# SCCF - funded Project (UNDP): "Coping with Drought and Climate Change in Ethiopia"

## 1. Background:

As already observed in recurrent droughts, climate changes such as water shortages and subsequent food insecurity are impacting Ethiopia. The country is particularly prone to drought as well as climate-driven health impacts. Projections on the increases in temperature and declines in rainfall for the northern half of Ethiopia will negatively affect agricultural production, deteriorate infrastructure and worsen the livelihoods of the rural poor. Predicted climate variability and change will exert additional pressures on the already weakened subsistence economy. The chosen pilot area, the community of KaluWoreda, in the South Wollo Zone of Ethiopia, has been suffering from recurrent droughts that have pushed their livelihoods to severe poverty and destitution.

## 2. Project Summary:

As part of a set of three other "Coping with Drought and Climate Change" projects in Mozambique, Kenya, and Zimbabwe, (scheduled to run for 5 years) this project is working to improve the livelihood strategies and resilience of farmers. Through enhanced farming practices, alternative livelihood strategies, and use of early warning information in agricultural systems, rural communities will be able to adapt to water scarcity and drought. The project objective is to develop and pilot a range of effective coping mechanisms for reducing the vulnerability of farmers, particularly women and children in Kalu Woreda district. It will benefit 14,421 people in 6 villages.

## 3. Impact:

The project is expected to reach the following targets:

- 20% reduction in vulnerability to climate change of the population in pilot sites
- 25% of households (disaggregated by gender) adopt alternative livelihood strategies by the project
- 25% of the target villages adopt sustainable land management practices introduced by the project
- 90% of pilot sites disseminate weather/drought information
- 50% of households receive and use weather forecast information
- 20% of farmers/ agro pastoralists outside the target area adopt/replicate best practices

#### 4. GEF's role:

SCCF resources will be used to analyze and address the major barriers to adaptive capacity. Furthermore, SCCF project will build on the development baseline to implement a range of small to medium-scale livelihood improvement projects to mitigate the impacts of climate change by providing financial and technical support to vulnerable communities, 50% of which are women's groups. These interventions will achieve four different outcomes:

- Livelihood strategies and resilience of vulnerable farmers improved and sustained to cope with drought
- Enhanced use of early warning systems in agricultural systems
- Drought preparedness and mitigation activities integrated across sectors and at various levels of society
- Farmers outside the pilot sites replicate successful approaches to cope with drought.

## 5. Lessons Learned:

- Introduced early maturing and high yielding new varieties of teff, rice, sorghum and chickpea as good coping mechanisms for climate change and drought. The introduced drought resistant and early maturing chickpea and teff varieties have received farmers' appreciation due to the demonstrated high productivity early maturity/fast growing, its tolerance to water logging and canopy/tiller formation.
- Knowledge sharing among community members of best practices especially on homestead agricultural practices, water management (geo-membrane utilization techniques), high yielding and early mature crop varieties and gully crossing for irrigation, marketing approaches and spring developments.
- Farmers access to safe and dependable water as a result of the spring development. This activity benefits especially women by saving time to fetch water (at least 40 min to one hour) often at night, after 3am. Women were forced to dig sand to get water in the Borkena River. As a result of the spring development and the possibility of saving time, women can cook their family meal on time early in the morning and the husbands are able go to their farm activities on time. The health of the community members has improved.
- The forage and tree plants and gully rehabilitation by gabions and sacks on the selected watershed have good performance. Pigeon pea, acacia policanta, jatropha, sasibania and lablab are found on the selected watershed on a good performance on hill side tracing and eyebrow basin.
- The adoption trail on NERICA (rice variety) has been successful and farmers appreciate
  the rice plant performance, water logging tolerance and early maturity. Especially
  interested on this crop, are the farmers who have water logged lands, because
  waterlogged land was not suitable to grow crops.
- Sheep, goat, honey bee and forage productions are also a means to adapt climate change and drought by increasing productivity and diversified income sources of vulnerable farmers
- A regular and systematic data collection, analysis, feedback, and dissemination modality
  at a site level, between the office of Agriculture, Metrology and the communities, are a
  good means to strengthen early warning information communication and decision
  making at all levels, to increase agricultural production systems.

## 6. Additional Information and Contacts:

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GEF Database: http://gefonline.org/projectDetailsSQL.cfm?projID=3154

Adaptation Learning Mechanism: www.adaptationlearning.net

ALM Project Website: http://adaptationlearning.net/projects/ethiopia-coping-drought-and-

climate-change

UNDP Project Website: http://www.undp-adaptation.org/portfolio/projectR.php?id=35

## 7. Photographs

Experience sharing visit on best practices (homestead agricultural practice and water management techniques) in *kebele*.





Cooperative training on business management, sheep, and goat raring in Degan









UNDP Country Officer/ GEF program analyst crossing Borkena River to project *kebeles* for visiting the spring development



The UNDP Country Officer mission discussion with farmer groups/associations (IPM, water user/committee, irrigation user, environmental management committee, seed supply and marketing cooperatives)



UNDP mission providing technical backstopping for the spring development in kebele 31



UNDP mission discussion with beneficiaries at the spring development site in kebele 31



UNDP staff visited spring development in kebele 31 and conducted discussion with the beneficiary



UNDP staff visited spring development in kebele 31 and conducted discussion with the beneficiary



Experience sharing visit on best practices (homestead agricultural practice and water management techniques) in *kebele* 22, 04, 34



Experience sharing visit on best practices (homestead agricultural practice and water management techniques) in *kebele* 22, 04, 34



Integrated pest management (IPM) training in Degan and Harbu