



United States Department of Agriculture

USDA Foreign Agricultural Service Climate Change Adaptation Plan

April 2022

Introduction

The U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS) has defined its mission in its 2023-2027 strategic plan as, “FAS is a trade agency that promotes U.S. agricultural exports.” FAS maintains a global presence that helps inform stakeholders on international markets, works to expand access for U.S.-produced food and agricultural products, and builds new markets by assisting developing countries to develop capacity for trade. FAS’s global presence and international focus is critical in promoting the U.S. climate agenda and assisting countries to adapt to a changing environment.

Mission	FAS is a trade agency that promotes U.S. agricultural exports
Goal 1	Liberalize global agricultural trade by developing and enforcing agreements, policies, and addressing trade barriers
Goal 2	Expand U.S. agricultural exports through implementation of trade-supporting initiatives
Goal 3	Inform global agricultural markets and advise U.S. decision-makers by providing relevant intelligence, expertise, and analysis
Goal 4	Operate FAS and administer its programs efficiently and effectively, with a focus on excellent customer service
Goal 5	Promote a supportive trade environment for sustainable and climate-smart commodities, while encouraging the adoption of global agricultural climate solutions
Goal 6	Recruit, build, and retain a well-qualified, diverse, and inclusive workforce, and ensure FAS programs are equitably promoted and available to underserved communities

FAS’s strategic goals listed above, and FAS’s approaches to adapting to climate change, are identified as priorities in FAS’s Strategic Plan Fiscal Year (FY) 2023-2027. The FAS strategic plan describes activities that address climate change factors and incorporate adaptation and mitigation strategies and actions.

While Goal 5 is particularly relevant to climate change, all the strategic goals incorporate responses to climatic changes, variability, and seek to establish mechanisms to respond to agricultural and food systems challenges, such as increasing natural disasters and the spread of pest and disease, among many other risk factors.

Various U.S. laws, departmental policies, and directives define specific duties FAS is obliged to undertake. These include: (1) acquiring and reporting information pertaining to agricultural trade; (2) implementing market development programs; (3) administering and directing the Department’s programs in international development, technical assistance, and training; and (4) carrying out specifically authorized food aid programs. Furthermore, USDA Departmental Regulation 1051-001 states FAS is the lead agency responsible for coordinating Department agencies’ functions involving foreign agricultural policies and programs and their operations and activities in foreign areas, including those agencies having representatives stationed abroad.

In linking U.S. agriculture to the world, FAS has a unique role in addressing climate change. Limiting global temperature increases to 1.5 degrees Celsius (as outlined in the Paris Agreement) cannot be achieved by only focusing on U.S. practices; through our international agency, we must assist countries in accessing U.S. research, innovations, and climate smart and sustainable practices, while enabling a trade environment that promotes these innovations, practices, and agricultural products. It is within this mindset that we outline our programming and goals to expand USDA’s reach globally.

Climate Change Effects and Vulnerabilities

Shifting global trade patterns and decreased food security: Many countries are already experiencing rapid price increases for basic food commodities, a trend at least partially due to production losses associated with more frequent weather extremes and unpredictable weather events. Some regions will face higher risks, while others will face new risks, with a disproportionate effect on and need for adaptation assistance by developing countries. Cascading risks with impacts on multiple systems and sectors also vary across regions. The stability of food supply is projected to decrease as the magnitude and frequency of extreme weather events that disrupt food chains increase. Increased atmospheric CO₂ levels can also lower the nutritional quality of crops.¹ However, these trends are not consistently understood nor explicitly addressed in FAS's current program planning and risk management processes. Improved planning and risk management aids, along with increased data analysis and attention to hot spot regions increasingly threatened by food insecurity, will be required to adequately adapt operations.

Furthermore, developing countries are facing enormous challenges and climate risks to their food and agricultural systems and capacities to participate in international agricultural trade. For the foreseeable future, demand for international capacity building activities and technical exchanges to educate and promote climate resilience are likely to increase significantly. For countries, especially low- and middle-income ones, to be food secure and good trading partners with the United States, they need food and agricultural systems that are resilient to climate change. As the U.S. government (USG) engages more on climate programming, there will be a need to provide capacity building to cooperating countries' ministries of agriculture and other agricultural institutions, promoting U.S. climate-smart innovations. Capacity building will also be needed for international partner regulators and other relevant stakeholders to ensure other countries' policies and regulations do not negatively impact agricultural trade. FAS anticipates the increased demand for such assistance will place stress on existing agency resources and human capital, unless such capacity is enhanced, and markets and applicable climate programs are prioritized.

An additional benefit is that increasing capacity building and/or food assistance opens doors to greater trade facilitation and cooperation, which will help increase developing countries' economic stability. A synthesis of food security-related adaptation options showed opening new markets and trade pathways are two transformational adaptation options to reduce food insecurity, along with implementing new technology and improving food storage infrastructure, among others. Capacity building and extension programs work as enabling conditions to ensure such transformative adaptation.² FAS can position itself to proactively address both the risks and opportunities of changing global trade patterns and food insecurity, including in the areas of data collection, modeling, international and internal capacity building, personnel, and addressing shifting consumption patterns. In doing so, there will be increased opportunities for FAS to promote U.S. international cooperation on climate-smart agriculture through its existing programs.

Decreased agricultural productivity: Climate change has the potential to adversely impact agricultural productivity at local, regional, and continental scales. Crop and livestock production in certain regions has been adversely impacted both by direct effects of climate change (such as increasing trends in daytime and nighttime temperatures; changes in rainfall patterns; and more frequent climate extremes, flooding, and drought) and consequent secondary effects (such as increased weed, pest, and disease pressures; reduced crop and forage production and quality; and damage to infrastructure). Access to solutions for these adverse impacts is often limited by a partner country's enabling environment, infrastructure deficiencies, barriers to trade, and other factors that FAS engagement can help address.

¹ IPCC Land Report Summary for Policymakers p. 17

² IPCC Land Report, Chapter 5, p. 467

Overall decreased agricultural productivity will require adapting reporting mechanisms. FAS will have to consider the timescale and frequency with which commodity reports are submitted, as well as reconsider long-held assumptions, such as what constitutes baseline “normal weather” in the partner countries. Satellite imagery is an important part of this reporting. To adequately capture both direct and secondary climate change impacts at a high spatial and temporal resolution, optical and radar satellite imagery will need to be continually updated, along with cloud storage capabilities, augmented analytical tools, and mining existing global data sets.

The global changes in agricultural productivity, and its cascading impact on food security and international security, means international and domestic organizations are increasingly focused on agricultural production and trade. There is a risk in not having adequate staff resources to cover the multiple fora where agricultural trade inequities may arise. However, this increased interest offers an opportunity to engage with global partners and create coalitions of like-minded countries to advance U.S. agricultural trade policy objectives. Consideration must also be given to how existing FAS-administered programs can contribute to USDA’s climate-related international initiatives (Aim for Climate, Sustainable Productivity Growth Coalition, and Global Methane Pledge) and help to inform and amplify U.S. exporters’ sustainability strategies. In addition, increased international engagement and reporting will require flexible staffing mechanisms for foreign service operations.

Increased stress on trade (including SPS) infrastructure: Climate change creates additional stress and exacerbates existing risks to livelihoods, infrastructure, and food systems. Trade infrastructure will be tested; shipping routes are likely to change; and port facilities, roadways, buildings, and other important infrastructure will be at risk of damage from rising sea levels and increased frequency of extreme weather.

Already, U.S. trade with partners in developing countries is sometimes inhibited due to lack of adequate infrastructure such as storage, including cold chain storage, warehousing, and distribution channels. Managed by FAS, the Facility Guarantee Program provides credit guarantees that facilitate the financing of goods and services that are inputs into projects that primarily benefit the expansion of U.S. agricultural goods in a specific market. In this program, FAS already evaluates the environmental and social impact of a project as a primary eligibility criterion and may also require a full Environmental and Social Impact Assessment if preliminary findings warrant.

Expanded and changing incidences of pests, diseases, and food safety risks: Climate directly influences the range and natural evolution of agricultural pests, diseases, and food-borne pathogens, and their risk pathways, including international trade flows.

In addressing changing, and sometimes increasing, pests, diseases, and food safety risks, there is a need for increased sanitary and phytosanitary (SPS) capacity building to help countries address current and emerging threats, including support for innovative tools and technologies. FAS manages numerous projects intended to enhance foreign countries’ SPS capabilities and systems and expects there will be increased demand for such capacity building and technical assistance programs. Additionally, FAS may need to increase, or augment, existing Global Agricultural Information Network (GAIN) reports to adequately account for changing international trade dynamics, resulting from increased and/or changing pest and disease outbreaks. Without reallocating or increasing internal resources toward climate adaptation, these requests will likely strain existing human capital resources.

In addition, regulatory officials have the opportunity to recognize the contribution by plants and animals developed through biotechnology in reaching climate goals, including resilience to animal and plant diseases and pests. The availability of such products depends upon partner countries having science-based approaches to providing regulatory approvals, without which the products cannot be used in the country. Capacity building should focus on the adoption of proactive national and regional biosafety frameworks that take a trade- and innovation-facilitative approach that meets the countries’ needs, but which are also based on appropriate evaluations of risk, protection of developers’ intellectual property rights, local access to, and acceptance of, the technology, and which are consistent with the countries’ obligations under international agreements.

The need for systems approaches in the agriculture and forestry sectors: The agriculture and forestry sectors face particular challenges of institutional fragmentation and often suffer from a lack of engagement between the many, various stakeholders and narrowly focused policy objectives.³ In addition, changes in climate can amplify environmentally induced migration, both within countries and across borders, reflecting multiple drivers of mobility and available adaptation measures.⁴ Coordination with other sectors, such as public health, transportation, environment, water, energy, and infrastructure, can increase co-benefits, such as risk reduction and improved health. Addressing desertification, land degradation, and food security in an integrated, coordinated, and coherent manner can assist climate resilient agricultural development and provides numerous potential co-benefits.

Clear communication of the many climate change initiatives across the U.S. Government and within USDA, and engagement with external stakeholders on the purpose and utilization of such initiatives, will contribute to FAS's operational efficiency. It will be crucial to improve existing cooperative mechanisms to reduce fragmentation and adequately seize the opportunity to further FAS's mission. Without proper engagement of the extensive list of stakeholders along the agri-food supply chain, USDA runs the risk of reducing the uptake of climate smart practices both domestically and internationally, if climate-related policies decrease U.S. competitiveness in foreign markets. Continuing engagement, both formally and informally, with FAS stakeholders will be crucial in identifying, designing, and implementing climate-related agricultural policies and practices. Programmatically, technical assistance and capacity building should seek to incorporate a whole-of-government approach and include topics such as biodiversity, One Health, antimicrobial resistance, energy, and infrastructure.

In addition, increased collaboration and coordination with stakeholders, across USDA, and the U.S. government, of U.S. science and agricultural innovation offers new opportunities for adaptation, mitigation, international cooperation, research and development collaboration, and local engagement. Adaptation also involves use of current genetic resources, as well as breeding programs, for both crops and livestock. More drought, flood, and heat-resistant crop varieties and improved nutrient and water use efficiency, including water quality (such as salinity), are aspects to factor into the design of adaptation measures. Availability and adoption of these varieties is a possible path for adaptation and can be facilitated by proactive, country-specific outreach and capacity building.⁵

Additionally, increased international cooperation on climate change and agriculture may enhance bilateral, plurilateral, or multilateral cooperation and create new opportunities for agricultural market access expansion. Regional coordination, as may be required, can also enable various FAS/Posts to work together to advance climate adaptation and resilience on a larger scale. Such international and regional coordination will include promoting and engaging on USG initiatives such as the Agriculture Innovation Mission for Climate (AIM for Climate), the Global Methane Pledge (GMP), the Sustainable Productivity Growth Coalition, Feed the Future, among others.

Reliable and improved data mechanisms: A key function of FAS includes analyses and forecasts of international commodity markets and trade flows, commodity production forecasts, and the export sales report. Increased climate variability is expected to exacerbate the need for, and importance of, reliable and flexible data collection methods and programs. FAS already utilizes various remote sensing technologies and international agricultural production data sets. Augmenting these technologies can improve FAS's ability to identify climate-related impacts such as those resulting from drought, famine, and floods to accurately forecast global production and trade. Current optical and radar satellite imagery at high spatial resolution will need to be continually updated to account for the increased severity and frequency of extreme weather events.

³ IPCC Land Report Summary for Policymakers, p. 30

⁴ IPCC Land Report Summary for Policymakers, p. 18

⁵ IPCC Land Report, Chapter 5, p. 471

Additionally, while FAS's traditional data analysis has focused on major crops in top producing countries, climate change will disproportionately affect smaller producers and developing countries, with cascading effects on food security, governance, and societies. FAS may need to increase its analysis of food insecure "hot spot" regions and climate change policies that directly, or indirectly, impact global agricultural trade. Also, because much of the agricultural data FAS utilizes is produced by the countries themselves, helping to build their capacity to produce reliable agricultural data and market information improves the host country's ability to assess and respond to the effects of climate change, and veracity of data reported by FAS posts.

Climate Adaptation Actions

Adapting to climate change will be critical for the success of FAS and our ability to implement our mission. To that end, we have a lot of existing, ongoing work that we can build upon. We have already begun to assess climate risks across our programming, received numerous voluntary climate change GAIN reports detailing foreign countries' approach to climate policy and programming in the agriculture sector, established a climate team in the FAS Office of the Administrator, and successfully promoted the role of U.S. agriculture as a leader in the climate sphere at the 2021 UN Climate Change Conference (COP26). As an agency, we continue to promote trade policies that benefit U.S. producers and create an enabling environment to export U.S. agriculture innovations and climate smart tools, while marketing the sustainability of U.S. commodities. Through various programs, FAS applies the technical expertise of USDA agencies and land grant universities, and U.S. technological innovations to build low- and middle-income countries' capacities to adapt their agricultural systems to climate change, to reduce or mitigate agriculture's contributions to climate change, and to be better enabled for international trade. Our base is strong, but there is more to be done.

FAS has identified several actions to reduce potential vulnerabilities to our mission, stakeholders, programs, and operations as a result of climate change. Adapting and building resilience to climate change is of utmost importance to ensure our work is long-lasting, impactful, and benefits U.S. farmers and ranchers. However, doing so will not be easy. There is a need to expand internal climate literacy, rework funding mechanisms, increase staffing, and increase attention to this new threat facing U.S. agriculture and trade. Now, more than ever, it will be crucial to coordinate across stakeholders, work with foreign governments, and leverage international partnerships as FAS works to ensure climate change solutions and mitigation measures are science-based, equitable, and help create more, and better market opportunities for U.S. food and agricultural exports. In addition to the narrative of actions (below), the table of actions at the end of this document provides a comprehensive explanation of action descriptions, their linkage to the aforementioned vulnerabilities, along with additional information on expected time for implementation, the lead office, and more. For clarity, we have delineated our efforts to adapt to climate change into four categories: increased capacity building and technical exchanges related to climate change; augmented internal data collection and analysis; encouraging climate-smart agriculture and trade policies; and improved USDA and USG coordination on climate issues.

A. Increased Capacity Building and Technical Exchanges Related to Climate Change

Given the international conversation around climate change, and USDA's role as a leader in the climate change and agricultural space, FAS as an initial step will adjust capacity building and technical exchanges to reflect this focus, as appropriate. However, in order for FAS to fully respond to the increase in demand for climate change technical expertise present in USDA, FAS would need to request additional appropriations for FAS programs focused on 1) advancing USDA resilient and climate smart agriculture practices and innovations, capacity building and technical cooperation in bilateral and multilateral fora that accelerate climate adaptation and mitigation in the food and agriculture sector; and 2) international SPS programs that address climate-related drivers of pest and disease. In addition, FAS can leverage existing programs such as USDA fellowships and scientific exchanges, Food for Progress and other USDA programs, along with new funding for new climate change focused capacity building that can be scaled and assist developing countries with the implementation of

adaptation strategies. This will assist FAS in strengthening efforts on food security, the trade environment, and bilateral relationships with foreign governments. Internally, developing standard operating procedures to work with other USDA agencies to share technical assistance internationally will provide a good foundation for increased and improved cooperation and coordination.

B. Augmented Internal Data Collection and Analysis

FAS will also take steps to address the need for new, or augmented, internal data collection and analysis of FAS programs. Initial steps include amending, and expanding the use of, existing screening tools to identify climate-related risks to all FAS programs. New analytical tools and data storage mechanisms or partnerships with other institutions who have such tools may be necessary to better assess impacts from extreme weather or biological events. Similarly, augmenting existing GAIN reports to address issues such as climate initiatives undertaken, food insecurity, extreme weather events, natural disasters, and to generally account for rapidly changing weather environments will improve FAS global trade reporting and information for U.S. stakeholders.

C. Encouraging Climate-Smart Agriculture and Trade Policies

Engaging in international conversations to encourage climate-smart farm policy will not only help ensure positive environmental outcomes, but also policy formulation that benefits USDA stakeholders. FAS needs to take the lead in engaging with foreign governments, and in international institutions, to guard against the implementation of measures that discriminate against imports of U.S. agricultural products and also encourage the development of policies that promote the adoption of more climate-smart agricultural practices for foreign producers. This work will keep overseas markets open for U.S. products, develop new markets for climate-safe commodities, and encourage the application of more climate-smart production practices globally. Furthermore, FAS will support industry efforts to market climate-smart commodities, in line with ongoing domestic initiatives, and highlight the sustainability of U.S. commodities and products during trade promotion activities.

D. Improved USDA and U.S. Government Coordination on Climate Issues

Another major action for FAS will be to improve coordination on climate issues across other U.S. government agencies and within USDA. Specific actions to improve coordination include developing or improving existing FAS, USDA, and U.S. government working groups; leveraging existing climate initiatives to improve bilateral trade relations and cooperation; and creating targeted lists of topics and countries to engage in the climate smart agriculture space. With its whole of government approach, FAS's participation in the President's Emergency Plan for Adaptation and Resilience (PREPARE), which aims to support developing countries and communities in vulnerable situations around the world in their efforts to adapt to and manage the impacts of climate change, will ensure coordination on pressing issues such as food security, climate information services, and water. PREPARE offers another forum for coordinated bilateral and regional engagement on climate and agricultural related technical assistance.

Cross-Cutting Adaption Issues and Considerations

FAS authority extends to the administration of USDA's export credit guarantee and food aid programs, assisting in improving income and food availability in developing nations by mobilizing expertise to support agriculture-led economic growth. FAS also works to enhance U.S. agriculture's competitiveness by providing a bridge to global resources and international organizations. The primary programs operated by FAS are market promotion, trade capacity building, and food aid. Traditionally, several of our capacity building programs are already

congressionally defined as focusing on low-income countries, many of which have large indigenous and minority group populations. For all aforementioned programs, FAS continues to take the appropriate affirmative steps to remove barriers in accessing programs, increasing program delivery, and increasing the diversity of program participants.

While developing this climate adaptation and resilience plan, FAS considered possible impacts to environmental justice communities. Capacity building and technical assistance efforts undertaken as part of this plan will continue to undergo risk assessments that consider the social, environmental, and economic impacts of proposed programming. Furthermore, in recognition of the disproportionate impact climate change is expected to have on developing countries, FAS has proposed increased capacity building efforts focused on climate smart agriculture, food safety, animal and plant health, and regulatory environments in emerging markets.

In addition, when considering promoting and recruiting for various events and positions, FAS will continue to utilize its memorandum of understanding with various minority serving institutions (Hispanic Association of Colleges and Universities, Conference on Asian Pacific American Leadership, 1890s, Wallace Carver, Thurgood Marshall). One of our proposed adaptation actions includes expanding collaboration with partner organizations and private industry to draw on external climate-related knowledge, research, and practices being undertaken. In doing so, we will also utilize this memorandum of understanding and ensure FAS collaborates with and supports minority serving institutions.

FAS seeks to continue and expand collaboration with USDA's Climate Hubs. The goal of Climate Hubs is to develop and deliver science-based, region-specific information and technologies to natural resource managers and communities, enabling climate-informed decision making and providing assistance to implement those decisions. FAS will leverage the Climate Hubs as a framework to support FAS in sharing climate adaptation science, technology, and tools. The Climate Hubs offer many resources to promote with foreign counterparts during international technical exchanges and as a way to promote U.S. best practices. In addition, the Hubs can serve as one tool to improve workforce climate literacy across the agency. FAS is prioritizing climate literacy for all staff, both in Washington, D.C., and across our Foreign Service Officers and Locally Employed Staff, to ensure our agency can respond to the changing demands of international markets and advance new market opportunities. Already in FY22, FAS has held several events and webinars related to climate change and agriculture and plan to offer a minimum of six internal training opportunities in FY22.

Climate Vulnerability	Action Title/Description	Type of Activity	Lead Office	Timeframe	Coordination	Progress Metrics	Accomplishments to Date
Shifting global trade patterns and decreased food security; decreased agricultural productivity; increased stress on trade infrastructure; expanded and changing incidences of pest and disease; reliable and improved data mechanisms	Establish funding for a new FAS program focused on (1) internationally advancing USDA resilient and climate smart agriculture practices and innovations through capacity building efforts, (2) international SPS capacity building and (3) technical cooperation programs that will address climate-related drivers of pest and disease risks to U.S. products and agricultural trade flows.	Proposed	GP	FY22-24	USDA Technical Agencies, Cooperators and Land Grant Universities. Coordination with USTR, DOS, FDA, EPA, USAID to determine areas of collaboration and possible leverage points.	New program concept, operational framework, budget, and funding plan developed by FY22	FAS funded and initiated ad hoc activities to advance adaptation.
Shifting global trade patterns and decreased food security; decreased agricultural productivity	Leverage Food for Progress and other FAS-administered programs to help contribute to USDA's international adaptation leadership and objectives.	Proposed	GP	FY24	USDA technical agencies, Cooperators, Land Grant Universities. Coordination with DOS, USAID, U.S. IDFC.	Food for Progress portfolio of climate-smart agriculture activities is expanded in FY22; USDA and stakeholders develop concept for new FAS adaptation program in FY24.	Food for Progress developed established climate-smart agriculture as a priority theme for new activities.
Shifting global trade patterns and decreased food security; decreased agricultural productivity; the need for systems approaches in the agriculture and forestry sectors	Develop SOP for FAS to request assistance from other USDA agencies and offices, including USDA Climate Hubs, as well as FAS internal expertise to address climate issues.	Proposed	OA	FY22	Across USDA	Finalize SOP by May 31, 2022.	N/A
All	Create a channel or adapt an existing mechanism for Posts to direct climate programming to countries.	Proposed	OA; FA; GP	FY22-23	Climate Hubs, OCE, OCS, FS, ARS, NIFA, FPAC, others. Coordinate with other USG agencies on issues related to trade, climate, and agriculture.	Mechanism for Posts to direct climate programming to their country(ies) established. Add Climate Hub training to Global Attaché Conference.	N/A

Climate Vulnerability	Action Title/Description	Type of Activity	Lead Office	Timeframe	Coordination	Progress Metrics	Accomplishments to Date
Shifting global trade patterns and decreased food security; decreased agricultural productivity; increased stress on trade infrastructure; expanded and changing incidences of pest and disease; reliable and improved data mechanisms.	Develop a logic model, performance indicator(s), metric method(s) and knowledge system for FAS capacity building and technical cooperation programs, to better target select markets/regions for climate adaptation and climate-related trade issue trainings and exchanges.	Proposed	OA; GMA; GP	FY22-23	USDA Coordination. Consult USG agencies on existing MEL systems for international projects/ programs.	Logic Model, performance indicator and metric methods are established by FY23 and tested by FY24.	In FY22, FAS developed a new job aid for program planning quality, including purpose (logic model) and evidence (metric).
Reliable and improved data mechanisms	Add datasets, create new analytical tools or amend existing tools (such as GADAS) to assess impacts from extreme weather or biological events (for example, pathogen spread) that impact crop production. Potentially develop an alert system informing relevant analysts of the risk.	Proposed	GMA and GP	FY22-25	ARS, OCE, NIFA; NASA, DOD, and USGS	Needs assessment of data tools completed FY22; increased training on existing or augmented data tools provided to Posts/LES by FY23; additional funding secured for GADAS and underlying databases.	Many existing applications (GADAS, Google Earth Engine, Crop Explorer) already supply decades of climate data and vegetation indices.
Reliable and improved data mechanisms	Expand big data storage/ processing capacity on a cloud infrastructure and continuous updates for satellite data and additional data streams coming online in the future.	Ongoing	GMA	FY22-25	ARS, OCE, NIFA; NASA, DOD, and USGS	Big data storage/ processing created by FY24; dedicated funding for in-house tools (such as GADAS, Crop Explorer, CropSignal) and broader USDA use and awareness of these tools.	Process is already underway for an enterprise licensing agreement (for entities such as Google) for access to cloud storage and big data processing.
The need for systems approaches in the agriculture and forestry sectors; reliable and improved data mechanisms	Create new GAIN report to capture country climate change policies, actions, and impacts. Update existing GAIN reporting requirements to account for hotspot areas of food insecurity, extreme weather events, and other factors.	Proposed	GMA, OA	FY22	None	Climate GAIN reporting instructions developed in FY22	Voluntary climate GAIN reporting completed by many Posts

Climate Vulnerability	Action Title/Description	Type of Activity	Lead Office	Timeframe	Coordination	Progress Metrics	Accomplishments to Date
All	Screen FAS program plans and funding opportunities for climate risks and, as appropriate, include risk analyses and risk management as criteria for implementing partners.	Proposed	GP	FY22-FY23	Across USDA, USAID	By FY2024, planning processes for FAS programs identify and address relevant climate risks.	FAS program-level climate risk assessments are initiated; FAS job aids for program planning quality are underway.
Shifting global trade patterns and decreased food security; decreased agricultural productivity; the need for systems approaches in the agriculture and forestry sectors	Engage in international conversations to encourage climate-smart trade policy and practices, and to discourage policies that reduce access to climate smart agricultural tools and/or negatively impacts minority communities.	Ongoing	OA; TPGA	FY22-25	OCE, OCS; USTR, USAID, DOS	Develop target list of top priority countries and adaptation strategies by August 31; strategize USDA's position regarding climate-smart farm policy by FY22.	Successful engagement at COP26
All	Expand internal trainings to improve FAS staff climate literacy. Expand collaboration with partner organizations and private industry to draw on external climate-related knowledge, research and practices being undertaken.	Ongoing	OA	FY22-25	Climate Hubs, OCE, OCS, FS, ARS, NIFA, FPAC, others. Coordinate with other USG agencies on issues related to trade, climate, and agriculture.	Host 6 internal training/educational opportunities in FY 2022.	N/A
The need for systems approaches in the agriculture and forestry sectors	Enhance and broaden our public facing communication and marketing plan, highlighting climate initiatives, research, and practices undertaken by FAS/USDA to promote climate programs in support of science-based decision making.	Ongoing	Comms OA	FY22-25	Across USDA. Input from interagency on joint initiatives or programs.	Climate GAIN reporting Develop 6 public facing announcements focused on climate related initiatives/projects/engagements in FY 2022.	N/A

Climate Vulnerability	Action Title/Description	Type of Activity	Lead Office	Timeframe	Coordination	Progress Metrics	Accomplishments to Date
All	Increase FAS's dedicated climate staff to administer climate-related workstreams.	Proposed	OA; Human Capital	FY22-25	None	Resources dedicated to administering climate-related workstreams have been allocated by FY23.	Establishment of OA Climate Team
All	Improve USG climate coordination, as it relates to international trade, agriculture, and climate impacts.	Ongoing	OA; TPGA	FY22-25	Across USDA and USG	Climate coordination mechanism improved or better utilized by end of FY22.	None
Shifting global trade patterns and decreased food security; decreased agricultural productivity; the need for systems approaches in the agriculture and forestry sectors; reliable and improved data mechanisms	Utilize USG and USDA initiatives, coalitions, and resources to strengthen trade infrastructure; dilute climactic impacts to international trade flows; and improve food security.	Ongoing	OA; TPGA	FY22-25	CPA external stakeholder meetings; technical agencies with roles in existing USDA initiatives/coalitions	Strategy session held in FY22 Coalition/Initiative goals in relation to strategy are defined by end of FY22	None