Introduction

The flower sub-sector is one of the most promising foreign exchange earners for Uganda. A number of varieties of roses and other cut flowers have been introduced into Uganda for cultivation with 70 percent, 25 percent and 5 percent under roses, chrysanthemums and potted plants production respectively. About 95 percent of the total volume of flowers produced in Uganda is exported. All cut flowers and foliage is exported to the European Union (EU) market mainly the Netherlands.

This policy brief highlights the key findings of study and proposes interventions/policy actions that need to be undertaken by Government, the private sector (business community) and development partners to engage in sustainable trade with the EU i.e. trade that will not only bring revenue to Government through increased trade in cut flowers but will also ensure that potential negative impacts on biodiversity and the environment are overcome.
mitigated. Biodiversity is a very important natural capital for Uganda. It contributes about $1,000 million per year in monetary, non-monetary and informal sectors, and through provision of ecological services.

**Approaches**

The analysis relied on an integrated assessment (IA) approach developed by UNEP (2009). The IA employed a four-stage process that included (i) identifying the criteria relevant to the main issues of concern for developing economic, social and environmental indicators; (ii) determining the baseline for the IA; (iii) identifying the most likely scenarios and policy options to be reviewed; and (iv) conducting the analysis. To capture future trade liberalization related impacts on socio, economic and environmental & biodiversity aspects, three scenarios representing future paths for Uganda’s trade with the EU under the EPA were formulated.

**Findings from policy scenarios**

The findings are based on projections done for the period 2009 to 2025. For economic gains, the flower exports will need to grow at a rate of 20.6 percent in both by value and volume of exports for the next 17 years if Uganda is to harness opportunities EPA presents. Cut flower production has to be at least as competitive as other countries in the COMESA region such as Kenya and Ethiopia. But this will be based on growth in volume through the intensification and/or extensification of flower production where it will require considerably more land to be put under production.

With increased area under production, environmental impacts especially on biodiversity cannot be ruled out. At present, the cut flower industry is relatively resource intensive with respect to land, energy, water and agrochemical use. Thus, the best scenario flower producers can engage in with EPA opportunities while mitigating biodiversity loss is to increase the land area under current production from 180 hectares to just under 4,500 hectares with proportional increases in fertilizer use from less than 1 tonne per day to nearly 20 tonnes per day, and electricity use would increase from around 17 MWH to over 300 MWH between 2009 and 2025 (Figure 1). The findings suggest that the increased value of exports is expected to outweigh the increase in costs associated with an increase in inputs.

**Figure 1: Environmental indicator projections for flowers**

With regard to social impacts, the flower industry currently employs over 6,000 people of which 85 percent are women, mainly working in unskilled and clerical positions. Roughly 90 percent of the employees rely entirely on their jobs working on rose farms, with no supplementary income. Wage levels are relatively low. With projected growth in the flower sub-sector, 20-fold increase in employment and aggregate wages are expected under the trade scenario suggested (Figure 2). In other words, the added advantage gained from growth within the sub-sector through increased benefits of expansion of the corporate flower industry, would enable flower entrepreneurs to invest more in their human resources.
But with EPAs, as flower producers try to expand production, concerns on occupational health and safety issues arise. Several of the flower companies visited showed a high level of concern for the health and safety of their workers, particularly with respect to the use of chemicals and pesticides. Most chemicals used on the farms are hazardous and several measures are typically in place to avoid accidents. However, performance assessments undertaken by the Ministry of Labour Gender and Social Development indicated that while many flower producers have codes of practice, implementing the codes had proved to be a challenge.

The findings further revealed that obtaining certification through Milieu Programma Sierteelt (MPS) guidelines, a private protocol (originally developed in the Netherlands) geared toward environmental conservation and risk mitigation\(^1\) is very costly—estimated to be around €8,000 annually. The MPS is one of the flower-related protocols that have been benchmarked to the Euro-Retailer Produce Working Group for Good Agricultural Practices (GAPs).

In addition to MPS-GAP, it was noted that companies are required to be International Standards Organization (ISO) 180001 compliant and need to implement the new ISO 26000 standard, which went into effect as of October 2008. Stakeholders recommended developing a Uganda GAP with EU equivalency to address the requirement for multiple certifications.

In conclusion, cut flower producers should take a cautious growth strategy while trying to harness the opportunities the EPAs present. Any additional growth from the current production will have an impact on the environment and biodiversity in different ways, with land use being the most significant among them. Large-scale conversion of land and loss of biomass will lead to increased greenhouse gas emissions.

**Policy recommendations**

From the above findings, the following is recommended:

- The Uganda Flower Exporters Association (UFEA) should help companies to access markets. Export markets for horticulture are largely controlled by multinational companies that have placed stringent conditions on the supply of seeds, amount produced, amount exported and price. These requirements have frustrated local farmers unable to compete in such a restricted market. Although an opportunity to access the market through an auction exists for local exporters, a quality test must be passed. The few successful flower exporting companies already have partners abroad.

- The Horticulture Promotion Organization of Uganda (HPOU) should strengthen, implement and coordinate the activities of all stakeholders in the horticulture sector. Given the expensive nature of obtaining certification from EU, HPOU should develop a Uganda-GAP which is equivalent to the EURO-Gap for ownership and

---

\(^{1}\) MPS themes relate to fertilizer, crop protection, energy, water, and waste management.
acceptance by the EU market and standard enforcing agencies. Further improvement in market information on accessing producers, exporters and importers should be made readily available.

- Uganda should develop a new strategy for trade and development in the context of the EPA, which exploits opportunities for higher revenues that could be achieved by adopting more sustainable production techniques. Such techniques would help to secure lasting economic, environmental and social benefits and avoid biodiversity loss.

- Companies exporting horticultural goods should practice social responsibility in the communities where they operate and invest in the restoration and maintenance of the ecosystems that sustain their operations. This can be done by use of technologies that ensure the efficient use of resources, such as water, energy, fertilizers and land, and that encourage environmental conservation.

- Government together with the EU should support capacity building to monitor the impacts of climate change on biodiversity and implement activities to mitigate any adverse impacts on it, through technical and financial assistance. Climate change is but one of several factors that is likely to exacerbate the loss of biodiversity, increase the risk of floods and droughts, reduce the reliability of hydropower and biomass production and affect agricultural productivity and land use.

References


About the Authors

Madina Guloba is an Assistant Research Fellow at the Economic Policy Research Centre, Kampala, Uganda.

Francis S. Ogwal is a Natural Resource Management Specialist with the National Environment Management Authority (NEMA), Kampala, Uganda.