



American Society of Agronomy • Crop Science Society of America • Soil Science Society of America

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November 1, 2021

Mr. Robert Ibarra
Commodity Credit Corporation
United States Department of Agriculture
1400 Independence Avenue SW
Washington, DC 20250

Re: Climate-Smart Agriculture and Forestry Partnership Program
Docket Number: USDA-2021-0010-0001
Federal Register Effective Date: 10/01/2021
Federal Register Citation: 86 FR 54149

Dear Mr. Ibarra:

Thank you for the opportunity to offer comments to the U.S. Department of Agriculture (USDA) in response to the proposed Climate-Smart Agriculture and Forestry Partnership Program.

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA) represent more than 8,000 scientists in academia, industry, and government, over 13,000 Certified Crop Advisers (CCA), and 620 Certified Professional Soil Scientists (CPSS). We are the largest coalition of professionals dedicated to the agronomy, crop and soil science disciplines in the United States. We are pleased USDA is considering ways to expand the use of climate-smart farming practices, and we welcome the opportunity to comment.

Question 1. How would existing private sector and state compliance markets for carbon offsets be impacted from this potential federal program?

A major investment in pilot projects can accelerate science-based market development and adoption of climate smart conservation practices. Current incentives are not enough to drive widespread participation.

Agricultural input and service companies with strong ties to and relationships with producers will be essential to gaining adoption of climate smart practices at scale. The Climate-Smart Agriculture and Forestry Partnership Program should be designed to encourage public-private partnerships and avoid competition with existing carbon programs. The program should establish a clear role and provide value for private sector and state involvement. Including addressing who can claim GHG reductions to meet corporate, state, or national climate goals.

Question 2. In order to expand markets, what should the scope of the Climate-Smart Agriculture and Forestry Partnership Program be, including in terms of geography, scale, project focus, and project activities supported? And Question 3. In order to expand markets, what types of CSAF project activities

should be eligible for funding through the Climate-Smart Agriculture and Forestry Partnership Program? Projects should promote the production of climate-smart commodities and support adoption of CSAF practices.

Technical assistance (TA) is the single most important activity USDA can support. Without a strong commitment to TA, producers will be unable to adopt new climate smart practices and cropping systems at scale. USDA does not have the human capacity to meet the TA demand and should leverage partnerships with trusted advisers, such as Certified Crop Advisers. A more inclusive approach will help drive greater acceptance and adoption of climate smart practices. Pilot projects are an opportunity to test new technical assistance delivery mechanisms that encourage public-private partnerships.

The program should address both removals of atmospheric carbon and reductions in greenhouse gases and should include measures of efficiency of land and nutrient use (i.e., include nitrous oxide gains and losses, quantified as net change in CO₂e of the entire field operation per acre, not just change in CO₂).

In addition to traditional cost share, or pay for practice, USDA should consider programs that pay for performance. There are two significant reasons for this. First, it is rare that a single practice fully addresses a conservation challenge. Farms that combine multiple conservation practices, which lead to more robust outcomes, should receive higher compensation than single practices alone. Second, the impacts of climate smart practices can vary greatly depending on where they are implemented.

A multi-tier approach should also be considered. Under this scenario, USDA could pay a base rate for implementing practices and provide a premium based on measurable outcomes.

USDA should also ensure there is an avenue for emerging technologies and practices to be included in pilots. There is a risk of limiting innovation if USDA too narrowly defines climate smart agricultural practices.

Question 4. In order to expand markets, what entities should be eligible to apply for funding through the Climate-Smart Agriculture and Forestry Partnership Program?

Both university extension and private-sector technical assistance providers should be eligible. Extension and other government agencies tasked with outreach are staffed at a small fraction of the levels they were just a few decades ago. As a result, there is insufficient outreach, education, and technical assistance. Limiting adoption of climate-smart agriculture practices. As public investments have diminished, industry has borne more of the costs of sampling, measurement, innovation, field implementation, and promotion of new practices. Industry input and service companies employ tens of thousands of farmer-trusted field agronomists, soil scientists, and crop advisors throughout the nation that are well positioned to provide technical assistance. USDA should leverage CCAs and Certified Professional Soil Scientists along with others working at the grower interface.

Question 5. In order to expand markets, what criteria should be used to evaluate project proposals for receiving funding through the Climate-Smart Agriculture and Forestry Partnership Program?

USDA should prioritize proposals where data collection is robust and data storage ascribes to "FAIR" (Findable, Accessible, Interoperable, Reusable) principles. What to do with data and how it is shared cannot be afterthoughts. Projects proposals should include plans for scalable, cost-effective data generation, collection, and storage. For example, using calibrated, machine collected data (such as yield

monitors). Data from these projects would unlock a wealth of information for researchers, in addition to the producers themselves, and USDA should ensure the data collected is accessible and useful.

There also needs to be quantification of confidence. Producers often have less confidence in data produced from models, and more confidence, and, therefore, value, is often given to field sampled data. However, field collected measurements contain variability and error. Modeling, with proper validation, should be included as acceptable.

The private sector is clamoring for science-backed practices and products that facilitate the sequestration of carbon in soil and other ecosystem services. Researchers have found a great number of practices and products that show promise, but too many of these are effective only at a local or regional level. For new ideas that show promise, USDA should facilitate the collaborations and investments necessary to form networked research programs that study a variety of locally appropriate cropping systems, such as agroforestry, and soil amendments, such as locally produced biochar, for carbon storage, water filtration, reduced erosion, and other ecosystem services.

As new practices or products are identified by these projects, there needs to be rapid and continuous communication of new information and practices to the research community, which can verify data and legitimize practices. But the communication must not stop there – also important is to include those who can bring technical assistance directly to producers. USDA should provide on-going opportunities for researchers to collaborate with NRCS, extension, ag retailers, and professional agronomists, such as Certified Crop Advisers (CCAs), to establish regional standards, metrics, and testing protocols for climate-smart agricultural practices and their effects.

To assess the benefits of program projects, USDA should include water quality, carbon sequestration, and reduced emissions through records of practices and soil sampling.

Question 6. In order to expand markets, which CSAF practices should be eligible for inclusion?

Practices eligible for this program should include cover crops, no-till, reduced tillage, extended crop rotations, soil health planning, and nutrient management plans. Indeed, any practice should be eligible that, through established research, data, or application of established soil, agronomic, or climate science principles can be expected to produce a positive net result. Additionally, stronger consideration should be given to practices that apply a systems approach.

Question 8. How can USDA ensure that partnership projects are equitable and strive to include a wide range of landowners and producers?

The most straightforward way to help underserved communities reap benefits from this proposed program is to include them from the start. To ensure inclusion of the widest range of landowners and producers, USDA should implement a robust outreach program. Extra effort must be made to reach producers often left out of traditional means of communication. Economic viability is another barrier to participation. Cost of practice of implementation is often greater than cost share payments. This limits participation and makes it difficult for disadvantaged producers to participate.

USDA should also encourage partnerships with university extension and certified professionals to provide technical assistance to underserved producers. Strong partnerships that leverage trusted advisers are the most direct way to encourage participation and innovation. CCAs may be the most

important group to engage. They have the closest relationships with growers and are the interface between science and practice.

Another way to ensure a wide range of landowners is to deliberately include a wide range of farms and lands. Urban farms have the highest cost of land and are often valued more for development than for food production. They support the local food movement and often engage disadvantaged populations. These farms have fundamentally different structures, different cost-benefit priorities, and different outcomes than rural farms, and USDA should consider those differences when designing this program.

Rural farms with highly erodible soils may share geography with farms that have highly productive soils, but their structures, priorities, and outcomes are as different as urban farms are from rural. The Conservation Reserve Program works for farms with highly erodible soils, for example, and carbon credits may encourage more producers to put marginal land into this program. Meanwhile, farms with highly productive soils have a greater potential for higher yields and more carbon sequestration. In the longer-term, these lands are needed to produce food and should be protected from development. Just as urban farms should be considered separately in climate smart programs, the potential of each of these types of rural lands should also be considered.