



BANANA PRODUCTION SYSTEMS AT RISK

Effectively responding to banana wilt disease in the Great Lakes Region

Burundi | Democratic Republic of Congo | Rwanda | Tanzania | Uganda

Banana-based production systems in the Great Lakes Region are central to many livelihood systems, they are a staple food and contribute to national economies. Providing a rich source of vitamins and minerals and more than half of the daily calorie intake, they make an imperative contribution to food and nutrition security for millions of people. Banana sales are often used to fund schooling and health expenditures and serve as a bank repository, enabling rural poor to contribute to social and community functions. Grown in association with other crops, they help to prevent soil erosion in fragile ecosystems while demanding less farm labour which is important for people living with HIV.

WHAT'S THE PROBLEM?

The productivity of perennial banana-based systems is constrained by pests and diseases, poor soil fertility, a low genetic base and various other socio-economic factors. Currently, yields under smallholder conditions are estimated at 6.25 tonnes per hectare as opposed to the potential of 80 tonnes per hectare. Banana Xanthomonas Wilt (BXW) is the latest disease to pose a serious threat to regional food security and if not addressed quickly it has the potential to wipe out whole plantations, destroying livelihoods, and having a severe impact on food security of households, with economic repercussions at both local and national levels. In areas where rural communities have few alternative food crops the fast-spreading BXW gives an urgent cause for alarm. The situation is further aggravated by poor coordination among development partners and poor research and extension linkages.

“The need for a regional coordination structure is now critical, ensuring buy-in of all key stakeholders along with consolidated research for a development strategy geared at addressing BXW and other food crop pests and diseases in the Great Lakes Region.”

Rod Charters,
FAO Subregional Emergency Coordinator

WHAT IS THIS PROJECT DOING?

With support from the Belgian Development Cooperation, FAO launched a regional initiative to improve responses to the threat of the BXW. The main objectives are to strengthen and improve the coordination and planning capacity of stakeholders and mobilize and sensitize communities to improving their response and mitigation strategies in the wake of the BXW. The project will enhance farmer knowledge and skills in good farming practices, disease identification and in phyto-sanitation, facilitate the establishment of effective community-based early warning systems and improve the institutional capacity of stakeholders at national and local levels. At the regional level, FAO works with international research organizations and Universities on questions pertaining to epidemiology, livelihood impacts, mobilization and adoption. At country level, FAO supports the sensitization and capacity building in disease identification and farmers' training in good agricultural practices using field school approaches. FAO also works with the private sector to ensure the effective production, delivery and maintenance of disease free planting materials.

ACHIEVEMENTS SO FAR

In each country BXW hotspots have been identified and Farmer Field Schools (FFS) launched. Field school approaches concentrate on on-farm disease detection, removal of male flowers, maintaining proper hygiene of banana plants, sterilisation of tools, sharing of information between banana producers and training of "lead" farmers to continue the sensitization process. Collaboration has been sought with programs that rely on FFS for building farmers' capacity.

FAO has also entered into agreements with stakeholders from the Consortium for Improving Agriculture-based Livelihoods in Central Africa (CIALCA), to produce and disseminate BXW awareness raising materials and undertake a livelihood analysis for purposes of benchmarking and monitoring and evaluation.

A workshop was organized to establish an early warning system in Tanzania. Smart phone and GPS technology for data collection was introduced which prompted 400 banana farmers to respond. The technology has potential for up-scaling in the Great Lakes Region which will contribute to information sharing between countries.

WHAT NEXT?

FFS observations in Uganda and in the Democratic Republic of Congo suggest a gradual decline in the incidence of BXW and in its severity where the focus of support has been on improved community phyto-sanitation. Effective phytosanitation resulted in the re-greening of banana bunches and in an overall improvement in productivity. However, to sustain these realizations and keep the risk of BXW resurrection to a low, the project will need to continue mobilizing and sensitizing stakeholders, creating task forces and committees and developing the right incentives to encourage behavioral change.

Behavioral change can be realized by creating "islands of success" which need to be scaled up in the region. This in turn will require support in proving effective communication tools and methods and in rolling out the early warning system piloted in Tanzania. By reducing the incidence of BXW and improving productivity, supply chains will need to be strengthened and market linkages established.

A gender equitable approach will be required in ensuring that the most vulnerable are addressed and nutritional aspects are included. Through partnerships with research partners new knowledge will need to be created on the epidemiology of the diseases and its potential impacts on households, the environment, food security and economic growth.



KEY FACTS:

- Functional coordination platforms established in each country .
- More than 60 sensitization meetings organized involving all stakeholders.
- More than 80 farmer field schools on-going in DRC, Rwanda, Tanzania and Uganda.
- More than 100 radio spots have aired in DRC, Burundi and Tanzania, creating awareness on BXW and BBTV.
- An effective community-based BXW early warning system established in Tanzania.

PARTNERS

Association for strengthening Agricultural Research in Eastern and Central Africa (ASARECA), Bioversity International, International Institute of Tropical Agriculture (IITA), National Agricultural Research and Extension Systems (NARES), Private Sector Agencies including providers of TC plantlets and market agents, Catholic University of Louvain (UCL) in Belgium, National Universities in DRC and Burundi, Community Based Organizations, Banana producers' groups

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