



# An Integrated Assessment of the Potential Impacts of the EU-ACP Economic Partnership Agreement on Uganda's Biodiversity: A case study of the horticulture sub-sector

Economic Policy Research Centre and National Environment Management Authority

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# FOCUS OF THE ASSESSMENT



The East African Community (EAC) including Uganda signed an Interim Economic Partnership Agreement (EPA) with the European Union (EU) in November 2007. The EAC will be signing a Comprehensive EPA with the EU by July 2009.

Uganda is exploring the economic opportunities that can be gained with the agreement ranging from:

- increased agricultural production,
- value addition,
- export and importation of goods

Likely impacts may include loss of the nation's biodiversity due to agricultural activities.

## FOCUS OF THE ASSESSMENT (cont.)



Focusing on Fresh fruits and vegetables, and Flowers in Uganda

Uganda especially in Eastern Western and Central regions with the banana/coffee farming systems, Banana/Millet/Cotton system and montane farming systems.

Study is projection to the future scenario (ex ante)

# FOCUS OF THE ASSESSMENT

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The two main outcomes of the country project will be:

(i) an Economic Partnership Agreement that fully takes into account social, economic and environmental concerns on sustainable use of biodiversity

(ii) a national integrated response and national action plan to respond to the outcomes of the integrated assessment.

## METHODOLOGY (cont.)

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### – **Data collection methods:**

- (i) Literature review;
- (ii) Stakeholder meetings, consultations and discussions;
- (iii) Reviews with the PSC

### – **Analytical Approaches**

- (i) Scenario building approach;
- (ii) Simple regressions; and
- (iii) Root cause analyses

- **Economic indicators** (EU export/import, EU FFV export, Trade balance, Area on FFV)
- **Social indicator** (No. Women/children employed, Days absent from work due to occupational health reasons)
- **Environmental indicators** (Agrochemicals use (kg/tonne of flowers exported))
- **Biodiversity Specific Indicators** (Rates of biodiversity loss (%), % of varieties of horticulture produced commercially that are indigenous)

## ASSESSMENT: SCENARIOS

1. ***Business As Usual*** scenario which is akin of a status quo.
2. ***Exponential Trade Growth*** scenario sets out an exponential growth scenario 39% to 80% to match its comparators, by 2025.
3. ***Balancing Trade*** scenario targets a trade balance with the EU where the value of the exports is equivalent to the imports from the EU, by 2025.

# Results of the Integrated Assessment



Projections	Baseline 08 ('000 US\$)	Rate of change (%) per year			Projected 2025 ('000 US\$)		
		BAU	ETG	BT	BAU	ETG	BT
<b>ECONOMICS</b>		<b>BAU</b>	<b>ETG</b>	<b>BT</b>	<b>BAU</b>	<b>ETG</b>	<b>BT</b>
<b>Imports from EU</b>	481.2	27.3	16.4	27.3	29,135	6,391.8	29,135
<b>Exports to the EU</b>	293.8	15.7	20.6	31.9	3,138	6,391.8	29,135
<b>Total Trade</b>	775.0	24	17.9	28.9	32,273	12,783.6	58,270
<b>Trade deficit</b>	217.5	32.5	- 17	- 17	25,997	0	0
<b>FFV exports</b>	32127	9.4	20.6	31.9	163,000	775844	3,547,000
<b>BIODIVERSITY</b> (Biodiversity loss %)	1.0				1.04	1.16	2.31
<b>ENVIRONMENT</b>	720				2092	17397	79680
<b>Fertilizer use (KNO<sub>3</sub> )</b>							
<b>Water use ('000'</b>	1630				5027	2027	17020

## Results of the Integrated Assessment (cont.)



- **Economic assessment:-** The Best case scenario is the *Balancing Trade* scenario as it generates a lot more export revenue. It involves more investment in horticulture subsector.
- **Land and Biodiversity:-** The *Balancing Trade* scenario puts an more pressure on the environment and natural resources:- Mitigation is through improving productivity and efficiency in resources use
- **Social Impacts:-** Balancing Trade Scenario require more workers, good management will lead to workers better pay and invest in occupational health for the workers.

Important results derived from stakeholder (private sector, government and NGOs representative) consultations: -

- Need to integrate environmental concerns to their activities
- Need for strengthening of environmental outreach on communities

## **POLICY RECOMMENDATIONS (govt)**



The country stand to benefit through the agreement but relevant interventions should be put in place to ensure conservation of the biodiversity

The linkages between trade, agriculture and biodiversity needs to be integrated in the country's production systems.

Need for valuation of biodiversity (wild and agro-biodiversity) to quantify its contribution to national development, livelihood improvement and economic impacts arising from loss of agro-biodiversity.

Need for interventions to low agricultural productivity and markets constraints which may affect trade.



# **POLICY RECOMMENDATIONS (govt)**

- **More understanding in environmental management concepts**  
*(pollution tax & effluent charges are used in a very limited manner but could be used in a way that does not hurt exports but protects the environment.*
- **Research is needed to quantify the cost – benefits of certification; effects of pollution on ecosystems services, species and habitats**
- **NEMA should fully implement the National Environment Act**
- **Other compounding issues that will affect biodiversity (increasing population and climate change need to be understood and mitigated**

# POLICY RECOMMENDATIONS (EU)



- **Capacity building for monitoring the impacts of climate change on biodiversity and implementation of activities to mitigate the adverse impact is needed. This is an area that the EU and other development partners could provide financial and technical assistance.**
- **To bridge trade imbalance, EU entrepreneurs are encouraged to locally invest in sectors that support trade such as energy, water, agricultural production and productivity. These investments will be in research and development, technology support and education.**
- **Valuation of biodiversity is very important and yet Uganda lacks capacity in this field. The EU and other development partners need to intervene through training and capacity building.**

# ACTION PLAN



- Valuation of biodiversity
- Support strengthening of producer associations e.g. HORTEXA,
- Support development of national code of practice - Uganda GAP (*Good Agricultural Practices*)—that sets standards for food safety, health and environmental issues
- Flowers production impact on environment and mitigation measures
  - Set up a comprehensive information sharing system between entities dealing with trade and those dealing with biodiversity.
- Ensuring/ More work to Promote Corporate Social Responsibility amongst the companies/farms encouraging them to maintain and restore ecosystems on which they depend

## ACTION PLAN (cont.)



Economic valuation of agro-biodiversity in critical hotspots in productive landscapes in Uganda.

The National Biodiversity and Action (NBSAP) has identified inadequate information and misconception on the value of agro-biodiversity and has recommended research and documentation on the value of biodiversity

Integrated assessment report which identified valuation of biodiversity as one of the key areas that needs to be addressed by GoU

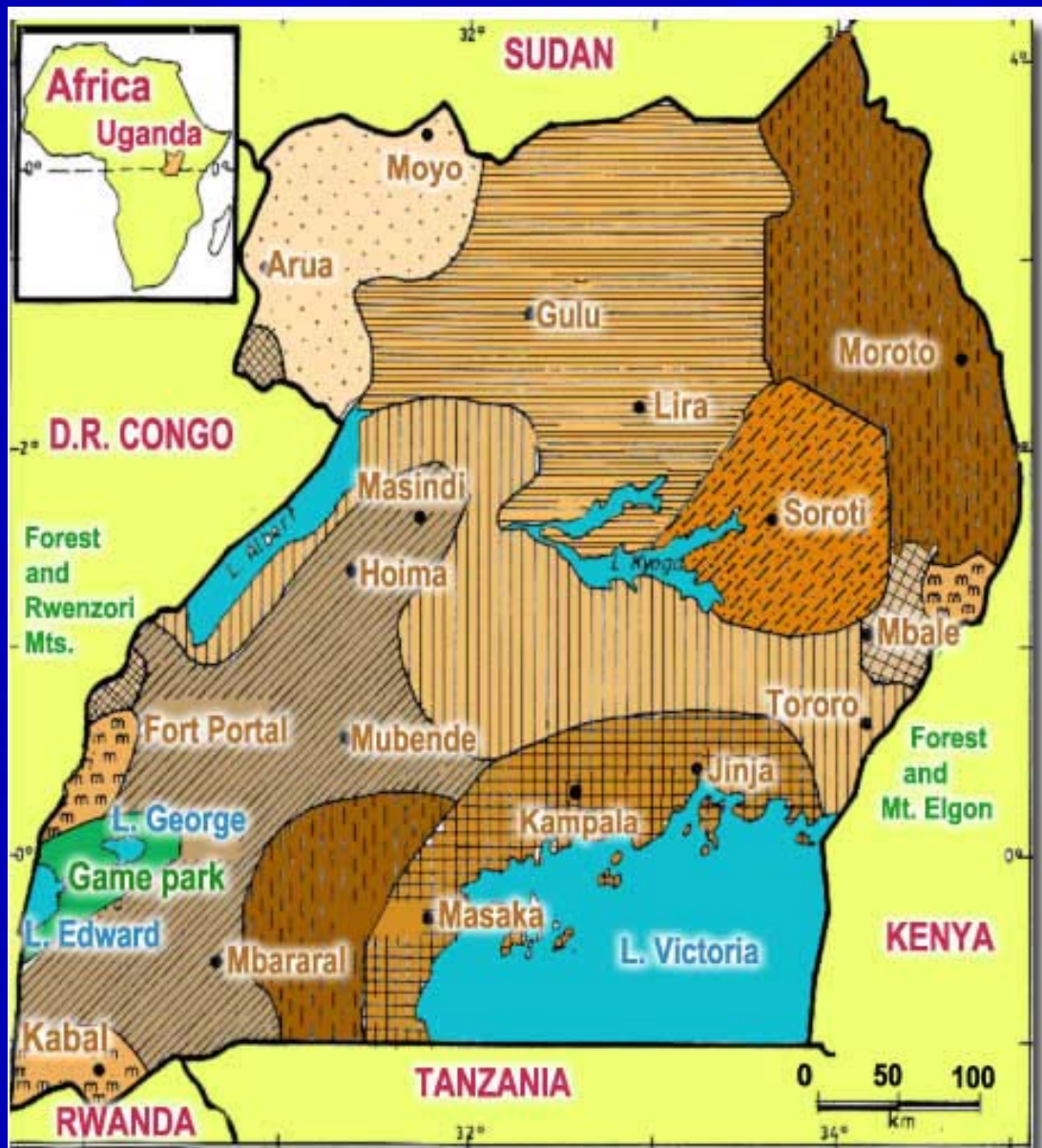
Valuation of biodiversity will contribute to the implementation of the Convention on Biological Diversity

## ACTION PLAN (cont.)



- A survey on Agro-biodiversity will be undertaken.
- Agro-biodiversity will be assessed based on its three components: genetic diversity, species diversity and ecosystem diversity.
- The study will consist of scientific assessment of agro-biodiversity for the selected 'hot spots' and interviews and focus group discussions as part of the data collection.
- A total economic value approach for the valuation will be used
- The study will be conducted in Uganda's seven farming systems. A district will be sampled to represent each farming system.

# Uganda's Farming systems regions



- |  |                                     |  |  |  |   |
|--|-------------------------------------|--|--|--|---|
|  | Intensive Banana Coffee             |  | Banana Millet Cotton system                    |  | Annual cropping and Cattle West Nile system |
|  | Lake shore system                   |  | Medium altitude intensive Banana Coffee system |  | Annual Cropping and Cattle Teso System      |
|  | Western Banana Coffee Cattle system |  | Montane system                                 |  | Pastoral and some annual crop system        |
|  |                                     |  | Annual cropping and Cattle Northern system     |  |   |

## ACTION PLAN (cont.)

- NEMA will coordinate, monitor and supervise activities during the study on behalf of GoU.
- NEMA will identify appropriate research institutions/experts to undertake the study on its behalf and will work with the relevant government ministries, research institutions, private sector, NGOs and CBOs in executing the activities.
- A committee (comprising stakeholders mentioned above) shall be constituted with clear terms of reference and shall meet regularly to give technical guidance to ensure that the study achieves its objectives.



# Achievements and Constraints



## Achievements:-

- Bringing stakeholders together
- Training on impact assessment
- Finishing the project on time

## Constaints:-

- Stakeholder were skeptical on the intention of the study (tax)