

SUSTAINABLE MANAGEMENT OF FALL ARMYWORM IN BOTSWANA

Locations Botswana

Dates 01/07/2019 - 31/07/2021

Summary

During 2017-18, the invasion of the fall armyworm (FAW) in Botswana posed a serious threat to food and nutrition security for vulnerable farming communities and households. Surveillance of pests, known as pest monitoring, will help mitigate the negative impacts of FAW in the country and will also promote the wider use of Integrated Pest Management (IPM) for sustainable management of the pest. This project will work towards strengthening the capacity of stakeholders in these two areas of management whilst supporting the development of a national strategy for the sustainable management of FAW in Botswana.

The problem

During the 2017-18 cropping season, Botswana was affected by fall armyworm (FAW) (*Spodoptera frugiperda*) which resulted in a poor harvest; a crisis smallholder farmers responded to by widespread use of pesticides.

The continuous use of pesticides, however, would likely result in insecticide-resistant FAW populations. and farmers using highly hazardous products to cope with this. Furthermore, the use of these products could result in other pesticide

risks including both acute and chronic human health burdens and adverse effects on natural enemies and pollinators in the country.

Given the negative impacts of FAW on food and nutrition security for vulnerable farming households and communities and the lack of data available for decision support on managing the pest, there was a need to urgently support the Government of Botswana and smallholder farmers to better respond to this threat in a sustainable manner.

In order for stakeholders to understand FAW, the problems and its impacts, it is critical to increase awareness amongst farmer and extension staff and undertake pest monitoring, through surveillance and implementation of IPM methods, to effectively manage FAW and safeguard people's lives and livelihoods.

The need to develop a strategy to guide the sustainable management of FAW in the short, medium and long term in the country is also necessary.

What we are doing

To effectively manage the FAW crisis and protect people's lives and livelihoods, this project aims to increase the awareness of farmers and extension staff of the tools and inputs available including the conducting of pest monitoring and the promotion of biopesticides.

Specific activities of the project include:

- Conducting a training of trainers (ToT) course on 'Community Based Fall Armyworm Monitoring, Early Warning and Management (COFAMEM)', including using the Fall Armyworm Early Warning Systems (FAMEWS)
- Conduct training and awareness-raising of sub-national extension staff on COFAMEM and related data collection tools
- FAW early warning data to be collected and uploaded onto relevant databases
- Technical backstopping of farmers and extensionists
- Contribute technical inputs to the awareness-raising workshops and production of awareness-raising materials
- Contribute to the development of a tool for the assessment of FAW impact
- Support the development of a national strategy for the sustainable management of fall armyworm in Botswana

Results so far

One training of trainer session and four district-level sessions on FAW management and digital tools, such as FAW portal, were conducted, as was a socio-economic survey on yield losses, which reached 220 respondents.

CABI distributed 45 manuals on community-based fall armyworm management and 400 copies of a pocket guide to frontline extension workers and farmers while 3000 posters and 3000 brochures were developed for wider distribution. Six media training sessions were also conducted, reaching 180 participants.

A policy brief, entitled "Pesticide risk reduction in the management of fall armyworm in Botswana," and a national strategy for sustainable fall armyworm management, "National Strategy for the Sustainable Management of Fall Armyworm in Botswana and 5 Year Strategy (2020-2025)," were also produced.

A visit to Malawi by key personnel enabled them to observe the different integrated FAW management methods, and share the knowledge in Botswana. However, implementation towards the end of the project was affected by Covid-19, and an in-person validation workshop for the strategy and policy brief was not feasible.

Donors

Food and Agriculture Organization of the United Nations (FAO) – Sub Regional Office for Southern Africa, and the Government of Botswana

Partners

Ministry of Agricultural Development and Food Security

CABI Project Manager Ivan Rwomushana






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