage of the trailer as compared to the exhibition of boxes is that is 'big & shiny', it is well visible in a fair with many stalls and visitors. Under

perfect sunshine condition, 30 pancakes per hour can be baked. One of the Scheffler cookers is equipped with a phase-change heat storage element (3). This allows continued selling of pancakes during the passage of a cloud or in the late afternoon when the sun is weakening.

We have been using the 'crêperie solaire' at music festivals with up to 30'000 visitors, at ecological fairs and we regularly use the kitchen to feed 25 hungry adolescents during youth camps of Greenpeace (all meals).

4.2 The yurt project

For the second time, the 'Centre Neuchâtelois de cuisine solaire' (4) was transformed into a 'Centre *Nomade* de cuisine solaire' (nomadic solar cooking center). For one month (between May and June 2006), it moved to a yurt in Martigny in the Swiss mountains. The construction of solar box cookers and fruit dryers is taught in open-air workshops (fig. 2). People are invited to pass at any time to see the cookers and ask questions, all in a relaxed environment. Special events about solar hot water systems, a solar barbecue party, a documentary movie night, etc., and offers for school-kids complete the program.

This 'mois solaire' (solar month) is organised in collaboration with the local 'Centre de culture et de loisir' (center of culture and leisure) and an association working with yurts.

4.3 Special cookers for Europe

The people using solar cookers in Europe normally belong to two groups. They are either ecologically minded or related to development projects. In order to approach other groups of people, we continue developing new cookers, specially for travellers and campers. These cookers are more lightweight. Their design is distinguished from the classical wooden boxes by using more 'fancy' materials and colors, while staying ecologically friendly.

The first product, a 5 kg box cooker with an outer shell of resistant nylon cloth is already on the market (ULOG light, fig. 3). It weighs 4kg less than its wooden equivalent, which makes it handy for carrying around or transporting by bicycle.

Still more demanding are cookers for travellers and backpackers, because even 5kg are too much if you have to carry them for a long time on your back. We are therefore developing – sponsored by the Swiss Federal Office of Energy – a foldable and lightweight solar cooker (ref. 5 and fig. 4). Its total weight is less than 2kg and includes the cooking pot. It cooks a meal for 2 people in about an hour.

Currently, a pre-series of 30 cookers is being tested by travellers. Their experience will allow final changes

before the beginning of regular sales at Christmas 2006.

5. CONCLUSION

If solar cookers are promoted as a poor people's tool, they will not be accepted in poor countries. In order to give them a modern reputation and to be more credible, we have to integrate solar cooking in our everyday life in Europe as well. GloboSol will continue its double strategy of leading or consulting projects in the south and promoting solar cooking in Europe. The 'crêperie solaire' and the development of new models for camping and backpacking have to be continued.

6. REFERENCES

- (1) In this paper 'Africa' stands as an example for 'southern countries'. Similar experiences could be reported in relation with Latin America or Asia.
- (2) Michael Götz, 'The 'solar crêperie' - Promotion of Solar Cooking by Selling Pancakes', Paper presented at the 'Encuentro Solar 2002' in Benicarlo, Spain in June 2002
- (3) Michael Götz, 'Liquid Tin Heat Storage for Scheffler Parabolic Cookers', Paper presented at the 'Encuentro Solar 2003' in Benicarlo, Spain in June 2003
- (4) The 'Centre Neuchâtelois de cuisine solaire' is the information center and technical office of GloboSol, as well as a commercial shop for solar cookers. See www.cuisinesolaire.com.
- (5) Michael Götz, 'The ultralight solar cooker for travellers: 2kg including the cooking pot', Paper presented at the 'Encuentro Solar 2005' in Granada, Spain in July 2005



Fig. 1, The 'crêperie solaire' in the 'Cité de l'espace' (science parc in Toulouse).



Fig. 2, An outdoor construction workshop during the 'yurt project'.



Fig. 3, The 'ULOG light' model for camping.



Fig. 4, The ultralight cooker for backpackers.