

FISCAL YEAR (FY) 2018

AGRICULTURE AND FOOD SECURITY SECTOR UPDATE



A woman herds her flock in Khovd Province, Mongolia, following a USAID/OFDA-supported information session on an emerging viral disease affecting goats and sheep. Photo by Christine Jost/USAID.

Strengthening Mongolia's Livestock Sector

The livestock sector is a significant part of the Mongolian economy, particularly in rural areas where livestock serves as the primary source of food and income. As a landlocked country, however, Mongolia is vulnerable to transboundary animal diseases (TADs), highly contagious epidemic diseases that can spread rapidly irrespective of national borders. TADs often cause high rates of animal death and illness, which can lead to loss of livelihoods for livestock farmers and socio-economic consequences for local communities.

In 2018, USAID/OFDA partnered with Mercy Corps to improve early detection and response to TADs through participatory disease surveillance efforts. By training rural veterinarians and border inspectors, USAID/OFDA-supported Mercy Corps activities strengthen local capacity to detect and conduct early surveillance of TADs, enabling rapid response measures and the reduction of livestock death, disease, and harm to livelihoods and food security.

Monitoring and Mitigating Locust Infestations in Senegal

Oedaleus senegalensis (OSE), or the Senegalese locust, is one of the most severe insect pests of the West African Sahel region. OSE infestations persists across the Sahel, causing low-level reductions in crop yields—particularly millet—with

USAID/OFDA Agriculture and Food Security Activities

FY 2018 FUNDING

Standalone Global and Regional Agriculture and Food Security Programs	\$4,451,937
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Agriculture and Food Security Interventions Worldwide	\$106,174,257
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\$110,626,194¹

Sector Overview

Conflict and natural disasters, such as drought, floods, and insect infestations, can have critical impacts on the food security and livelihoods of affected populations. USAID's Office of U.S. Foreign Disaster Assistance (USAID/OFDA) supports agriculture and food security interventions that increase livelihood opportunities and address the basic food requirements of disaster-affected populations. USAID/OFDA also works to strengthen local disaster response capacity and increase community resilience to shocks that could negatively affect livelihoods and food security. In the aftermath of disasters, USAID/OFDA supports agricultural infrastructure rehabilitation and economic recovery by providing agriculture-based livelihood assistance. USAID/OFDA-funded programs also support animal health, livestock and fisheries, pest control initiatives, and provision of agricultural inputs to vulnerable households.

¹ USAID/OFDA FY 2018 agriculture and food security sector funding supported activities in 29 countries, including Burma, Kenya, Somalia, Syria, and Yemen.

infrequent but high-intensity occurrences of outbreaks that result in costly, widespread crop damage. While chemical pesticides can offer protection from locusts, repeated applications are necessary to effectively protect crops and pesticide stocks are often not available in sufficient quantities when locusts cause the most severe damage. Some pesticides can also have negative effects on human health and are high in cost. To reduce the social and economic impact of locusts, farmers require more sustainable solutions for locust monitoring and management.

USAID/OFDA is supporting Arizona State University (ASU) with \$540,000 to mitigate locust infestation risks in Senegal's Kaffrine Region. The ASU project aims to bolster community capacity to reduce the potential for locust outbreaks and to promote agricultural practices that minimize locust losses and maximize crop yields. As locusts dislike grains with high nitrogen content, the project distributes nitrogen-rich fertilizer to keep locusts away from crops. The project also provides training on locust monitoring tools—such as light traps to monitor OSE population numbers and movement—to improve existing pest management infrastructure, minimize unnecessary pesticide use, and facilitate operationalization of an early warning system through regular, village-level locust monitoring.

Shaping Nutrition-Focused Livelihoods Programs for Drought-Affected Children and Women

Pastoral communities in Kenya's Arid and Semi-Arid Lands (ASALs) rely heavily on livestock-based livelihoods and require access to pasture and water to sustain animal productivity. Land degradation and changing climatic patterns in the ASALs, however, has reduced and stressed available pasture lands. The scarcity of animal feed is most pronounced during increasingly frequent droughts and dry periods, leading to worsened nutritional conditions for children who rely on animal milk and meat for the bulk of their daily energy intake.

In partnership with the UN Food and Agriculture Organization, the UN Children's Fund (UNICEF), the Global Animal Health Department of Washington State University, and national and regional authorities, USAID/OFDA is supporting research and development of scalable and cost-effective strategies in the ASALs to protect vulnerable children ages five years and younger and pregnant and lactating women from seasonal spikes in acute malnutrition during dry periods. The project—funded jointly by USAID/OFDA Agriculture and Food Security and Nutrition teams with a \$2 million FY 2018 award—analyzes the effect of providing livestock feed coupled with counseling on the nutritional status of children and pregnant and lactating women during the dry season and seeks to inform future drought response programming in Kenya and globally.

Reducing Post-Harvest Loss in Malawi and Tanzania Through Improved Storage

Post-harvest loss due to pest infestations and reduced profits due to the immediate sale of harvest yields are key challenges facing farmers and food systems globally, particularly in complex humanitarian emergencies where agricultural production is already unstable. Pests, such as grain borers and fall armyworm, can result in a post-harvest storage loss of up to 30 percent in six months, while selling yields immediately after harvest reduces profits for smallholder farmers, as food prices typically decrease following the harvest due to increased food availability.

In Malawi and Tanzania, USAID/OFDA is supporting Purdue University with \$550,000 to document best practices for promoting the use of Purdue Improved Crop Storage (PICS) bags—durable, airtight plastic storage bags that stop pest infestation and mold growth, leading to increased quality and storage life of harvests. PICS bags are produced and sold inexpensively across several African countries. In Malawi, Purdue University also provides loans to smallholder farmers, offsetting immediate cash needs following the harvest and enabling farmers to store harvests longer and benefit from seasonal price fluctuations. In Tanzania, Purdue University has found widespread acceptance of PICS bags, extended storage periods, and an improvement in local banks' and financial institutions' lending risk profiles of small farmers.

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