The Economics of Ecosystems and Biodiversity for Agriculture and Food (TEEBAgriFood) aims at equipping decision-makers with the tools and information to recognise the value that ecosystems provide to food systems

TEEBAGRIFOOD

KENYA

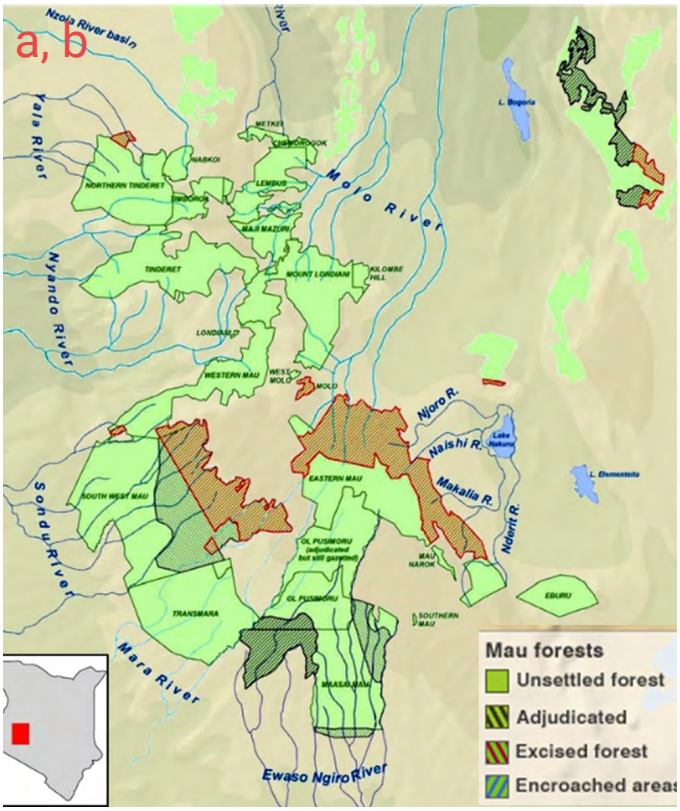
Agri-Food Systems In The Mau Forest Complex

Context & Focus

The Mau Forest Complex is the largest closed-canopy forest ecosystem and the single most important water catchment in the Great Rift Valley. The indigenous montane forest covers almost 400,000 hectares of land. Through the ecological services it provides, the Mau Forest Complex is a natural asset of national importance that supports key economic sectors in both Rift Valley and western Kenya. This includes energy, water supply and agroforestry, as well as two of the three largest foreign currency economies: tea and tourism.

Location

The Mau Forest Complex straddles seven counties (Figure 1.0). The Mau Forest Complex contains 19 gazetted forest areas covering a total designated area of 391,352 ha.



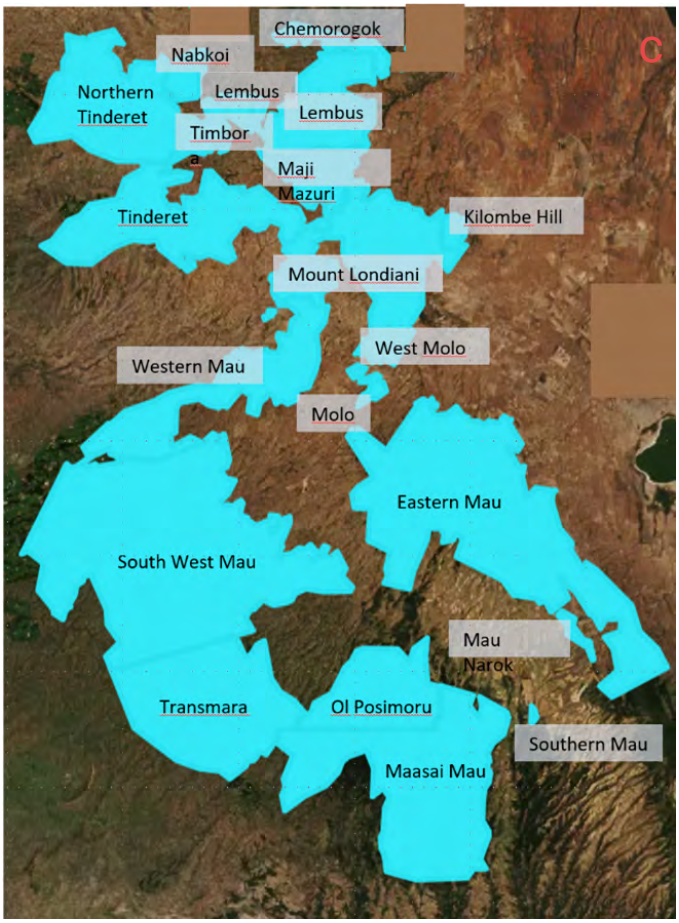


Figure 1. a) Mau Forest Complex (Landsat 2019) showing county lines; b) gazetted forest areas; c) different historical processes that have affected the boundaries of the Mau Forest Complex

- Facts & Figures -

Forestry contributes **3.6%** of Kenya's GDP

excluding charcoal and direct subsistence uses.

Forests support the **most productive sectors**

and services in the country i.e. agriculture forestry and fisheries (23% of GDP 2020), food manufacturing (4%), tourism, water and energy services, wildlife, recreation, trade and industry.

Biomass comprises about **80%**

of all energy used in the country

Forests comprise **75%** renewable surface water

They serve critical water regulation roles, which are important for human livelihoods, irrigated agriculture, and production of hydroelectric power.

Forestry Services

provided by the water towers include local climate regulation, water regulation, water purification, waste treatment and water pollution sinks.

Method, Objectives & Impacts

The main aim of the project is to:

i. Undertake a baseline review of biophysical data availability from published grey literature, existing databases and expert consultations.

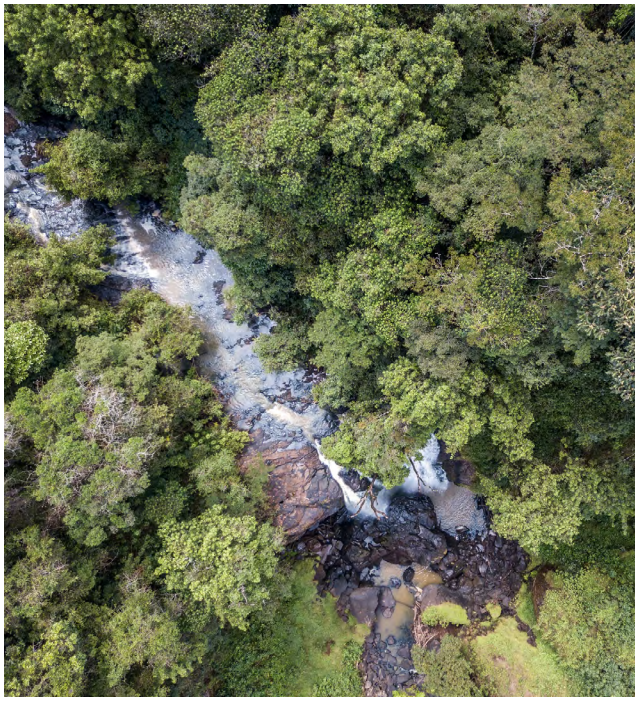
ii. Quantify the contribution of natural capital (e.g. biodiversity, water, soil) and ecosystem services to the functioning of the Mau Forest Complex, trade-offs among land uses, value chains and impacts in decision-making on future prosperity, livelihoods and climate adaptation; and

iii. mainstream these approaches in decision-making by working with stakeholders at all levels. As ecosystem services often remain invisible; the aim of this project is to apply the TEEBAgriFood Framework to help make the value of nature explicit in national policies and in the system of national accounts and to support farmers, business and communities in their local decision-making.

iv. Baseline policy review and consultation at the community, county and national levels to come up with the theory of change for the desired future scenario(s)

In addition, new approaches to determining the social capital of the communities in the Mau Forest Complex and its neighborhood are being tested, following the work done by the Prosperity Co-Laboratory (PROCOL) in Kenya.

Following scenario development based on historical, current and potential trajectories for the different pathways of natural, social and produced capital, the next step will consist of the co-production of a Theory of Change (ToC) to determine the policy and implementation pathways to deliver the preferred scenario. Consultations have taken place at National, County and Community levels; the ToC will be designed to connect the three levels.



Waterfall, Southwest Mau Forest. Photo: Patrick Sheperd / CIFOR

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