Efficient Stoves Reduce Deforestation in Eritrea

The village's women fill the gaps with sand and clay so that a stable construction is created.

The climate protection project in Eritrea supports the villagers in building smokeless, efficient ovens. The reduction of the smoke and greenhouse gases benefits the climate and at the same time promotes the health of women and children.

92% of stove users report better health conditions

2,300 women trained

16,800 beneficiaries

The project in Eritrea is being carried out by the Swiss support committee for Eritrea (Schweizerischen Unterstützungskomitee für Eritrea, SUKE) together with the Eritrean partner organization Vision Eritrea.

Until now, every household in Eritrea has a so-called mogogo oven with which the traditional flatbread (injera) is prepared. However, the ovens do not have a chimney or smoke outlet and consume large quantities of firewood, which is scarce in that region. The new smokeless and energy-saving mogogo oven model was developed and tested by the Eritrean energy ministry. With the new ovens, no more health-damaging smoke accumulates in the house during cooking, which benefits the health of the

Project type: Efficient cook stoves

Project location: Debub and Gash Barka, Eritrea

Project status: Completed, credits available

Annual CO₂ reduction: 2,500 t

Situation without project
Use of non-renewable biomass fuels

Project standard

Gold Standard

VER

Logo

Impressions

With the smokeless and low-emission mogogo oven, the health-damaging smoke emissions during cooking are eliminated.
women and children. Moreover, the new mogogo saves about 50 per cent of firewood. The consumption of firewood, and therefore also the deforestation and the emissions of greenhouse gases, are consequently reduced.

The project also includes other social advantages: The population saves itself the tiresome gathering of firewood and the cooking time is reduced. This way, more time remains for other tasks. Since less money has to be spent for the purchase of the expensive firewood, the project supports the poorest families in Eritrea and thus leads to a social balance. Project implementation was successfully completed by the end of 2011.

This project contributes to 9 SDGs:

- **1. No Poverty**
  - Households spend less time on firewood collection and fuel preparation.

- **3. Good Health and Well-being**
  - 92% of stove users report improved air quality in the kitchens and better health conditions.

- **5. Gender Equality**
  - 2,331 women have been trained.

- **7. Affordable and Clean Energy**
  - 16,878 people benefit from efficient and clean cooking.

- **8. Decent Work and Economic Growth**
  - 340 temporary jobs have been created.

- **12. Responsible Consumption and Production**
  - Each stove reduces firewood consumption by 0.7 tonnes every year.

- **13. Climate Action**
  - Each stove avoids 1 t CO$_2$e per year.

- **15. Life on Land**
  - The project saved 17,300 tons of firewood equaling 540 ha of forest area.

Working together, the women erect the upper part of the mogogo oven with prefabricated tiles.

The efficient mogogo ovens are constructed by the village's women themselves.

Trained instructors assist the women of the village in the construction of the ovens.
2,981 efficient cook stoves have been installed.