

## Concept for „Impact Assessment“ of the ProBEC Malawi rural clay stove interventions

### Introduction

The highly populated South of Malawi is excessively deforested. Firewood has become a commodity even in rural communities. ProBEC supported from 1999 onwards pilot implementation of Biomass Energy Conservation work under the then „Integrated Food Security Programme“ in Mulanje District. This first phase of intervention was characterized by a „self-help“ approach, in which villagers were trained how to train their fellow villagers in the construction of simple fixed mud stoves or portable clay stoves (fired in the traditional way resulting in many cracks and brakeage).

The experience shows that this approach did result in a high number of people building a poor quality stove, which did not perform well and broke in short time. However, spontaneously some village based promoters trained by the programme started to produce and sell good quality stoves as a business in 2004.

Mid-2004, a first Impact Assessment was carried out by Verena Brinkmann. Four Villages were assessed in respect to the adoption rate of improved stoves (mainly the self-help stoves) as well as the benefits in the field of income, health and environment. This study forms a kind of baseline for the situation before the commercial concept was fully adopted and promoted by the then proper ProBEC programme (starting September 2004 until now).

In May 2008, the current funding of ProBEC is coming to an end. It was agreed between HERA and ProBEC to assess the impacts of the rural clay stove interventions again to find out if the new, commercial approach has led to changes in the marketing strategy developed and applied by producer groups, the adoption of stoves as well as the achievements towards the MDGs.

### Scope of study

Following suggestion for implementing this study in March, April and May 2008.

### “Follow-up” study in Mulanje district plus comparison with second district Aiming at assessing:

- Impacts at household and producer level in Mulanje district
- Impacts in second district (to be identified by ProBEC Malawi)
- Progress towards Sustainability of stove market in both districts
- Progress towards Scaling up

Scope	<p>A) Revisit up to 3 villages (Ligomba, Matanya, Njete or Salamu) of the impact study of 2004 to assess the following issues:</p> <ol style="list-style-type: none"> <li>a. Current stove adoption, usage rate and „correct use“</li> <li>b. Impacts of BEC contributing to the MDGs (particularly poverty, health, environment) and to BMZ focal areas Malawi</li> <li>c. Sustainability of local stove user-producer relationships (Age of stoves still in use; maintenance and replacement; Will the stove business continue after the end of the programme phase?)</li> </ol> <p>Compare results with baseline study and conclude about the progress made with regards to adoption, impacts and sustainability.</p>
-------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>B) Visiting up to 3 villages with ongoing clay stove interventions in the second district (Identification of district by ProBEC according to criteria (in exchange with consultant) and assess the following:</p> <p>d. Current stove adoption, usage and „correct use“</p> <p>e. Impact of BEC to the MDGs (particularly poverty, health, environment) and to BMZ focal areas Malawi</p> <p>f. Sustainability of local stove user-producer relationships (Age of stoves still in use; maintenance and replacement; Will the stove business continue after the end of the programme phase?) – considering that ProBEC interventions started much later than in Mulanje</p> <p>Compare impact results of HH using stoves and HH without stoves. And compare results with regards to adoption, impacts and sustainability between the two districts.</p>
	<p>Sample size:</p> <ul style="list-style-type: none"> <li>- Up to 300 HH</li> <li>- App. 20 producers (team leader and team member of producer group in each village)</li> </ul>
methodology	Questionnaires for household users and stove producers, semi-structured interviews for group discussion, field observations, review of project documents
requirements	<ul style="list-style-type: none"> <li>• consultant (for 2,5 months: 10. March – 31. May 2008)</li> <li>• interpreter (ProBEC staff<sup>1</sup>) for consultant during 4 weeks of data gathering in the villages</li> <li>• backstopping by ProBEC staff Malawi</li> <li>• one representative of respective locally cooperating partner/NGO (per district)</li> <li>• team of 5 enumerators for up to 5 weeks (e.g. students with competences in quantitative and qualitative statistical surveys, good skills in English)</li> <li>• workplace in IFSP</li> <li>• transport</li> <li>• accommodation</li> </ul>

**HERA support:**

- questionnaires for user households and stove producers
- selection criteria for villages, households and producers
- procedures for training of enumerators
- guiding questions for data interpretation
- basic background information to ProBEC (especially) EnDev Reports.

<sup>1</sup> Advantage of ProBEC staff: would be of benefit in terms of logistics and capacity building as person would get insight into methodology and content of impact assessment.

## Proposed timeframe

Months	Weeks	Activities
March	2, 3	<b>Preparations</b> <ul style="list-style-type: none"> <li>introduction of consultant to and exchange with ProBEC staff,</li> <li>selection of the comparison district and respective villages to be visited in comparison district,</li> <li>contacting/visiting all villages with ProBEC staff, local partner and with village chiefs (village authority) to introduce the study,</li> <li>adaptation of the Kenyan Questionnaires to the Malawian situation, adjusting the SPSS/excel matrix for later data entry,</li> <li>The consultant provides training to carefully selected 5 enumerators, together with ProBEC staff (max 2 days)</li> </ul>
	4	<b>Carrying out the survey in Mulanje</b> <ul style="list-style-type: none"> <li>interviewing app. 50 HH (randomly selected, stove users and non-users) and 3 producers per village and group discussion with producers; local partners provide support and advice for the enumerators, e.g. in terms of orientation on site,</li> <li>Consultant accompanies the interviews, provides backstopping (daily: midday and evening) and ensures completeness and correct use of questionnaires, and consultant conducts interviews with stove producers (with support of interpreter)</li> <li>This requires app. 2 days per village, accommodation and transport of consultant and enumerators to the village and back</li> </ul>
April	1	<ul style="list-style-type: none"> <li>Cont. Assessment Mulanje</li> </ul>
	1, 2	<b>Carrying out the survey in 2. district</b> (same as above)
	3	<b>Data entry</b> <ul style="list-style-type: none"> <li>The consultant assisted by ProBEC staff (number depends on scope of questionnaires and availability of workstations) enters the collected data into SPSS/excel software</li> </ul>
	4	<b>Data analysis</b> Following the guiding questions, the data is analysed by the consultant
May	1, 2	<b>Data interpretation and Composition of report</b> <ul style="list-style-type: none"> <li>Interpretation of results (considering official statistical data)</li> <li>Presentation of first results to project team in Malawi/South Africa</li> </ul>
	3, 4	<ul style="list-style-type: none"> <li>Writing of the report</li> </ul>