

Esri Support for the White House Climate Data Initiative—Food Resilience Theme

Our global food systems are at a tipping point. Booming populations are straining a system that's already near capacity, and unpredictable threats from climate change endanger the food security and health of billions worldwide. To meet this challenge, governments, citizens, and organizations around the world must embrace a more sustainable future. Through geography, we can better understand the symbiotic nature of our global food system and take actions that ensure the integrity of our food supply for years to come.

Esri is committed to supporting the White House Climate Data Initiative's focus on food systems by unleashing the power of geography to better visualize, understand, and improve our global food systems. This effort is organized into three complementary actions: unlocking authoritative data from public and private partners as live data feeds, establishing a collaborative virtual laboratory that enables scientists and policy makers to explore and create spatial data, and hosting an Executive Whiteboard Session in fall 2014 centered on food resilience. Together, we hope these steps will catalyze understanding of our global food system and drive innovative solutions that will build a more sustainable future.

Unlocking Authoritative Data

Filling In the Data Gaps

Working with our partners in government, nongovernmental organizations (NGOs), and commercial providers, Esri will expose and catalog authoritative live feeds related to agricultural production, threats, climate, and trade. Where datasets do not currently exist, Esri will work with leading organizations to create information that is critical to boosting global food resilience. A sample of the data Esri and our partners plan to share include the following:

- Geographies of global crop production
- Monthly estimates of crop production
- Monthly global crop assessments
- US Department of Agriculture (USDA) Drought Monitor
- Weather
- Commodity stocks distribution
- Global "market sheds"



Virtual Food Resilience Laboratory

Incubating Ideas and Accelerating Understanding

This virtual laboratory provides an online destination for our food resilience partners to discover, contribute, and share innovative resources critical to overcoming our global food challenges. This website offers a starting point for data and ideas and will evolve and grow over time as more scientists, government organizations, and concerned citizens get engaged. Through this collaborative portal, built on Esri's ArcGIS™ Online technology, users can explore and create data, maps, and analyses to answer questions such as

- What is the current state of global agricultural production?
- How are extreme weather events affecting production and distribution?
- Where are people most vulnerable to sudden changes in food supply?
- What are the spatial/temporal patterns of commodity trade flows?

For more information, visit
esri.com/resilientcommunities

Executive Whiteboard Session

Developing a Global Plan for Action

Scheduled for fall 2014, the Executive Whiteboard Session will bring together leaders from across the public and private sectors to tackle global food resilience problems. Through a collaborative needs assessment, attendees will produce a list of prioritized datasets, maps, and apps that can help us better understand and act to support our global food systems. The ultimate goal of the session is to initiate a discussion between agencies and organizations that can drive global change and develop the framework for information and actions that will produce a more sustainable future.

Our Capability

Esri and geographic information system (GIS) technology inspire and enable people to positively impact the future through a deeper geographic understanding of the changing world around them. More than 350,000 organizations, governments, industry leaders, academics, and NGOs worldwide use Esri® GIS technology to think and plan geographically, solve real problems, and make critical decisions that shape our planet. Creating resilience in the face of climate change is at the forefront of these efforts.

