



Resilient Food Systems



Overview

Climate change impacts food security, economic growth, and livelihoods, with extreme weather such as droughts and heat waves shortening growing seasons, increasing exposure to pests, and reducing crop yields. Greater access to weather and climate information services is a critical component of climate resilient agricultural value chains.

Abt is a leader in conducting climate vulnerability and impact assessments. We identify and compare the costs and benefits of climate-smart agricultural strategies. We develop policy and policy implementation guidance. And we monitor and evaluate adaptation policies and practices.

Climate-smart agriculture: Abt's technical assistance introduces sustainable farming practices to improve soil fertility, irrigation management, and planting practices. We partner with growers to help increase production and income by using improved inputs and decreasing post-harvest losses as well as costs associated with excessive use of water and chemicals, all with an eye toward enabling farmers to link with lucrative foreign markets.

What is Abt's role in climate-smart agriculture?

Abt has partnered with the U.S. Environmental Protection Agency (EPA) and the U.S. Agency for International Development (USAID) to evaluate various climate-smart agriculture approaches across the world, contributing to the evidence base in this field. Abt has also provided technical assistance to a range of project stakeholders, including farmers, financial institutions, and policymakers.

Featured Projects

AgSTAR Climate-Smart Agriculture Strategy U.S. Environmental Protection Agency

Abt is partnering with EPA on **AgSTAR Climate-Smart Agriculture Strategy** to identify best practices for manure management through anaerobic digestion and promote adoption of anaerobic digestion systems on U.S. livestock farms. Through this project, Abt works to advance climate-smart agriculture in the following ways:

- Preparing memos on relevant policies, programs, and opportunities that support clean energy and the reduction of methane emissions through anaerobic digestion.
- Creating external communications materials (e.g., case studies, project management guides for farmers, etc.).
- Developing a stakeholder engagement plan to identify gaps in communications strategies and connect more farmers, project developers, and policymakers to AgSTAR resources.
- Supporting AgSTAR presentations by developing presentation materials, managing webinar registration, and promoting the events.



Global Methane Pledge Implementation Support

U.S. Environmental Protection Agency

Abt is partnering with EPA on the **Global Methane Pledge Implementation Support (GMI)** project to provide technical assistance in support of international methane mitigation efforts.

Although GMI is not exclusively dedicated to agriculture-related methane emissions, Abt supports various climate-smart agriculture initiatives through this project. Some notable activities include:

- Developing tools to help key international stakeholders (e.g., farmers, project developers, financial institutions, government agencies) understand the economic and environmental impacts of anaerobic digestion. Examples of these tools, included in [EPA's Biogas Toolkit](#), are:
 - » Anaerobic Digestion Screening Tool (ADST)
 - » OrganECs
- Supporting GMI presentations by developing presentation materials, managing webinar registration, and promoting the events.

Feed the Future Egypt Rural Agribusiness Strengthening (ERAS) Project

U.S. Agency for International Development

Abt is partnering with USAID to improve market conditions for smallholder farms in Egypt to increase productivity and farmer incomes. One way the project aims to achieve this goal is by adopting a climate-smart agriculture approach to improve farming sustainability.

The project team has worked to improve the efficiency of resource use on farms, find ways to reduce or remove greenhouse gas emissions from smallholder farms, and introduce innovative practices that will enhance food security and build capacity for climate resilience.

One promising practice used in the area is vermicomposting: the process of using earthworms to create compost. This process decreases greenhouse gas emissions by reducing the need to burn organic materials and depend on chemical fertilizers produced using fossil fuels. Vermicomposting also increases plant immunity and reduces infections resulting from soil-borne disease, which are increasing in response to climate change.

Connect With an Abt Expert

René Nutter, MBA

USDA Account Lead

Human Services Portfolio
(617) 520-2329

Rene_Nutter@abtassoc.com

abtglobal.com



Printed on 100% Recycled Content Paper | 2024

Abt Associates is a global consulting and research firm that has combined data and bold thinking to improve the quality of people's lives since 1965. For nearly 60 years, we have partnered with clients and communities to advance equity and innovation—from creating scalable digital solutions and combatting infectious diseases, to mitigating climate change and evaluating programs for measurable social impact. Our global workforce crosses geographies, methods, and disciplines to deliver tailored solutions in health, environmental and social policy, technology, and international development.