

Institutional Improved Cook Stoves in 15 KCCA Schools pilot Project supported by Expertise France

Kampala, like the rest of the world, is experiencing climate changes mostly with increased temperatures and more intense rainy seasons which are less predictable and more erratic leading to flooding, food insecurity and increase in temperatures.

In the Kampala Climate Change Action Plan, one of the major causes of vulnerability is the heavy reliance on charcoal and firewood for cooking which significantly reduces tree cover countrywide.

The Uganda National Alliance for Clean Cooking (UNACC) estimated in 2012, that only 7% of the population are using clean and efficient cook stoves. Similarly, the institutions in Uganda such as schools, health centers, prisons, commercial buildings and restaurants, primarily rely on traditional cooking technologies such as three stone stoves, open fires etc. As per the Uganda Bureau of Statistics (UBOS) 2012 survey, 14.88% of the population have access to power grid services (54.8% in urban, and 7% in rural areas). The most prevalent form of cooking fuel in schools is wood fuel estimated at 96% followed by charcoal at 4%.

As part of implementation of the Kampala Climate Change action Plan, KCCA partnered with Expertise France and technical support from SIMOSHI Ltd to conduct a UGX 75,271,000 (Euros 18,900) pilot project for the construction of institutional improved cook stoves in 15 KCCA Primary Schools which include; Bukasa Primary school, Kalinaabiri Primary school, Kyaggwe Road Primary School, Kisasi Primary School, Namugoona Kigobe Primary School, Kiswa Primary School, Ntinda Primary School, Busega Community Primary School, Busega Community Primary School, Kitebi Primary School, Kabowa Primary School, St. Paul Nsambya Primary School, Murchinson Bay Primary School, Kamwokya Primary School, Ggaba Demonstration COU and Naguru Katali Primary School



The aim of the pilot project was:

- Reduce the city's vulnerability to charcoal, fuel supply shocks as well as the environmental benefits of reduced deforestation and greenhouse gas
- Introduce for replication elsewhere renewable energy technologies: Energy cook stoves in institutions and households estimated to reduce energy consumption by 20-40%;
- Reduce carbon emissions by CO₂ 1,671 tonnes annually

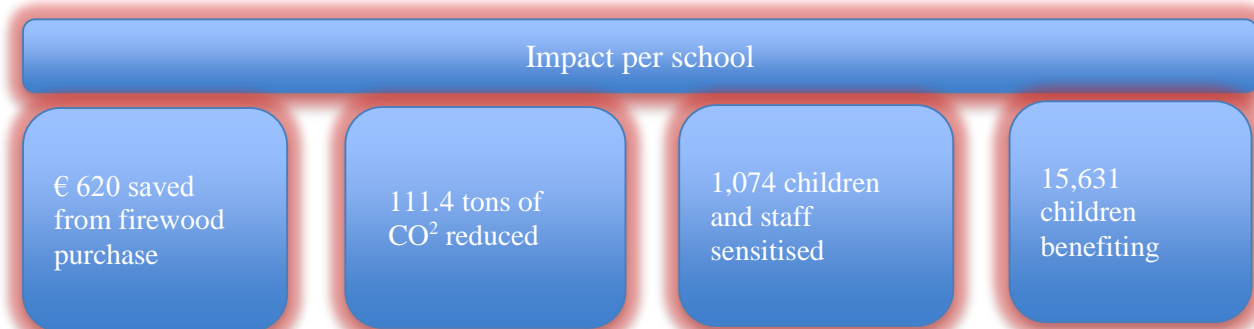
The project disseminated 64 New Improved Institutional cook stoves supplied by Uganda Stove Manufacturers Ltd in 15 KCCA Primary schools across the five Divisions of the City.

The new stoves have a thermal efficiency of 35.3% and can be customized to different saucepan capacity that ranges from 30 liters and up to 350 liters.

The deployment has replaced the previous utilization of traditional 3-stone fires, made out of mud and associated with indoor air pollution, smoke inhalation and the associated health risks to the cooking staff and in deplorable conditions.

As part of the Clean Development Mechanism and Gold Standard registered project activity, maintenance events will take place every December 2017/January 2018. It is through carbon finance that the project will become sustainable in the next five years as future earnings accrued from the sale of carbon credits will be reinvested in schools to continuously support the annual maintenance, monitoring and management of change.

Project Impact




- Through an intensive training and education programme delivered to the schools, a behavioral shift towards using cleaner energy technologies, and awareness raising about environmental and climate change issues has resulted in a collaborative participation from each school management and kitchen staff.
- Energy stoves with chimneys improve the hygiene of the children and staff because it reduces acute respiratory infections in children and staff.
- Through renovations of kitchens done prior to the installation of cook stoves, schools kitchen buildings are secured from theft.
- Establishment of Firewood storage for higher IICS performance for the schools.
- Energy stoves ensure safer kitchen environments for staff and the children.



Acknowledgements

KCCA would like to thank Expertise France, Nicholas Drunet and Cecile Vivien for the financial support and Simoshi Ltd, Virginia Echavarria for technical support in the installation of the cook stoves.



“On behalf of the school management Committee and the entire school community, I wish to sincerely appreciate you for the installation of improved cook stoves in Kabowa Church of Uganda Primary School.”
Mrs. Baziwe Sarah, Headmistress, Kabowa Church of Uganda Primary School.

Recommendations

Government, institutions and private sector should recognize the value of renewable energy technologies to the larger economy, and design energy and economic development policies accordingly.