



## Ghana

### EnterpriseWorks/VITA – Gyapa Charcoal and Wood Stoves

Since April 2002 EnterpriseWorks/VITA, an international non-profit organisation, has been working with Shell Foundation in Ghana's two main cities – Accra and Kumasi.

The goal is to improve health and productivity in the west African state by reducing Indoor Air Pollution (IAP), caused by smoke-emitting cooking stoves.



Affordable, clean-burning stoves, which cook more quickly, are being promoted and sold, while householders learn about the dangers of inhaling smoke and fumes.

The original aim was to reduce IAP levels in 40,000 urban and 5,000 rural households, but more than 120,000 Gyapa stoves have been sold since late 2002, way exceeding those targets.

#### Marketing and Awareness Raising

Charcoal is the fuel of choice for 65% of urban households in Ghana but, used in a traditional coal pot, it burns inefficiently, causing air pollution and quicker deforestation.

EnterpriseWorks/VITA is promoting a Kenyan sourced alternative called the Gyapa (meaning 'good fire') stove which is produced in three sizes. A ceramic liner improves fuel-efficiency by up to 50% and the stoves are marketed with the slogan 'it's already cooked'.

Both social and conventional marketing methods were used to promote Gyapa stoves. These included TV

and radio advertisements, newspaper promotions, cooking demonstrations on market days and quizzes.

The message to the public has centred on economic and health benefits, as well as emphasising the affordable price.

EnterpriseWorks/VITA ran educational campaigns in seven locations, mainly for women, on the dangers of inhaling smoke from cooking stoves. These campaigns included a 10-minute documentary film and advice on the need for good ventilation and to avoid inhaling smoke wherever possible, regardless of stove choice.

Cooking outdoors or by an open window or door, keeping children away from smoking fires and extinguishing a fire immediately after use were all recommended, along with design changes to homes, such as higher ceilings and bigger windows.

### STOVE BENEFITS

- 40% saving on charcoal
- Over 5,000 hectares of forest area saved per year <sup>[1]</sup>
- Nearly 100,000 tonnes of CO<sub>2</sub> reduced in a year <sup>[2]</sup>
- A study of Ghanaian households, where traditional cooking pots were replaced with wood stoves, showed significant reductions in noxious fumes and smoke, bringing carbon monoxide levels within World Health Organisation (WHO) guidelines.

Indoor Air Pollution is thought to account for 1.6 million premature deaths each year, worldwide. According to the study, conducted in 36 households in Accra, the replacement stove meant children under five were nearly 25% less at risk of respiratory mortality.

<sup>[1]</sup> Traditional Energy Unit of Ministry of Energy; Unpublished results on Forest Inventory Statistics, Dec 2002

<sup>[2]</sup> A study of Fuel Consumption in three types of Household Charcoal Stoves in Ghana; Lisa Stosch, Monitoring and Evaluation Consultant, Dec 2002