



An Assessment of Ethiopia's Diagnostic Capacity in Sanitary and Phytosanitary Measures Related to Fresh Fruit and Vegetables



Prepared for USAID

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Executive Summary

Since 2000 Ethiopia has seen explosive growth in its export flower industry. In 2000 the revenues were a modest \$400,000 USD and by 2004/2005 the revenues rose to \$12 million USD. It is expected that floriculture annual exports will exceed \$100 million USD by the year 2010. While the fruit and vegetable export sector has not grown as rapidly in 2004/2005 it contributed \$12 M USD in exports. Further this segment has the potential to significantly increase exports to the EU and Middle East. Indicators of the potential include new investment: Ethio Green has invested in 1700 hectares of mango production and Ethio Veg-Fru is adding an additional 75 hectares of vegetable production specifically for export. Based on Kenya's growth rates it is likely that Ethiopia can also attain significant horticultural exports over the next 5 – 10 years in excess of \$100 M USD.

Due to the current and potential economic value that these exports can bring to Ethiopia the government of Ethiopia and USAID recognized the need to insure that products that are exported meet international as well as private sector sanitary and phytosanitary requirements. It is well recognized that failure to meet international or private sector standards could have a devastating impact on Ethiopian exports. Other countries have seen highly valued export markets disappear almost overnight due to their inability to meet SPS requirements of the importing countries. Mexico, India and Guatemala¹ have seen export market segments and their accompanying export revenues diminish or disappear due to a product's failure to meet SPS standards.

Therefore as a part of USAID's ongoing efforts in Ethiopia, USAID under the RAISE SPS project, commissioned a study to conduct an in-depth assessment of Ethiopia's overall diagnostic capacities related to sanitary and phytosanitary (SPS) measures associated with fresh fruit and vegetables (FFV). This project evaluated Ethiopia's public, private, and academic capacity (facilities, equipment, and training) to detect, monitor, and control plant pests and pathogens, agro-chemical residues, toxins, and microbes that can cause food borne illness as well as the ability to meet private sector standards (ISO-22000, HACCP, EurepGAP, and BRC). For this evaluation the authors used the International Plant Protection Commission (IPPC) Assessment Standard.

General Comments

As we evaluated Ethiopia's capacity we grouped the sanitary and phytosanitary requirements into three categories: plant health requirements, human health or food safety requirements, and private sector standards.

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Plant Health

Plant Health programs are designed to protect the importing country's agricultural production from damage caused by introduction of non-native pests, plant diseases, or weeds. The cornerstone of this program is the issuance by the exporting country's plant quarantine organization of a Phytosanitary Certificate that states that the plant or plant material is free of disease or pest that could damage the importing country's agriculture. Due to a lack of funding and support for the last 30 years, the Ethiopian plant quarantine system is poorly equipped, poorly trained, and without the resources to comply with the requirements set by the importing countries or IPPC. Thus while the Plant Quarantine organization conducts "inspections" and issues phytosanitary certificates, if at anytime the importing country's inspected the Plant Quarantine program, Ethiopian exports would be at risk of losing their access to horticulture and floriculture export markets.

Further the Plant Quarantine organization needs to create standardized processes and systems for conducting inspections. They are in need of manuals, procedures, checklists and reference materials as well as training and basic equipment. Also the Plant Quarantine organization needs to create/update a plant pest, disease, and weed list for Ethiopia and should learn how to conduct Pest Risk Assessments as outlined by the IPPC.

Human Health

These programs are designed to protect the public from the consumption of chemical residues, toxins, and pathogens whose ingestion could represent a health hazard. Again a lack of attention and funding has left the diagnostic system ill equipped to handle the needs of a growing export market. The supporting laboratories lack reagents, consumables, have very limited capabilities to perform chemical and microbiological analysis required for export. The laboratories also lack spare parts, maintenance services and standards.

The laboratory staff will need extensive training to allow them to use basic methods that are commonly used throughout the world. In addition, the staff will need training on the conducting of experiments, developing test methods, validation of test methods, and the calibration of equipment. Further the staff has limited or no access to the Internet and trade journals, which hinders their ability to keep up with changes in tests and emerging plant pests or pathogens. Finally the management needs training in the management of laboratories using common quality principles and processes.

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Private Standards

We found, in the case of the green beans and floriculture, that the organizations involved are either already certified and or will be certified to the required private sector standards.

Despite these shortcomings there are bright spots in the future of Ethiopian horticulture and floriculture. The Testing and Calibration Service laboratory, which is a part of the Quality and Standards Authority of Ethiopia, has undertaken the task of becoming ISO-17025 certified. While they are in the early stages of completing this task their goal is to achieve certification in 2006. As a part of this process they are developing standard methods for the testing of agricultural products that will strengthen the plant quarantine and protection program and SPS diagnostic system for the country.

The Ministry of Agriculture has implemented a reorganization program that places the regional plant quarantine and inspection laboratories under one authority. This will reduce the variation of controls and provide for a national plant quarantine system. In addition they are strengthening the program by placing plant quarantine and inspection stations at all points where products either enter or leave the country.

Further we found that there was an abundance of testing equipment available. In these cases the organizations need training on how to use the equipment, access to international methods, and training in Good Laboratory Practices.

Keeping the above in mind the authors would like to point out that there is nothing noted in the course of our assessment that would prevent Ethiopia from achieving a level of performance that would meet international SPS requirements. All of the adverse findings can be corrected. Moreover, we believe this can be accomplished over a relatively short period of time (12 – 24 months).

In addition there is a near term program that can be used to begin the process and deliver significant export assistance. In the area of unrooted geranium cuttings it is important to Ethiopian producers that they be able to sell products to the United States. In order to do this the Plant Quarantine organization and growers need to comply with the Ralstonia Protocol. If this protocol can be implemented successfully, as well as demonstrated it will enable the unrooted geranium cutting growers to sell product in the United States, protect Ethiopia's significant investment, foster future investment and growth, and improve the plant quarantine organization. With focus and effort this program should only take 3 – 6 months to achieve certification and provide the Plant Quarantine group with a quick success.

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