The Economics of Ecosystems and Biodiversity
TEEB for Agriculture & Food
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TEEBAgriFood Africa: overview of proposed report structure

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27th February 2019, Nairobi
TEEB for Agriculture and Food in Africa: assessing policy options to improve livelihoods

• The application of the TEEBAgriFood Framework in Africa (henceforth ‘TEEBAgriFood Africa’) is to be developed.

• Three case studies applying the evaluation framework are currently in progress – rice in Senegal, agroforestry (coffee/cacao) in Ethiopia and Ghana, and livestock in Tanzania.

• **Aim:** To apply TEEBAgriFood framework and evaluate policy options for the improvement of livelihoods in Sub Saharan Africa (SSA) region.

• **Purpose of this session:** To present an outline of the report and seek feedback and inputs to finalise it from participants.
Outline of the report

• Executive Summary and Key Messages
• Introduction and Aim
  • Growing population, increasing demand, potential of agriculture and food system in SSA as compared to global situation.
  • Brief introduction to macro-economic indicators in SSA, with special reference to agriculture and food sector, key policies, challenges and overall ambition through to 2050 and beyond (refer Agenda 2030 SDGs, African Agenda 2063).
  • Issue of externalities in current intensive agriculture and food systems with impacts on natural resources, society and health.
  • Emphasis on SSA agriculture – need to examine current practices and policies and plan for the transformation of agriculture and food systems in SSA to fulfil demand for healthy and nutritious food and protect environment.
  • Need a mechanism and policies to respond to the high social and environmental costs of agriculture and food systems.
• First, need to measure externalities in agriculture and food systems so that they can be reported in the national accounts and economic environment.

• Second, facilitate policy to develop appropriate responses through new theory of change.

• The lack of appropriate tools to measure and reveal externalities is the main shortcoming of current policies. This has been filled by the development of TEEBAgriFood Evaluation Framework. Aim and relevance of the TEEBAgriFood framework to evaluate agriculture and food systems in general and particularly in SSA.
Specific objectives of the report

• To review the economic interdependencies between human (economic and social) systems, agriculture and food systems, and biodiversity and ecosystems in three case studies – rice in Senegal, agroforestry (coffee/cacao) in Ethiopia and Ghana, and livestock in Tanzania.

• To provide a regional analysis and narrative on the economics of the agriculture and food sector by focusing on Sub-Saharan Africa, highlight key positive and negative externalities it generates, and the national and international policy context.

• To provide insights into policy opportunities and recommendations for capturing externalities in decision-making for better livelihood outcomes.
Background

- **Economy**
  - Key economic indicators, GDP, value added by agriculture, FDI, employment, education. Agricultural economy in SSA, Key food value chains

- **Society**
  - Social equity. Food culture, commons.
  - Food, ecological and social security.

- **Human capital**
  - Population and food demand to 2050.
  - Labour, Education, consumer behaviour.
  - Human health and nutrition linkages.

- **Natural resources**
  - Soil fertility, land degradation, climate change, water resources, biodiversity etc.
Systems approach in agriculture and food systems

• Major eco-agri-food systems in SSA
• Farming systems in SSA
• Natural resources – land, water, air, biodiversity
• Food systems, market etc.
• Health systems and nutrition in SSA
• Systems approach to transformation of agriculture and food systems
Overview of development policies in SSA

- **Economic development policies**
- The New Partnership for Africa’s Development (NEPAD), the economic programme of the African Union (AU), officially established in 2001,
- The 2014 Malabo Declaration, Agenda 2063
- Human Capital Development, Regional Infrastructure and Trade, Industrialisation, Science, Technology and Innovation, Natural Resources Governance and Food Security
- AU 2003 Maputo Declaration on Agriculture and Food Security
- Comprehensive Africa Agriculture Development Programme (CAPPD), the African Peer Review Mechanism (APRM)
Agriculture and food policies

• Agriculture and food sector in SSA and four case study countries.
• Agriculture in Agenda 2030 (SDGs) and Africa 2063 agenda.
• R&D sector, agriculture, food, health and environment policy.
• Subsidies in inputs, markets.
Application of TEEBAgriFood framework

• Framing and description of applications – three case studies, agroforestry, livestock, rice.
• Summary of each case study
• Key positive and negative externalities in three systems – rice, agroforestry and livestock.
• Impacts and dependencies on produced, social, human and natural capital including health externalities.
• Linkages with nutrition and health.
• Change in stocks and impact on social, environmental and economic wellbeing.
Systems comparison and policy evaluation

- What are the positive and negative externalities in case study countries and SSA associated with agriculture and food systems?
- Outcome of applying the framework in three case studies.
- Insights from systems comparison in three case studies.
- What are the farming systems that can deliver this amount of food?
- Outcomes for policy.
- Evaluation of current agriculture, food, health and environment policies and systems.
- Policy evaluation in SSA with special reference to four countries – Ghana, Ethiopia, Tanzania and Senegal.
- Integrating social, natural and human capital in agricultural and food economy and wider policy environment.
Theory of change: From analysis to policy options

- Insights into policy and recommendations for decision makers – farmers, R&D and education sectors, Policy (agriculture and food, health, environment).
- Linkages with SDGs in SSA and strategies.
- Change agents in SSA and in each of the four countries.
- Towards sustainable and just agriculture and food systems in SSA.
Conclusion

• Key findings

• References
• Appendix
Q&A

Thank You

@001harpinder
Notes/Suggestions
Policy options and mainstreaming

Agriculture and Food systems

• What are the **key issues and polices around food** availability and affordability? Now and in future.

• What are the **farming systems that can deliver** this amount of nutritious food? Now and in future.

• What **mechanisms can deliver** nutritious food to growing population without impacting natural and social capital?

• Agenda 2030 (SDGs) and Agenda 2063 (The Africa We Want)
Agriculture and food policies

• How can governments facilitate the ability to undertake the evaluation using the TEEBAgriFood framework?

• What are the pathways for integrating these findings in their agriculture, food, environmental, health policies?

• What kind of modification is required in the current policies to respond to the need for transformation of agriculture and food systems?

• What resources are available and how human capital can be enhanced to deliver the change through new and improved policy environment?

• Where are the opportunities to coordinate and implementation of cohesive policies?
### Pathways to sustainable agriculture policy

<table>
<thead>
<tr>
<th>Rank (1-4) in order of preference</th>
<th>Intensification</th>
<th>Sustainable intensification</th>
<th>Agroecology</th>
<th>Organic farming</th>
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<td>Allocate % age area for each preference</td>
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<tr>
<td>Allocate to preferred farming system (Cereals/Cash crops/Livestock/Vegetables/Horticulture etc.)</td>
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<td>Outcomes for society, ranking (1-4)</td>
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## Prioritising investments

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<th>Priority (H/M/L)</th>
<th>Farming systems (I/SI/AE/OF)</th>
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<td>Input subsidies</td>
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<td>Incentives to farmers</td>
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<td>Agricultural infrastructure</td>
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<td>Extension/Training/Education</td>
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<td>FDI to agriculture</td>
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<td>Market support (Domestic/Export)</td>
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<td>Minimum support price</td>
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<td>Post production processing</td>
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<td>Land tenure/Land acquisition</td>
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Additional questions