### **Expected results**

- Current status of the 2 ecosystems in terms sedimentation levels, hydrological and water characteristics to inform rehabilitation and conservation actions established.
- A Payment for Ecosystem services (PES) model for enhanced participation by communities, common interest groups (CIGs), community based organizations (CBOs) in rehabilitation, conservation and for improved livelihoods piloted.
- Integration of selected rehabilitation and conservation technologies for improved NRM, SLM and AWM in the 2 water towers demonstrated.
- Enhanced production of bamboo promoted and capacity on value addition built.
- Nature based enterprises developed and promoted
- Communication and knowledge management strategy developed and implemented.
- Monitoring and Evaluation carried out.



Inadequate cultivation of trees on farm exposes homesteads to shortages of critical products and services

## **Project Implementation**

#### **Project Implementation Team**

- Component 4 programme activities are housed at KEFRI headquarters and implemented with partners.
   A project management team has been established to coordinate activities. Field activities are coordinated from the two KEFRI Regional Centers at Maseno, for the Mt.Elgon Ecosystem and Londiani for Cherangany Ecosystem.
- At grass root level, the project empowers the local communities and creates awareness on resource management schemes that enhance the adoption of viable landuse options that contribute to the well-being of the communities, whilst adding to the economic sustainability.
- A website is being developed for sharing information on the project and its outputs.

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# Kenya's Water Tower Protection and Climate Change Mitigation and Adaptation (WaTER) Programme



SCIENCE TO INFORM DESIGN OF COMMUNITY-LEVEL ACTIONS AND NATIONAL POLICIES

**FEBRUARY 2016** 







# Programme background

Kenya's forested landscapes, including Kenya's water towers, store rainwater, regulate river flows and prevent runoff. These landscapes also recharge ground-water aquifers, improve soil fertility, and reduce soil erosion and sediment loads in river water. The forest landscapes regulate local climatic conditions for commercial agriculture, energy generation, and act as carbon reservoirs and sinks.

The ability of Kenya's forested ecosystems to continue to provide critical ecosystem services, in a sustained manner to adjacent communities and beneficiaries further afield is being threatened by deforestation and land degradation. Recognition of Kenya's water towers economic importance and threats posed by their degradation has necessitated rehabilitation and restoration actions.

European Union is supporting the Govenrment of Kenya through Kenya WaTER Programme to: 1. strengthening of systems and capacity of institutions in charge of water towers; 2. developing integrated management frameworks for provision of services and products; 3.adopting incentive mechanisms for sustainable landuse; and 4. identifying and actualizing scientific evidence-based support for policy decisions and interventions on the ground. Therefore Kenya WaTER programme pursues innovative institutional approaches for linking ecosystem services providers and beneficiaries through design and implementation of rewards and/or payments for ecosystem services. The programme aims to achieve its objectives through four component areas. Component one is lead by the Ministry of Environment, Natural Resources and Regional Development; Component two by Kenya Forest Service, Component three is implemented by the ten County Governments in the programme area, whilst Component four is led by Kenya Forestry Research Institute (KEFRI)

# Science to inform design of community level action and national policies

Component 4 will provide data and information required for decision making. This is because for a long time, decisions on the management of Kenya's water and other key natural resources have neglected the incorporation of scientific information in rehabilitation and management activities. This omission results in poor decisions which are often conflicting hence resulting in accelerated degradation of the resources. KEFRI together with key collaborators in the sector have developed technologies and procedures which can enhance decision making options and systems to help improve the management of key water towers of the country. The generated information will assist County

Governments to enhance the management of Mt. Elgon and Cherangany forest ecosystems which are catchments for western Kenya water resources.



Degraded forest that can be rehabilitated

# **Overall Objective of Component 4**

To contribute to poverty reduction and sustainable livelihoods by applying scientific principles to inform design of community level actions and national policy decisions on rehabilitation and conservation in Cherangany and Mt. Elgon water towers.

#### **Specific Objectives**

- To undertake a baseline survey on biophysical and socio-economic status of the 2 Ecosystems to inform rehabilitation and conservation actions.
- To pilot a Payment for Ecosystem services (PES) model for enhanced collaboration between land owners and water users

 Explore livelihood opportunities associated with forest conservation and rehabilitation



Bamboo is specifically targeted for large scale planting for rehabilitation of degraded sites and as a resource to promote cottage industries

- To demonstrate integration of selected rehabilitation and conservation technologies for improved NRM, SLM and AWM in the 2 water towers.
- To build capacity of the participating counties within the 2 Ecosystems in NRM, PES, and germplasm development.
- To promote large scale production of bamboo seedlings, planting and train artisans on value addition in the 2 ecosystems.
- To promote the development of nature based enterprises targeting women, the youth and people with disabilities.
- To develop a communication and knowledge management strategy for the programme.
- To monitor and Evaluate programme activities.