



U.S. AGENCY FOR INTERNATIONAL **DEVELOPMENT'S SUPPORT FOR** ADAPTING FOOD SYSTEMS IN AFRICA

Food systems and the food security of communities and households in Africa are highly vulnerable to climate impacts. For example, flooding in Nigeria and South Sudan has led to hundreds of deaths, contaminated water supplies, and damaged massive swaths of farmland. The current drought in the Horn of Africa, caused by four failed rainy seasons, is killing millions of livestock, withering crops, and devastating small farming and pastoralist communities.

To tackle these challenges, the U.S. Agency for International Development (USAID) is working with African partner countries to drive urgent action to build resilience to climate impacts and is supporting African institutions and communities to advance climate resilient development. These efforts align with USAID's Climate Strategy 2022-2030 and advance the President's Emergency Plan for Adaptation and Resilience (PREPARE). USAID plans to program more than \$100 million in direct and indirect climate adaptation funding in Africa that will advance food and water security and strengthen early warning systems with fiscal year (FY) 2022 funds.

INTEGRATING CLIMATE ACTION FOR RESILIENCE AND FOOD SECURITY

Building climate-resilient food systems requires approaches that tackle multiple risks to people and the environment. USAID is intentionally integrating climate, food security, and humanitarian assistance programs and is using inclusive approaches to address root causes of food insecurity and to strengthen food systems. This integration—along with expansion of USAID efforts in Africa—is supporting transformative change that partner countries are calling for, and includes:

- FEED THE FUTURE EXPANSION: USAID has expanded Feed the Future, the U.S. government's flagship global food security initiative, from 12 to 20 target countries. All eight new target countries are in Africa: the Democratic Republic of the Congo, Liberia, Madagascar, Malawi, Mozambique, Rwanda, Tanzania, and Zambia. Feed the Future's new strategy elevates our work on climate-smart food systems.
- **RESILIENCE FOOD SECURITY ACTIVITIES (RFSAS):** USAID is ensuring its resilience and food security assistance builds in long-term, climate-sensitive activities. We are investing \$345 million in FY 2022 in 11 African countries to support vulnerable populations in increasing their capacity to withstand shocks and stresses, improving food access, and bolstering incomes through agriculture and off-farm livelihoods initiatives. Examples of activities include scaling land use planning that decreases conflicts over natural resources; promoting climate-smart practices; and providing timely weather and climate information. RFSA partners are also well-placed to support emergency responses when an acute shock or crisis occurs. For example, in Zimbabwe after Cyclone Idai in 2019, RFSA partners rapidly pivoted activities to assist with the crisis, with quick action leading to quick results.
- **RESEARCH, INNOVATION, AND SCALING WITH CGIAR:** In support of the objectives of the Agriculture Innovation Mission for Climate (AIM for Climate), and in partnership with CGIAR and smallholder farmers, USAID will help 200 million people in South Asia and Sub-Saharan Africa raise agricultural productivity by 25 percent by 2030. We will reach our targets by facilitating the development and dissemination of improved crop varieties and livestock breeds that are resilient to climate change. USAID will match its \$43 million pledge in 2022 with an additional installment of \$43 million in 2023, subject to the availability of funds, and in line with and as part of its commitment to providing \$215 million for AIM for Climate announced in 2021 at COP 26, the United Nations' annual climate change conference.

WHAT DOES THIS INTEGRATION LOOK LIKE IN PRACTICE?

In the Sahel, USAID programming streams are coming together to help mitigate climate change impacts through more than 150 activities with an annual budget of up to \$650 million. USAID is helping people, governments, and organizations across Burkina Faso, Chad, Mali, Mauritania, and Niger adapt to climate stressors that are undermining food and water security and often lead to displacement and conflict. This is critically important, given that the Sahel's high dependence on rainfed agriculture and natural resources for food and livelihoods means it is highly vulnerable to climate impacts. Various forecasts suggest that the region's main harvests will decrease by 15 to 30 percent with every one degree of warming. Activities not only cover agriculture, water, and land use, but also health, nutrition, governance, access to finance, microenterprise, fisheries, ecosystems, micro-infrastructure, livestock, and many more, with a particular focus on the needs of women and youth.

Strategic Programming For Climate-Resilient Food Systems

USAID, in partnership with African countries, is supporting adaptation of food systems and helping countries achieve their climate commitments. The following section outlines program examples that detail actions USAID is taking to address key challenges or to leverage key areas of opportunity including research and innovation; water availability, access, and quality; locally led adaptation and development; disaster risk reduction; and private sector mobilization.

INVESTING IN AND SCALING INNOVATIONS

- IMPROVED MAIZE FOR AFRICA: Efforts to enable farmers to increase agricultural productivity in the face of climate change are yielding results. For example, in partnership with the Bill & Melinda Gates Foundation and the Foundation for Food and Agriculture Research in 2022, farmers planted seven million hectares of climate-resilient maize varieties, benefiting more than 44 million people in 13 African countries. As a result, these heat-, drought-, and floodresistant maize varieties provided a 25 percent yield advantage.
- FOOD LOSS AND WASTE (FLW) ACROSS AFRICA: In 2021, USAID announced \$60 million over five years in new research awards to reduce FLW at the UN Food Systems Summit. This includes funding for Feed the Future Innovation Labs, such as the Post-Harvest Loss Reduction Innovation Lab working in Ghana to locally produce technologies that thoroughly dry and safely store grain for future use. The Women in Poultry Association has adopted these technologies, resulting in farmers being able to increase flock sizes by as much as 5,000 percent over five years. USAID allocated an additional \$2 million in 2022 to support engagement with the private sector to scale FLW reduction work. This resulted in a FLW partnership opportunity for businesses in Bangladesh, Kenya, Nepal, Niger, Nigeria, and Tanzania to apply for matching grants that will increase the uptake and scaling of technologies and management practices that reduce FLW, with an emphasis on nutrition.

WATER AND FOOD SECURITY

- WATER AND ENERGY FOR FOOD: USAID's Bureau for Development, Democracy, and Innovation, and its predecessor the Global Development Lab, provided \$8.8 million in FY 2019-2020 funding to develop the Water and Energy for Food Grand Challenge (WE4F), which totals \$65 million through partnership with Germany, the Netherlands, Sweden, and the European Union. WE4F supports more than 135 local small- and medium-enterprises (SMEs) and helps farmers in Africa get access to climate-smart innovations. By 2025, WE4F will enable three million people to become more climate resilient and will produce five million tons of food, while reducing 500 million tons of CO2 emissions. To date, WE4F has helped SMEs raise more than \$30 million in climate financing in Africa and aims to raise at least \$30 million in climate finance by 2025.
- WATER FOR FOOD AND NUTRITION: The USAID-funded PRO-WASH award recently supported work on climate-resilient water, sanitation, and hygiene (WASH) for food and nutrition security outcomes. This work provides the vision to address water scarcity, unsafe water quality, and inequitable access issues for women and girls, all of which impact food systems. In doing so, this work prompts the WASH sector to consider how to further integrate climate resilience within its work.

IRRIGATION: The Feed the Future Innovation Lab for Small-Scale Irrigation (ILSSI) is investigating the potential for asset-based finance to reach women with irrigation equipment, especially solar pumps. In partnership with CGIAR and the private sector, ILSSI supports solar irrigation pump suppliers to better target women in Ghana, Ethiopia, and Mali through genderresponsive, asset-based financing tools. Solar pump companies are filling many of the gaps in direct finance to farmers. These companies take on risks, so they rely on credit scoring tools to assess the ability of farmers to pay for solar pumps over time.

CHAMPIONING AFRICAN CHANGEMAKERS

- **AGRICULTURAL EXTENSION & ADVISORY SERVICES:** USAID, in partnership with Winrock International, is leveraging the power of Nigerian entrepreneurship to facilitate learning, replication, and scale around alternative models of extension to increase access to and adoption of proven and climate-resilient agricultural technologies for at least two million smallholder producers in Nigeria. The activity leverages micro-, small-, and medium-sized enterprises (MSMEs), including farmers, as change agents. Financial institutions are engaged to co-design, pilot, and scale suitable financial products with MSMEs, including bundled financing packages for smallholder farmers, especially women and youth.
- ADVANCING LOCAL LEADERSHIP, INNOVATION, AND NETWORKS (ALL-IN): The USAID-funded Feed the Future Innovation Lab for Markets, Risk, and Resilience, led by the University of California, Davis, developed ALL-IN to support African researchers in development economics and related fields. These researchers, who have the skills, talent, and ideas to take the lead in defining research priorities, can now draw on U.S. university-based mentors to enhance their capacity to implement and manage large-scale research projects.

DISASTER RISK REDUCTION

- CLIMATE SERVICES ACROSS AFRICA: SERVIR is a joint initiative of NASA, USAID, and leading technical organizations around the world. The goal of SERVIR is to address critical challenges in climate change, food and water security, hydroclimatic disasters, and land use. In 2022, USAID signed a five-year cooperative agreement with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) to implement the second phase of SERVIR West Africa. Under a model of locally led development, SERVIR West Africa brings together a consortium of ten partners to benefit the greater West Africa region, with a focus on Burkina Faso, Ghana, Niger, Nigeria, and Senegal. As part of the Gender-Sensitive Satellite-based Insurance (GAIINS) project to increase the climate resilience of women farmers in Kenya, the SERVIR Eastern and Southern Africa Hub convened high-level stakeholders representing the Kenyan federal and county governments, agricultural insurers, researchers, farmer groups, and women's organizations. This project establishes new channels for collaboration and engagement for gender-sensitive, satellite-based insurance products in Kenya.
- **DISASTER RISK FINANCE:** USAID is supporting African countries by lowering barriers to disaster risk finance. At a global level, USAID invested in the Agricultural Development Insurance Program (AIDP) and Financial Resilience Program (FRP) at the World Bank to support governments on disaster risk financing, including technical assistance, feasibility studies, capacity building, and organizing workshops. Program successes include the development of the Kenya Livestock Insurance Program (KLIP), which provided drought insurance for 65,000 vulnerable pastoralists.

RISK INSURANCE: USAID has also committed \$17 million in the Africa Risk Capacity (ARC) system since 2016. The ARC brings together African Union countries, the African Development Bank, the World Food Program (WFP), civil society actors, and donors to empower countries to purchase sovereign risk insurance for droughts, cyclones, and now floods. This is done through ARC LTD, a private insurance company that functions as a regional risk pool for Africa. USAID's contribution to the African Development Bank's Africa Disaster Risk Financing Program (ADRiFi) provides premium support and technical assistance by directly working with African governments. An example of USAID's impact is through the ARC Replica program implemented by WFP, USAID has funded drought insurance for the people of Mali and Burkina Faso since 2021. Due to two years of catastrophic drought in the Sahel, the policies triggered, resulting in \$23 million in disaster relief to drought-stricken farmers. USAID's investments in ARC Replica also support Madagascar and Mozambique in disaster risk management, including the option to buy cyclone and drought insurance, as well as a feasibility study in Sudan this past year.

PRIVATE SECTOR MOBILIZATION

- ACELI AFRICA: Through the Aceli Africa program, USAID's anchor commitment of \$10 million has secured more than \$62 million in commitments from the Dutch Ministry of Foreign Affairs; IKEA Foundation; the Swiss Agency for Development & Cooperation; and the UK Foreign, Commonwealth & Development Office. These partnerships and commitments will be leveraged to mobilize \$600 million in private sector finance for agriculture in Uganda, Rwanda, Tanzania, and Kenya. From the inception of Aceli's operations in 2020 to date, (September 2020-September 2022), 569 loans have been registered, totaling \$71 million with 31 lenders. Climate-smart and resilient agricultural practices—including the use of natural fertilizers, environmentally sustainable packaging, erosion control, water re-use, and the use of compost—are supported by 18 percent of the loans.
- AFRICA'S FOOD SYSTEM FORUM: USAID has been a sponsor of the AGRF and funded the AGRF Agribusiness Deal Room, and supported an AIM for Climate ideation event that brought together funding, policy, and implementing partners to crowd in more climate finance for adaptation and private sector investment in agri-SMEs. Under the co-chairmanship of USAID at this year's Deal Room, 212 SMEs, 45 investors, 58 anchor buyers, and more than 4,500 individuals participated, and more than 1,000 investment and partnership meetings took place.