

Promotion of Clean cooking in Malawi Progress Report August 2015

The new container with various cookstoves arrived mid of June 2015 in Malawi

After a delay of more than 6 weeks caused by various problems at the borders the container with 2000 stoves had been unloaded and stored in the warehouse in Likuni (near Lilongwe). And thus the next stage in the promotion of clean cooking in Malawi could be initiated!!!

Selling stoves and solar systems in the urban regions

In cooperation with local partners in the past three years 2000 clean cooking stoves have been donated to the communities in the Central Region of Malawi. The total costs involved were about USD 50,000. Only 30 % was donated by a large Dutch institutional donor, which has meanwhile stopped funding these types of projects. The remaining funds have been donated by the Lions Club Zeeuws-Vlaanderen, various women groups, schools, churches and private persons. This year we were not able to find sufficient funds for the continuation of the program and therefore we are temporarily forced to follow another approach. Due to the increasing costs of fuelwood and charcoal in the urban regions people in town are willing to pay nearly the full cost price of the high efficient stoves. The savings of their daily fuel expenditures are that high that the investment of the stove is earned back in 4 months. However, the general problem in Malawi at the moment is the price of the food. Due to the combined effects of the drought in certain parts of the country and the terrible flood in the South a great part of the maize harvest had been lost. Lack of food means higher prices and thus consequently lack of money. As a result the only possibility is that people are paying their stoves in two or three instalments. Nevertheless, next year I hope to be able to raise the consumer price in the towns to such an extent that the project will become fully independent of external funding.

Meanwhile I had identified 10 people who started about 3-4 weeks ago with the selling of charcoal stoves, woodstoves and solar systems in the urban regions (20 -30 % profit for the sellers). A few more sellers are still hesitating and will hopefully soon collect their stoves at the central warehouse. Sellers are located throughout nearly the whole country: Lilongwe, Mzimba, Mzuzu, Ekwendeni, Dedza, Zomba and Blantyre. All these sellers are individuals and/or owners of small shops (job creation!!!). Furthermore stoves need to be assembled in Malawi, which also creates a temporarily job for a few people.

During my recent visit to East-Africa I have had meetings with all sellers throughout Malawi. Apart from a number of practical topics the marketing methodology was treated in detail. It has been emphasized that when more than one seller is working in a particular town only cooperation is the key to success. After my trip through Malawi I had a stop in Nairobi where I had a very fruitful meeting with the Envirofit team. One of the immediate results was that their assembling specialist has meanwhile travelled to Malawi to give my assemblers the appropriate training.

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The following stoves were available (some double pot accessories were still in stock as well):

Household stoves	Wood/Charcoal % reduction	CO % reduction	PM % reduction	Number ordered	Consumer price (USD)
Econochar charcoal	57 %	62 %	N/A	1300	31
M-5000* wood	74 %	79 %	70 %	80	48
Econofire wood	68 %	77 %	47 %	600	28

Performance improvement versus 3-stones (wood stoves) or traditionally Jiko stove (charcoal)

*M-5000 including pot skirt for a better performance

PM: Particulate Matter (emission during charcoal burning is negligible and thus not reported).

Note: Data are based upon certified test reports submitted by the Advanced Cookstove Laboratory at The Engines & Energy Conversion Laboratory at Colorado State University.



Econochar (31 USD)



Econofire (28 USD) M-5000 with potskirt (48 USD)



M-5000 with double pot accesoroy (consumer price 32 USD)

Some solar-light systems were initaly in stock as well:

WAKA WAKA Solar light.

More than 130,000 units sold worldwide.

After 8 hours sun at least 16 hours – 100 hours light (adjustable intensity)

Consumer price: USD 24



5-Watt solar system

The whole night light in 3 different rooms

Charging all different phones

Consumer price: 130 USD



Progress of the selling

About 4 weeks after the start-up the situation is as follows:

5-watt solars: I had ordered only 4 items; within 4 weeks all were gone and they want more!!
At least 40 could be sold easily. Because of the transport costs we might have to wait until we can order again a full container.

The same holds for the 80 M-5000 stoves with potskirt; some sellers will have a few in stock but again I should have ordered more of these stoves (the demand clearly exceeds the offer).

Econochars: People are fighting for such a stove. The performance is found to be superb. As a result of the performance at least one or may-be two customers will become sellers!
This product will sell easily!!!

In fact charcoal is not the most favourable fuel with respect to energy consumption because a lot of energy is lost during the inefficient charcoal production. But as long people in the urban are using this fuel it's our obligation to provide them with the most optimum charcoal stove.

Econofire: The selling of this stove is going to be more problematic. The target group are the poorest part of the population: those people which collect their fuelwood and thus don't have an economic drive to do the investment. We probably will have to keep the major part of these stove until next year. At the same time I am looking for an institutional donor which might be willing to help the victims of the food.

Wakawaka solar lamps: I could bring only 30 of these lamps into the country (more did not fit in my suitcase). The selling went "Like Hot Cakes" and thus I will order another 250 items. Everyone who is interested in this Dutch development please have a look on the website. <http://us.waka-waka.com/>

Distribution stoves in the rural communities

For the time being the rural communities ("no money economy") entirely depend upon external donors to improve their cooking practice. In addition, in the near future I hope to be able to raise the consumer price in the towns to such an extent that the surplus can be used to support the communities.

Other items

My Facebook page has drawn the attention of some people in Uganda. Using my experiences in Malawi combined with an exhaustive literature study I could advise them how to proceed. The good flight connections between Uganda and Addis Ababa enable a short stop in Kampala. Together with a member of the Nairobi Envirofit team we had a number of fruitful discussions in this country.

Tea Estates, mainly located in the South of Malawi, are for the greater part operated by large (multinational) companies. These companies employ a lot of season workers which prepare their meals on open fires. With the cooperation of these companies we could offer these workers highly efficient wood stoves (the Econofire). The use of these stoves will stop the deforestation which is extremely severe in the South. The stoves will also create a much

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healthier environment for those workers. By the end of next month I might be back in Malawi and could visit a number of tea estates and explain the project in more detail. Due to the vacation period thus far I was not able to make fruitful contacts.

Together with other institutes the government will be put under pressure to submit tax exemption for clean cooking stoves!

Giel de Pooter
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