



Livelihoods in Focus: “Cooking up Change” February 2014

Introduction

To celebrate the partnership between the Ramsar Convention Secretariat and the Livelihoods Fund in protecting our environment and improving local livelihoods, this is the first instalment in a four-part series of stories that showcase how both organizations are promoting habitat conservation by encouraging sustainable development by wise-use practices and addressing issues of climate change, poverty and food and water insecurity.

Type of Project: Rural Energy
Location: Embu region, Kenya
Start Date of Project: 2013
Local Partner: Climate Pal Ltd.
Number of People Impacted: 300,000

The Livelihoods Fund is proud to present its project with its local Kenyan partner Climate Pal Ltd. at a national conference to promote Clean Cookstoves and Fuels in Nairobi, Kenya, 4-7 February 2014. This event is hosted by the United Nations-sponsored Global Alliance for Clean Cookstoves and the Clean Cookstoves Association of Kenya (CCAK).

Clean cookstoves protect habitats, biodiversity

Several indicators point to an energy crisis in Kenya including: accelerated deforestation, a biomass energy deficit and deterioration in electricity generation and distribution systems. The Government recognizes the need for alternative, renewable energy sources, as a means of reducing tremendous pressure on woody biomass. Providing adequate, affordable energy is essential for eradicating poverty, improving human welfare, and raising living standards. Energy-saving stoves are easy and cheap to build and thus are an essential part of the strategy to increase wood and charcoal efficiency in this forest-deficient country.

Clean cookstoves decrease the rate of deforestation. They also preserve healthy river basins, fauna and flora habitats, and dwindling forest cover. Overharvesting of fuel wood disrupts wetland ecosystems, and clean cookstoves protect forests and watersheds from unsustainable harvesting of firewood and soil erosion. The overharvesting contributes to mud-slides and loss of healthy watersheds, which places pressure on regional food security and agricultural productivity, and can lead to increased sedimentation in rivers and streams. At least two of the six Ramsar Sites in Kenya face challenges related to the expansion of forestry and agricultural activities.¹

95% of people in rural areas in Kenya (greater than 68% is the national average) rely on firewood for cooking². Each household consumes 13 kg of wood per day on average. This high demand is a primary driver of reduction in Kenya’s forest cover, which now stands at less than 3% of national territory. The cookstoves traditionally used by Kenyan families are made of three stones overhung by a cooking pot that heats up during wood combustion. The inefficient design of these primitive cookstoves allows both heat and smoke to escape.

In Kenya, the Livelihoods Fund is working with Climate Pal Ltd., a social business, and its partner EcoAct, on an ambitious project to provide 60,000 households with improved “Hifadhi” (“to save, to preserve” in Swahili) cookstoves³ and envisages a reforestation component to the project as well. Portable Hifadhi

¹ Please see: Annotated List of Ramsar Sites for Kenya: http://www.ramsar.org/cda/en/ramsar-documents-list-annotated-kenya/main/ramsar/1-31-218%5E16536_4000_0

² Global Alliance of Clean Cookstoves <http://www.cleancookstoves.org/>

³ Climate Pal Livelihoods project: <http://www.livelihoods.eu/climate-pal-kenya.html>



cookstoves are locally sourced and manufactured using clay-based materials available in huge quantities in the region. They will be distributed in the Embu region at the foot of Mount Kenya to 300 villages.

Fighting climate change

Perhaps the most important aspect of clean cookstoves, such as the Hifadhi stove, is that they reduce the production of polluting aerosols and thus reduce the large greenhouse gas releases associated with the traditional models. Emissions from burning large volumes of unsustainably harvested wood fuel and biomass is inefficient. Traditional cookstoves are a significant contributor to global climate change.⁴

National policies that address climate change mitigation and adaptation need to include cookstoves and limit aerosol production where possible. The role of conservation, sustainable management of forests and forested wetlands, and enhancement of carbon stocks in developing countries helps Ramsar Contracting Parties to achieve the objectives of the Ramsar Convention specific to climate change.⁵

Use of the Hifadhi clean cookstoves will reduce wood consumption by 60%, saving 13,000 tons of wood per year. One improved Hifadhi cookstove results in 2.75 tons of CO₂ emissions avoided each year, which represents the carbon emissions of a 20,000km ride by car.⁶

Sustainable development and social impact

Today 3 billion people in developing countries – nearly half the world’s population – cook over open fires and inefficient coal, charcoal and dung-burning cookstoves inside their homes. According to the World Health Organization (WHO), smoke exposure from these primitive stoves is as bad as smoking two packs of cigarettes a day. Two million people globally die each year from respiratory illnesses – pneumonia, chronic lung disease, and cancer – all due to these toxic smoke emissions. That means one death every 16 seconds. In Kenya, where the Livelihoods project with Climate Pal is being carried out, Household Air Pollution (HAP) contributes to 14,300 premature deaths annually, with women and young children affected disproportionately.⁷ Clean cookstoves protect the health of people that use them due to the improved combustion that results in fewer emissions of noxious smoke.

Addressing ecosystem degradation and deforestation will not only help preserve the environment, but it will also significantly contribute to the health of women and girls, who bear the brunt of collecting firewood and fuel for cooking and heating purposes. Protecting the local environments from deforestation improves the quality of the lives of people as well. The improved Hifadhi cookstove model has a strong social impact: it reduces by half the time spent every day gathering wood, which leaves more time for young girls to go to school.

Ramsar has published the 2011 Sabah Call for Action, “Integrated Biodiversity Conservation: Linking Forests and Wetlands”⁸. This Call for Action promotes integration of socio-economic priorities, rights and responsibilities of local communities. It also promotes the use of innovative technologies in the management, restoration and conservation of forests and forested wetlands. The Sabah Call notes that it is important for countries to incorporate the values of forest and wetland ecosystem services in their financial, economic and investment planning and policies, and to consider the economic costs associated with forest and wetland degradation and loss.

⁴ Clean Cookstoves and Climate Change: <http://www.cleancookstoves.org/resources/fact-sheets/cookstoves-and-climate-1.pdf> and http://www.cleancookstoves.org/resources_files/clean-and-efficient-cooking-energy.pdf

⁵ Ramsar COP11 Resolution on Climate change: <http://www.ramsar.org/pdf/cop11/res/cop11-res14-e.pdf>

⁶ Global Alliance of Clean Cookstoves <http://www.cleancookstoves.org/>

⁷ Global Alliance of Clean Cookstoves <http://www.cleancookstoves.org/>

⁸ Sabah Call for Action: http://www.ramsar.org/pdf/Sabah_Call_For_Action_Final.pdf “Integrated Biodiversity Conservation: Linking Forests and Wetlands”



Kenyan clean cooking stakeholders developed and adopted a Country Action Plan (CAP) in April 2012 facilitated by the Global Alliance for Clean Cookstoves that set a national target of 7 million households adopting clean and efficient cookstoves by the year 2020. This is part of the Alliance's global goal of facilitating the adoption of clean and efficient cookstoves by 100 million households by the year 2020. The Livelihoods Fund is proud to actively contribute to this pledge via its partnership with Climate Pal Ltd.

This initiative will help to:

- Implement a wood and charcoal efficiency and substitution strategy to counter the deforestation crisis in Kenya
- Promote efficient conversion and end-use energy technologies and practices in order to minimize health hazards disproportionately affecting women and children, and environmental degradation.

Additional reading

- Livelihoods Fund <http://www.livelihoods.eu>
- Global Alliance of Clean Cookstoves <http://www.cleancookstoves.org/>
- VCS: Verified Carbon Standard (VCS) programme for crediting climate benefits and methodologies used for Livelihoods projects: <http://www.v-c-s.org/>
- Water, Wetlands and Forests <http://www.cbd.int/doc/publications/cbd-ts-47-en.pdf> (Convention on Biological Diversity)

About this series

As part of the ongoing partnership between the Ramsar Convention Secretariat and Livelihoods Fund, this article is part one of a four-part series looking in-depth at connections between our areas of work. Each story will showcase how both organizations are promoting habitat conservation (especially wetland habitats) by encouraging sustainable, wise-use practices, and addressing issues of climate change. The Livelihoods Fund is a unique carbon investment fund that finances major projects in reforestation, sustainable farming and efficient energy in developing countries in Africa, Asia and Latin America. Its mission is to improve the living conditions of rural local communities through the restoration of their natural ecosystems, which serve as the core of their livelihoods and is directly linked to their food security. All projects are carried out by and for the benefit of the local communities in tandem with a local partner NGO. Livelihoods' investors are private companies committed to combating climate change by their reducing carbon emissions via voluntary offsets that they receive from the projects. The Ramsar Convention Secretariat works with Ramsar Convention Contracting Parties to encourage wise use, international cooperation, and designation on Wetlands of International Importance, called Ramsar Sites.