

### HOW ARE AGRICULTURE AND CLIMATE CHANGE LINKED?

ANSWER: Agriculture, including land use change, is one of the most climatesensitive sectors, being both a major contributor to global greenhouse gas emissions accounting for 19–29 percent of the total—and highly susceptible to its effects.



# How does GAFSP help countries address climate change?

**ANSWER:** GAFSP is uniquely placed to have transformative impact to support innovative climate sensitive approaches.



Out of 59 current GAFSP-eligible countries, 56 have included climateresilient agriculture as a priority sector in their **Intended Nationally Determined Contributions**, as have 80 percent of the 30 countries in which the GAFSP Public Sector Window is already operating. By testing innovations and bringing together the science with good practices, GAFSP allows piloting of project approaches which, if proven successful, can be replicated and scaled up elsewhere.

Countries can, and do, choose which interventions are best suited to their own situations, and this is reflected in prioritization at the country level.

### THE CHALLENGE AHEAD

In 2016, 400 million people were affected by drought; and according to current projections a warming climate could cut crop yields by more than 25 percent. If such adverse climactic trends continue, more than 100 million additional people could be in poverty by 2030, largely due to changing crop yields and prices.

An unprecedented focus on agriculture during COP22 in Morocco in 2016 resulted in the Marrakech Action Proclamation, which issued a call to strengthen and support efforts to eradicate poverty, to ensure food security, and to take strong action to deal with climate change challenges in agriculture.

# Climate change directly impacts agricultural practices, with:

- droughts
- floods
- rising temperatures
- changing weather patterns

#### In turn, this:

- increasingly threatens crops, fisheries, and livestock production
- pushes poor people deeper into poverty

## Agriculture can and must be part of the solution, through:

- adoption of sustainable and climate-resilient practices, policies, and investments that maintain or even increase food production to meet future demand
- strengthening farmers' resilience
- reducing its climate footprint



### **THE GAFSP PORTFOLIO**

Nearly 50 percent of GAFSP funds for the public sector and 74 percent of its projects—29 investment projects in 28 countries—have elements that contribute to climate change co-benefits, either adaptation and/or mitigation, through various climate-sensitive interventions.

- These include both traditional and innovative agronomic techniques and agro-climatic risk management technologies for improved climate resilience and reduced carbon emissions.
- They range from mulching, intercropping, conservation agriculture, on-farm water management, and pasture and livestock management to the promotion of improved, climateresilient local seed varieties, integrated pest and disease control technologies, and agro-ecological strategies.

### MONITORING AND EVALUATION (M&E)

#### GAFSP tracks its portfolio engagement in the areas of climate change adaptation and mitigation

using a World Bank methodology that is designed to capture the financing of adaptation and mitigation cobenefits in projects even when neither of these is the main objective. In addition, GAFSP's M&E framework incorporates a range of indicators that, at the project level, are able to specify relevance to climate-resilient agriculture, where applicable.

### CLIMATE-RESILIENT FOOD SYSTEMS & SDGs

The new Sustainable Development Goals offer a major opportunity to place climate-sensitive agriculture at the center of the development agenda.

The attainment of at least half of the SDGs requires the global food system to be productive, resilient, and contributing to tackling climate change. GAFSP has much to contribute in this space—the nexus of food security, productivity, and climate change—given that it focuses its investments in agriculture and food security on the regions and sectors where significant progress will be required in order to meet the expected SDGs on poverty reduction, sustainable agriculture, hunger, food security, and nutrition.



#### BANGLADESH

Reducing water use by up to 25% and GHG emissions, specifically methane, by up to 50%

### Examples of GAFSP Projects with Climate-Sensitive Agriculture Interventions

In **Bangladesh**, the GAFSP Integrated Agricultural Productivity Project is increasing the agricultural productivity of selected crops, livestock, and fisheries in economically depressed areas that are vulnerable to impacts of climate change. It contributes to improving climate resilience through the promotion of new technologies, agronomic practices, and the adoption of crop varieties and production technology packages better suited for evolving climatic and environmental conditions. For example, the project uses Alternate Wet Dry Irrigation, which can reduce water use by up to 25 percent and GHG emissions (specifically, methane) by up to 50 percent. The project also promotes drought-, heat-, and saline-tolerant varieties of wheat and rice for farm areas facing drought and flash floods.

In **The Gambia**, the GAFSP Food and Agriculture Sector Development Project focuses on reducing smallholder farmer risk and vulnerability to disasters and climate change by developing

### Examples of GAFSP Projects with Climate-Sensitive Agriculture Interventions

and improving community resilience and household coping strategies. The project works to strengthen the technical and organizational capacities of the most vulnerable groups through community-based training programs to strengthen knowledge, skills, and sustainable approaches. Climate-sensitive activities include improved land conservation and management; erosion control schemes; water conservation activities, including establishing tidal irrigation and water retention schemes; the development of community land use and watershed plans; community agro-forestry; and establishing seed banks and replenishing grain buffer stocks.

In **Nicaragua**, the GAFSP Caribbean Coast Food Security Project supports Innovation Development Plans developed by farmer groups to improve sustainable production opportunities. These plans promote small farmers' use of climate-resilient seeds that are tolerant to extreme drought or high humidity conditions and their associated pests and diseases. They also promote the adoption of a diversified production system that goes beyond annual crops to include longer-term agroforestry/silvopastoral systems that generate income from the sale of agroforestry products as well as provides important ecosystem services to the surrounding environment, such as regulating moisture (moderating drought or heavy precipitation) and soil temperature.



### THE GAMBIA

Developing and improving community resilience and household coping strategies



#### **NICARAGUA**

Supports plans by farmer groups to improve sustainable production opportunities

### About GAFSP

The Global Agriculture and Food Security Program (GAFSP) is a multilateral mechanism to assist in the implementation of pledges made by the G8++ at the L'Aquila Summit in July 2009 and set up in response to a request from the G20 in Pittsburgh in September 2009. It addresses the underfunding of agriculture and food security strategic investment plans already being developed by countries in consultation with donors and other stakeholders at the country level.

GAFSP helps farmers to achieve substantial income gains, to be food-secure, and ultimately to share in the gains of local growth and development by investing in a wide range of opportunities across five key components:

- raising agricultural productivity;
- linking farmers to markets;
- improving non-farm rural livelihoods;
- reducing risk and vulnerability;
- and providing technical assistance, institution building, and capacity development.

GAFSP is a funding mechanism that channels funds to stakeholders in different ways, adapted to their need: to countries through their governments, and to private sector enterprises and agribusiness through innovative financing packages. GAFSP is also testing ways to channel funds more directly to farmer organizations, through its Missing Middle Initiative. The decision-making body of GAFSP is its Steering Committee, which includes an equal number of donor countries (Australia, Canada, the Bill & Melinda Gates Foundation, Germany, Ireland, Japan, the Netherlands, the Republic of Korea, Spain, the United Kingdom, and the United States) and recipient representatives. Other stakeholders on the Committee include GAFSP's supervising entities (ADB, AfDB, FAO, IFAD, IFC, IDB, World Bank, and WFP), civil society organizations, and the Special Representative of the United Nations Secretary General.

#### www.gafspfund.org

