# USDA Regional Hubs for Risk Adaptation and Mitigation to Climate Change Terms of Reference for Individual Regional Hubs and Subsidiary Hubs

**Vision:** Robust and healthy agricultural production and natural resources under increasing climate variability and climate change.

**Mission**: Develop and deliver science-based, region-specific information and technologies to agricultural and natural resource managers, and communities, that enable climate-smart decision-making, and to provide assistance to implement those decisions.

### Approach:

The USDA Regional Climate Hubs will:

- Emphasize the needs of rural communities and economies and focus on maintaining and strengthening production agriculture, grazing systems and forest lands in light of climate change;
- Be responsive to the information and technical needs of USDA's Programs at the Regional, State, and local levels, and to work through them to meet stakeholder needs;
- Build upon the research and development expertise of USDA (ARS, FS, NRCS and ERS) and other research institutions in the public and private sectors to respond to the effects of regional climate change;
- Create new opportunities and initiatives that engage networks of researchers, educators and extension professionals in capacity building to address climate-related issues;
- Deliver science-based information and tools to enable the agricultural and forestry sectors to implement climate-smart management practices; and
- Determine metrics to track progress and demonstrate accomplishments.

USDA regional, state, and local programs will provide support to the USDA Regional Climate Hubs to assist them in carrying out their mission. For example, USDA service agencies (e.g. FSA, NRCS, RD) and the Cooperative Extension system – a partnership of USDA and the land-grant university system – will work with the Regional Climate Hubs to deliver knowledge, tools and information to farmers, ranchers and foresters through existing outreach, extension, and education capabilities.

Climate change impacts and adaptation strategies vary by region since both the regional effects of climate change, and land use and ecosystems vary across the landscape. To better address these distinctive regional differences each Regional Climate Hub will have the independence to establish specific approaches to address regionally specific needs and requirements.

Sub-Hubs may be designated within a region to address a specific resource or geographic area. The features, roles and responsibilities of the Sub-Hubs are similar to those of a regional hub, with the scope defined by the Sub-Hub focus. Regions may also establish Centers that focus on specific sectors within the region where appropriate.

#### **Functions:**

## **Technical Support:**

- Provide coordinated technical support to supplement USDA agriculture and land management program delivery, especially to underserved and vulnerable communities, tribes, and individuals;
- Deliver science-based agriculture and land management tools and strategies for climate change response (adaptation and mitigation) strategies;
- Support applied research and development and innovation partnerships for all-risk management and climate change response, through joint solicitations and collaborative efforts to appropriate funding agencies;
- Work closely with other extension organizations and be a source of user-friendly information developed from research from a wide variety of sources;

#### Assessments and Forecasts:

- Provide periodic regional assessments of risk and vulnerability to production sectors and rural economies, building on material provided under the National Climate Assessment conducted through the United States Global Change Research Program (USGCRP).
- Provide access to usable regional data and climate change forecast services for incorporation into individual and community hazard and climate adaptation planning;

### Outreach and Education

- Provide outreach and extension to farmers, ranchers, and forest landowners on science-based risk management through the land grant universities, Cooperative Extension, USDA service agencies, and public/private partnerships; and
- Educate natural and agriculture resource managers on the latest understanding of climate change science and the effects of climate change on, and the vulnerability to agroecosystems and forests.

### **Value Added Statement:**

The USDA Climate Hubs will coordinate with regional climate change networks managed by other Federal entities, states, and institutions (e.g. CSCs, LCCs, and RISAs). The USDA Climate Hubs will add value by serving as a regional source of knowledge explicitly designed for hazard and adaptation planning for agriculture and natural resource management. Through the Climate Hubs, USDA will bring together all of USDA's capabilities to deliver science-based, proven solutions more efficiently to our stakeholders to enable them to maintain and increase productivity and resilience in light of climate change. The Climate Hubs allow USDA to coordinate more effectively with the other federal regional networks.