



COMMITTEE ON AGRICULTURE

Twenty-seventh Session

28 September - 2 October 2020

Fall Armyworm (FAW): impact assessment and the Global Action for Fall Armyworm control

Executive summary

Since the Fall Armyworm (FAW), *Spodoptera frugiperda* was first detected in Africa in 2016, it has continued to spread across Africa and beyond marching to wherever its host plants exist. Beyond Africa, the pest has now been found in the Near East, much of Asia, and most recently, in Australia. A recent impact assessment demonstrated that losses due to FAW on maize have already put vulnerable rural communities in a vicious cycle of food insecurity.

In response to the pest's inexorable spread, the Director-General of the Food and Agriculture Organization of the United Nations (FAO), Mr. Qu Dongyu launched the three-year Global Action for Fall Armyworm Control in December 2019. The Global Action aims to reverse the trend of the spread of FAW and protect the livelihoods of vulnerable populations. The Global Action will support countries by providing a global coordination mechanism and evidence-based solutions, such as integrated pest management (IPM), with the support of key partners. In addition, FAO has provided guidance to countries on mitigating impacts of the COVID-19 pandemic on FAW management and continues to support countries through virtual training sessions, coordination meetings and relevant technical materials.

Queries on the substantive content of the document may be addressed to:

Mr Jingyuan Xia
Director

Plant Production and Protection Division (NSP)
Tel. (+39) 06 5705 2040

I. Fall armyworm global spread

1. Fall armyworm (FAW) has been spreading quickly around the world. By 2018, the pest was reported in almost all of sub-Saharan Africa, Yemen, and some Asian countries such as Bangladesh, India, Sri Lanka and Thailand. By the end of 2019, it was confirmed in Cambodia, China, Egypt, Indonesia, Japan, the Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Korea, and Viet Nam. As of May 2020, FAW had reached Australia, Mauritania, Timor-Leste and the United Arab Emirates (UAE).
2. FAW is likely to continue spreading to other northern African and Near Eastern countries as well as southern Europe (in particular, Greece, Italy, Malta, Portugal and Spain). FAO will continuously closely monitor the spread and provide alerts through early warning systems to relevant countries.

II. Impact assessment of the risk of fall armyworm on affected livelihoods

3. FAW is a polyphagous insect pest which feeds on maize and on more than other 80 crops, including sorghum, millet, sugarcane, vegetable crops and cotton. It is a transboundary pest able to fly over 100 km in a single night. It causes considerable yield losses in maize and in other key staple cereal crops, threatening food security and the livelihoods of hundreds of millions of smallholder farmers and consumers. It is estimated that, for 12 African¹ countries alone, FAW could cause losses of 8.3 million tons to 20.6 million tons of maize annually, equivalent to USD 2.5 billion to USD 6.2 billion, and enough to feed 40 - 100 million people.²
4. FAO and the Ministry of Agriculture of the United Republic of Tanzania collaborated in 2019 to assess FAW's impacts on maize production, farmers' livelihoods and food security using a new methodology. The results are at once less extreme yet, more concerning than figures circulating during the early stages of the FAW invasion. Less extreme, because the average yield loss due to FAW was found to be 10.8 percent in the three monitored regions, lower than earlier estimates; but more concerning because some farmers experienced very high losses due to FAW – on top of pre-existing food insecurity. There were also indications of the start of a vicious cycle in which FAW related yield losses in one season eroded farmers' capacities to cope with future losses. Further systematic impact assessments should be done at the regional level.³
5. Further impact assessment studies are planned for delivery between 2021 and 2022 under the Global Action framework implementation plan.

III. FAO response to the global fall armyworm threat

6. Since 2016, FAO has been on the frontlines of the FAW crisis, working alongside all relevant partners to address this global threat by mobilizing resources, conducting global coordination oversight and providing technical support.
7. In response to a request by the Committee on Agriculture (COAG) that FAO allocate more resources to plant protection, including through South-South Cooperation (SSC), many activities have been carried out. Sixty-six projects worth more than USD 28 million have been implemented specifically to respond to challenges relating to FAW; and an additional USD 700 000 from Regular Programme funding have been allocated for further training through workshops and farmer field school activities. Moreover, the yearly base agreement with the Norwegian Agency for Development Cooperation (NORAD) has been signed for 2020; and the European Commission is set to allocate USD 4.4 million for a two-year project on FAW.
8. Preparations are ongoing for an SSC project for FAW management. One SSC-China project on capacity building with a USD 1.5 million budget will be implemented in 2020 in four countries

¹ Benin, Cameroon, Democratic Republic of Congo, Ethiopia, Ghana, Malawi, Mozambique, Nigeria, Uganda, Tanzania, Zambia.

² <https://www.cabi.org/isc/FullTextPDF/2018/20187200429.pdf>

³ The study is foreseen to be published.

in Asia and Africa. Another FAO-SSC-China programme, worth USD 3 million addressing pesticide risk reduction by regulatory management, is being developed for five Asian and Central Asian countries. Three inclusive regional consultations for Africa, Near East and North Africa, and Asia regions were held in 2019 with the scope of exchanging experiences and knowledge sharing among key partners and countries on sustainable management of FAW. Collaboration on monitoring and early warning between countries in Asia is also being promoted.

9. Three Letters of Agreement were signed to implement activities on: monitoring and early warning; testing FAW management methodologies (International Institute of Tropical Agriculture - IITA); and implementation of FAW farmer field schools with relevant partners. FAO also facilitated collaboration and technology transfer from the Brazilian Agricultural Research Corporation (EMBRAPA) to Cabo Verde, Guinea-Bissau and Mozambique.

10. As of 10 June 2020, nine guidance notes, most in multiple languages, and 13 other knowledge products covering different aspects of FAW control have been produced⁴.

11. As of 1 June 2020, 46 countries – the majority of which are located in sub-Saharan Africa – have adopted FAO's Fall Armyworm Monitoring and Early Warning System (FAMEWS) as the official reporting and monitoring tool. Trainings on FAMEWS have been held since January 2020 in 11 countries. An iOS version of FAMEWS and a light Android version, to be used in countries with limited Internet bandwidth, are now available.

12. The Global Action for Fall Armyworm Control aims at mobilizing USD 500 million and removing barriers to FAW global coordination, thereby accelerating progress towards the sustainable management of FAW. The main objectives of this massive Action are to establish a global coordination mechanism, reduce yield losses from FAW, and prevent further spread of the pest. The three-year Global Action is reaching 65 priority countries in Africa, the Near East and in Asia. Based on survey feedback, there is a funding gap of USD 71.4 million over three years for implementation of the Global Action.

13. The implementation arrangements for the Global Action include: a global Steering Committee (SC) chaired by the FAO Director-General that oversees the coordination and implementation of activities; and a Technical Committee (TC) supported by seven Technical Working Groups, (TWG) chaired by scientists from collaborating institutions, which advise the global SC. The FAW Secretariat, hosted by FAO's Plant Production and Protection Division (AGP), in close coordination with the International Plant Protection Convention (IPPC) Secretariat, is responsible for the day-to-day implementation of the Global Action.

14. A high-level global conference is planned for the second half of 2020, gathering all relevant government ministers from FAW-infested and target countries, along with research and development partners and other relevant partners. The conference will encourage participants to make concrete commitments for the implementation of the Global Action.

IV. Addressing the impact of COVID-19 on the Global Action for Fall Armyworm Control

15. The COVID-19 pandemic introduced restrictions to the movement of people and materials, potentially disrupting the FAW mitigation response. Yet FAW continues to fly into new areas. It is thus important to continue FAW control via the Global Action despite the pandemic.

16. The FAW Secretariat developed a guidance note on mitigating the impact of COVID-19 in the implementation of the Global Action (*Addressing the impact of COVID-19 on the Global Action for Fall Armyworm*)⁵. A webinar on the topic was organized on 12 May 2020. The FAW Secretariat has also adapted its Global Action implementation strategy during the pandemic. Meetings and capacity building are now conducted virtually.

⁴ <http://www.fao.org/3/ca9395en/ca9395en.pdf>

⁵ [Addressing the impact of COVID-19 on the Global Action for Fall Armyworm](#)