

Kenya: Clean cooking; safe water Improved cook stoves and water treatment project



Certification:

Gold Standard

Key Facts



Background

Wood fuel still provides up to 90% of households' energy requirements in rural Kenya. The majority of energy consumption is used for cooking. Commonly, three-stone cook stoves are used which utilize only about 10% of the thermal energy released by burning firewood. This inefficiency together with a general lack of sustainable forest management in Kenya results in increasing deforestation and erosion.

In addition to environmental issues, traditional cooking methods have a variety of adverse health effects as they generate large amounts of fumes in people's homes due to inefficient combustion. The smoke, which is inhaled on a daily basis over years, can lead to serious lung and eye ailments and may even cause birth defects.

Unsafe water is another major health issue for many of the world's poorest, and most vulnerable people. According to a WHO report, about 80% of the diseases in developing countries can be traced back to the consumption of contaminated water; each year more than two million children die due to this cause.



The Project

In this project, cooking stoves are developed through a participatory approach with the locals. The project aims to improve health and incomes throughout Kenya by reducing time and money spent buying fuel for household and institutional cooking. The production and selling of the cooking stoves is also handled by locals. The sales price of the stove has been reduced by 20%, thanks to carbon financing. Since no single technology alone can provide a solution to the problem of clean water in Kenya, the Paradigm Project is leveraging carbon finance to make a range of water treatment systems, including water filtration and community level chemical treatment, available to Kenyans who do not currently have access to these systems.

Location:

Kenya, Africa

Project type:

Energy efficiency - domestic

Total emission reductions:

» 485,000t CO₂e p.a. «

Project standard:

Gold Standard

Project start date:

June 2009

Sustainable Development

By supporting this project you'll contribute to the following Sustainable Development Goals:



SUSTAINABLE DEVELOPMENT GOALS

While focusing on reducing greenhouse gas emissions, all our projects also generate multiple co-benefits. These are supportive of the United Nations Sustainable Development Goals.



No poverty

Poor households are offered to buy stoves on credit and to repay the loan from charcoal savings. The money saved on fuel can make huge savings in household spending every year.



Good health and well-being

Improved cookstoves reduce the emission of harmful substances. Cooking through traditional methods mean women inhale the equivalent of two cigarette packs every day. The new stoves will significantly increase their health.



Gender equality

Women in Kenya spend most of their time doing various forms of housework, including cooking and collecting firewood. By using more efficient stoves, the process of cooking is sped up and less firewood has to be collected, allowing for women to have more free time.



Clean water and sanitation

By facilitating access to clean water, the project helps to stop the spreading of water-borne diseases. Boiling water for sanitation is no longer necessary. This helps to save time, money, and resources.



Decent work and economic growth

The project promotes locally manufactured technology with optimized energy efficiency, which improves technological self-reliance and breaks the ground for self-sustaining development. The program also creates employment positions generating additional income in the region.



Reduced inequalities

The project targets rural areas of Kenya, which are often home to the poorest members of the population. This will help them to economically develop and improve their quality of life so as to reduce the development gap between themselves and urban areas.



Life on land

The efficient stove types employed reduce fuel demand by up to 35% and help to save biomass resources. Slowing deforestation yields direct benefits and helps to slow down soil erosion, destruction of natural habitats, and loss of biodiversity.



Technology brief – how it works

The project distributes two types of efficient cook stoves across Kenya: the “JikoPoa” (cool stove in Swahili) and the Envirofit stove. The JikoPoa, which is developed through a participatory approach involving stove-users in rural Kenya, is locally produced using local materials and expertise. Cooking stoves are provided through a participatory local stakeholder approach. The idea is to improve health and incomes throughout Kenya by reducing the time and money spent buying fuel for household and institutional cooking. The production and sales of the cooking stoves is also handled by locals. The cooking stoves are made of sustainable and durable materials and are very energy efficient, meaning less wood is required and burned, resulting in significantly lower carbon emissions as well as less toxic smoke.

The project supports the distribution of diverse water-purifying technologies. Water treatment systems allow households to get access to clean water without the need to boil it. Reduced boiling helps to keep fuel use and greenhouse gas emissions low.



Project Standard

Gold Standard
Climate Security & Sustainable Development

The Gold Standard is an award winning certification standard for results based project finance and is recognised internationally as the benchmark for quality and rigour in certifying environmental and socio-economic project outputs. Established in 2003 by the World Wide Fund For Nature (WWF), the Gold Standard today is trusted and endorsed by NGOs, governments and multinationals including United Nations agencies worldwide.

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