

Brandon Willis Testimony
Senate Committee on Budget
Cultivating Stewardship: Examining the Changing Agricultural Landscape
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Chairman Whitehouse, Ranking Member Grassley, and members of this Committee – thank you for allowing me to testify today on climate-related costs of the agriculture sector. My testimony will focus on crop insurance.

My name is Brandon Willis, and I’m currently a Professional Practice Assistant Professor at Utah State University. I also own an insurance agency that helps livestock producers access the USDA’s insurance programs. I grew up on a third-generation sheep ranch in northern Utah. I also spent several years in Washington, DC. I began as an agriculture staffer for Senator Max Baucus (D-MT), then I had the opportunity to work at the USDA, where I served as the Deputy Administrator for Farm Programs at the Farm Service Agency, following that I was a Senior Advisor to the Secretary of Agriculture, and finally, as the Administrator for the Risk Management Agency (RMA), which oversees the Federal Crop Insurance Program.

In each of these roles, I saw the devastating impacts that Mother Nature could have on America’s farmers and ranchers. I also witnessed the value of the USDA’s safety-net programs, particularly the Federal Crop Insurance Program. We often discuss the financial impact of crop insurance. Yet, I also saw significant value in the peace of mind that it provided to producers struggling through challenging circumstances.

Ultimately, crop insurance is every farmer’s first line of defense against extreme weather events, including those worsened by climate change. A discussion on the impacts of climate on the Federal Crop Insurance Program (FCIP) and its costs is important to ensure that both agricultural producers' and taxpayers' interests are protected.

Background

Before going into depth on the potential impact of climate on crop insurance, I would like to offer a few thoughts on the program in general. Years ago, Benjamin Franklin said, “I have sometimes thought it might be well to establish an office of insurance for farms against the damage that may occur to them from storms, blights, insects, etc. A small sum paid by a number would repair such losses and prevent much poverty and distress.”

Today we have that program. It is not perfect, yet, it is the envy of many other nations because of the value and stability it provides. When I was the Administer of RMA, the Chief Actuary and I were asked by Brazil, India, and China to visit those countries to educate their agriculture leaders on our crop insurance program. It’s easy to overlook what we have – a well-run insurance program that allows farmers to farm and Congress to focus on other issues rather than constantly passing ad hoc disaster programs.

Farmers pay approximately half of the cost of their insurance. Crop insurance also requires farmers to meet a deductible – on average more than 25 percent of their crop – before any payment is made for a

loss, and the program is designed so as not to make a farmer whole but to make them able to plant another year. Crop insurance is also flexible and can be customized to the needs of individual farmers in terms of their risk tolerance and the types of risk they face on their farms.

Congress has set the program up to balance the unique strengths of the private and public sectors. USDA is responsible for program oversight, including premium rates, rules, and, ultimately, program integrity. Private insurance companies shoulder some of the risks of the policies purchased by farmers, so the American taxpayer does not have to. These private insurance companies don't compete on price, but rather, they compete on service. Working directly with farmers are approximately 12,000 agents who provide outstanding customer service. The results are that farmers receive payments quickly, and the Federal Crop Insurance Program has one of the lowest improper payment rates of any government program.

When considering the impact of climate change on crop insurance, a few key points are useful background. Historically, RMA used a longer period when setting rates, i.e., what insurance should cost. This meant that these rates were not as responsive to climate change and other production patterns and methods changes. After a lengthy study into the methodology, RMA adjusted the methodology, and the results continue to be used to set rates today successfully. This shorter timeline should allow the program to adapt quicker to changing climate conditions.

I would be remiss if I didn't credit the Risk Management Agency for their excellent work setting rates. The Crop Insurance Act requires that RMA set rates in an actuarially sound manner with a loss ratio of 1.0. This means that total premiums should equal total indemnities paid, and RMA includes a buffer to maintain a reasonable reserve and cover administrative and operating expenses. The result is a program consistently running at a loss ratio of approximately .88. RMA has maintained this loss ratio despite a changing climate.

How will climate change impact crop insurance? Numerous reports have been written on the topic. The consensus is that climate has already impacted crop insurance costs and will continue to impact program costs. However, the exact extent is subject to debate.

A Stanford study from July 28, 2021 titled "Historical warming has increased U.S. crop losses," examined how climate change has affected crop insurance costs. The researchers found that climate change has increased crop insurance expenses from 1991-2017 by approximately 19 percent. Their research showed that increased costs, primarily due to heat and drought, have risen due to climate change, leading to more crop losses and damages. However, the study also acknowledged some limitations, such as the challenges in precisely attributing specific weather events to climate change and the uncertainty surrounding future climate projections.

The USDA Economic Research Service study titled, "Climate Change Projected To Increase Cost of the Federal Crop Insurance Program due to Greater Insured Value and Yield Variability" analyzed the potential impacts of climate change on the cost of the Federal Crop Insurance Program. The study found that climate change is expected to raise the program's costs due to two main factors: increased insured value and increased yield variability. As temperatures rise, the insured value of crops is projected to increase as farmers aim to protect higher-value crops from potential losses. Additionally, climate change

is likely to result in more frequent and severe weather events, leading to greater yield variability and increased insurance claims.

The study also emphasized that these projections are subject to uncertainties, such as the effectiveness of adaptive measures and changes in farm management practices. The USDA Economic Research Service study examined two emissions scenarios to assess their impact on the Federal Crop Insurance Program. The moderate emissions scenario predicted a gradual increase in greenhouse gas emissions, while the higher emissions scenario represented a more rapid and extensive rise. Under the moderate emissions scenario, crop yield projections indicated a moderate increase in insured value and a moderate rise in yield variability due to climate change. In contrast, the higher emissions scenario projected a more substantial increase in insured value and a significant rise in yield variability, primarily driven by more frequent and severe weather events associated with climate change. The study estimated that the moderate emissions scenario would lead to a 3 percent increase in FCIP costs, while the higher emissions scenario would result in a 22 percent increase in costs. However, if adaptation of farm management practices isn't considered, the cost increase was projected at 10 percent and 37 percent, respectively.

The stark differences in projected costs between scenarios where adaptation takes place and where adaptation doesn't take place highlight a need for all USDA programs, particularly crop insurance, to ensure that program rules do not inhibit the ability of farmers to adapt to changing conditions.

Finally, what should Congress do to ensure crop insurance continues functioning properly during uncertain conditions? I have two thoughts for your consideration. First, it needs to stay affordable so that producers purchase crop insurance coverage at levels high enough so that ad hoc disaster isn't necessary.

Second, during my time at RMA, I was impressed by the strength of the team that oversees the program. They are some of the brightest in government. Yet, with the Federal Crop Insurance Program, now USDA's second-largest program, Congress must ensure RMA has the resources to hire and retain highly trained employees who properly oversee extremely complex insurance products. Asking RMA to continue to oversee this program with stagnant funding isn't realistic and would be penny-wise but pound-foolish. With proper oversight, small investments on the front side could save Congress time and money by positioning crop insurance at the forefront of climate issues, therefore reducing the need for Congress to address ad hoc disasters.

Conclusion

In conclusion, I would like to thank this Committee for your willingness to seek perspectives on the impact of climate change on agriculture and the Federal Crop Insurance Program, specifically. I look forward to answering any questions you have for me.