

# HIGH FIVE CLUB

changing lives, £5 at a time

## “Biochar Agricultural Climate Change Project” - Kenya

We are thrilled this month to be together supporting the inspiring, cutting edge work of **United Science of Africa (USA)**, an indigenous community self-help group working on poverty reduction and environmental issues in the impoverished and environmentally degraded Matungu district of Kakamega County, Kenya.

### Background

As in many other African countries, there is a growing movement of grass roots self-help groups set up and managed by pro-active individuals in the community to tackle their community’s most pressing needs. United Science of Africa in Kenya is one such group.

USA is improving peoples’ lives in Matungu District through a ground-breaking initiative that promotes food self- sufficiency and environmental conservation through the promotion of **biochar farming technology**.

The current knowledge about biochar is limited and there still remains a lot we don’t know, but the initial findings are extremely suggestive that biochar may offer a promising triple-benefit scenario for agriculture, energy production and climate change.

This technology was new to us here at the High Five Club, so when we received a grant application from USA we had to get online and do our research. Suffice to say we were blown away. Now for the science!

Biochar is the charcoal-like byproduct formed when biomass (that’s agricultural waste, maize stalks, chicken manure, etc. to you and I) is heated in the absence of oxygen in a specially designed kiln or stove.



At the village level, the energy produced in this process is used for cooking and heating as an alternative to cutting down trees and collecting firewood, and the biochar is used by community members on their agricultural plots to dramatically improve soil structure, its water-holding capacity and fertility thereby improving food security through increased agricultural outputs and yields. Critically, this process is carbon-negative as carbon is locked into the biochar, meaning that biochar production has a positive impact on climate change.

# HIGH FIVE CLUB

changing lives, £5 at a time

## High Five Club Support:

Together this month we are assisting USA in promoting the use of biochar farming, clean cooker stoves and reforestation programs on a wide scale in Matungu district to reduce hunger, deforestation, energy insecurity and at the same time tackling climate change.

Our support will help USA in:

- A. Identifying and training indigenous people to make low-cost kilns, clean cooker stoves and solar-powered briquette machines from locally available materials and help them to start to turn their agricultural waste into biochar.
- B. Training people to establish community forests, plant trees/fruits to fight climatic change.
- C. Sensitising people to the importance of organic farming, the effects of inorganic /conventional farming practices on the environment and health of their families, ways to increase crop capacity as well as hands-on training in sustainable agriculture techniques.



350 rural women, children and youth farmers will benefit from this project through USA's participatory approach, training them in project management and income generating activities, participating in public climate change awareness campaigns, tree planting, engaging in food security activities and manufacturing biochar stoves for business incomes, cooking and farm use. 500 people will additionally benefit as secondary beneficiaries.

High Five Club has contributed £526 to this project from monthly membership fees, again demonstrating how a little goes such a long, long way in Africa.

For further information on this initiative contact Dr Cheryl Mvula on [Cheryl@highfiveclub.co.uk](mailto:Cheryl@highfiveclub.co.uk)