Fall Armyworm
FAO Global Programme 2020/21

The Fall Armyworm (FAW) continues its invasive spread into new regions, beyond sub-Saharan Africa. In December 2018, it had been reported in Bangladesh, Sri Lanka and Thailand. As of June 2019, it has been reported also in China, Egypt, Indonesia, the Lao People’s Democratic Republic, Malaysia, Myanmar, the Republic of Korea and Viet Nam. Japan reported presence of FAW in July 2019. A map detailing the current status of FAW spread globally is provided on page 3.

FAW continues to be of concern to farmers and governments across the newly-infested regions because it can cause significant yield reduction to a number of crops, especially maize, if not under natural biological control or effectively managed. The vast majority of maize farmers across Africa and Asia are smallholders, so effective Integrated Pest Management (IPM) programmes need to be especially developed and tailored for their context, especially the economic context of their production.

FAO has worked with many partners, both nationally and internationally, to provide high quality international knowledge and information so governments and farmers are able to effectively support and implement sustainable management of FAW in their cropping systems.

During 2020/21 FAO will build on its Global FAW Programme to scale up activities with the aim to reach tens of millions of smallholder farmers enabling them to sustainably manage FAW. During 2020/21 FAO will focus on the following components of the Global FAW Programme:

- **Coordination**: FAO will provide the fora for review, discussion and recommendations for best practices. The coordination mechanisms include the Technical Working Groups that FAO coordinates, supporting national FAW Task Forces, providing a clearing house for information and knowledge, and sharing and communicating this knowledge broadly via the FAO FAW website, as well as adaptation and translation into local languages.

- **Elucidation and validation of best management practices by smallholders**: Via the Technical Working Groups and feedback from farmers’ innovations identified in Farmer Field Schools (FFS), FAO will continue to support local, national, and international efforts to validate best sustainable FAW management practices for smallholders. In July 2019, the Programme supported training of national researchers on biological control of FAW in Brazil and Niger.

- **Global conference on FAW**: To share lessons learned and best practices from around the globe, and to identify priorities going forward, FAO will support a Global FAW Conference in 2020.

- **Monitoring, Early Warning and Recommendations delivered in the field**: FAO has developed the Fall Armyworm Monitoring and Early Warning System (FAMEWS) with Pennsylvania State University and other partners, which is a mobile Application (App). This system uses cutting-edge technology to correctly identify FAW damage in the field, provides real-time updates to the open-access global platform that monitors FAW population levels, develops capacity at the national level to analyze FAW movement patterns and good management practices, and provides information and recommendations directly to farmers and service providers, based on local conditions.
A new version of the App is powered by Pennsylvania State University’s Plant Village and provides additional benefits to the user, including education and advice on FAW, crop growth information, weather forecasts and expert chats. It is currently being beta-tested and will be officially released soon. The global platform, containing analysis of the field data, is available here.

- **Farmer and service-provider education**: Via FAMEWS and Farmers Field Schools, FAO will continue to collect, validate, understand, and disseminate farmers’ FAW management innovations. Farmers will continue to share their experiences in the field with other farmers, providing them with sufficient tools to sustainably manage FAW in their context. The rapid changes due to climate change are already causing farmers stress in terms as drought and flooding. These effects have the potential to compound the negative effects of FAW. FAMEWS can now integrate climate data and satellite derived observations of crop growth through the FAO Water Productivity through Open access of remotely sensed derived data (WaPOR) portal.

- **Biological Control**: In collaboration with Embrapa, FAO co-organized a training on the production of biological control agents from 8 to 19 July in Sete Lagoas, Brazil. Representatives from the National Institute of Agricultural Research and Development, Cabo Verde, and the Ministry of Agriculture and Food Security, Mozambique, were present. Participants got a practical insight on the local production of Trichogramma. Simultaneously, a laboratory was set up and inaugurated in São Lourenço dos Órgãos (Cabo Verde) for the local production and release of Trichogramma and Telenomus. Trials will be carried out in the country to evaluate the acclimation of the different Trichogramma strains in the local environment, generating new information and recommendations for sustainable Fall Armyworm management in Africa.

- **Policy and Technical Guidance and Advice**: Many member countries request policy and technical advice of FAO for FAW management. FAO is able to quickly respond, using its existing activities and programmes. For example, many member countries request information and assistance on which pesticides to use against FAW. FAO provides international guidance, recommendations, and access to international knowledge to assist member countries in their policy and technical frameworks and applications for FAW.

- **Farmer Field Schools**: Since 2017, thousands of farmers have received support through FFS. FAO has quickly responded to the FAW invasion into Asia thanks to its FFS network. To date, 100 FFS trainers from Government of Andhra Pradesh, India, have already been trained by FAO on ecology-based IPM of FAW. FAO has also trained staff from Government of Maharashtra, which conducts 12,000 FFS during the main growing season. FAO intends to further strengthen the establishment of FFS, the training of trainers and facilitators and the use of FAMEWS within the FFS.

- **Resource Mobilization**: Projects for supporting farmers to sustainably manage FAW have been implemented since 2016 for a total of approximately USD 26 million (of which 25 emergency projects with a value of USD 14 million).

- **Regional Workshop**: A Regional Workshop for Africa will take place from 21-24 October in Cabo Verde, focusing on the exchange of knowledge and lessons learnt from smallholder management of FAW across the continent.
Map of areas affected by FAW (July 2019)