A CASE STUDY OF THE ROCKEFELLER PROJECT

Project Objective

The objective of the three-year project from August 2011 to July 2014 is to strengthen the capacity of ICPAC in the dissemination of climate prediction and agro-meteorological services to vulnerable farming communities for improved agricultural production and food security to enhance adaptation to climate variability and climate change

Project Background

The project addresses some of the ***risks to agriculture sector resulting from climate change and variability*** within the Greater Horn of Africa (GHA) region. Drought and other climate-related disasters are very common; and are expected to become severe and more frequent due to climate change. Farming communities rely on their own (indigenous knowledge) weather prediction but as a result of climate change, the seasons are no longer predictable negatively impacting crop production, food security, pastures and water availability, and livelihoods.

Project Activities

The project encourages a shift from traditional to climate based agriculture planning and management by providing quality, down-scaled, well interpreted climate information to highly vulnerable farming communities in Kenya. Climate information at the beginning of each cropping season is disseminated through community-based climate downscaling workshops, while subsequent climate information needed by farmers as the seasons progressed is ***communicated through SMS*** using an Internet Based SMS Broadcasting System based at ICPAC. ***Over 200 crop farmers and pastoralists are participating*** in the project.

A Climate downscaling workshop in Reru community

Contrast between garden of climate information user (Left) and a conventional garden (Right)

Successes

The project successes at community level include the following:

1. Yield increment of ***3-4 times above*** **the community baselines** (for sorghum & Maize)
2. Higher multiplier effect (over *1:120* for sorghum)
3. More awareness created – ***farmers are now able to plan and make informed decisions*** based on the anticipated weather/climate
4. More food is being produced and stored; surplus food is available until the next harvest
5. ***Pasture and water resources better managed*** – utilization of water harvesting and storage, reseeding in degraded areas, rotational grazing. Livestock conditions remain high and for longer.
6. Proper land use planning and management such as (intercropping, construction of soil erosion control structures, reduced seed rate, increased soil fertility management, Agro-forestry etc).
7. Investor opportunities in participating communities; for example, farmers in Reru who have mastered the skill of sorghum production have been ear-marked to produce beer-type sorghum by and for East African Breweries

The project has clearly demonstrated that ***accurate climate prediction***, followed by proper interpretation, packaging and timely dissemination, and proper utilisation by farmers in planning and management of their farming activities undoubtedly ***increases*** farm / rangeland productivity, food production and ***food security and improve livelihoods***.

[1] A comprehensive information package including: an advice on choice of crops/varieties, soil fertility management, erosion control & crop protection, weeding regimes, timing of harvesting and post-harvest operations, etc to the dominant crop-based farmers. The Livestock advisory included strategies for appropriate utilisation of pastures and water resources.