

Efficient Cookstoves for Social Impact



Background

Uganda is one of the world's poorest countries. Due to the low income level and the lack of affordable alternatives the vast majority of households in Uganda (> 90%) uses firewood or charcoal for cooking. The traditional and inefficient three stone open fire is the most commonly used cooking technology. This has many negative impacts:

- Emission of greenhouse gases that contribute to climate change
- Indoor air pollution resulting in 19,700 deaths / year (WHO 2009)
- Resources (time / money) spent to collect firewood or to purchase charcoal are not available for school and income generating activities
- High rate of deforestation (each year 92,000 hectares of forest are lost)

Globally, emissions from the combustion of unsustainably harvested wood fuel alone accounts for roughly 2% of global greenhouse gas emissions. Thus, this inefficient cooking technology is an environmental issue as well as a significant barrier to sustainable economic development. Though cleaner, more efficient cooking technologies have been developed, they are often out of reach for families in Uganda due to cost or lack of availability in their local marketplace.

Solution

We help poor households to obtain a fuel-efficient stove. The revenues from the carbon credit program are used to reduce the price of these stoves to an affordable level. This improves the daily lives of Ugandans while reducing pressure on the local environment and the climate.

GHG savings / stove:

1.5 tonnes of CO₂ each year

Contribution to Sustainable Development

“The lack of modern cooking services accounts for the largest share of incidences of energy poverty, and addressing that lack has the clearest and most immediate benefits for human welfare” (WHO 2014)



Social benefits

Families benefit from lower energy costs and reduced indoor smoke. Less time spent collecting firewood means more time for girls to attend school and for women to pursue income generating activities. Local artisans earn a living making these efficient stoves.



Environmental benefits

140,000+ tonnes of charcoal and firewood are saved each year, lowering pressure on Uganda's forests. Forest saved from deforestation continue to be an important part of the local ecosystem (e.g. prevent drought, floods as well as soil erosion and store CO₂).



Health benefits

Improved indoor air quality results in better health for women and children (e.g. less respiratory diseases).

Standard

Gold Standard (GS-VER)

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Uganda



Improved Cookstoves Makes Economic Sense for Families

Juliet lives in a household of 15 people with 3 adults and 12 children. Everyday she uses her AES improved cookstoves to cook for the entire family. Juliet told Impact Carbon that her stove saves fuel, cooks fast and is safe for the children. *“Before I used a stove made from a car rim. Everyday I would spend about 5,000UGX (€1.40) on charcoal, but today I only use 1,000UGX (€0.28). With my savings I pay for school fees and rent. It has helped my family.”*



Dreaming of Becoming an Entrepreneur By Using Improved Cookstoves

KAMPALA, UGANDA - Improved cookstoves make it possible to save up to 50% of fuel costs. Significant reduction in day-to-day living costs help families save for other important expenses, such as health and education. But it also gives some a chance to save and capture life ambitions.

Resty is a mother of two who uses AES stoves everyday to cook for her family. *“Before I used 2,000UGX (€0.56) everyday for charcoal, but today I only use 1,000UGX (\$0.28). I put my savings in a wooden box for safe keeping. I want to start a business with the money I save.”* The savings she made so far has also helped her buy another AES improved cookstove.



Projekthintergrund

Uganda zählt zu den ärmsten Ländern der Erde. Aufgrund der sehr geringen Haushaltseinkommen nutzen noch mehr als 90% der Haushalte Holz oder Holzkohle und das traditionelle offene Drei-Stein-Feuer zum Kochen. Dies hat zahlreiche negative Folgen:

- Starke Energieverluste und unverhältnismäßig hohe CO₂-Emissionen
- Rauchbelastung der Wohnräume führt zu Atemwegserkrankungen mit jährlich 19.700 Todesfällen (WHO 2009)
- Abholzung führt zum Verlust von jährlich 92.000 Hektar Waldfläche

Werden Ugandas Wälder weiter mit der gleichen Geschwindigkeit abgeholzt, sind diese bis 2050 nahezu komplett verschwunden. Schwere Dürren sowie Überflutungen und daraus resultierende Hungerkatastrophen wären die Folge. Die nicht nachhaltige Nutzung von Holz zur Energiegewinnung – wie dies in Uganda der Fall ist – verursacht circa 2% Prozent der weltweiten CO₂-Emissionen. Die Vermeidung eines Teiles dieser Emissionen ist durch verfügbare effizientere Kochertechnologie leicht möglich. Viele Familien in Uganda können sich diese effizienten Kochöfen jedoch nicht leisten.

Projektgegenstand

Wir fördern die Nutzung effizienter Kochöfen, die gegenüber traditionellen Kochtechnologien Brennholz bzw. Holzkohle sparen. Dies erleichtert den Alltag der Familien, fördert den Waldschutz in Uganda und global den Schutz des Klimas. Einnahmen aus dem Verkauf von CO₂-Minderungszertifikaten werden genutzt um die Öfen zu erschwinglichen Preisen anbieten zu können.

CO₂-Einsparung pro Ofen: 1,5 Tonnen CO₂ pro Jahr

Nachhaltige Entwicklung

“The lack of modern cooking services accounts for the largest share of incidences of energy poverty, and addressing that lack has the clearest and most immediate benefits for human welfare” (WHO 2014)



Armutsbekämpfung

Familien profitieren von geringeren Energiekosten und sauberer Raumluft. Durch geringere Aufwendungen für die Brennstoffbeschaffung haben Familien mehr Zeit und Geld für wichtige Grundbedürfnisse (z.B. Schulbesuch, Erwerbstätigkeit). Lokale Betriebe zur Herstellung der Öfen bieten Handwerkern Arbeitsplätze.



Schutz der Biodiversität

Durch das Projekt können pro Jahr nahezu 140.000 Tonnen Holzkohle und Brennholz eingespart werden. Der vor Abholzung bewahrte Wald ist wichtiger Bestandteil des lokalen Ökosystems (z.B. Schutz vor Dürre und Überflutungen, Lebensraum für viele Wildtierarten und natürlicher CO₂-Speicher).



Gesundheitsvorsorge

Durch geringere Rauchbelastung treten insbesondere bei Frauen und Kindern weniger Atemwegserkrankungen auf.

Projektstandard

Gold Standard (GS-VER)