



Toyola efficient cooking stoves, Ghana

Fuel use from increasingly scarce firewood is a growing problem in Ghana. In order to address this problem, an emission reduction project has been set up to distribute modern, fuel-efficient cooking stoves to private households at reduced prices.

Location



Though rich in natural resources, the West African state of Ghana still counts as developing country, and is suffering from high unemployment rates.

The efficient cooking stoves project's geographical target market is in and around the Greater Accra Region, Eastern Region, Ashanti Region and Central Region.

Project



Fuelwood and charcoal meet approximately 75% of Ghana's fuel requirements. Approximately 69% of all urban households in Ghana use charcoal. Whilst wood is used in rural areas, charcoal is common in urban areas because it is light and easy to transport and quick to light. Charcoal is used by approximately 1.3 million households or 31% of all families in Ghana. Most families cook with charcoal in a metal grate or 'coal-pot' that burns very inefficiently.

This project replaces coal pots with an efficient insulated stove, known as the *Toyola Coalpot*. Users of the stove are pleased with the effects: they observe that the stove keeps going for longer periods, cooks food more quickly, is less smoky and uses less fuel.



Deforestation rates in Ghana are amongst the highest in Africa. With current levels of wood-fuel consumption far exceeding forest growth, the project will reduce pressure on remaining forest. Careful fuel consumption tests undertaken as part of the baseline study showed that the new stoves reduce charcoal consumption by 25%. This corresponds to an annual CO₂-reduction of over 100,000 tons.

Project achievements



Socio-economic impact:

- The project creates employment and builds capacity throughout the supply chain, i.e. in manufacturing, distribution, retailing, quality control and project management: The liners are made by a small group of accredited ceramicists who have received specialist training. The metal claddings are made by a further group of accredited manufacturers.
- Ghana's technological self-reliance is improving thanks to specialist skills being developed and furthered in-country: The project partners in Ghana provide training and quality control services, and distribute the stoves through a wide network of retailers.
- The new Toyola coalpots are less smoky, reducing emissions of hazardous air pollutants and improving the health of the cooks, typically mothers and children.
- Reducing fuel costs for families and freeing up money for other uses, the project improves livelihoods of the poor.

Environmental impact:

- Significant reduction of baseline deforestation levels saves forests and wildlife habitat, and improves the water storage capabilities of the soil.

Checklist Project 301 278



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