



Food and Agriculture
Organization of the
United Nations

GLOBAL ACTION FOR FALL ARMYWORM CONTROL



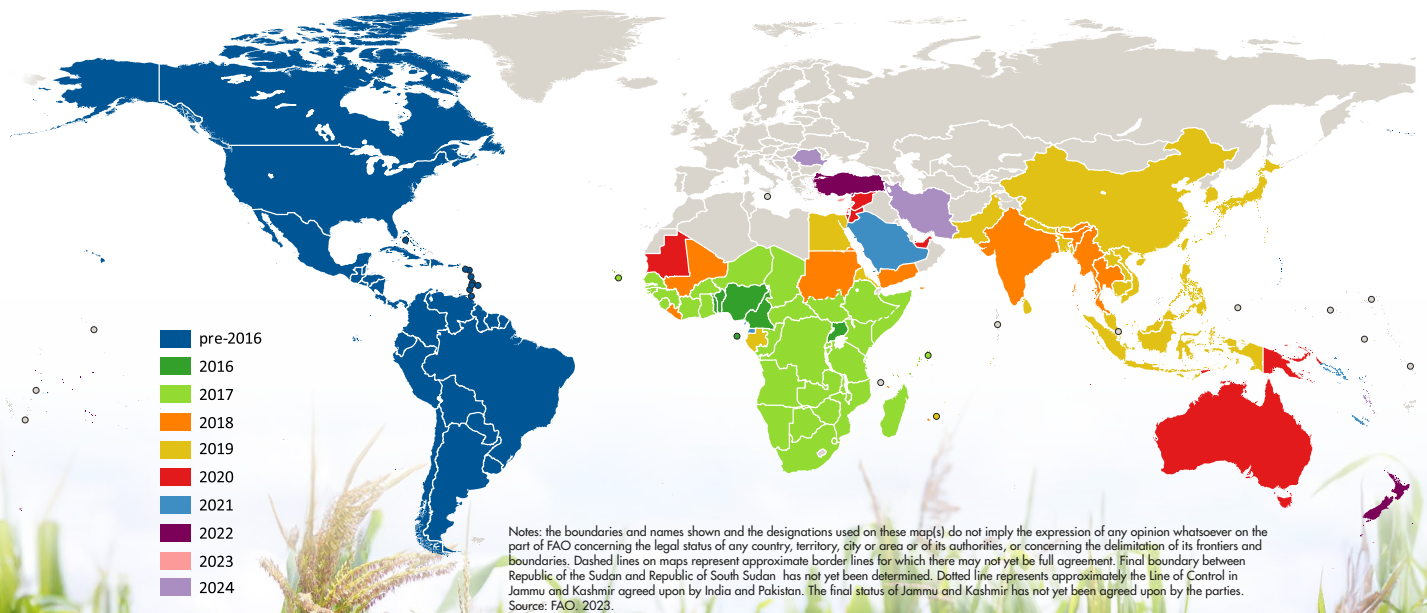
SUCCESS IN SUSTAINABLE PEST MANAGEMENT



Introduction

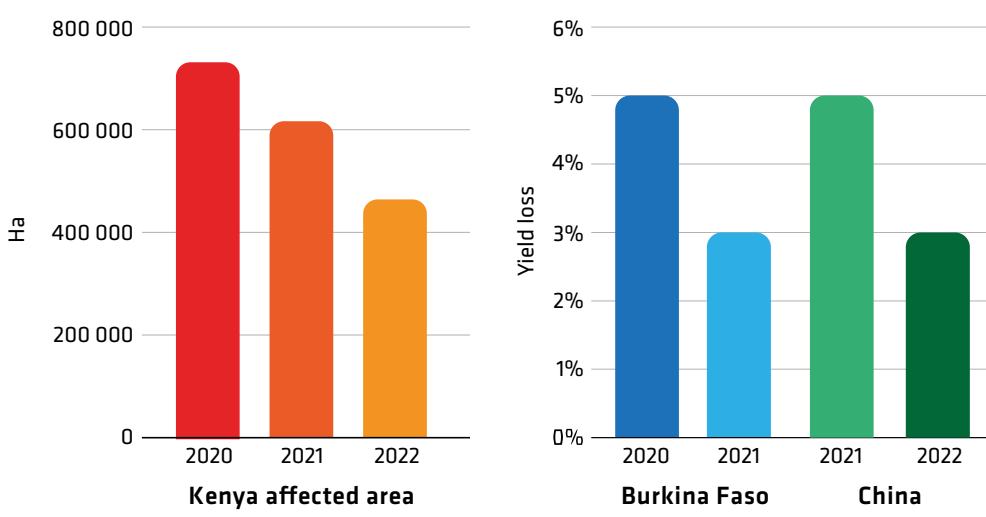
- ▶ Fall armyworm (FAW) is a highly destructive transboundary pest that targets important food crops such as maize and other cereals. Its ability to spread widely threatens global food security and farmers' livelihoods.
- ▶ Since the first report in Africa in 2016, FAW has invaded over 80 countries in Africa, the Near East, Asia and the Pacific, and Europe. It reduces maize yields by up to 73 percent and inflicts economic losses worth USD 9.4 billion in Africa alone.
- ▶ In response, FAO launched the Global Action for Fall Armyworm Control in 2019, a collaborative approach to coordinate pest control while promoting integrated pest management (IPM).
- ▶ Working with farmers, farmer groups, Farmer Field Schools (FFS), NGOs, national and international research institutes, extension services as well as government officials, the Global Action has developed a global platform to coordinate plant health research, extension, and policy support across disciplines and at different scales.

Figure 1. Recorded presence of fall armyworm from pre-2016 to 2024



Success in reducing crop losses, increasing incomes

Figure 2. Under the Global Action, yield loss is reduced



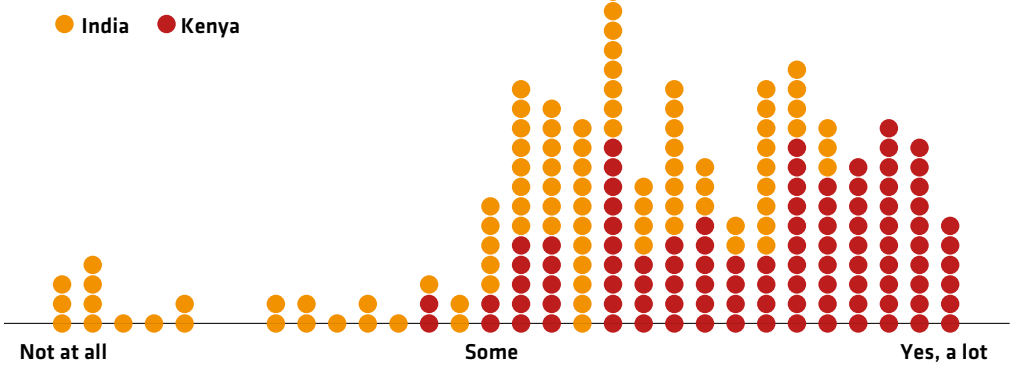
Source: FAO. 2024.

“ Infestation and damage levels on farmers’ fields are decreasing... In comparison with previous estimates of FAW-induced yield losses, there is a general reduction in maize production losses associated with FAW. ”

CAB International

Farmer surveys show yields/incomes increased due to the Global Action

Figure 3. Impacts of the Global Action



Source: CAB International. 2024.

QUESTION

Have farmer yields/incomes increased due to the FAW response, since pre-response levels?

CAB International. 2024.

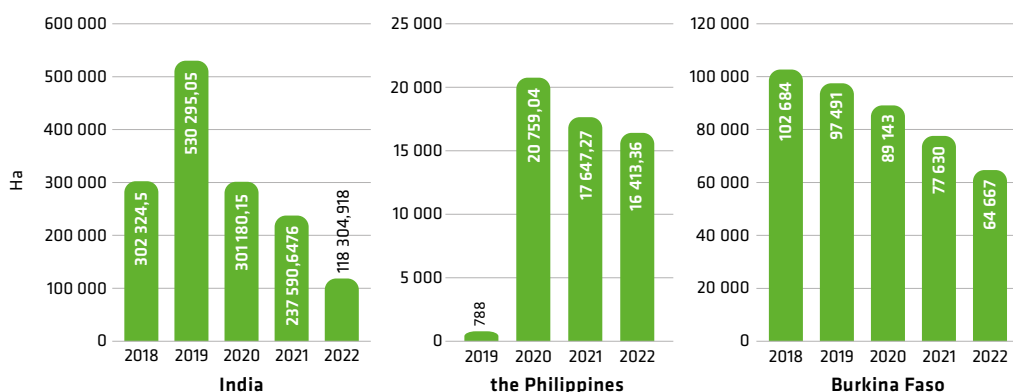


In demonstration countries such as India, the Philippines and Burkina Faso, areas seriously affected by fall armyworm are on a decreasing trend



Impacts: FAW affected maize acreage reduced

Figure 4. Reduction in FAW-affected areas



Source: FAO. 2024.

Monitoring and early warning through FAW Monitoring and Early Warning System (FAMEWS)

- ▶ FAMEWS: a crowd-sourcing data system with over 10 000 users in more than 60 countries collecting FAW and African armyworm (AAW) monitoring information published on dashboards, including:
 - FAW scouting maps to highlight infested areas
 - FAW presence analysed against factors e.g. crop type, crop type, crop system and stage
 - FAW analysis of infestation trends shows contrast between biopesticide and synthetic pesticide use
- ▶ AAW infestation information is available on relevant dashboards for seven eastern African countries: Ethiopia, Kenya, Rwanda, Somalia, South Sudan, Uganda and United Republic of Tanzania.



Building and strengthening national capacities through application of integrated pest management (IPM)

Progress (2019-24)

Figure 5. Stakeholders trained for IPM technologies

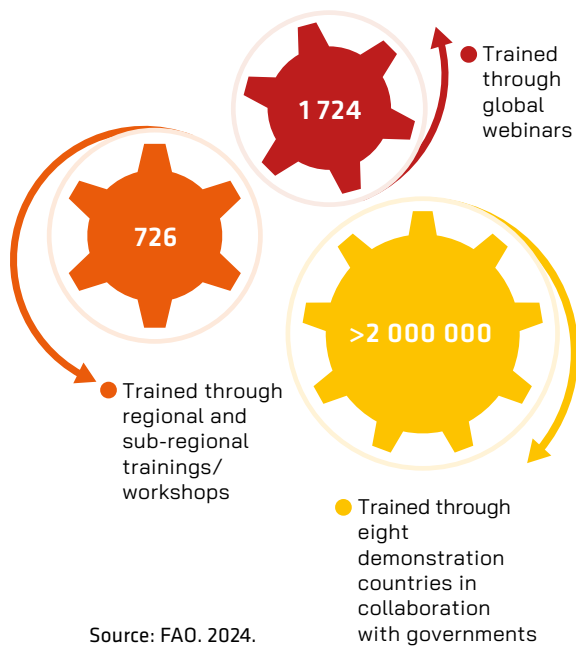
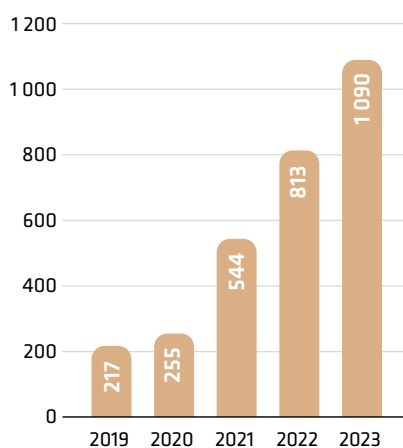


Figure 6. People trained in Egypt



- IPM guidelines adapted and implemented by several countries.
- FAW management practices systematically compared in 50 networked field trials, covering multiple countries including Burkina Faso, Cameroon, Ghana, Malawi, and the Philippines.
- Host plant resistance: higher yield via use of hybrid maize varieties in Egypt compared to control.
- Preservation of natural enemies: Field testing in the Near East, Asia and Africa yielded a number of native arthropod natural enemies against FAW.
- Cultural control: Intercropping only one example that can improve yield.



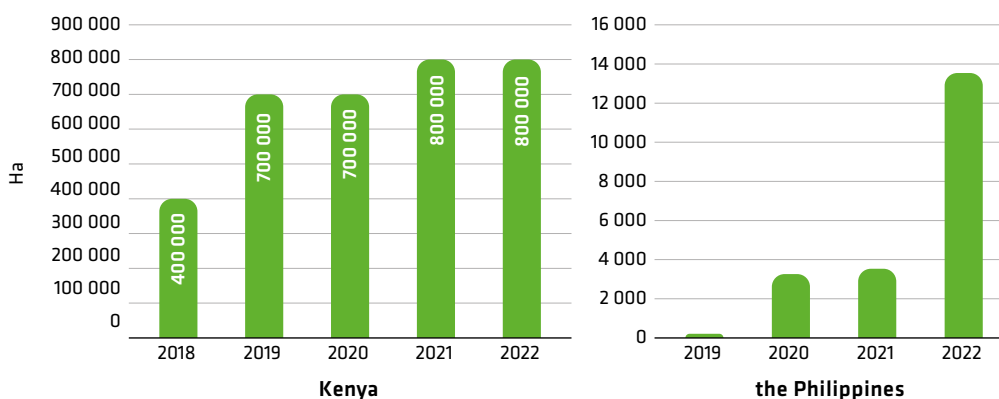
Farmers in Kenya and the Philippines report that less expensive preventive cultural practices were widely used for FAW management

Success through biological control

Mass releases of natural enemies and use of botanical/microbial biopesticides showed promising results in all regions

Progress: Application of biocontrol technologies

Figure 7. In Kenya and the Philippines, areas under biocontrol treatments (both biopesticides and mass releases of natural enemies) are on the rise



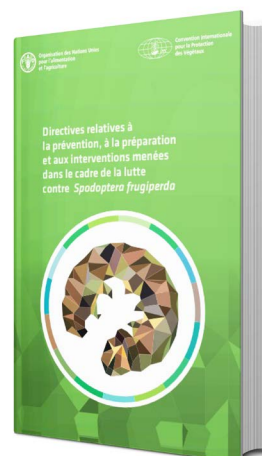
Source: FAO, 2024.

Outreach and communication

- Over 2.6 million farmers reached through training and awareness-raising activities on sustainable FAW management.
- Twelve technical and steering committee meetings, regional committee meetings, numerous national-level workshops and geozone meetings coordinated.

Progress: Knowledge products

- FFS IPM guides for FAW in Africa and in India.
- Guidelines on FAW IPM in Arabic, French, and English
- Prevention and preparedness guide
- Twelve guidance notes
- Ten FAW newsletters
- Forty success stories
- Eighteen videos with farmer success stories
- Global Action impact assessment



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Food and Agriculture Organization of the United Nations

Fall Armyworm Control in Action Newsletter
April, 2021 - Issue # 3

Highlights
The 4th meeting of the Steering Committee (SC) of the FAO Global Action (GA) on Fall Armyworm (FAW) Control on 18 April 2021 was chaired by SO Chengxi, ICRD Director General, and attended by 56 SC members and observers. The meeting provided guidance on the revised Technical Committee (TC) working mechanisms, resource mobilization recommendations, and a proposal for a Fall Armyworm Migration Monitoring and Early Warning System in Asia.

Implementation
Prevention, preparedness, and response guidelines for Spodoptera frugiperda (FAW) are under development, with input from target countries. A questionnaire will seek information on pest regulations, prevention, surveillance, emergency response and control measures in target countries, to be evaluated by the FAO/IPC FAW technical working group. This information will be used to facilitate implementation of FAW guidelines in countries planned for the second quarter of 2022.



Fighting back against fall armyworm in Kenya: Josephine's story



Outreach via meetings and trainings



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