

## ANNEX 5: ECOSYSTEM APPROACH

### What is an Ecosystem Approach (EA)?

The Ecosystem Approach (EA) is a strategy for integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. It recognizes the inter-connectivity between ecological, socio-cultural, economic and institutional arrangements.

Ecosystems provide important goods and services including food security, micro-climate regulation, disease regulation, fresh water supply, disaster risk reduction, and habitat for biodiversity. These are the building blocks for resilient, sustainable and successful economies. Ecosystems continue to provide important goods and services if the inter-connectivity between its ecological, socio-cultural, economic and institutional structures is considered in resource extraction. This requires the recognition of the important role that communities play in sustaining important ecosystem goods and services; harmonization of institutional arrangements and integrating agriculture, forestry, wildlife, water and agroforestry.

In Kenya the failure to promote inter-connectivity within and across ecosystems is evidenced by declining fresh water for consumption, tea production, irrigation and increased frequency and severity of extreme climatic events like drought and floods. Nairobi has on several occasions experienced water and power rationing because water flowing into Sasumua, Ndakaini, Masinga, and Kindaruma for hydropower production and urban water supplies have declined. The degradation of the Mau complex is threatening livelihoods in the Mara, Nakuru, Nyando, Kerio River, Molo and Baringo river basins. Encroachments into Taita Taveta, Embobut, Kakamega, Mt. Kenya, Aberdares, Chearangani, Marsabit, Nandi, Mangroves, Tugen Hills, Ngare Ndare and other forested ecosystems has led to economic, socio-cultural and ecological losses. This is partly attributed to the failure to integrate land, water, and living resources.

Sustaining ecosystem services will require the adoption of ecosystem management approaches that will enhance:

- i) **Ecological aspects** of ecosystems including maintaining biodiversity, swamps, forests, wetlands, and mangroves;
- ii) **Socio-cultural aspects** including use of natural areas for rituals and celebrations important to local communities;
- iii) **Economic aspects** including micro-climate for tea production, tourism for landscapes and biodiversity, maintaining soil fertility and productivity, steady supply of fresh water in rivers and lakes for hydropower, irrigation, and consumption; and
- iv) **Institutional aspects:** Management of natural resources need effective management structures that promote equitable access and use, ownership rights and co-management involving local communities, non-state actors and government agencies.

The ecosystem approach promotes the recognition of the inter-connectivity among the 4 aspects of ecosystems. The Ecosystems approach leads to greater efficiency, effectiveness and equity. It involves all stakeholders and balances local interests with wider public interest. It further ensures that there is greater responsibility, ownership, accountability, participation and use of local knowledge in the management of natural resources.

## **Ecosystems for the CEF 2010 Call for Proposals**

Projects proposed to the CEF 2010 Call for Proposals are expected to integrate the 4 above mentioned aspects for purposes of improving and sustaining ecosystem goods and services provided by Kenya's environmentally important areas.

The activities of the proposed projects must have an impact on improving ecosystems and should therefore cover all communities with a substantial impact on the ecosystem. Depending on the size and location of the ecosystems, proposals may have to include activities done by a number of adjacent communities. The assistance to be provided by CDTF to communities for the development of a full proposal can integrate activities among such communities.

The proposals using the the ecosystem approach will ensure that:

- Functional relationships and processes within ecosystems shape natural resource management;
- There is improved benefit sharing among communities;
- Communities' capacity to formulate, implement and manage environmental projects is improved;
- Communities working in an ecosystem are linked with those working in other parts of the ecosystem;
- Communities are working with local authorities, non-state actors and government agencies in managing different natural resources; and
- Inter-connectivity across sectors is promoted to achieve an efficient and effective management of natural resources.

## **CEF adoption of the Ecosystem Approach**

CEF recognizes the fact that Kenya's diverse ecosystems provide important goods and services that are important to different groups. CEF pursues a demand-driven approach that expects community-based organisations to propose integrated projects that address environmental problems whose impacts are ecosystem-based and affects several communities. The CEF investment allocates 40% of the available resources to interventions proposed for the 5 water towers and 60% towards interventions in other ecosystems (see section 1.2 of the guidelines for more details). This recognizes the role Kenya 5 water towers plays in Kenya's economic growth but without ignoring the other ecosystems. This is because what happens in one ecosystem also affects other adjacent ecosystems. Some of the environmentally important ecosystems include:

- Major water catchment areas;
- Critical ecosystems such as dryland and hill forests, lakes, swamps, coastal and marine zones, protected and unprotected areas and important river basins;
- Drylands including Arid and Semi-Arid Lands (ASALs) that supports local livelihoods and are facing serious environmental degradation;
- Settled and high agricultural potential areas where human activities have negatively affected or are likely to negatively affect the environment as a result of associated livelihood activities;
- Areas vulnerable to the effects of climate change or related disasters such as floods and drought; and
- Other unique areas not covered above whose management and conservation will be enhanced by the ecosystem approach.