



# **CLIMATE RESPONSE**

This is the decisive decade for our planet and our future. Egypt is highly vulnerable to the adverse impacts of climate change, including water scarcity, drought, extreme heat, rising sea levels, and food insecurity. The U.S. Government is committed to working with the Government of Egypt (GoE) and the private sector to respond to the climate crisis.

In support of Egypt's transition towards a green economy, USAID is helping Egypt adapt to the impacts of climate change, reduce greenhouse gas emissions and support low - emissions development, build the capacity of future climate leaders, and access financing to implement climate solutions. Our work today builds on decades of partnership between Egypt and the United States to protect Egypt's natural resources and empower local communities, especially youth, with the skills, knowledge, and opportunities to lead on climate action.

### **IMPACT & PROGRAMMING**

# **Agriculture**

Some of the biggest challenges faced by smallholder farmers result from climate change including temperature extremes, storms, winds, water availability, and pests—all of which negatively impact crop quality and quantity. USAID supports smallholder farmers in Upper Egypt and the Delta with both

production and post-harvest technical assistance to grow marketable crops for export and address water security challenges. USAID also assists smallholder farmers to implement climate-smart practices—like transferring farm waste into compost instead of traditional burning practices that emit CO<sub>2</sub> and other harmful emissions. Additionally, USAID promotes low-cost solutions that increase crop resistance to climate related stresses, improve water use efficiency by 30 percent, and reduce fossil fuel consumption used for pumping groundwater. USAID's programs increase awareness of the gender-specific impacts of climate change and food insecurity on rural women and improve the nutrition knowledge and feeding habits of female farmers, which boosts the physical well-being of women and children.

#### Water

Water—a precious resource in Egypt—is becoming increasingly scarce due to climate change. Since the 1970s, USAID has invested more than \$3.5 billion to bring clean water and sanitation services to the homes of over 25 million Egyptians, improving health outcomes and reducing child mortality by 80 percent. USAID investments are strengthening Egypt's water utilities to improve their operational performance and financial sustainability to deliver sustainable quality services to Egyptians across the country. As a result, water utilities have increased their operational efficiency, reduced their water losses by 8 percent, and optimized their power usage. USAID supports utility companies to build institutional resilience. USAID also informs water policy; expands and modernizes water sector degree programs at Egyptian universities; and funds innovative research conducted by Egyptian professors to develop solutions for issues like irrigation, industrial water use, desalination, and urban water planning.

### Renewable Energy

USAID supports Egypt's goal to achieve 42 percent renewable energy capacity by 2030 through development of a regulatory and financial environment conducive to clean energy investments. USAID partnered with the Government of Egypt and private businesses to develop the New and Renewable Energy Diploma Program, through which technical school students learn the technical skills needed to work in the lucrative and growing renewable energy industry. In higher education, USAID informs energy policy formation, promotes efficient energy use, improves the quality of energy curricula, introduces new courses to undergraduate and graduate fields of study related to energy, and funds innovative applied research solutions to climate mitigation issues. Beyond education, USAID strengthens commercial relationships within the renewable energy value chain. USAID supports the creation of renewable energy-focused accelerators and business development services centers. To provide equitable access to clean energy, USAID facilitates loans to small-scale farmers to utilize solar panels instead of diesel fuel to power irrigation. In FY 2022, USAID committed \$10 million to the Energy Pillar of Egypt's Nexus for Water, Food, and Energy Initiative. Through this GOE-led initiative, USAID supports Egypt's goal to install 10 gigawatts of renewable energy capacity by providing technical assistance on grid integration and modernization, energy

efficiency, and creating an enabling environment to support the deployment of large-scale renewable energy capacity.

### **Education**

Across all levels of the education system, USAID partners with the GOE and private businesses to empower youth with skills, knowledge, and opportunities to overcome climate challenges and lead future climate action. USAID partnered with the private sector and GOE to establish 10 International Applied Technology Schools that include environmental curricula and link secondary students with green jobs. In Beni Suef, USAID recently expanded a literacy program in community schools that will provide climate change education and awareness for girls and their families. Through USAID's long-standing science, technology, engineering, and math (STEM) programming, students at Egypt's 19 STEM high schools learn about environmental protection and sustainability and access cutting-edge USAID-funded fabrication laboratories to design projects that address Egypt's climate challenges. Each year, USAID funds Egypt's top STEM students to compete in the International Science and Engineering Fair where they unveil their innovative climate solutions to a global audience. To further strengthen learning, USAID established STEM teacher undergraduate degree programs focused on university-level climate change and environmental sustainability courses to convey the skills needed to become effective STEM and climate teachers. USAID provides university scholarships to 727 of Egypt's most talented youth to obtain energy, water, and agriculture degrees. USAID is also building the capacity of mid-career government officials to address national climate priorities by awarding over 100 scholarships for leadership and professional training and study abroad opportunities. USAID-funded education programs strengthen Egypt's scientific and technological capabilities through high-impact scientific research on climate resilience, collaboration between public and private sector institutions, and innovative training for the next generation of scientists and entrepreneurs. USAID and the GOE also jointly fund 12 research projects with one US and one Egyptian scientist as co-leads, to research the intersections between climate and water, energy, health, and agriculture.

# **Policy and Governance**

USAID partners with the GOE to promote inclusive development through effective public institutions, with climate change as an area of particularly deep partnership. To bolster Egypt's National Climate Change Strategy 2050, USAID is collaborating with the GOE to draft a plan for successful implementation of the strategy's climate governance objective. USAID provided support to the GOE to guide public investment decisions and doubled the percentage of green public investments between 2021 and 2022. USAID also works with key government counterparts to analyze fiscal risks, explore alternative financing mechanisms that leverage public and private money for climate investments, and develop procedures to integrate climate change mitigation into all public investment projects. This work is complemented by USAID technical assistance programs supporting Egyptian startups and micro, small, and medium enterprises—especially

those owned by women and youth—and helping them increase their resilience to climate change impacts. In the lead up to COP 27, USAID partnered with the GOE to empower future climate leaders by encouraging university students' involvement in climate action through the Youth Model COP and supporting the Youth Climate Change Caravan, which traveled to each governorate to raise awareness of climate change among young Egyptians. In addition, USAID supports Egypt's national voluntary family planning program, which is a GOE priority, and promotes individual, household, and community resilience to adapt to environmental shocks and stresses.

#### **Coastal Communities**

USAID's decades-long partnership with the GOE has ensured ongoing protection and long-term strategies to preserve the natural environment and helped local communities build resilience to climate change impacts. USAID has invested nearly \$200 million in environmental education and awareness, conservation of wildlife reserves, eco-friendly tourism, and continuous partnership with the private sector and local organizations. USAID programs supported conservation efforts on 14 islands, funded scholarships for underprivileged students to study ecotourism, constructed solid waste and recycling systems, and established the Wadi El Gemal National Park along the Southern Red Sea coast. USAID works with fishing communities in North Sinai to promote sustainable fishing practices, minimize marine degradation, protect fish stocks, and use waste from fishing activities to fertilize medicinal herbs growing locally. USAID is also establishing water reservoirs to harvest rainwater for irrigation and domestic purposes in North Sinai. In 2022, USAID signed a \$15 million Climate Change Agreement with Egypt and launched the Egyptian Red Sea Initiative. In partnership with the United Nation Development Programme and the Global Fund for Coral Reefs, this initiative aims to protect the Red Sea's coral reefs and coastal ecosystem against the impacts of climate change and human activity, empower Red Sea communities to lead on climate action, and establish a finance mechanism that supports reef-positive businesses to build resilience against climate change, reduce emissions, and create good jobs. The Egyptian Red Sea Initiative marks a new milestone in the U.S. and Egypt's development partnership and will play a crucial role in creating programming that combats the climate crisis.