

April 29, 2021

U.S. DEPARTMENT OF AGRICULTURE  
OFFICE OF THE CHIEF ECONOMIST

Re: *Docket No. USDA-2021-0003 (www.regulations.gov)*

The American Association of Crop Insurers, Crop Insurance and Reinsurance Bureau, and National Crop Insurance Services collectively represent all Approved Insurance Providers (AIPs) that provide insurance coverage to America's farmers and ranchers, as well as many of the private reinsurers and insurance agents who play key roles in the smoothly functioning system of crop insurance. These companies and individuals are rural America's front line of defense against the negative impacts of climate change and extreme weather events. Our comments, based upon our particularized expertise, are confined to these questions in the Notice of Request for Public Comment:

- ***1.A. How should USDA utilize programs, funding and financing capacities, and other authorities, to encourage the voluntary adoption of climate-smart agricultural and forestry practices on working farms, ranches, and forest lands?***
- ***1.E. How can USDA encourage the voluntary adoption of climate-smart agricultural and forestry practices in an efficient way, where the benefits accrue to producers?***
- ***4.B. How can USDA provide technical assistance, outreach, and other assistance necessary to ensure that all producers, landowners, and communities can participate in USDA programs, funding, and other authorities related to climate-smart agriculture and forestry practices?***

The public-private crop insurance system, which has become the cornerstone of America's farm safety net policy, has a primary mission to help agriculture manage risk. This mission is made possible by the industry's extensive and long-term collection of data, focus on research, and training. Its operational flexibility allows it to efficiently address a broad range of climatological events. Crop insurance complements risk mitigation strategies – new technologies, tools, and techniques – that help farmers and ranchers reduce their risk profiles while increasing on-farm efficiency.

The modern-day multi-peril crop insurance program has evolved since its beginnings in the wake of the 1980s farm crisis. In 2020, crop insurance covered more than 380 million acres of farmland. Thirteen private companies sold 1.1 million crop insurance policies, protecting more than 130 different commodities.

Such wide-scale popularity can make crop insurance an attractive way for some to incentivize behavior on the farm-level; however, the system is built upon economic necessity, has a clear mission of mitigating yield and financial risks, and has a federal mandate of maintaining actuarial soundness. Any decisions made about crop insurance as it relates to climate-smart policy must be closely examined through that lens to ensure this delicate balance is not upset. Failing to do so could materially harm the program, and therefore, the men and women who depend on crop

insurance every day to underpin their farming operations. Subject to those constraints, the crop insurance industry hopes to be a constructive partner with USDA in respect to this important climate initiative.

On behalf of the men and women who comprise the crop insurance industry, it is our privilege to present the following thoughts on how the system can help address climate change while still maintaining the underlying integrity of the program.

***1.A. How should USDA utilize programs, funding and financing capacities, and other authorities, to encourage the voluntary adoption of climate-smart agricultural and forestry practices on working farms, ranches, and forest lands?***

Farmers are the core of crop insurance and without their widespread and voluntary participation, the program would not be effective in managing the risks of agriculture and in recognizing and implementing good farming practices that keep the program actuarially sound. Crop insurance is flexible and constantly evolving with new practices that rely on modern science, including practices consistent with and that incentivize sound environmental stewardship. Crop insurance is also an effective public-private partnership that engages with a variety of stakeholders to advance policies that encourage good farming practices and conservation.

As the USDA examines ways to help farmers mitigate the risk of climate change by increasing the adoption of climate-smart agricultural practices, we believe the agency must recognize three foundational paradigms: farmers' decisions must be 1) voluntary; 2) premised upon reliable data; and 3) properly incentivized. We further believe that resulting efforts must reinforce and not interfere with crop insurance's primary mission, which is to help farmers and ranchers manage the yield and revenue risk of climate change by speeding assistance to farmers after disaster strikes through an efficient private-sector delivery system.

**Primary Mission**

The importance of a strong crop insurance program has grown as the impacts of climate change and extreme weather events continue to threaten the nation's food supply. Fortunately, the system we know today has evolved since the 1980s and continues to adapt to meet current needs.

The primary mission of crop insurance is to help manage the risks of agricultural production by offering farmers affordable, reliable, and widely available yield and revenue coverage based on sound actuarial data. Policyholders are rewarded for producing higher yields while an actuarially sound program shields taxpayers from expensive and inefficient ad-hoc disaster spending. In the event of a loss, farmers who purchase crop insurance shoulder deductibles and receive indemnities quickly, often within 30 days. While crop insurance is not meant to absorb all of the risks of agriculture, it does provide farmers, and their lenders, with the confidence they need to improve operations from year to year and continue farming after a catastrophic loss.

For decades, policymakers have invested in a system of crop insurance that recognizes and encourages good farming practices while leveraging the efficiency of private sector delivery. The system is designed to adjust to meet the changing demands of climate, weather, and food

production while providing affordable coverage that holds farmers accountable for their operational decisions through financial incentives.<sup>1</sup>

### Actuarial Soundness

As required by federal law, crop insurance is premised upon actuarial soundness. To be actuarially sound, premiums must be sufficient to ensure that the crop insurance program is able to pay all expected insurance risks and to establish a small reserve.

The GAO, in its seminal report following the 1980s farm crisis, noted that crop insurance consistently manages the risks of agriculture by providing farmers with indemnities that are directly related to losses.<sup>2</sup> With crop insurance, the decision on how to compensate policyholders for losses has been made before a disaster occurs using actuarial data based on historical yields and good farming practices. Under an actuarially sound system, taxpayers do not have to shoulder the entirety of assistance following major disasters because the insurance system has accumulated enough funds to pay large amounts of indemnities – funds supplied by the farmers themselves, as well as capital reserves by private-sector insurers. This system ensures that premiums adequately reflect risk, including climate risk.

The need, and statutory requirement, to maintain actuarial soundness is not incompatible with effective climate solutions. Illustrative is the fact that crop insurance premium rates are responsive to climate-friendly practices, and are reduced, so long as the data demonstrates improved yield results. The current methodology used to set premium rates takes into account a farmer's production history, and as yields improve through the adoption of new tools, techniques, and technologies, rates are naturally lowered to reflect reduced risk.

Conversely, riskier farmers who plant on unproductive land or fail to adopt modern-day practices will face higher rates. This dynamic is explained in more detail in the Actual Production History section below.

In addition to premium rating, another way to encourage conservation practices, without eroding actuarial soundness, is to promote adoption by providing additional assistance to farmers to offset their individual premium costs. As an example, Illinois and Iowa currently use state-funded programs that pay a portion of a farmer's premium if the farmer plants a cover crop. Actuarial soundness is not threatened because the overall premium remains based on sound actuarial data – the only change is how the producer's out of pocket premium is reduced.

Offering additional premium support, as contrasted with a reduction in premiums, is a much preferred incentivization approach because premium reduction has the potential, over time, to adversely affect the solvency of the program and is only a viable strategy in circumstances where the incentivized behavior demonstrably reduces actuarial risk.

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<sup>1</sup> Dr. Thomas Worth, Chief Actuary, USDA Risk Management Agri-Pulse Food & Policy Summit 2021, Top Five Things You Need to Know About Crop Insurance and Climate

<sup>2</sup> United States General Accounting Office, September 1989, "Disaster Assistance: Crop Insurance Can Provide Assistance More Effectively Than Other Programs"

## Actual Production History

Crop insurance already accounts for climate change in its premium rating methodology, and it encourages land conservation and adoption of new tools and techniques that drive efficiency by rewarding farmers for good farming practices, including climate-smart initiatives, that increase yields over time. Farmers with a higher Actual Production History (APH) get better premium rates and more insurance coverage.

Crop insurance further manages risk by assessing higher premium rates and deductibles in relation to those producers who engage in risky practices that ultimately harm productivity, including the failure to adopt proven climate-smart techniques. Farmers must absorb significant losses, in the form of deductibles, before crop insurance begins to pay on claims. By the time farmers receive crop insurance payments, they are typically operating at a loss because the margins in agriculture are lean. Crop insurance is designed to minimize the loss to help farmers stay in business but not incentivize them to participate in problematic behavior such as growing on marginal land.

Farmers are incentivized to adopt climate-smart practices that boost performance through the current APH premium rating system. A lower yield increases the premium rate potentially for up to 10 years.<sup>3</sup>

Crop insurance regulations also include provisions to deter expansion onto new and sensitive lands by capping the insurable yield for land that has not been planted in at least one of the past three years or where the only crop was cover, hay or forage. Similarly, other provisions increase premium rates for those who farm high-risk land. The 2014 and 2018 Farm Bills linked crop conservation practices to insurance participation and directly discouraged tillage of native sod acreage.

And contrary to the suggestions of some, studies support the conclusion that crop insurance's role in promoting farming on at-risk land is minimal.<sup>4</sup>

### **1.E. How can USDA encourage the voluntary adoption of climate-smart agricultural and forestry practices in an efficient way, where the benefits accrue to producers?**

Crop insurance has historically been innovative and forward-looking. An example is embodied in the requirement that insured farmers adhere to production techniques referred to as Good Farming Practices.

Good Farming Practices (GFPs) are defined as “the production methods utilized to produce the insured crop and allow it to make normal progress toward maturity and produce at least the yield used to determine the production guarantee or amount of insurance . . . which are those generally recognized by agricultural experts or organic agricultural experts . . . for the area.”

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<sup>3</sup> Dr. Thomas Worth, Chief Actuary, USDA Risk Management, Agri-Pulse Food & Policy Summit 2021, *Top Five Things You Need to Know About Crop Insurance and Climate*.

<sup>4</sup> National Crop Insurance Services: Crop Insurance and the Environment, August 17, 2012, “*A Brief Review of Agricultural Economics Literature on the Land Use Effects of Crop Insurance*.”

Agricultural experts include plant pathologists and other certified crop advisors approved by USDA.

The GFP known as no-till is a great example. Other environmentally beneficial GFPs that have been adopted by agriculture and embraced by crop insurance in recent years include recognition of new drought-resistant seed varieties, more efficient irrigation systems, buffer strips, cover crops, and precision agricultural technology and equipment.

Section 508(h) of the Federal Crop Insurance Act is another example of the flexibility crop insurance provides to adapt to a changing climate. This program allows for the private submission of crop insurance policy ideas and sets forth clear criteria for policy approvals by the Federal Crop Insurance Corporation Board.

Through its self-correcting premium rating formula, recognition of Good Farming Practices, and 508(h) program that encourages the creation of new risk management tools, the crop insurance system is already encouraging the voluntary adoption of climate-smart policies – such as no-till and cover crops – that can improve a farm’s performance and reduce greenhouse emissions.

This fact was reinforced by a recent study in the peer-reviewed *Journal of Environmental Management*.<sup>5</sup> The study found crop insurance is not a barrier to the adoption of conservation practices and has a role in helping farmers maintain healthy soil. Researchers from Purdue University, Arizona State University, and the Nature Conservancy conducted the study. They used interviews and a multi-state survey to determine if crop insurance requirements limited cover crop usage and conservation tillage for corn producers in the Midwest.

Respondents indicated that, as compared to other potential hindrances to conservation practices, including cost, time and labor, crop insurance was perceived as the least limiting for conservation tillage and planting cover crops. Conservation tillage and cover crop usage were specifically studied because they may reduce soil erosion, improve water quality, and promote soil health. The study noted that the 2018 Farm Bill designated cover crops planted in 2020 and later as a good farming practice.

Among the study’s findings:

- Adoption rates of conservation practices were higher among respondents enrolled in crop insurance than those not using crop insurance.
- Both crop insurance and conservation were credited by farmers as being important and complementary tools to their risk management strategies.
- Nearly 90 percent of the respondents were enrolled in crop insurance, 60 percent used conservation tillage, and 25 percent planted cover crops.
- Nearly 70 percent of the respondents reported using crop insurance as a long-term risk-management strategy and 51 percent reported using on-farm conservation practices as a long-term risk management strategy.

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<sup>5</sup> *Journal of Environmental Management*, 276 (2020), “Crop insurance: A barrier to conservation adoption?”

“Qualitative analysis of the interview data reveals distinct, yet complementary, benefits by participating in both crop insurance and conservation adoption simultaneously,” according to the study.

**4.B. How can USDA provide technical assistance, outreach, and other assistance necessary to ensure that all producers, landowners, and communities can participate in USDA programs, funding, and other authorities related to climate-smart agriculture and forestry practices?**

While crop insurance is not the appropriate vehicle for directly educating farmers about the benefits of climate-smart practices, industry efforts to educate farmers about risk management practices may be useful to USDA in conjunction with its efforts to broaden its program participant base.

Since 2004, the crop insurance industry has partnered with extension specialists and economists from 1890 Land-Grant Universities, as well as the USDA’s Risk Management Agency, to offer free risk-management and business-planning workshops for socially disadvantaged farmers across the nation every year. In 2019-2020 alone, these efforts trained 327 minority growers in Alabama, Arkansas, Georgia, Mississippi, Pennsylvania, and Tennessee.

Such workshops not only provide the agricultural community valuable training that benefits minority farming operations, but it also gives the industry and its partners a unique insight into the challenges faced every day by socially-disadvantaged producers – insight that helps continually improve the system for all.

Conclusion

Enabling farmers and ranchers to financially recover from the immediate and deleterious effects of weather and climate related disasters is the primary mission of the crop insurance industry. Crop insurance is simply the preeminent resource in confronting weather and climate related disasters.

With respect to the development and expansion of climate-smart agricultural policies, the crop insurance industry can be an effective conduit and serve a complementary role in achieving the goals and objectives of USDA. The experience to date indicates that USDA/RMA and the crop insurance industry have developed the necessary institutional infrastructure that is actuarially self-governing, incentive-based, data-driven, and voluntary.

The modern-day crop insurance program is characterized by high rates of participation as evidenced by land area insured, high levels of coverage per acre, diversity of insurance coverage plans, and diversity of crops insured. This has been accomplished through the successful partnership between USDA/RMA and the private sector delivery system. Going forward, as USDA better articulates its specific climate-smart initiatives the crop insurance industry looks forward to working as a willing and effective partner with USDA/RMA while remaining focused on its primary mission area for the benefit of U.S. farmers and ranchers.