

Stoves Activities in Eastern Africa: *Experiences from Practical Action*

**Presented
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Stove Colloquium
7th June 2011, Nairobi, Kenya



About Practical Action

- Practical Action is an international development charity with the head office based in the UK and regional programmes in Eastern and Southern Africa, Latin America and South Asia, and country programmes in Nepal, Bangladesh and Sudan.
- We work together with some of the world's poorest women, men and children, helping to tackle poverty in the developing world through the innovative use of technology.
- Our vision is 'a world free of poverty and injustice, in which technology is used to the benefit of all'.

- While modern energy alternatives are still out of reach of many, biomass is becoming scarce
- In Kenya, the demand is expected to increase from 34.3 million tones in 2000 to 53.4 million tones per year by 2020 against decreasing production
- Households are resorting to more inferior quality woodfuel



Fuel types

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Why Cook Stoves?

- A shortage of fuel for cooking is one of the many problems faced by people in the developing world.
- Gathering fuel is generally women's work but is fraught with dangers; they gamble with the risk of rape and life threatening attacks during their search for much needed firewood, in order to feed their families.



Targeting women

- Women/children suffer most from over-reliance on biomass energy resources.
- They are the main producers and consumers of woodfuel for domestic use and have limited access to modern, clean and efficient energy technologies.
- They spend a lot of time and physical energy sourcing and processing firewood.
- More vulnerable to indoor air pollution exposure and illnesses associated with smoke.



Source: WHO/PHE GFH

Stoves activities cont'd

- Practical Action is tackling this issue through the use of more fuel-efficient woodstoves, which are both affordable and easy to use; cutting the amount of risky trips for firewood and allowing more trees the opportunity to grow. Subsequently, burning smaller amounts wood fuel means less smoke will engulf their homes and their lungs.

Key Issues in Cooking Energy Access and Delivery

- Cost of cooking fuel
- Access to efficient cooking technology
- Access to fuel e.g. distances travelled by women & children to fetch firewood in rural areas
- Indoor Air Pollution
- Safety of cooking technology

Our Stoves Work Kenya

1. Practical Action's stoves work in West Kenya started in 1988 , as part of the National Women and Energy Project which was a bilateral Project implemented by GIZ(formally GTZ) , Ministry of Energy and Maendeleo ya Wanawake and Practical Action.

The project Involved development and testing of an improved wood burning stove-Maendeleo stove

2. Rural Stoves West Kenya project - aimed at improving the quality of life of poor household in rural West Kenya by reducing their dependence on biomass fuels, increasing their access to appropriate energy saving technology options and investigating income generating opportunities. Supported women porters

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Our stove work cont'

Rural Stoves West Kenya project promoted the production and marketing of the Maendeleo Stove under the brand name Upesi for local acceptability.

Activities implemented:

- Design of production manuals for stoves and kilns (Better born fire kilns)
- Training on production of ceramic wood and charcoal burning stoves
- Training on marketing for sustainable dissemination of rural stoves
- Supporting the market intermediaries with promotion and production of promotion materials and promotion activities.
- Documenting and sharing the experiences of the Project - Booklet from Stoves to wealth.

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Activities implemented

- Proving the effectiveness and sustainability of a fully commercial approach to rural stoves marketing
- Training selected women group to produce and market ceramic stoves
- Adaptation and production of quality Upesi stoves
- Strengthen capacity of producer groups and distributors in marketing
- Develop a commercialization strategy to expand consumer choices and increase incomes
- Establish a network of key actors
- Dissemination

Stove work cont'

5. Indoor Air Quality work –
 - Monitoring indoor air quality (done in Kisumu and Kajiado)
 - Developing and testing interventions to reduce indoor air pollution - (a range of energy saving stoves) smoke hoods, eave spaces, windows etc.
6. Scaling up of the interventions - KIAPNET, WESTKNET.
7. Household energy regional project – Aimed at sharing experiences of our work on energy in western Kenya with our partners in Uganda.
8. Enabling significant numbers of the poorer in EA to reduce the problems they face as a result of their dependence on biomass fuels by increasing their access to appropriate energy saving technology options.
9. The East Africa Energy Technology Development Network(EAETDN aimed at increasing capacity of partners to implement energy projects



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Upesi stoves - Portable



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Stove dissemination – Improved Institutional stoves



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Stove dissemination – Kenya Ceramic Jiko



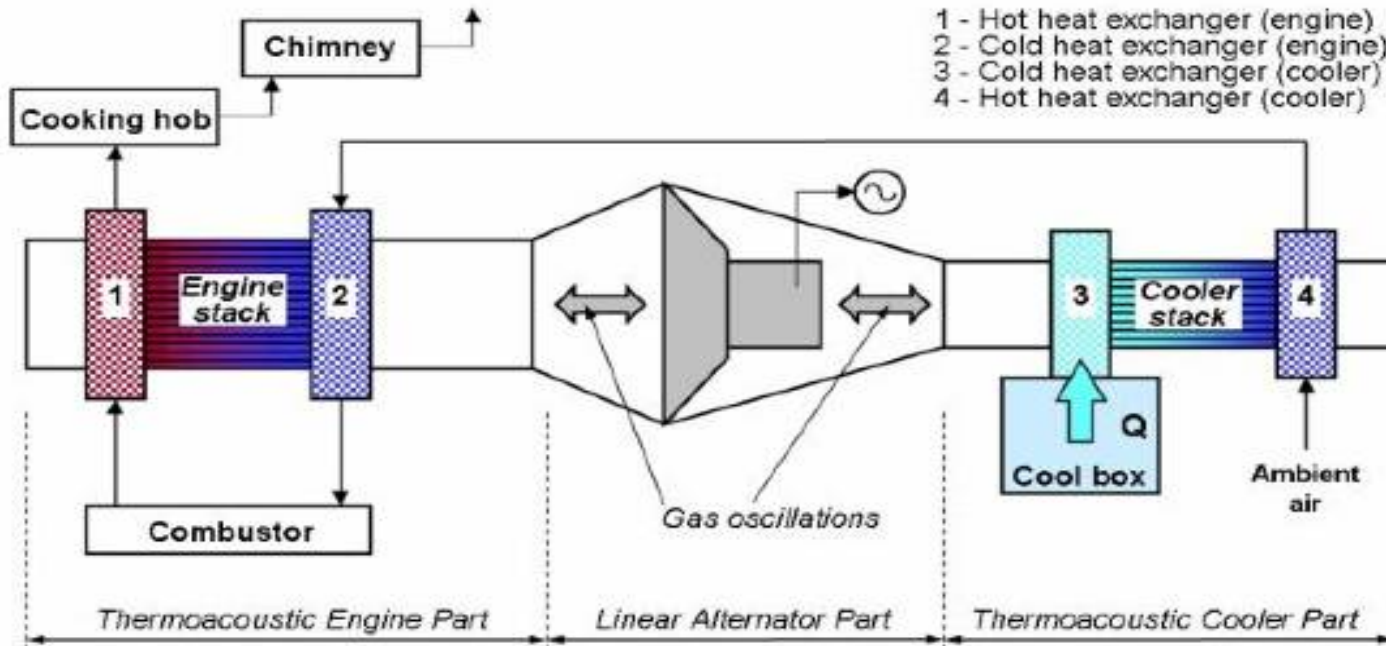
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Current Stoves work

SCORE: Stove for Cooking, Refrigeration and Electricity



Bioethanol Clean Cook stove



Transfer of skills.

- Scaling up of the interventions - KIAPNET, WESTKNET
- Household energy regional project – Aimed at sharing experiences of our work on energy in western kenya with our partners in Uganda
- Enabling significant numbers of the poorer in EA to reduce the problems they face as a result of their dependence on biomass fuels by increasing their access to appropriate energy saving technology options
- The East Africa Energy Technology Development Network(EAETDN aimed at increasing capacity of partners to implement energy projects
- Capacity building of energy enterprises aimed increasing viability of energy enterprises

Approaches being tried out

- Participatory Technology development, testing and transfer
- Networking
- Partnerships
- Policy influence – Standards development for ICS
- Knowledge and evidence generation, documentation and sharing

Achievements

- Producer groups trained on production and marketing of ICS
- Promoters, retailers and distributor networks established
- Networks and partnerships established to support stove activities (EAETDN, KIAPNET, WESTKNET)
- Scaling up of smoke removal interventions based on IAP monitoring

Lessons learned

- Rural stoves can be effectively commercialized through rural networks
- Standardization of production procedures ensures quality and sustainability of markets
- Networks are viable medium for stoves dissemination
- Reliability: IGA from stoves ensures continuity of production

Lessons cont'

- Upesi Project has matured and can stand on its own
- That for long term sustainability there is need to form a regional grouping of the actors
- That in order to improve quality control it is necessary and urgent to formulate standards for both Upesi as well as other ceramic stoves
- That the kitchen improvement work needs to be enhanced.

Partners involved

- GIZ – Initial work on stoves
- Energy and development partners in the east Africa region
- DEEP partners(GVEP international)
- Edinburg University – IAP work
- Min of Agriculture – Home Economics department
- Solar Cookers international

Challenges

- Transportation of ceramic stove products to markets is a major constraint – Fragile
- Financing to ensure growth of business
- Competition with substandard products which affects the market negatively
- Still low penetrations???

Thank you for listening

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