

# RESEARCH, EXTENSION, AND INNOVATION

FARM BILL POLICY PRIORITIES

**RECOMMENDATIONS TO THE 118TH CONGRESS** 



#### **ABOUT FACA**

The Food and Agriculture Climate Alliance (FACA) initially began as an informal dialogue between eight organizations discussing opportunities for the food, agriculture, and forestry sectors to help advance climate solutions across the supply chain. Since formally launching in 2020, FACA has grown into an 80+ member coalition.

Today, our broad membership represents farmers, ranchers, forest owners, agribusinesses, manufacturers, the food and innovation sector, state governments, higher education associations, sportsmen and sportswomen, and environmental advocates.

FACA has served as a resource to Members of Congress and Administration officials. Our past recommendations have been credited with shaping federal laws and programs.

FACA members are united in support of federal climate policies that:

- 1. Are voluntary, market- and incentive-based;
- 2. Advance science-based outcomes;
- Promote resilience and help rural economies better adapt to climate change;
- Ensure equitable opportunities for all farmers, ranchers, and forest owners, including historically underserved and small producers; and
- 5. Are strongly bipartisan.

## OPPORTUNITIES IN THE 2023 FARM BILL

U.S. farmers, ranchers, and forest owners are at the forefront of national efforts to address climate change. But we cannot do it alone. Further reducing emissions throughout the agricultural and forestry supply chain will require a comprehensive effort involving financial and technical assistance, research investments, proactive response to innovation, public-private partnerships, and a commitment to equitable opportunities for all producers.

With that in mind, FACA has developed a suite of policy recommendations for the upcoming farm bill that would help our sectors achieve our climate mitigation potential while preserving and creating new economic opportunities. These recommendations reflect FACA's guiding principles and fall into six categories, which include:

- Conservation, Risk Management, and Credit
- Energy
- Food Waste
- Forestry
- Livestock and Dairy
- · Research, Extension, and Innovation

FACA recognizes the enormous importance of farm bill programs and supports critical investments in the farm safety net and disaster assistance, as well as for conservation, forestry, rural development, market access and research programs. These programs are all vital to sustaining rural livelihoods and protecting our nation's ability to produce the most abundant, affordable, and safe food supply in the world.

FACA's 23-member Steering Committee developed farm bill policy recommendations to advance voluntary bipartisan climate solutions. We urge both chambers of Congress and the President to act this year to pass this essential legislation, which impacts every family in America.

## STEERING COMMITTEE MEMBERS:











EXECUTIVE SUMMARY





































#### RESEARCH, EXTENSION, AND INNOVATION

Robust investments in research, Extension, and innovation are vital to unlock the agriculture and forestry sectors' climate mitigation potential. To produce more with less, while protecting our resources and communities, we must foster innovation through a strong, science-based risk/benefit regulatory system. Doing so will require a coordinated partnership effort between the federal government, universities, and the private sector.

In addition, the agricultural and forestry sectors must have access to scientifically rigorous tools and information to build climate resilience, mitigate environmental impacts, and increase productivity. This includes science-based

protocols, production practices, and new technologies. FACA recommendations would maximize opportunities with and modernization of USDA National Institute of Food and Agriculture related university experiment stations/research farms and forests. We also support related resources for the USDA Agricultural Research Service and Forest Service.

The 2023 Farm Bill offers a key opportunity to prioritize the innovation, partnerships, and research needed to create sustainable solutions and strengthen the science behind their mitigation potential. To achieve these goals, FACA requests increased investments in agriculture research and innovation to adapt to and address climate change impacts.

#### **POLICY RECOMMENDATIONS:**

## Ensure USDA Climate Hubs maximize research opportunities and outreach.

- A. Provide a clear connection between Climate Hubs and the Office of the Chief Scientist and Office of Energy and Environmental Policy.
- B. Consider a diverse range of crops and production systems in the U.S. in protocols for measurement and quantification.
- C. Ensure protocols are created in partnerships among non-profits, higher education institutions, the private sector, USDA's Office of Energy and Environmental Policy, Agricultural Research Service (ARS), and Forest Service (FS), and in close coordination with the National Institute of Food and Agriculture (NIFA).
- D. Leverage NIFA's networked research and Extension for field testing, laboratory analysis, and human capacity for research on crop- and livestock-specific innovations to adapt to, mitigate, and increase resilience to climate challenges. These capacities exist through Experiment Stations/Research Farms and the Experimental Forest and Range Network.
- E. Use the Cooperative Extension Service as the primary education and outreach feature of the Hubs to create site specific approaches to mitigating, adapting, and adopting practices that limit impacts to the environment.
- F. Maintain an accessible and updated clearinghouse of information from the Hubs. This would assist producers, agribusinesses,

#### NNTF.

Recommendations are numbered for ease of organization and review. Numeric position does not indicate order of importance.

and other partners in the agriculture and conservation sector in identifying and implementing climate-smart practices. The clearinghouse should be easily accessible and updated on an annual basis.

## **Pacilitate and stimulate innovation to build strong and sustainable agriculture and food systems.**

- A. Provide reauthorization and full funding of the Agriculture Advanced Research and Development Authority (AGARDA). Advanced Research and Development through the "other transaction authority" established in AGARDA allows USDA to drive high-risk and long-term research focused on climate resiliency.
- B. Continue research and innovation in crop and forestry protection with the goals of reducing non-target impacts, improving crop and forest productivity, and maximizing the benefits toward meeting climate objectives.
- C. Establish a federal definition for biostimulants, along with a predictable, science- and risk-based framework for their assessment. Plant biostimulants are emerging and promising tools that could mitigate or reduce GHG emissions, conserve and replenish soil health, and improve water quality.
- D. Support a robust science- and risk-based regulatory process for animal and plant biotechnology products to help ensure access to safe and effective tools for achieving sustainable food production.

- E. Continued development of innovation in plant breeding to fully capitalize on plant-based solutions for adapting to and mitigating the effects of climate change, ensuring climate resiliency, and continuing to achieve environmental gains. Public-sector research should support equitable access of farmers, ranchers, and forest owners and managers to improved genetics developed using a range of breeding methods, including gene editing, genomic enabled predictive breeding, and genetic engineering in a diversity of crops.
- F. Continue to improve animal genetics. This is a critical innovative solution for livestock producers to adapt to and mitigate the impacts of a changing climate, while improving production.
- G. Emphasize climate-smart inputs and processes. This includes biotechnology, pesticides (both organic and conventional), biologicals, mechanical solutions, and data solutions- with potential to contribute to net positive impacts on climate mitigation, when used in combination with tillage management, integrated pest management and other conservation practices.

#### Reauthorize and fund the Research Facilities Act (RFA)

- A. Update and upgrade the facilities for food and agricultural research at the U.S. colleges and universities of agriculture. A Gordian report found that 70% of the facilities at agricultural colleges and universities are beyond their useful life, with an estimate of deferred maintenance of \$11.5 billion and a replacement value of \$38.1 billion.
- B. Utilize RFA authority to provide one-time, competitive funding for facility construction, alteration, acquisition, modernization, renovation, or remodeling of critical research infrastructure for research defined as food and agricultural sciences. Qualified facilities may be connected with Cooperative Extension services, education, and outreach.

# 4 Strengthen grant programing through the National Institute for Food and Agriculture for the Cooperative Extension System.

A. Increase voluntary adoption of conservation or climate practices through a new competitive

- grants program in Smith-Lever (d) for landgrant colleges and universities to raise public awareness, conduct workshops, add capacity, and provide technical assistance.
- B. Implement a grant program with a discretionary authorization level of \$80 million to support implementation of innovative conservation or climate practices, additional staffing, workshops, materials, and, if applicable, transfer of innovations and information about related markets.

# Provide consistent and comprehensive evaluation mechanisms for climate- smart agriculture practices and processes, including measurement, verification, and data collection.

- C. Continue periodic funding for surveying crop production practices, such as nutrient management, which will be key to reducing impacts to climate and water.
- D. Add information related to the planting of cover crops to the NASS Prospective Plantings survey. Data related to acres and types of cover crops planted last season, and intention to plant cover crops next season would help producers and the seed industry to plan ahead to ensure the availability of high- quality cover crop varieties at the right place and the right time.
- E. USDA should conduct an end user assessment report of the Carbon Management & Emission Tool (COMET). The report should:
  - Determine if improvements would be needed to align with GHG protocols for a diversity of users;
  - II. Provide clarity around scope of COMET for a diversity of crops, production systems, and both production and conservation practices; and
  - III. Determine if key stakeholders representing a diversity of crops and cropping systems have access and can utilize its results.
- F. Support continued improvements to USDA's COMET-Farm tool by investing in soil science research and updating the NRCS SSURGO database with site-specific soil data to reflect the diversity of crops and cropping systems.