HERA – your GTZ support for Household Energy

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They are evergreen topics: Household Energy (HE) and energy efficient cooking stoves!

While technologies are developed, tested and applied, the required strategies for large-scale implementation and up-scaling have only been implemented in a few individual cases. There is a need to further mainstream these strategies.

HERA is the new Household Energy Programme of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH, funded by the German Ministry for Economic Cooperation and Development (BMZ). HERA formally started in December 2003 and is scheduled to end in November 2007. The programme follows in *HEP's footsteps*; the widely acknowledged former GTZ Household Energy Programme – with renewed energy!

HERA's objectives

The main objective of HERA is to further mainstream sustainable HE management into relevant projects and programmes to ensure basic energy security for households and small businesses. Basic energy security, in the context of HERA, covers thermal energy for cooking, baking, heating and productive use. The beneficiaries of the project are households and small businesses – low-income groups – with a special focus on Africa. The intermediaries for integration of basic energy security are projects and partners in development, linked through cooperative working in the areas of energy, environment, rural development, food security and health.

HERA workshop

To further specify the role and responsibilities of HERA in a participatory way, an initial workshop was held in June 2005. For international GTZ project staff, and partners from other organisations, this workshop provided the opportunity to exchange experiences. Focus of the workshop was an inventory of proven tools & instruments for sustainable HE management and scaling-up. Over 30 participants defined their requirements for tools and instruments for support and large-scale implementation of sustainable HE measures.

HERA is working at four different levels:

- Lobbying for HE
- advising on projects
- co-ordination of knowledge management and networking
- further development of HE concepts and strategies.

HERA's lobbying activities

To highlight the relevance of HE, HERA is promoting and lobbying this topic, producing and distributing documents such as fact sheets and presentations. Topics include, among others, HE and health effects, HE and environment/forestry, HE and the economy. The exchange of experiences and lessons learned with other energy-, health-, environment-related projects is facilitated. HERA also lobbies relevant international organisations such as the World Health Organisation (WHO) or US Nations Environment Protection Agency (USEPA).

HERA's advisory activities

At the end of 2004, GTZ was mandated by DGIS to scale up household energy initiatives, especially in selected African countries with a budget of approximately 18 million Euro over four years. This partnership is coordinated by the GTZ project 'Energising Development' (EnDev). Senegal, Benin, Burkina Faso, Mali, Uganda, Ethiopia and Kenya are the first to scale up household energy under the programme; it is envisaged that other countries will follow.

HERA provides advice primarily to GTZ projects, co-funded by the Dutch Directorate General for Development Cooperation (DGIS).

- *Ethiopia*: promotion of the *Mirt Stove* (for Injera baking). So far more than 50 000 stoves have been sold. The Shell Foundation co-funds current scaling-up in Tigray. With DGIS support, scaling up of production and marketing for another 220 000 stoves is planned.
- *Malawi, Tanzania, Mozambique, Zimbabwe:* promotion of clay stoves (Upesi type, portable or inbuilt). More than 30 000 stoves have been built so far. With current BMZ funding and co-funding from DGIS, scaling up production and marketing for another 50 000 stoves is envisaged (more information at www.probec.org).
- *Uganda:* promotion of rocket stove (Lorena- type stove). More than 30 000 household stoves have been built. With co-funding from DGIS scaling up production and marketing for another 60 000 stoves is scheduled.
- *Malawi, Tanzania, Mozambique, Lesotho, Uganda*: Rocket stoves for large scale cooking are being promoted. More than 500 stoves have been sold to schools and prisons; scaling up is planned with DGIS co-funding.
- South Africa: more than 4000 solar cookers were sold over a period of 3 years (visit www.solarcookers.co.za for more information).
- In *Burkina Faso, Mali, Benin, Senegal and Bolivia* the promotion of production and marketing of

stoves with DGIS funding is in the initial phase.

HERA supports the conception and design of new projects and plans, implements and monitors on-going projects. Guidance for HE-related baseline development, project planning, implementation and monitoring is in preparation.

HERA's activities in coordinating knowledge management and networking

Information on household energy technologies, experiences as well as fuel types is provided by HEDON Household Energy Network. Therefore HERA supports HEDON as an important information and knowledge source.

Information for the support of interventions is going to be provided along three pillars:

- policy level
- supply side management
- demand side management

Networking activities have already started with Practical Action (formerly ITDG), Gender and Energy Network Energia, Global Village Energy Partnership (GVEP), WHO and HEDON as well as with the different GTZ projects. In future, HERA meetings with all network partners will be held on a regular basis.

HERA's development of HE concepts and strategies

Strategies and concepts used will be analysed through case studies. Successful strategies and best practice will be taken-up by other projects.

HERA is a dynamic and interactive project that really wants to make a difference to the HE situation in its partner countries with concrete ideas and strategic support. The programme aims at supporting the exchange around HE. Even though the webpage is still under construction, we hope it contributes to facilitating this exchange.

Please contact us

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The ROCKET is launched in Southern Africa!

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Background

With field tests confirming up to 90% wood savings, coupled with a near smoke-free kitchen environment, the rocket stove has revolutionalised cooking in schools, hospitals and other large scale catering institutions in Southern Africa. This is not so strange considering that an ideal rocket stove, which is correctly dimensioned and constructed with suitable materials (including proper insulation), is known to achieve energy transfer efficiencies of up to 35% or more (1). In July 2004, biomass stove designers, builders and promoters met in Mulanje, a small town in southern Malawi to exchange experiences on efficient institutional stoves. They toured and observed cooking practices at the tea estates where rocket stoves have displaced the open fire in the preparation of meals for thousands of workers.

Objective of workshop

The major objective of the July workshop was to bring representatives from different stove projects in East and Southern Africa to exchange experiences on fuel-efficient institutional cooking technologies and marketing strategies, as well as address challenges that impede large scale dissemination. The workshop coincided with the week long International Trade Fair in the city of Blantyre, where the different efficient stove designs were exhibited and demonstrated to the public.

Criteria for a good fuel-efficient institutional stove

After presentations were made by different stove designers, builders and promoters, there was a long discussion to consider basic criteria or guidelines to which a good fuel-efficient institutional cook stove that burns biomass fuel should conform. These criteria were developed taking into account the requirements of key stakeholders in institutional cooking, that is cooks, catering managers, financiers/buyers, wood suppliers and stove producers. The recommended criteria are listed below (not in any order):

- User friendly, safe and easy to handle.
- Effective smoke removal.
- Should conform with proper kitchen design, plan or layout.
- Affordable price for the intended target users.
- Durability. Should last 5 years before requiring major repairs or replacement.
- Efficiency. PHU of not less than 30%.
- Time and wood savings.
- Return on investment.
- After sales support.
- Guarantee/warranty.
- Minimal maintenance requirements.
- Provision of user training package.
- Appropriate for intended pot sizes.
- Stove capacity sufficient for number of people to be served.
- Appropriate to the cooking requirements of the institution in consideration of the types of commonly cooked foods.
- Appropriate for use with the commonly used/available fuels.
- Standardisation of stove and replacement parts for compatibility.
- Rocket stove design should have insulation of thickness not less than 5 cm.

Rocket stove takes the lead

Over the past year, the rocket stove