



# Compete Caribbean Partnership Facility

## Reducing Domestic Greenhouse Gas

Few are aware of the dark assassin that is quietly decimating the under-privilege sect of Haiti's population. It is the thick, acrid smoke that rises from hot charcoal. This indoor air pollutant penetrates the lungs and increases the risk of contracting many respiratory diseases. Child pneumonia, lung cancer, chronic obstructive pulmonary disease and heart disease are the causes of death in Haitian children under age five and the low life expectancy of 43 years for adults.



The reality is that 95% of the population is forced to use charcoal for their energy needs because liquified

petroleum gas is expensive and difficult to obtain. But there is one company that is actively seeking to make Haitian households breathe easy again; and Compete Caribbean has partnered with them for the innovation.

D&E Enterprises manufactures low-cost, high efficiency clean cook stoves. The product is the first Clean Development Mechanism (CDM) project of its kind in Haiti. The stoves are considered as 'clean' since sustained use reduces smoke emissions and indoor air pollution by more than 50%. The reduction comes because D&E's stoves utilize fuel more efficiently. This factor may seem small but it has far reaching effects. Apart from the health benefits, fuel efficiency means:

- Less money is spent purchasing fuel. Prior to the introduction of the cook stove, a low-income family spent 23% of its earnings on cooking fuel. The advent of the high efficiency cook stoves contributes to a reduction in poverty.
- Deforestation is decreased. With less demand for large quantities of firewood and charcoal, the deforestation that contributes to soil erosion and flooding is diminished.

Compete Caribbean provided funding for activities across two main project components. Component 1 focused on improving the manufacturing plant capacity for increased production while Component 2 provided funding for technical support in marketing, distribution, training and for further research and development.

By project closing the following results were achieved:

1. Production was 92% mechanised allowing D&E to quadruple its output capacity,
2. 6000 stoves are manufactured per month,
3. Sales increased from 200 to 1200 stoves per month; and
4. The distributor network enlarged from 20 to 211.

D&E has also implemented a community element in its operations. Community members are encouraged to participate in public workshops and to contribute suggestions to design improvement of the products. This community based approach to design often results in the creation of new products as well as refinement of existing ones that meet specific user needs and preferences. Learn how your company can compete for innovation funding at

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