

## **Energy efficient stove saves money and preserves the forest**

**An energy efficient stove could be a complete life changer for many people. Follow along to Mabilioni village in Tanzania where new stoves have reduced the pressure on the natural resources while changing people's lives for the better.**

"I used to burn five bundles of firewood a week, but since the new stove was installed it's dropped to two," says Dada Asha, 34-year-old restaurateur.

Dada has run a small restaurant in Mabilioni for ten years where she serves her guests fish, beans, rice, cassava and a maize porridge called ugali. Her income supports her and six other people. Every day she gets thirty to fifty guests from Mabilioni and neighbouring village Simanjiro.

Mabilioni nestles in the shade of the Pare mountain range in northeast Tanzania. The area is semi-arid and there is a great shortage of water. The nearest source is Pangani River, but the great distance means that the women and children, who are responsible for fetching water, return with only half of the daily requirement. The dry conditions also mean a shortage of firewood for cooking. Food is normally cooked on a traditional stove in a pan placed on three stones with a fire underneath. It is a method that consumes large amounts of fuel, creating a long chain of problems among the poor population. The women have to walk for three hours one way at least three times a week to gather enough wood, which leaves them little time over for other tasks. The children also have to help, causing them to miss school.

But for the past six months the firewood consumption has fallen dramatically thanks to new energy efficient stoves that go by the name of Mkombozi, meaning 'saviour' in Swahili. The stove focuses the heat on the pan while leading the dangerous smoke away and has cut firewood consumption by nearly half.

"Since I started using a Mkombozi stove four months ago I've managed to save 120,000 shillings. That's quite a lot with my income," says Dada Asha and thanks God for her new stove.

But it was no divine intervention that gave Dada Asha a new stove. She built it herself together with people in the village who attended a three-day course arranged by WWF's local partner SMECAO. Roughly 450 households have changed to the new stoves that are made from clay, brick and cement. Between 2007 and 2014, 100,000 energy efficient stoves were built within the framework of WWF's sustainable energy project in several African countries and they save around 6.4 million trees a year. Mabilioni is one of four villages in Tanzania selected to serve as models for new sustainable energy solutions that can be replicated in other parts of the country. The aim is for all energy in the village to come from renewable sources by 2030. As well as the energy-efficient stoves, several households are also planning to install solar panels, enabling them to abandon their costly, environmentally hazardous and ineffective paraffin lamps.

Less than six months after the first stoves were built in Mabilioni there are already signs of a fall in firewood consumption. They have also given women more time to spend on farming, bee-keeping and chicken breeding. For Dada Asha the stove has not only saved her the equivalent of €12 in four months (four average monthly incomes in Mabilioni), it has also greatly improved her working environment.

"Because the stove has a chimney, I now avoid infections caused by smoke getting in my eyes and air passages and I don't burn myself anymore because there are no open flames. There are only benefits."

## **Sustainable energy solutions in eastern and southern Africa**

The World Wildlife Fund is contributing to sustainable energy projects in Uganda, Kenya, Tanzania, Zambia and Zimbabwe. The goal is for renewable and sustainable energy solutions to meet the energy need of the entire region by 2050. But getting there requires a greater commitment to a sustainable energy policy, an outreach campaign to help people understand the need and to make them aware of their rights. It is also important for the communities in the region to be given the opportunity to exchange knowledge and experience of sustainable energy. Model villages like Mabilioni serve as an inspiration for switching to renewable and sustainable energy on a larger scale. The work is carried out in collaboration between national and local partner organisations that have in-depth knowledge of the communities in which they operate.