ENHANCING TECHNICAL CAPACITY FOR MONITORING AND MANAGING FALL ARMYWORM IN BANGLADESH

Locations
Bangladesh

Dates
01/11/2019 - 31/12/2020

Summary
Fall armyworm (FAW), *Spodoptera frugiperda*, is an incredibly highly invasive pest that feeds on over 80 plant species. Favouring maize and wheat, this caterpillar devastates crops and consequently affects the food security of a country and of smallholder farmers. In Bangladesh, maize is the second most important crop which is grown on over 500,000 hectares. With FAW's ability to spread quickly, if not managed early, it can damage up to 80% of crops. In this project, CABI provided essential support in increasing the resilience of livelihoods in Bangladesh against the threats and crises caused by the FAW invasion in the country.

The problem
FAW is recognized as one of the most serious pests of maize. The life cycle of the FAW, its ability to spread and to reproduce quickly, makes it an incredibly damaging invasive species.
In Bangladesh, maize is one of the most important cereal crops, grown on over 500,000 hectares, the crop is a viable product, attracting good market prices while providing food for those who grow it and for others.

The devastating effects of the FAW, if not detected and managed early, can cause major crop losses and put the food security of millions at risk.

First reported in Africa in 2016, the FAW spread rapidly through sub-Sahara Africa, causing serious damage, and then onto Asia. In December 2018, FAW was first reported in Bangladesh and within five months of detection, it was agreed an emergency action plan was needed to manage its spread.

**What we are doing**

In response to the detection of FAW in Bangladesh and the need for action, the Food and Agriculture Organization of the United Nations (FAO) developed the emergency project. Bangladesh received $350,000 of FAO support in May 2019 in the form of a FAW emergency technical capacity project.

The project aimed to contribute towards increasing the resilience of livelihoods against the threats and crises caused by the FAW invasion in Bangladesh.

One aim of the project was to enhance capacity building within the National FAW extension systems by providing training to national focal extension officers on the FAW Monitoring and Early Warning System (FAMEWS) mobile application – a mobile tool that is used to record data each time a field is scouted or pheromone traps checked – and data generation for FAMEWS global platform – the online resource used for mapping data collected by the mobile app which provides a real-time situation overview at global, country and sub-country levels.

The second aim of the project was to promote awareness among communities at risk from FAW on effective management of the pest.

**Results so far**

In order to meet the project objectives, CABI provided technical assistance by conducting surveys, analysis and reporting of FAW infestation in Bangladesh.

To address the pest in the country, stakeholder consultations were conducted to develop Trainer of Trainer (ToT) Manuals for Extension Officers, Sub Assistant Agricultural Officers (SAAO) and farmers. Three CABI-FAO Master Trainers’ manuals were also created and translated into Bangla.

CABI also provided a series of training for national extension officers to increase their capacities on the use of FAMEWS and data collection.

To increase awareness of FAW amongst those communities at risk from FAW, CABI developed communication materials including Pest Management Decision Guides, videos and posters on the effective management of the pest through continuous situation monitoring, data gathering and reporting.

Final outputs of the project included:

- Customized printed manuals for Extension Officers, SAAOs and farmers
- 100 copies each of three manuals in Bangla were distributed to 38 Master Trainers to enable further scaling-up of training
- 3600 Pest Management Decision Guides and 72 posters were developed in Bangla and distributed in 36 Upazilas of 19 districts
- 38 Master Trainers trained a further 360 focal extension officers on the use of FAMEWS
- A training manual in Bangla was also distributed as an additional aide for users of FAMEWS

By building the capacity of key stakeholders in the National FAW task force, CABI’s role in this project can help to ensure long-term national resilience and
adequate preparation against FAW.

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<th>Donors</th>
<th>Food and Agriculture Organization (FAO), Bangladesh</th>
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<tr>
<td>Partners</td>
<td>Department of Agricultural Extension (DAE), Bangladesh</td>
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<td>CABI Project Manager</td>
<td>Malvika Chaudhary</td>
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