Fuel Efficient stoves for Ethiopia Programme of Activities

Non-technical Summary

Cooking with firewood causes important environmental and health problems in Ethiopia. Firewood use leads to deforestation and erosion, while smoke from traditional cooking causes health problems.

The primary objective of the programme is the replacement of traditional three stone cooking stoves in rural households in Ethiopia. For this purpose, types of efficient stoves will be distributed, including Mirt stoves and Tikikil stoves.

Mirt stoves are specifically made for injera baking for which over 50% of firewood is used in Ethiopian households. Mirt stoves are closed, but the same mitad is used as for traditional injera baking.

Tikikil stoves are suitable for the other cooking tasks like preparation of sauces, coffee etc.

Both stoves have a robust, maintenance free design made of durable materials to make sure long-term operation. Their design ensures complete combustion of fuel and cleaner fire (little smoke) therefore uses considerably less fuel as compare to traditional stoves. This means speedy cooking, time and fuel savings, cleaner kitchen walls and indoor air.

The project aims at distributing 200,000 efficient stoves during the next six years in Tigray, Amhara, Oromia and SNNPR regions.

Households will receive the stoves with an estimated 80% subsidy.

The programme is coordinated by the World Food Program (WFP), the Ministry of Agriculture, Ministry of Environment and forest and the Ministry of Water and Energy, with support of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and other institutions. Distribution of efficient stoves on the local level will be organized by staff of the Ministry of Agriculture.

The proposed programme seeks to generate carbon credits. If it can be shown that CO₂ emissions are reduced by saving firewood, carbon credits can be generated and funding
can be obtained for them which will be used to finance the programme. Therefore, registration as a Programme of Activities (PoA) under the CDM is sought. Carbon credits will then be issued by the United Nations Climate Authority (Ex UNFCCC). Additionally, registration under the Gold Standard is pursued, enabling to obtain a label for high sustainability benefits. The local stakeholder meeting is part of the Gold Standard registration procedure. The use of efficient stoves will be monitored thoroughly, since this is a precondition for the generation of carbon credits.

Environmental benefits

The project reduces the use of non-renewable biomass thus reducing deforestation associated with firewood use. By reducing firewood consumption, the project activity reduces green house gas emissions stemming from the use of non-renewable biomass.

In terms of CO₂ reduction, the programme will save around 3 tonnes of CO₂ per household.

Social and economic benefits

The project activity will contribute considerably to user's economic sustainability through efficient use of firewood. Energy savings at both individual house and national levels make vital contributions to their economic competence.

World food program Ethiopia country office is coordinating and supporting the implementation of the program. It has sub offices all over the four regions for grass-roots level support of the government institutions during the implementation of the program.

The project schedule can be summarised as follows:

- since 2012: General planning and testing of stoves
- June 2013: Test distribution of 100 efficient stoves in Ebnat Woreda
- November 2013: Local stakeholder consultation (according to GS rules), Evaluation of the test phase and site visit of external auditors
- 2014-2019: Distribution of 200,000 stoves in four regions