STRENGTHENING PEST AND DISEASE MANAGEMENT IN THE SADC REGION

Locations
Angola, Botswana, Comoros, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, The Seychelles, Zambia, Zimbabwe

Dates
01/03/2021 - 31/08/2022

Summary
Transboundary plant pests and diseases threaten food and nutrition security and adversely affect trade and the agricultural sector’s competitiveness. In the Southern African Development Community (SADC) Member States, the five key priority pests include Maize lethal necrosis disease (MLN), Tomato leaf miner (Tuta (Phthorimaea) absoluta), Oriental Fruit Fly (Bactrocera dorsalis), Fall armyworm (FAW Spodoptera frugiperda), and Banana Fusarium Wilt (Fusarium oxysporum f. sp. Cubense Tropical race 4 (Foc TR4)). In this project, CABI supported the FAO-led ‘Support towards operationalization of the SADC Regional Agricultural Policy (STOSAR)’ project to strengthen national and regional capacities to prevent entry, control spread and manage these priority plant pests and diseases. The project’s aim was to support Member States in reviewing and developing harmonized national strategies for the key pests while providing training on Pest Risk Analysis (PRA) and implementing applicable Sanitary and Phytosanitary (SPS) measures.

The problem
Throughout the SADC region, the agriculture sector is of great economic and social importance, contributing between 4% and 27% of GDP and approximately 13% export earnings in the Member States. 70% of the SADC region’s population depend on agriculture for food, income and employment. Therefore, if underperforming, this sector can hinder food security, economic growth and social stability.

Pests and diseases directly impact the sector and are known to migrate and move across borders, adversely affecting crop production. However, managing them can mitigate the effects.

Five key pests have been identified as problematic in the SADC Member States: MLN, *Tuta absoluta*, Oriental Fruit Fly, FAW and Banana Fusarium Wilt. To-date, MLN has only positively been identified in two SADC Member States, the Democratic Republic of Congo and Tanzania. However, because of its transboundary nature, the presence of the disease in countries bordering the SADC Member States is of great concern and immediate steps need to be taken to prevent the entry of the disease and manage its spread.

To mitigate the effects of pests and diseases within the region and individual countries, national and regional capacities need to accurately identify the viruses associated with the diseases, analyzing the risk of introduction and implementing SPS measures to prevent entry and provide a first line of defence.

The project contributed to two components of the 11th European Development Fund (EDF) Regional Indicative Programme (RIP): enhancing information on agricultural production, sustainability and competitiveness for evidence-based decision-making; and improving access to markets through implementation of plant pest and disease control strategies at the regional level.

Its aim was to provide support to the SADC Secretariat by strengthening national and regional capacities to prevent entry, control spread and manage five priority plant pests and diseases. Additionally, strengthen regional cooperation and coordination on SPS issues, focusing on those pests and diseases identified in the region.

The project sought to develop a harmonized regional strategy for MLN disease and provide technical support to the Member States to develop and review their national strategies for this disease. Technical assistance to develop national Integrated Pest Management (IPM) strategies in line with the International Plant Protection Convention (IPPC) and the International Standards for Phytosanitary Measures (ISPMs) was also given. Key activities included:

- Developing regional and national strategies for MLN disease
- A systematic review of current national strategies for the control and management of FAW, *Tuta absoluta*, MLN, Fusarium wilt Foc TR4 and Oriental Fruit fly in the SADC region and aligning these with the SADC plant health strategy
- Regional training on pest and disease risk analysis for the implementation of SPS measures for the priority transboundary pests and diseases
- Hosting a series of webinars on selected topics to enhance inspection and diagnostic skills, and improve the understanding of SPS issues and provide updated guidelines for inspectors, regulators and other National Plant Protection Organization (NPPO) personnel

CABI also provided specialized services to strengthen pest and disease risk analysis capacities in the region, including the development of, and updating of, national commodity pest lists which will help to implement SPS measures concerning the priority transboundary pests and diseases.
The project has enhanced awareness about SPS, inter-regional trade and how this relates to attaining the Africa Continental Free Trade Area. The development of Terms of Reference (ToRs) for PRA teams in each country is helping to ensure harmonized PRA reporting across the SADC region and feedback from Member States has also shown that skills gained from PRA training have helped to negotiate better market access with trading partners. Activities implemented throughout the project to enable these outcomes are detailed below.

- A regional strategy on MLN disease was developed and multiple training events were held, all aiming to strengthen regional collaboration and coordination in the prevention and management of transboundary pests for enhanced food security and trade.
- A regional workshop on national pest strategies was held (11-13 May 2021) to review Member States' progress towards the development of national strategies effectively and sustainably managing and controlling the five priority transboundary plant pests and diseases, in line with key IPM principles. 34 NPPO staff attended.
- Virtual PRA training was conducted (14-18 June 2021) for the region and was attended by 57 delegates (53% male, 47% female). The training aimed to build the capacity of Member States in conducting PRA using CABI decision support tools such as the PRA Tool, Crop Protection Compendium and the Horizon Scanning Tool.
- A series of webinars were organised by CABI to sensitize Member States on three key areas, including pest risk management, ISPMs and the role of NPPOs in safeguarding plant health. The webinars were well attended by over 85 participants, mainly from NPPOs in SADC and some from other African countries.
- Four Member States (Botswana, Mauritius, Malawi and Zambia) were supported in either the development or validation of national strategies for priority pests.
- Refresher training on PRA and the CABI PRA tools was given to help strengthen hands-on skills with the tools and also support further reviews of national PRA protocols and terms of reference. As a result, increased capacity was demonstrated through the use of the PRA tools with nine of the SADC Member States among the top 15 users of the PRA tool.
- An assessment of SADC laboratories was carried out to check their readiness for accreditation while making recommendations to improve their capacity and effectiveness.
- Information education communication materials for priority crops in Malawi were also developed.

**Webinars**

Webinar 1: Application of integrated phytosanitary measures to enhance export market compliance, 6 July 2021. Speakers: Dr Megan Quinlan (Imperial College London) and Mr Thembelani Theo Pongolo (NPPO, South Africa).

Webinar 2: Feasibility of establishment & maintenance of pest-free areas for market access: Practical application of ISPMs 4 and 10, 27 July 2021. Speakers: Dr Washington Otieno (CABI), Dr Julian Smith (Rothamsted Research) and Mr. Jan Hendrik Venter (NPPO, South Africa).

Webinar 3: Phytosanitary Awareness: IPPC contracting parties’ obligations and phytosanitary measures for market access, 8 September 2021. Speakers: Dr Chagema Kedera (NEXT Kenya programme, COLEACP).

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**Donors**
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**Partners**
SADC Secretariat

**CABI Project Manager**