

BUREAU FOR HUMANITARIAN ASSISTANCE



Agriculture

OVERVIEW

Conflict and natural disasters—such as drought, earthquakes, and pest infestations—can have devastating impacts on food security and livelihoods. USAID's Bureau for Humanitarian Assistance (USAID/BHA) supports agricultural interventions that increase livelihood opportunities and help crisis-affected populations meet their basic needs. USAID/BHA works to strengthen local disaster response capacity and increase community resilience to shocks. In the aftermath of disasters, USAID/BHA

USAID/BHA Agriculture Funding in FY 2023

\$221,749,290

supports agricultural infrastructure rehabilitation and economic recovery by providing agriculture-based livelihood assistance. USAID/BHA-funded programs also support animal health, livestock and fisheries, pest control initiatives, and provision of agricultural goods to vulnerable households.

Promoting Advancements in Pest Management Techniques

Fall armyworm (FAW) infestations result in massive crop losses each year, with a 2021 UN Food and Agriculture Organization (FAO) study finding that up to 17.7 million metric tons of maize alone—enough to feed tens of millions of people—could be lost to FAW each year if infestations are not prevented and managed. Native to the Americas, FAW has spread to other areas of the globe in recent years, including damaging infestations in Africa and the Indian subcontinent in 2016 and 2018, respectively, according to FAO. In response to the threat posed by FAW, USAID/BHA supported the Community-Based Fall Armyworm Monitoring, Forecasting for Early Warning, and Timely Management (CBFAMFEW II) project, a three-year initiative implemented by the International Center for Insect Physiology and Ecology (ICIPE) in Ethiopia, Malawi, Rwanda, Uganda, and Zambia between 2020 and 2023.

USAID/BHA partner ICIPE—in collaboration with the National Research and Extension Systems—reached more than 3.5 million people across the five target countries with awareness-raising sessions on sustainable FAW management technologies via the CBFAMFEW II project. ICIPE's cooperating partners organized workshops and conducted site visits to promote the adoption of FAW management strategies—including biopesticides, conservation biological control, habitat management, intercropping, push-pull, and other traditional pest management methods—across the five countries to promote their use within the farmer community. Additionally, ICIPE conducted training-of-trainers sessions and disseminated FAW management strategies through national agricultural shows, on-farm training and other demonstrations, and radio and television programs. ICIPE also produced two FAW monitoring newsletters and distributed 700 copies of FAW integrated pest management techniques to participating countries during 2023. ICIPE continued to develop data modeling to track the spatial and temporal FAW infestation patterns and subsequently predict expected FAW infestations, allowing farmers to adequately prepare ahead of the outbreak during 2023. ICIPE's efforts to promote FAW management strategies resulted in the adoption of such activities in different planting seasons in Ethiopia, Malawi, Rwanda, Uganda, and Zambia.

Horticulture Supports Livelihoods and Post-Crisis Recovery

The inclusion of vegetables as a part of emergency programming is increasingly being shown to be an effective tool for supporting household's nutrition and livelihoods. Vegetables both provide critical micronutrients and income generation as they often can be grown quickly and do not require large amounts of land. In order to support household resilience and increase the households' vegetable planting, the USAID/BHA is supporting World Vegetable Center (WorldVeg) to identify indigenous vegetable varieties, provide of seed kits to vulnerable households, and train communities on best practices for introducing vegetables as a livelihoods and nutritional support crop.



WorldVeg assistance to IDPs supports household food security. In FY 2023, USAID commissioned an e-learning tool to help inform seed distributions to farmers in the wake of disasters. *Photo courtesy of WorldVeg.*

In FY 2023, WorldVeg supported 150 internally

displaced persons (IDPs) in Mali with seeds of resilient, underutilized vegetables, including amaranth and jute mallow. The seed was provided alongside training on sustainable farming practices, which worked to improve

IDP livelihoods by transitioning them from subsistence farming to amaranth and jute mallow cultivating for the market. Additionally, in FY 2023, WorldVeg conducted a rapid assessment in Ethiopia to understand how the 2020–2022 conflict in northern Ethiopia affected the vegetable sector in Tigray. The assessment found that vegetable production remains low after the war as households prioritized staple crops, while important agricultural infrastructure, including irrigation has not been rebuilt. As a result of this study, in FY 2024, USAID/BHA Ethiopia and implementing organizations will begin horticulture as a part of emergency recovery programming in conflict-affected areas of northern Ethiopia, including Afar, Amhara, and Tigray regions.

Improving the Locust and Grasshopper Mitigation Measures

Locusts and other pests represent one of the most serious threats to agriculture across the globe, particularly among subsistence farmers in low-income countries where appropriate pest surveillance, monitoring, and management are difficult to implement. Rural farmers may not have access to technologies and formalized knowledge networks for preventing, monitoring, and controlling outbreaks, while scarcity of resources, such as synthetic pesticides, may impede individuals' abilities to conduct regular activities, limiting long-term monitoring. To reduce the social and economic impacts of locust and grasshopper outbreaks, USAID/BHA is supporting a soil management intervention study in collaboration Arizona State University (ASU) to develop community and national plan protection organizations, which focuses on use of safe and affordable soil practices, such as compositing. In FY 2023, ASU trained 200 participants on composting as an alternative soil amendment fertilizer through this program. The program participants in turn trained 4,000 community members on how to compost and use compost to reduce risk of locust and grasshopper infestations, contributing to community-led approaches to pest reduction.

USAID/BHA also supported FAO and other relief actors to improve monitoring of and response to locust infestations, which consume most of the vegetation in their path—including crops and pastureland—and pose a major risk to food security in affected areas. Through USAID/BHA-funding, FAO worked with national governments in the Caucasus and Central Asia in FY 2023 to strengthen locust surveillance and early warning systems and enhance response capacity. In addition to training technical staff and community members, the UN agency developed a geographic information system-based monitoring, surveillance, and reporting platform to track locust outbreaks in the regions.

Building Resilience Amongst Vulnerable Pastoral Communities

As part of its support for research and innovation in agriculture, USAID/BHA funded the Livestock for Health program, led by FAO, which studies best practices to build household resilience among pastoralists and other people dependent on livestock herding. A previous USAID/BHA funded study conducted by FAO in northern Kenya found that distributing livestock fodder to households during the dry season significantly reduced the risk of acute malnutrition among children. In FY 2023, FAO and Tufts University conducted further research on the impact of market-based livestock food security assistance, nutrition counseling, and water management programs among livestock-dependent households in Chad, attempting to replicate the previous study's results. FAO plans to conduct the study in Chad over the course of three years and attempt to understand how to better support water access and livestock feed provision in a sustainable and conflict-sensitive manner.

More information on USAID/BHA sectors can be found at **usaid.gov/humanitarian-assistance/what-we-do/humanitarian-sectors**