The Economics of Ecosystems and Biodiversity
Agriculture & Food (TEEB AgriFood)

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KENYA PILOT STUDY

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Presentation Outline

- Introduction: Agriculture-Climate change-Water Catchment areas in Kenya
- Highlights of some laws/regulation/ Policies/ strategies
- Experiences of TEEB agri-food IKI project in Kenya
  - Inception workshop
  - Consultations prior and after workshop
  - Selection of the study site
  - Development of communication strategy
Agriculture-Climate change-WCA

- Kenya’s economy and people livelihood is highly dependent on the natural resources, with a heavy reliance on climate sensitive sectors including agriculture, tourism and energy.
- Rain-fed agriculture accounts for 98% of the agricultural activities in the country.
- Over 70% of rural livelihoods are dependent on rain-fed subsistence agriculture, thus vulnerable to climate variability and change.
- Agriculture sector is the mainstay of the economy, contributing about 26% of GDP, and accounting for 65% of Kenya’s total exports
- It also contributes to more than 18% of formal employment, and over 70% of the informal employment in rural areas.
- Agriculture sector is also the biggest user of freshwater resources (MEMR, 2012).
- Water Catchment Areas (WCA) thus plays a significant role in agricultural production through provision of water directly and indirectly (water cycle).
Laws/Policy/regulations/strategy framework

- In Kenya’s Vision 2030, we acknowledge the need to increase productivity in the agricultural sector to **ensure food security** for a rapidly increasing population, and **improve processing** to add value to the agriculture sector and increase farmer incomes.

- **BUT growth of agriculture** output is faced many challenges including **soil erosion**, **soil infertility**, **low productivity**, **agro-biodiversity loss** and **climate change** (Mulinge et al., 2016).

Photo Credit: L. Njoroge, NMK
In To address some of the challenges Kenya government has put in place laws/policies/regulations/strategies:

| **Kenya Constitution 2010** | Gives the environment and natural resources management a special place  
| - **Bill of rights Article 142:** a clean and healthy environment  
| - Stipulates that efforts should be made to maintain a tree cover of at least 10% of land area in Kenya  
| - States that Kenya should establish systems of environmental impact assessment, audit and monitoring of the environment |
| **Vision 2030** | Long term development plan aimed at making Kenya a phosphorus nation- implemented thro’ 5-year medium Term Plans.  
| - Conservation of WCAs is one of the priority programs |
| **The “Big Four” Agenda (2018-2022)** | Manufacturing, Food and nutrition, Housing & Universal Healthcare  
<p>| - AgriFood project is closely aligned with the <strong>Food and nutrition Agenda</strong> |</p>
<table>
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<th><strong>The Agriculture Act (Cap 318)</strong></th>
<th>Principles legislation governing agricultural activities: <em>Agriculture Farm Forestry Rules 2009</em> to promote farm forest.</th>
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| **Agriculture Sector Development Strategy (ASDS), 2010-2020** | - ASDS is the overall national policy for the agriculture sector in Kenya  
- Promote an innovative, commercially oriented and climate-smart modern agriculture- growth 7%, reduce poverty by 30%.  
- NB: Agriculture Sector Growth and Transformation Strategy (ASGTS) – in the making! |
| **Kenya Climate Smart Agriculture Strategy, 2017-2026** | Aims for the sector to “adapt to climate change, build resilience of agricultural systems while minimizing emissions for enhanced food and nutritional security and improved livelihoods. |
| **National Environment Policy, 2013** | - Better quality of life for present and future generations through sustainable management and use of the environment and natural resources. |
Despite Kenya’s well-intended policies, plans, legislation and institutional framework on environment and agriculture, there exist barriers to arrest deteriorating natural ecosystems:

- Low level of awareness on dependency of agriculture on ecosystem services
- The economic values of those values
- The risks associated to the deteriorating in quality of natural ecosystem
• The objective of a TEEBAgriFood study in Kenya is to **measure, quantify, and value the FULL benefits and costs of agricultural activities** around Mau Forest complex.

• The information will to inform government policies, initiatives, incentives or regulations by **providing a full cost accounting** of food systems and ecosystem services.

• The overall objective is to promote cohesive policy approach to maximize productivity, improve livelihoods, and reduce negative impacts on the environment.

Photo Credit: L. Njoroge, NMK
Kenya journey towards mainstreaming values of nature in decision making in agri-landscapes
21-22 Feb 2018
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- OUTCOME of the inception and subsequent consultation workshops
  - Created awareness and seek support among the stakeholders
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- OUTCOME of the inception and subsequent consultation workshops
  - The project structure was adopted and formed Steering Committee members (SCM) consisting of:
    - Ministry of Environment and Forestry (To Chair The Steering Committee)
    - Ministry of Agriculture and Irrigation (Co-Chair)
    - Ministry of Lands and Physical Planning
    - Ministry of Water and Sanitation
    - The National Treasury
    - Kenya National Farmers Federation (KNFF)
    - Kenya Associations of Manufacturers
    - National Museums of Kenya (NMK)- Secretariat /Coordination of the Project
    - UN Environment- Ex Offcio
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- OUTCOME of the inception and subsequent consultation workshops
  - The scoping/study area options for the next phase of the project were proposed and decided by SCM namely - Mau Forest Complex
    - Gazette Forest Reserve in 1954 under Forest Act
    - Largest remaining indigenous forest and water tower ca. over 400,000 hectares
    - The main catchment area for rivers draining Lake Victoria and Rift valley lakes: Lakes Nakuru, Turkana, Natron, Bogoria, Baringo
    - The Kericho County to the West, Narok to the South, Nakuru to the North and Bomet to the South-West.
    - Support agriculture (wheat, maize, Tea and livestock rearing), hydro power, urban water supply, tourism (wild beast) and wildlife.
    - Cultural value: Home to Ogiek people, derived their livelihood from the forest.
- Mau Forest complex rich in biodiversity and associated values
  - 169 species records of birds, 19 species of reptiles and amphibians, 23 mammals, 113 species of butterflies
  - Pollinators and
  - Gene banks - wild plants relatives of crops

Terer et al. 2016
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- Communication strategy for the project
  - Convey relevant data and information to various audiences to achieve its goals and objectives.
  - Enhance the visibility of TEEB-Kenya project and to rally key stakeholders to promote land-use practices and trade-offs that take economic values of nature into consideration.

- **TEEB Project Communication Objectives:**
  - Create awareness about TEEB-Kenya among all key stakeholder groups
  - Influence the attitude of all key stakeholder groups towards TEEB-Kenya project
  - Create awareness about the various land-use scenario models among all stakeholder groups
• TEEB-KENYA aspires to influence the behavior of all key stakeholder groups to promote land use decisions that take into consideration the value of nature

✓ scenarios that will guarantee better harvests and sustainable livelihoods for current and future generations
THANK YOU

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- Farmers representatives
- NMK
- Local Universities
- Private sector
- UN bodies
- Other Kenya government ministries