



Food and Agriculture
Organization of the
United Nations

GUIDE

The Global Action for Fall Armyworm Control: A resource mobilization guide



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Required citation:

FAO 2022. *The Global Action for Fall Armyworm Control: A resource mobilization guide*. Rome.
<https://doi.org/10.4060/cb8910en>

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ISBN 978-92-5-135865-8

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Foreword

The Food and Agriculture Organization of the United Nations (FAO), through the **The Global Action (GA) for Fall Armyworm (FAW) Control** and its Secretariat, is calling on partners to urgently and collectively mobilize USD 10 million per year to control the spread of fall armyworm (FAW) in order to help protect the food and nutritional security and livelihoods of over 600 million vulnerable people.

FAW feeds on more than 80 kinds of crops including maize, wheat, rice, and sorghum, and is devastating yields and livelihoods in more than 70 countries across South America, Africa and Asia so far. It has recently been reported in Australia and the Solomon Islands and could be poised to enter Europe. The insect pest moves quickly across borders, helped by international travel and trade, requiring countries to act collectively to manage its spread. Once established, FAW is virtually impossible to eradicate, but it is possible to sustainably manage its spread and limit the damage it can cause.

As the lead United Nations (UN) agency supporting sustainable crop production and protection, FAO has unrivaled expertise in addressing plant health issues. Combining agricultural data with significant experience, FAO can help prevent FAW's impacts on plant health, avoid food insecurity and protect the livelihoods of affected populations. To achieve faster and more sustainable results, FAO launched the GA in 2019 to ensure a coordinated approach at country, regional and global levels.

This resource mobilization drive will support concrete efforts to control FAW in eight demonstration countries and more than 50 pilot countries, building evidence of the best sustainable pest management solutions to control its spread and limit losses to crop yields. This information is being disseminated to farmers, extension agents and governments. In addition, work to establish a globally coordinated monitoring and early warning system will be expanded, including through the use of the **Fall Armyworm Monitoring and Early Warning System (FAMEWS)**, which is currently operating in 44 countries across Africa and Asia.

To support these efforts, FAO has developed this resource mobilization guide, which sets out ways to articulate the GA as a solution to help deliver many sustainable development outcomes. This guide contains practical advice on approaching existing and potential resource partners and developing key messages that can be adapted for different audiences. Short case studies are included, presenting various activities being carried out through the GA and the impacts of that work.

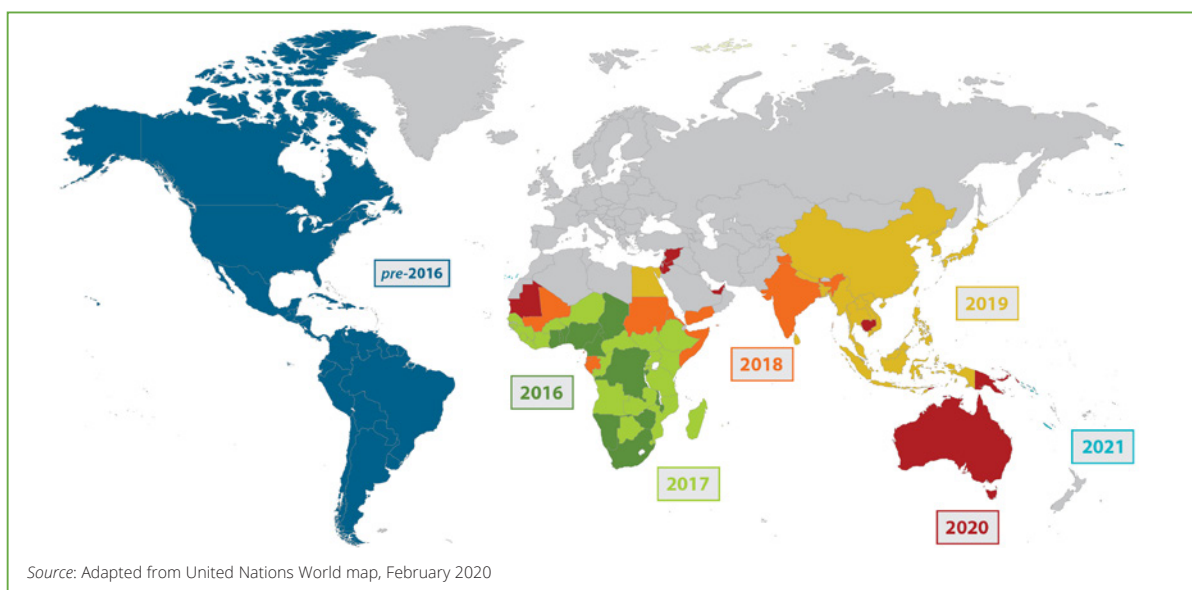
We must act collectively and urgently to mobilize resources to stop FAW and the damage it causes. Please join this campaign and help to raise USD 10 million a year to protect the lives and livelihoods of hundreds of millions of vulnerable people.

1. Fall armyworm: A growing crisis

Up to 40 percent of the world's crops are lost to pests every year at an estimated cost of USD 70 billion in lost yields (IPPC Secretariat, 2021), putting the livelihoods and food security of 600 million vulnerable people at risk in some of the poorest parts of the world. The number and type of crop pests are increasing, helped by global challenges such as climate emergencies, changes in land use, and biodiversity loss. At the same time, increased connectivity between different parts of the world through travel and international trade means that crop pests can travel further and quicker than ever before. In Africa alone, the estimated annual cost attributed to alien invasive species is USD 65.58 billion (Eschen, 2021).

One of the most ubiquitous and destructive crop pests in the world is FAW (*Spodoptera frugiperda*) – a small moth that is native to tropical and subtropical regions of the Americas. It flies alone, covers long distances, and can remain hidden in farmers' fields, only coming out at night to feed. Its crop of choice is maize – the most produced cereal globally – but it has wide-ranging tastes, feasting on more than 80 different kinds of crops, including staple food security crops like wheat, rice, and sorghum. Many countries and regions of the world have listed FAW as a priority pest to identify and prevent, due to its incredibly high reproductive rate and the virtual impossibility of it being eradicated once established.

FIGURE 1. Map of the worldwide spread of fall armyworm since 2016. (as of February 2022)



2. The Global Action for Fall Armyworm Control

In December 2019, FAO launched the **Global Action for Fall Armyworm Control** as an urgent response to the rapid spread of FAW. The GA is a three-year initiative to take radical, direct and coordinated measures to strengthen prevention and sustainable pest control capacities at a global level, complementing and bolstering ongoing FAO activities related to FAW.

The GA is being implemented in a coordinated and harmonized manner in three regions: Africa, the Near East and Asia-Pacific. There are eight demonstration countries: Burkina Faso, Cameroon, China, Egypt, India, Kenya, Malawi and the Philippines; as well as more than 50 pilot countries. Demonstration countries lead the evaluation and application of the technologies, together with the capacity development campaign in eight respective geo-zones, expanding their range of influence to the pilot countries, and indirectly benefitting from the GA implementation. The countries selected, excluding China, are all low- or middle-income countries.

Building capacity for fall armyworm control at farmer field schools

FAO has provided specialized training to almost 10 000 extension agents and farmers, mostly in Egypt, Kenya, India and the Philippines, through farmer field schools, and direct farmer outreach. This training is limiting the spread of fall armyworm (FAW) and resulting in more preparedness and enhanced capacity to manage its arrival including:

- 600 extension officers and 187 000 smallholders trained on FAW management leading to a 70 percent containment of the pest in affected areas in Zambia;
- two regional workshops on FAW control for western and eastern Africa and Asia Pacific regions serving as a regional information exchange and capacity development mechanism among members;
- a series of workshops and lectures in Jordan, Lebanon and Syria, plus the West Bank and the Gaza Strip – providing farmers with detailed information on the damage FAW causes, its biology and behavior, and monitoring and possible control methods – as part of a regional FAO emergency response project to combat FAW in the Near East and North Africa (NENA) region; and,
- more than 250 extension officers, crop scientists and plant health technicians trained in South Africa on the Fall Armyworm Monitoring and Early Warning System (FAMEWS).

Thus far, FAO and its partners, in particular the national governments of affected countries, have managed over 65 FAW control projects; launched a mobile application tracking system across 44 countries to monitor its spread; and facilitated the training of tens of thousands of farmers to monitor and sustainably manage infestations. Lessons learned on how to sustainably manage FAW outbreaks and control its spread will be scaled out to both affected and non-affected countries, while FAO will continue to leverage its technical, normative and convening powers to expedite the response and drive immediate results.

3. Fall armyworm control: Delivering sustainable development outcomes

FAW cannot be eradicated. However, it can be managed and controlled, meaning it is possible to stem its spread and limit damage. While this is a critical message to articulate to resource partners, particularly in light of FAW's increasing spread, it is also important to articulate the fact that supporting FAW management and control is contributing towards more than a single 'problem/solution'. FAW control can be considered and articulated as a strategic approach to accelerate progress across the [2030 Agenda for Sustainable Development](#). This includes related international agreements such as the Convention on Biological Diversity's [post-2020 global biodiversity framework](#), the One Health Initiative, the [Paris Climate Change Agreement](#) and the [New Deal for People, Planet and Prosperity](#) of the UN Food Systems Summit as well as multiple Sustainable Development Goals (SDGs) including, but not limited to:

3.1 SDG1: NO POVERTY

FAO estimates that FAW has already negatively impacted 26 million people. If left unchecked, crop losses, particularly of maize, could adversely affect the food security and livelihoods of 600 million people. FAW affects some of the world's most vulnerable people, including small-scale farmers who are already struggling to feed their families. The most direct impact of these losses hits smallholder maize farmers, most of whom rely on the crop to stave off hunger and poverty. Managing FAW means more inclusive economic growth opportunities presented across the agri-food chain, from farm to fork. This, in turn, means that people are more able to generate the income they need to sustain their families, including women and young people, in rural and urban environments. Better income opportunities also reduces the risk of a refugee or migrant crisis, particularly in conflict-affected areas like Yemen.

3.2 SDG2: END HUNGER

An estimated 40 percent of food crops are lost due to plant pests and diseases every year, causing annual agricultural trade losses of over USD 220 billion, leaving millions of people facing hunger, and severely damaging agriculture – the primary income source for poor rural communities. FAW does not discriminate between smallholder and commercial farms and feeds on over 80 different kinds of crops, including maize, wheat, rice, and sorghum. Many

Fighting fall armyworm in Yemen

Yemen is one of the pilot countries participating in the Global Action for Fall Armyworm Control. The country relies heavily on farming: 70 percent of Yemeni live in rural areas, depending on agriculture to survive. A crippling war has meant agriculture is even more vulnerable, so the arrival of fall armyworm (FAW) in June 2018 further aggravated farmers' situations – most had limited knowledge on how to manage it and a lack of available agricultural inputs made matters worse. *"I noticed a strange worm in my maize and sorghum. It spread quickly in my field and I had no idea what it was,"* explained Haliyah Ali Muthana Saleh, farmer. Analysis of a sample of the worm and some plant roots confirmed FAW. FAO had already detected the pest during surveys in the area and was about to launch a campaign to control it.

With support from FAO, the national authorities of Yemen have since built capacity to identify, monitor and manage FAW, based on an integrated pest-control approach that minimizes reliance on chemical pesticides and incorporates sustainable control practices. Biological pesticides have been introduced, which are safer for beneficial insects. FAO has also provided monitoring equipment (including pheromone traps) and smartphones, and conducted awareness-raising campaigns to advise farmers.

"Thanks to the support provided by FAO, the presence of fall armyworm has already been reduced," says Haliyah. "Now, I have no worries any more about my family food security because my crops are protected."

Find out more: <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1417318/>

families depend on these for income and household nutrition. Based on 2018 estimates, up to 80 million tonnes of maize could be lost annually – enough to feed tens of millions of people.

3.3 SDG3: GOOD HEALTH AND WELL-BEING

FAW easily moves across regions and borders, affecting not just plant health, but also human, animal and planetary health. The GA emphasizes the importance of taking a coordinated 'One Health' (FAO, 2021a) approach to pest management – an integrated approach that recognizes the interconnectedness of people, animals, plants and the environment, to safeguard human health and nutrition, along with the greater environment.

3.4 SDG13: CLIMATE ACTION

FAO estimates that up to 40 percent of global crop yields are reduced each year due to damage caused by plant pests and diseases. Controlling crop pests is critical to increase food production and sustain livelihoods for smallholder

Botanicals, intercropping and push-pull to the rescue in Malawi

Farmers in Malawi are working to validate local integrated pest management (IPM) practices that are accessible and affordable, with support from the European Union-funded KULIMA programme. Lessons learned through such field studies are cascaded to other communities through field days, which provide an interactive and experiential platform for information sharing. Farmers applied different approaches in five plots: two plots were treated with two different botanical pesticides; one plot was planted with both maize and pigeon pea – pigeon pea is used to attract natural predators of the fall armyworm; the fourth plot adopted a ‘push-pull’ approach by intercropping silver leaf desmodium as a repellent in the plot and napier grass on the field margin to “pull” or attract FAW; while the fifth plot was a control.

At a farmers’ field day, one of the takeaways for visiting farmers was the additional options from which to choose, as all four trial plots showed a good performance, with push-pull showing the most promise.

Find out more: <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1417318/>

producers. There is increasing evidence that climate change is impacting plant pests and making them more damaging to crops in intensity, distribution, and spread – the spread of FAW can be partly attributed to global warming, which means it can live in more places. Global crop losses of major staples such as wheat, rice and maize from crop pests and diseases are expected to increase by up to 25 percent per degree of global warming. At the same time, as food production systems are affected by climate shocks and stresses, they are themselves a major driver of climate change. With population growth expected to reach 9.7 billion people in 2050, it is estimated that agriculture may need to produce up to 54 percent more food, feed and biofuel feedstock than in 2012. Reducing food loss, including that caused by crop pests like FAW, is critical to reducing unsustainable pressures on the Earth’s natural resources (FAO, 2021b).

Bangladesh tackles fall armyworm with traps to attract male moths with female scent

The Food and Agriculture Organization of the United Nations (FAO) has supplied thousands of pheromone traps to farmers in Bangladesh to support them in the battle against fall armyworm (FAW) which was first detected in Bangladesh in late 2018. By 2020, it had been reported in more than half of the country's districts. The pheromone traps detect the presence and build-up of FAW in particular areas. Pheromones are natural compounds that are emitted by females to attract males for mating. Synthetic compounds that mimic FAW's natural pheromones, often referred to as 'lures', are placed in the traps to attract and trap male moths. Moths that are caught are then counted. From these numbers, farmers can know if FAW is present in their fields and if there is a need for increased scouting.

Find out more: <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1297588/>

3.5 SDG15: LIFE ON LAND

Biodiversity at every level, from genetic to ecosystem, underpins the capacity of farmers, livestock keepers, forest dwellers, fishers and fish farmers to produce food and a range of other goods and services in a vast variety of different biophysical and socio-economic environments. It increases resilience to shocks and stresses, provides opportunities to adapt production systems to emerging challenges and is a key resource in efforts to increase output sustainably (FAO, 2019). The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) estimates that up to one million species will be lost by 2050, including many of the plants that humans depend on for food and nutrition security (IPBES, 2019).

FAW control measures will help prevent the destruction of more than 80 species of plants and also contribute towards new global commitments to stem biodiversity loss that will be agreed upon within the post-2020 global biodiversity framework of the Convention on Biological Diversity. Expected to come into force in 2022, the new framework includes a goal (proposed target 7) to reduce the use of pesticides by at least two-thirds (CBD, 2021). Greater biodiversity in agro-ecological farms leads to a greater capacity to resist pest and disease attacks which, in turn, reduces the need for pesticides, which are expensive, and harmful to environmental and human health.

4. Mobilizing resources: A collective call to action

4.1 AN URGENT CALL FOR INVESTMENT TO CONTROL FALL ARMYWORM

FAO, through the GA and the Fall Armyworm Secretariat, is urgently calling on partners to invest USD 10 million per year for the eight demonstration countries (USD 1 million for each demonstration country and USD 2 million for global coordination), to spur fast and efficient results.

Sustainable long-term annual funding of USD 10 million will enable radical, direct and coordinated measures to strengthen prevention and sustainable pest control capacities at a global level, tackling FAW in one coordinated effort rather than through piecemeal responses. It will also support concrete efforts in demonstration countries to build evidence of the best sustainable pest management solutions, and disseminate information to farmers, extension agents and governments on monitoring and early warning, including through the use of FAMEWS mobile app.

From 2017 to 2019, FAO mobilized USD 12.5 million in funding for global and demonstration countries and since the launch of the GA, contributions have continued to grow, funding essential work to build capacities and knowledge to control FAW. But more is needed.

The Centre of Agriculture and Bioscience International (CABI) estimates that delivering the GA will bring potential savings of more than USD 9 billion per year in reduced crop losses in Africa alone (Eschen, 2021), and has the potential to protect the livelihoods and food security of 600 million vulnerable people at risk in some of the poorest parts of the world and accelerate progress towards multiple Sustainable Development Goals. The GA will emphasize the importance of taking a coordinated One Health approach to pest management and look to:

- deepen engagement with the eight demonstration countries and concentrate on scaling up the adoption of integrated pest management (IPM) technologies;
- broaden support activities to pilot countries; and
- look beyond FAW to other invasive pests by seeking alignment across many partners and initiatives to facilitate shared objectives and collective impact.

The Fall Armyworm Monitoring and Early Warning System (FAMEWS) platform and mobile app

As fall armyworm (FAW) is a cross boundary pest, local control measures are not sufficient in stopping its spread. Instead, a coordinated global effort is required, supported by a strong early warning and monitoring system that means limited resources can be directed quickly and efficiently to where the threat is greatest.

An effective way to control the spread of FAW is through a coordinated and robust global monitoring system, such as the Fall Armyworm Monitoring and Early Warning System (FAMEWS). FAO has disseminated the FAMEWS App to thousands of farmers in 44 countries and trained thousands of farmers to use the app to track FAW through farmer field schools and outreach programmes. Information from the FAMEWS app is uploaded to the FAMEWS global platform whenever fields are scouted, or pheromone traps are checked for FAW.

Loice Kiliru, a farmer in Kenya trained through the GA and now a FAW forecaster and community leader on its management, explains: *"We have been sensitizing the farmers through farmer field days, chief barazas (meetings), and through farmers and residents WhatsApp groups. Whenever we spot the infected crops, we take photos and share on the different platforms, we also train the farmers to use the control methods whenever they spot the pests to reduce their numbers."*

"Before, from this 10-ha marshland, we used to harvest 5 to 6 tonnes [of maize]. But in 2017 this dropped to 3.5 tonnes. We did our best to fight the worm but had nothing to show for it. When the FAO project came, we understood more about fall armyworm and the technologies it takes to fight it. The mobile phone application ...allows me to collect and share information. Then the agronomist comes and inspects the field. Production has gone back up. Today from our 10 ha, we are harvesting 7 tonnes." Cyril Nzagumandore, a Rwandan farmer.

4.2 A CHALLENGING RESOURCE MOBILIZATION ENVIRONMENT

Official Development Assistance (ODA), measured by the Organization for Economic Co-operation and Development (OECD), rose to an all-time high of USD 161.2 billion in 2020 (preliminary figures). Assistance was boosted by additional spending mobilized to help developing countries grappling with the COVID-19 crisis, and an increase in bilateral sovereign lending by some donors. This represents a 9.9 percent increase over 2019 levels. Initial estimates indicate that countries under the Development Assistance Committee (DAC) of the OECD spent USD 12 billion on COVID-19 related activities in 2020. The OECD

Battling a transboundary pest in a locked-down world

Despite limitations posed by COVID, FAO has been working to assist those whose livelihoods are most directly threatened. In 2020, nearly 1.5 million African farmers were trained on scouting and monitoring the appearance and spread of FAW and learned about using bio-pesticides and pesticides, as well as nature-based solutions for FAW management. Thousands of experts and technicians also trained including on mass rearing of natural enemies of FAW, such as particular types of wasps – China has included FAW monitoring and control in its own training programmes for nearly four million farmer technicians.

predicted that ODA commitments would be maintained as many DAC members already indicated that they would continue to maintain or increase them in 2021. While the funding outlook remains stable, funding new initiatives is still a difficult task, particularly in light of renewed commitments to limit global warming following COP26 in Glasgow in late 2021 and increased demands for emergency and humanitarian funding because of the increase in humanitarian needs caused by COVID-19 and other ongoing emergencies. At the same time, these emergencies are also exacerbating the challenges faced in controlling the spread of FAW. This means it is all the more important to mobilize regular, long-term development funds for FAW control by articulating the impact and results that will be achieved and identifying and accessing a diverse range of funding sources.

4.3 THE CASE FOR INVESTMENT

When mobilizing financial resources, it is important to articulate the return on investment of funds to funding partners. This can be stated in monetary terms and/or in terms of impact, i.e. by the number of people reached and the sustainable development outcomes achieved.

Risk management strategies for shocks such as droughts, floods, and pests – including multi-risk assessments, timely forecasts, early warning systems and early action plans – are key to helping all agri-food system actors prevent and anticipate major disruptions to systems and avoid human suffering and costly recovery interventions. It is far more cost-effective to proactively protect plants from pests and diseases than to react to full-blown plant health emergencies.

4.4 IN-KIND SUPPORT

Resource mobilization is not just about raising funds. It is also about developing the right partnerships that can help to achieve the objectives of the resource

mobilization campaign. Examples include, but are not limited to, partnering with institutes that can contribute human resources such as consultants, interns or volunteers, or offer support with meeting rooms, the provision of services like translation or reaching out to national and local media partners that can help disseminate messages about FAW control to farmers and farming communities, for example, through local radio or social media.

In addition, FAO, in cooperation with the FAW technical working group, has developed the Fall Armyworm Framework for Partnerships for the Sustainable Management of Fall Armyworm. Established after the first major stakeholder consultation meeting on FAW which was held in Nairobi in 2017, the Framework for Partnerships brought together all relevant stakeholders into a coherent and coordinated structure to leverage their comparative advantages in complementary and synergistic ways for the sustainable management of FAW in Africa, the Near East and Asia. Further, contributions in-kind may go directly to affected countries and not necessarily through FAO, even if FAO has a key role in mobilizing them. In this way, the efficiency and effectiveness of the FAW response was maximized from the outset, and potential areas of collaboration were identified to:

- manage FAW, including farmer education and communication;
- test and validate FAW management practices;
- enable monitoring, risk assessment and early warning systems;
- secure longer-term research and innovations;
- support policy and regulatory needs; and
- coordinate effectively.

In December 2019, the Framework for Partnership was transformed into the Global Action for Fall Armyworm Control to complement ongoing FAO activities on FAW.

Another way to mobilize in-kind resources is by engaging with non-traditional partners, such as the private sector.

4.5 PRIVATE SECTOR ENGAGEMENT

The private sector plays a unique role in innovation, trade, finance and investment and can impact agri-food systems transformation at scale. The private sector refers to a range of entities including multinational and large companies, financial institutions, industry and trade associations, foundations, and local/national micro, small and medium-sized enterprises, including start-ups, entrepreneurs and farmers (FAO, 2021c). Private sector partnerships can generate real-time knowledge and data, market intelligence and best practices, and facilitate the effective dissemination of information both nationally and globally.

At the same time, engaging private sector actors in resource mobilization for sustainable development outcomes can contribute to inclusive and sustainable food systems' development and transformation, and promote economic and social inclusion by playing a catalytic role in changing the ways that businesses operate and invest in food and agricultural systems.

The majority of engagements (FAO, 2021c) with the private sector will be informal, e.g. policy dialogues, workshops and joint events that bring visibility to a resource-mobilization campaign, rather than financial. Still, some engagements with the private sector will lead to a financial or in-kind contribution, which is formalized through a contribution agreement, should funds be anticipated to be channeled to/through FAO. In such cases, it is critical to contact the Resource Mobilization and Private Sector Partnership Division (PSR) of FAO for guidance and support on the workflow to be followed and clearances required. In considering private sector partnerships, FAO will carefully review the potential for any fiduciary, financial or reputational risks to the Organization. A detailed guide to engaging with private sector entities will be available on [CONNECT Portal](#) early in 2022.

In cases related to national task forces on FAW, where private sector entities are anticipated to participate or to contribute with funds, an open public call should be launched for private sector entities to support country-level activities. The launch of the call and selection of the private sector entities should be a government-led and government-managed process, while FAO may provide advice should a government so require. However, the final decision rests with the government as the lead of the national task force. Any contribution agreement to the national task force should be signed by the private sector entity and the government.

5. The roadmap to resources mobilization

5.1 IDENTIFY

There are many different types of potential resource partners and different levels at which partnerships can be formed depending on the size of the project and the intended results. It is important to carry out an initial analysis to identify potential partners with mutual interests in areas where you require support and understand what resources they could provide to further the objectives of FAW control; for example, financial or in-kind. It is also important to look at the potential of existing resource partners to build on previous or ongoing support, as well as trying to identify new partners. The Resource Mobilization Matrix (see Appendix 1) is a useful tool for this.

As part of this process, it is also very important to carry out a gap analysis to help you understand what kind of resources you are seeking to mobilize, how much is needed and by when, and how it will be used to ensure alignment with identified resource partners. The Funding Gap Analysis Matrix (Appendix 2) is a useful tool.

FIGURE 2. Funding gap analysis

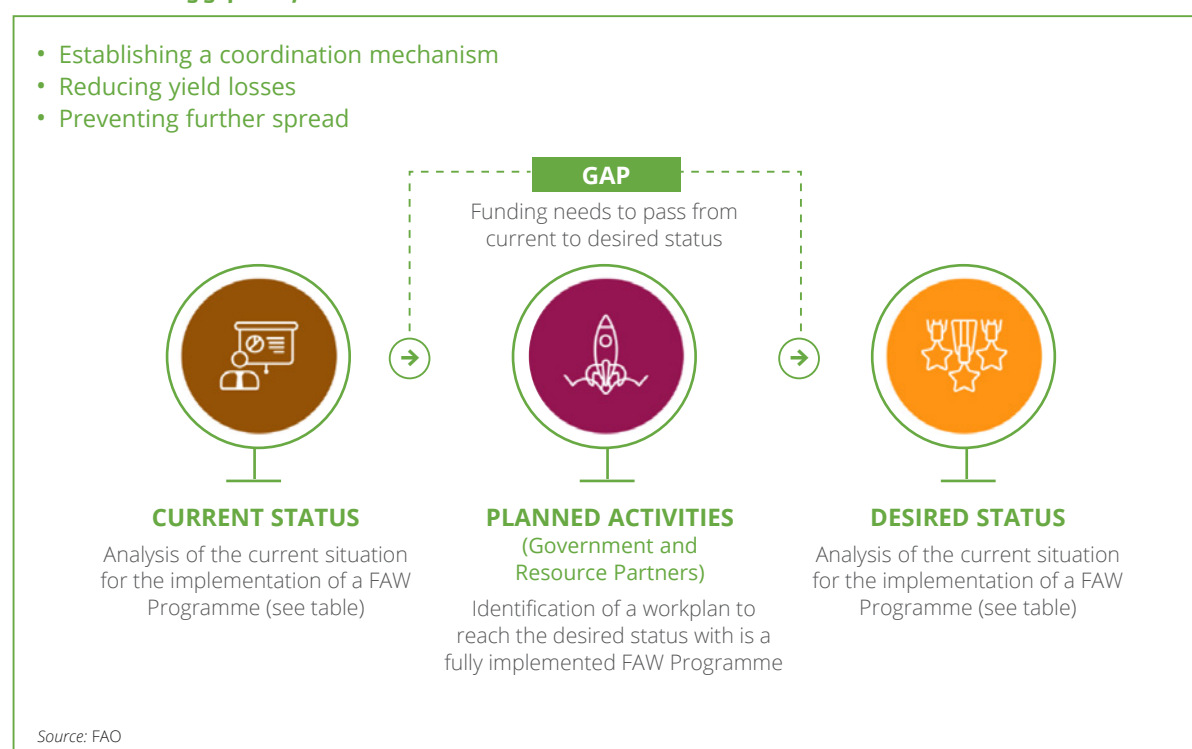


FIGURE 3. Types of resource partners



FAO has also carried out an analysis of FAO-related projects of funders in the demonstration countries for the latest six years (2014–2019) (analysis available on request). Two graphs from this report are included:

FIGURE 4. Top 10 donors - activities for agricultural research

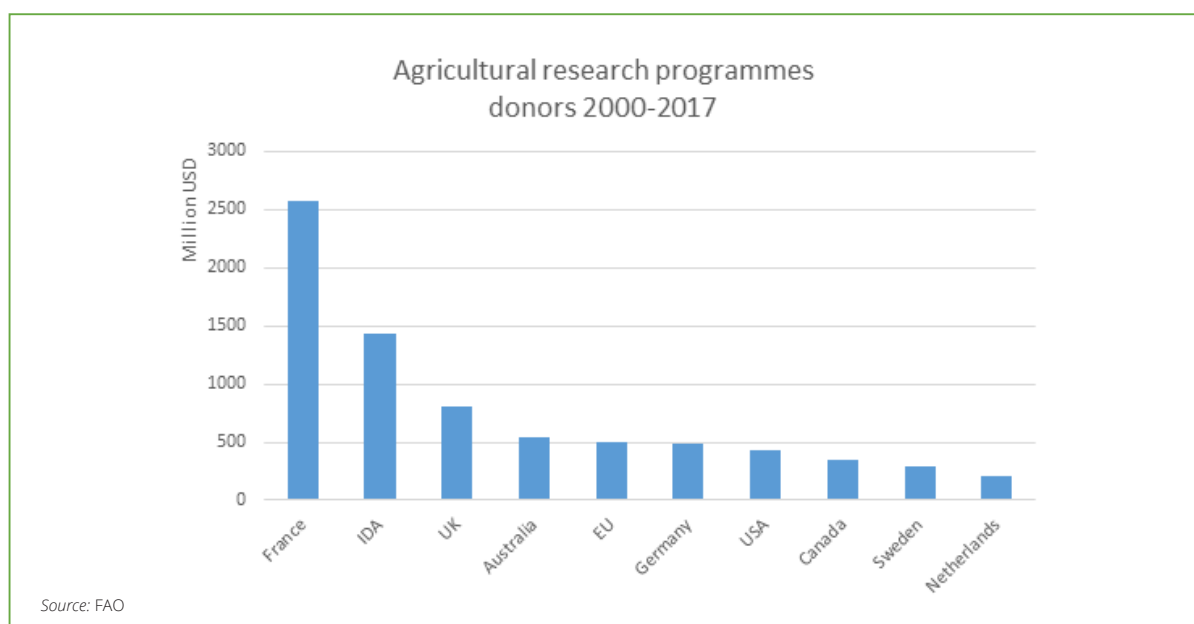
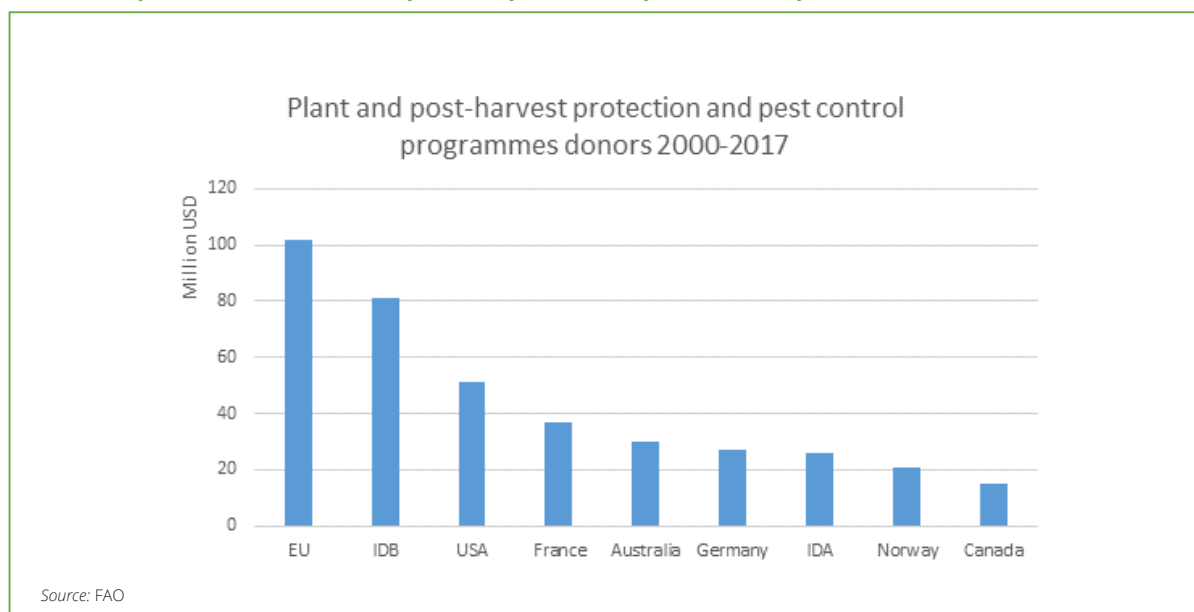


FIGURE 5. Top 10 donors - activities for plant and post-harvest protection and pest control



5.2 ENGAGE

After identifying a list of potential resource partners, the next step is to engage with them. Create an ongoing marketing and outreach campaign to reinforce your message and need. Ask potential or existing resource partners for bilateral meetings, or hold an event, such as a farmers' field day or a donor conference. This provides an opportunity to present the case for resource mobilization for FAW control to a range of partners including the private sector, government agencies, NGOs, foundations, and research institutions.

5.2.1 Targeting key messages

Effective engagement requires the preparation of key messages that are designed to resonate with each partner who will have different perspectives (see Appendix 3). It is not a 'one-size-fits-all' approach. Key messages need to be tailored to the specific resource partner that you are seeking to engage – whether by geography, crop, sustainable development outcome(s) or any other priority they may have. Further, it has been clearly expressed by partners that they prefer to support larger, programmatic challenges and solutions, rather individual issues like FAW. Thus, it is crucial to integrate FAW control into other relevant programmes wherever possible; for instance, as a component in major rural development programmes.

Do your research to find out the objectives of the resource partner before you communicate or meet with them, and tailor your messages accordingly. The work you have already carried out to identify resource partners (see section 5.1) and particularly, the work to complete the Resource Mobilization Matrix (see Appendix 1) will be helpful in this exercise.

A farmers' field day in Kenya

In October 2021, to mark World Food Day, the farmer field school network in Bungoma County organized a field day at the Mabanga Agricultural Training Centre which has five acres of demonstration and evaluation plots set aside for FAW management training. The farmer field school network has a membership of 7 350 farmers, 4 200 of whom are women. Visitors were able to see how the farmers had learned how to manage FAW, reducing damage to crops and food supplies. The event helped to introduce the Global Action to various stakeholders and underscored Kenya's commitment to its objectives – Kenya is one of the eight demonstration countries that form part of the Global Action. Organizing these kind of events helps to engage existing and potential resource partners, enabling them to see results and meet beneficiaries.

Find out more: <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1455757/>

The importance of doing your resource mobilization homework: an illustrative example

Acceptances are arriving for a field visit that has been organized to showcase some of the work of the Global Action (GA) in African Country X* to existing and potential resource partners. The Minister of Agriculture of Country X will deliver a keynote speech at the welcome reception, where promotional materials will be distributed. Guests will then visit one of the demonstration sites where various approaches to control FAW are being trialed.

Guests will include representatives from the African Development Bank, the European Union and Norway, which are all strong supporters of the GA and already support activities in Country X.

Research carried out in preparation for this visit shows that while each resource partner is keen to support work that accelerates progress across the 2030 Agenda for Sustainable Development, there is some divergence in their priorities:

- Norway has relatively recently put agriculture at the center of its development policy and brings a food systems lens to interventions; so, as well as humanitarian assistance, is also looking at outcomes such as climate adaptation and women's empowerment.
- The EU is particularly concerned with supporting initiatives that can mitigate potential refugee and migration crises and further COVID-19 response and recovery plans, particularly through the European Green Deal. It is also concerned with new sustainable economic opportunities for young people and women.
- The African Development Bank wants to boost African countries' economies through its Strategy for Agricultural Transformation in Africa 2016–2025. This strategy supports several of the Sustainable Development Goals (SDGs), including SDGs 1 and 2 and is also working to make Africa a net exporter of agricultural commodities.

This research helped inform the plans for the day so that the guests would be able to understand how supporting FAW control through the GA met their multiple objectives. In addition to framing the Global Action in terms of SDG outcomes, extra emphasis was placed on economic stability and increased opportunities provided by the improved yields, particularly for maize farmers. Visitors were also introduced to members of a women farmers' group who, after undergoing training on integrated pest management (IPM) techniques, have become community leaders on FAW control, teaching others in their community how to spot and report suspected cases to prevent FAW spread and reduce crop losses.

**Note:* This is an illustrative example, not a real case study

5.3 NEGOTIATE

Negotiating is the most complicated step of any resource mobilization activity and requires that all parties are clear about the terms of the partnership. It is recommended that you deploy experts to review and guide this part of the process and that any necessary clearances are given, for example, by the finance office or a government department or official. Often, agreements will have a set of standard conditions related to the use of resources, although there may also be opportunities to negotiate some flexibility for changes that may occur. Ensure there is clarity about how resources will be used, the expected results and timeline of deliverables, and the reporting agreements. Subject to the resource partner's agreement, plan external coverage to promote the new partnership (as well as throughout the agreement) ensuring that both parties' communications teams are alerted in good time so that they can coordinate efforts. Some resource partners wish to remain anonymous so always check. It is also important to ensure that communications deliverables, for example, a video, media campaign or website, are agreed upon and costed at the start of the project.

5.4 MANAGE AND REPORT

Following the negotiation phase, it is critical to follow the commitments specified in the partnership agreement, including acknowledging the resource partner's contribution where possible. Ensure that the relevant work activities are properly managed, monitored, evaluated and reported upon; for example, with a log frame. It is also critical to engage the partner throughout the project delivery phase, not just to the point that the agreement is signed. As well as regular reporting activities, and opportunities for site visits, other activities could include continuous promotion of the work including writing blogs, taking photographs, making short videos and gathering beneficiary testimonials along the way. These can be shared across joint social media or public relation channels as the project progresses, and can provide evidence that can be packaged at the end to show the progress of the impact of the work.

5.5 COMMUNICATE

In addition to communicating with resource partners before and during the project, it is important to share with them results and show how these results align with the resource partner's objectives as set out in the initial agreement. It is also important to update them on the objectives and progress of the wider work of the GA and how the project results fit into that, which in turn, may open the door to future resource mobilization opportunities.

Making a noise about fall armyworm management training in Gabon

A ten-day capacity-building workshop in Gabon captured significant news media interest and boosted national awareness of FAW. The workshop, held in three major cities in December 2020, was organized by FAO and Gabon's Ministry of Agriculture, Livestock, Fisheries and Food. Participants gained valuable knowledge on how to recognize FAW and differentiate it from other pests, how to manage it in the field, as well as which control and prevention methods to use. Participants received certificates acknowledging their participation, as well as flyers with important information on FAW recognition and management to share with other farmers and colleagues. Knowledge of the destructive pest was also increased across the country through news media reports about the workshop and the FAW issue, disseminated on national television and radio stations, online media and social networks.

Find out more: <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1381543/>

Channels to communicate with resource partners include face-to-face meetings, publications, websites, events, national consultations, farmer field days, email newsletters and digital/traditional media outreach. Consider the different formats and languages that can be used so that targeted audiences can benefit from communication efforts at local, national, regional and international levels.

Ensure the partners are updated about your communication plans for the completion of the project, as they may also wish to carry out their own promotional activities or work jointly with you where appropriate to do so, on planned activities and shared outreach. For example, if there is a media request for an interview about the work or a new publication about the project, you could ensure that a senior figure from the resource partner is also interviewed or asked for a quote. These kinds of joint communication activities provide a strong foundation from which future collaborations can evolve.

First Arabic-language book for integrated sustainable management of fall armyworm for food security

Publication of the first Arabic-language book on sustainable management of FAW is filling a serious gap in existing information concerning best practices to manage and control the voracious insect pest that is spreading rapidly around the globe. The publication *Fall Armyworm: Invasive pest threatening crops and food security* clarifies many of the scientific and practical aspects of the nature of this pest, describes best management approaches, as well as experiences, success stories and efforts made to combat FAW. Copies have been circulating quickly, reaching more than 700 people in Arab-speaking countries within a few days of its release, with hundreds more copies ordered by Arabic speakers working in plant protection and agriculture, as well as farmer field school (FFS) facilitators and academics. Its release has attracted significant engagement on social media channels where its launch was publicized. The book was published in November 2021 by FAO's Regional Office for the Near East and North Africa (RNE) and the Fall Armyworm Secretariat. *Find out more:* <https://www.fao.org/fall-armyworm/success-stories/detail/en/c/1381543/>

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Appendix 1:

Resource partner matrix

[illegible]

Appendix 2:

Funding gap analysis matrix

Key aspects of a FAW programme	Current status analysis	Planned activities to fill the gap	Partners activities to be considered	Funding gap to reach the desired status	Desired status
Establish regional and national coordination					<ul style="list-style-type: none"> • regional and national coordination system with effective communication strategies for stakeholder engagement, productive partnerships, and regional collaboration for FAW sustainable management in place • committees and working groups for implementation and coordination established • global outreach strategy developed
Crop yield losses are reduced					<ul style="list-style-type: none"> • adoption of integrated pest management (IPM) practices and other technologies and policies for the sustainable management of FAW • reduction in maize yield loss through implemented IPM practices, technologies and policies for the sustainable management of FAW • number of innovative technologies implemented and guidance developed and disseminated to farmers • national inception workshops in each target country organized and baseline studies prepared • national capacity for sustainable management of FAW enhanced and yield losses reduced • information material on sustainable FAW management developed and disseminated • national FAW monitoring and early warning systems improved • national data collection on FAW infestation and yield losses developed • risk of FAW introduction and spread to new areas reduced
Risk of FAW introduction and spread to new areas is reduced, especially in countries with limited FAW distribution					<ul style="list-style-type: none"> • guidance documents released and workshops organized • documents on preventing FAW introduction and spread drafted, validated and made available • national and regional training for pest risk assessment conducted • national and regional training conducted on preventive measures (surveillance and inspection) and on pest outbreaks and alert system

Appendix 3:

Key messages for resource partners

The following messages are intended as very broad statements that can appeal to a wide range of resource partners. However, it is important to remember that key messages should be tailored to the specific resource partner that you are seeking to engage – whether by geography, crop, sustainable development outcome (s). Do your research and learn the objectives of the target resource partner before you communicate with them (see Section 5.1).

Contributing to the Global Action is the best chance we have to control FAW

The Global Action has the potential to save more than USD 10 billion per year and preserve the food and nutrition security of 600 million people worldwide. To spur fast and efficient results, FAO and National Task Forces for FAW control are calling on partners to provide an immediate investment of USD 10 million per year through long-term, predictable and sustainable funding and in-kind resources. We must now put in place a globally coordinated risk-management strategy to prevent its spread and sustainably manage it.

Fall armyworm: a growing livelihood and food security crisis

FAW is a fast-spreading transboundary pest. Native to the Americas, since 2016 it has been spreading beyond its native boundaries and is now present in Africa, the Near East, Asia, and Australia. It was recently reported in the Solomon Islands, and it could soon be present in Europe. Many countries and regions of the world have now listed FAW as a priority pest to identify and prevent, due to its incredibly high reproductive rate and the fact it is almost impossible to eradicate once established. Thus, working to prevent its spread and sustainably manage it where it exists, is a global concern. FAW poses a significant threat to the food and nutrition security of millions of people, particularly women, who are disproportionately affected by food insecurity at a global level.

Fall armyworm: adding to a potential migration and refugee crisis amid a global pandemic

There is significant potential for the devastating impacts of crop losses from FAW on vulnerable populations to create a refugee and migrant crisis. It impacts particularly on maize farmers in Africa, the Near East, and Asia. In Africa alone, where it is the invasive pest that is causing the most yield loss, damage is estimated at USD 9.4 billion. FAW's devastating impact is increasing at a time when poverty and reduced food security from the COVID-19 pandemic is increasing – the total number of people living in poverty as a result of the pandemic is expected to rise to 150 million by the end of 2021 (World Bank, 2021).

More than 80 types of crops, including priority food security crops, are affected by FAW

FAW feeds on more than 80 kinds of crops including wheat, rice, and sorghum. Its crop of choice however is maize – the most produced cereal globally. In Africa, Asia, and the Near East alone, the destruction of maize crops by FAW could be as much as 80 million tonnes, worth an estimated USD 18 billion. In Africa, where maize is a core staple, this represents a potential loss of up to 50 days of food subsistence per capital.

Funding the Global Action also funds progress on the 2030 Agenda for Sustainable Development including, but not limited to, progress towards SDG1 No Poverty, SDG2 End Hunger, SDG 3 Good Health and Well-Being, SDG 13 Climate Action, and SDG15 Life on Land. Outcomes also align with other related international agreements such as the Convention on Biological Diversity's **post-2020 global biodiversity framework**, the One Health Initiative, and the **New Deal for People, Planet and Prosperity** of the UN Food Systems Summit.

Controlling FAW requires an urgent collective global effort

Plant pests are responsible for losses of up to 40 percent of food crops globally and trade losses in agricultural products worth over USD 220 billion each year. As such, coordinated responses to pests such as FAW are increasingly important to safeguard livelihoods and economies. Collective action is urgently needed to prevent the spread of FAW and to sustainably manage it, including effective monitoring and early warning systems that consider seasonal patterns and migratory flows between countries and regions. Central to these efforts is FAMEWS, which is currently being used in 44 countries.

The constraints of COVID-19

The COVID-19 pandemic has posed additional challenges to efforts to manage and stop the spread of FAW, such as lockdowns that impede pest management activities, pest and disease monitoring, and early warning (FAO, 2021d). COVID-19 has also exacerbated existing threats to food production and food security which means we need to redouble our efforts and take coordinated measures.

The Global Action for Fall Armyworm Control

The Global Action for Fall Armyworm Control was launched by the FAO Director-General in December 2019 to ensure a strong coordinated approach at the country, regional and global levels. The Global Action is already bearing fruit: preliminary studies are increasing our understanding of yield loss for maize due to FAW. Through farmer field schools, direct farmer outreach, and other mechanisms, tens of thousands of farmers and extension agents have been trained during 2020–2021 in sustainable management of FAW, as well as in monitoring and early warning systems. Studies are being conducted to determine the efficacy of various biopesticide and biocontrol options.

FAO is uniquely positioned to control FAW

FAO has the global reach, data-driven solutions, and unparalleled expertise in food, agriculture, and plant health. FAO has already led FAW response efforts since 2016, including the management of 65 projects supporting national governments to mitigate FAW threats and damage. As a part of efforts to support FAW monitoring and control, these projects have disseminated the FAMEWS mobile app to thousands of farmers in 44 countries to track the spread, and trained thousands of farmers through farmer field schools on sustainable FAW management.

Appendix 4:

Useful resources for impact

- newsletters, factsheets, guides and briefs
- meeting reports
- guidance notes
- webinars
- stories from the field
- multimedia
- the Global Action website

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