



INSTITUTE FOR AGRICULTURE AND TRADE POLICY

A Risky Proposition

**Crop Insurance in the Face of
Climate Change**

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In the last year, the U.S. has experienced some of the most severe floods and droughts in recent history. According to climate scientists, more droughts, more floods and more heat waves are what the future holds.¹ Perhaps it's not surprising, then, that in the run-up to the 2012 Farm Bill, most farm lobby groups have made clear they are willing to sacrifice direct and counter-cyclical payments (federal crop subsidies long considered untouchable) in order to hang on to and expand federal crop insurance. While high crop prices in recent years have helped to erode political will to continue direct payments (which farmers receive whether crop prices are high or low), the increase in extreme weather in recent years, and predictions that with a changing climate that pattern will continue and perhaps worsen, have made very clear the need for risk-management support for farmers.

This acknowledgement of agriculture's increasingly risky environment has not, however, been coupled with any specific acknowledgement of its primary cause—climate change—or of farmers' needs and ability to take steps to make their cropping systems more resilient to extreme weather. Crop insurance policies that compensate farmers financially for yield loss are essential in such a volatile environment, but so are measures that can actually reduce expected crop losses in the field. Yet such adaptive measures are not being talked about in the current farm bill debate. This state of cognitive dissonance has frightening implications for farmers and eaters alike, but it also could be devastating for U.S. taxpayers. Creating a federal crop insurance system, with no limits on federal outlays, without simultaneously giving farmers the tools to adapt to the effects of climate change is incredibly irresponsible from both a food security and fiscal perspective. It's like offering a home owner a fire insurance policy, but not even requiring the most basic preventative measures, such as smoke alarms or fire extinguishers.

Meanwhile, proposed "shallow-loss" revenue insurance proposals, when combined with the current federal crop insurance program, would guarantee 90–95 percent of commodity farmers' income if enacted, creating an unprecedented level of financial risk tolerance for farmers, even in areas that have been hit hardest by droughts and flooding. In a letter to Congress, the American Farm Bureau Federation, never considered a stalwart in the battle against farm consolidation, criticized the shallow-loss proposals, arguing that such programs would encourage producers "to buy more acreage than they can effectively manage and therefore bid up the price of land," and that the programs "could become a further barrier to entry for young farmers and another factor driving further farm consolidation."²

There are real things farmers can do to reduce their risk from climate change. When extreme weather hits, the farms that do best are generally not huge monoculture acreages. They are diversified, often small- to mid-scale operations that frequently combine row crops with livestock and incorporate perennials.^{3,4} They are not one-size-fits-all, but instead adapted to local conditions, and responsive to the changing climate. Farm programs need to emphasize such risk mitigation strategies, and help farmers to access the necessary technical and financial support to ensure that not only their incomes, but also their actual production systems are supported as weather becomes increasingly volatile. The Farm Bill needs to link crop insurance support with programs and funding to help farmers transition toward more resilient systems. Expanding the crop insurance program without a concurrent focus on climate adaptation makes agriculture riskier for everyone.

Federal crop insurance: basics and proposals

The Federal Crop Insurance program offers several types of policies to protect farmers from losses caused by drought, flooding, hail or other natural disasters, as well as against low prices. Coverage levels, types and premium costs vary between policies (for example, a farmer can choose a policy that protects against either yield loss or revenue loss, or a combination of the two, and can choose levels of coverage ranging from 50–85 percent). Federal subsidies pay for at least 60 percent of policy premiums.

Most farmers enroll. In 2009, more than 80 percent of corn, soybean, wheat, cotton and peanut farmers participated in some form of federal crop insurance program.⁵ The majority of crop and revenue insurance policies, however, are skewed in favor of less diverse farming systems because they make it difficult to insure a mixture of crops or integrated crop and livestock operations. Organic farmers are also at a disadvantage: they are required to pay an arbitrary five percent premium surcharge on any policy. If they suffer a loss, organic farmers are only reimbursed at conventional prices, which are typically lower than organic prices. Fruit and vegetable growers are offered only limited options, as many staple crops such as broccoli, carrots and lettuce are not covered by any federal crop insurance program.⁶

Net government outlays on crop insurance, including indemnities and premium subsidies, averaged \$3.6 billion a year between 2000 and 2009—about 17 percent of the total cost of direct payments, counter-cyclical payments, marketing loan benefits, crop market loss assistance payments and the Average Crop Revenue Election (ACRE) program, combined.⁷ That average, however, doesn't tell the whole story. Crop

insurance outlays have been steadily increasing since 1998 due to policy changes that encouraged farmers to switch from yield insurance to the more expensive—and more heavily subsidized—revenue insurance, as well as to increases in crop prices.⁸ Projections into the next decade indicate that outlays will outstrip entirely the cost of current commodity program subsidies, due to rising acreage enrollment and increases in extreme weather. In other words, even if the status quo is maintained and recently proposed insurance expansions not adopted, taxpayers would likely spend more on crop insurance over the next decade than on all other forms of commodity subsidies. If the federal government chooses to add another layer of insurance programs, these costs will rise even higher.

However the 2012 Farm Bill is ultimately sorted out—via cuts and restructuring by the so-called Super Committee at the end of 2011 or in a more traditional Congressional process in 2012—an expansion of crop insurance is a near certainty. At the time of writing this report, no fewer than ten proposals for “safety net” expansion were on the table. Senators Brown (D-Ohio), Thune (R-South Dakota), Durbin (R-Illinois), and Lugar (R-Indiana) have proposed the Aggregate Risk and Revenue Management (ARRM) program, which would take the place of direct payments, counter-cyclical payments, the Supplemental Revenue Assistance Payments (SURE) program and the ACRE program (in other words, nearly all fixed-crop subsidies).⁹ ARRM would guarantee 90 percent of the average of the preceding five years of revenue. The American Soybean Association has proposed a similar “shallow-loss” program they call Risk Management for American Farmers, which would guarantee 90 percent of revenue for non-irrigated crops and 95 percent of revenue for irrigated crops (hence, increasing the amount of risk farmers planting crops in areas most afflicted by droughts are willing to take on, a troubling proposition in the face of climate change).¹⁰ The other proposals are mostly variations on this theme, signaling the likely direction of upcoming agriculture policy.

Managing risk and increasing resiliency

Farmers are in a particularly vulnerable position when it comes to extreme weather. In 2011, the U.S. saw blistering droughts in Texas and Oklahoma that resulted in devastating losses for the cattle industry. Climatologists say it’s a weather pattern that could persist for at least a decade.¹¹ And flooding along the Missouri River caused erosion so severe it is uncertain whether farmers will be able to grow crops again on the most severely damaged fields. Agriculture’s future in the face of climate change is full of risk and uncertainty.

Federal crop insurance programs were created in 1938, when farmers were reeling from the impacts of the Great Depression and the Dust Bowl. Given the importance of a secure food supply for all people, it makes sense that the federal government subsidizes financial risk-management tools for farmers. However, it also makes sense that the government should provide tools, support and incentives to farmers to help them minimize risk and build resiliency in the fields.

Diversified farming operations offer real advantages to farmers for building resiliency to extreme weather. A mixture of crops and the inclusion of livestock help buffer against catastrophic loss: if one crop fails there are other revenue streams to fall back on. The incorporation of livestock into a farm system creates an alternative market for some of these crops in circumstances where lower quality reduces cash grain market value. Livestock production also creates the opportunity for planting perennial fodder, which has a much higher capacity for holding onto soil and remaining rooted in the ground in the case of flooding. Depending on the species, perennials can also have lower water requirements. Increased crop rotations, cover crops, perennials and other components of agroecological farming systems help improve soil quality and soil organic matter and require fewer synthetic inputs, all of which reduce farmers’ financial risk, particularly as fertilizer and energy costs climb.

Sustainable agriculture also offers mitigation benefits via reductions in direct greenhouse gas emissions and increases in carbon sequestration. Agriculture’s potential in sequestering carbon is still being researched and debated, but it could be very significant. An optimistic estimate states that, depending on the system, agriculture could sequester up to 25 to 40 percent of carbon from fossil fuel emissions annually.¹² That sequestration, coupled with direct emissions reductions from improved farming practices, positions agriculture as an undeniably important focus for combating climate change.

Protecting farmers: A multi-pronged approach

Farmers are facing unprecedented risk today from volatility in the market and the field. Financially stable farmers are better able to make changes on the farm that lead to improved resiliency. For that reason, we must continue to provide reliable risk-management products that work for all farmers and allow for diverse income opportunities on the farm. For farmers to continue to reliably produce food, we must also directly support their transitions to agriculture systems that help them adapt to and mitigate climate change.

The Farm Bill already has programs that could help farmers to make those transitions. The Conservation Stewardship Program (CSP) and the Environmental Quality Incentives Program (EQIP) are two of the best examples of the right path for climate-friendly agriculture. They are working-lands conservation programs, meaning they reward and support farmers not for setting land aside, but for making improvements to productive land. Neither of these programs (nor any other program in the Farm Bill) names climate as a specific goal. But many of the practices they support (and additional practices that could be added) help build resiliency and contribute to meaningful emissions reductions and carbon sequestration.

CSP, EQIP and other Farm Bill conservation programs are a good start at moving agriculture in a more climate-friendly direction, but they'll need fiscal support to make them big enough for all farmers to participate. Already, interest in CSP outstrips resources. In 2009 and 2010 only 57 percent of eligible farmers could participate in CSP because of a lack of funds, according to the USDA.

Conservation programs, however, are voluntary. If, in the face of climate change, we decide to base our farm support system primarily on risk-management products and offer publicly subsidized financial risk mitigation to farmers, it is only logical and fair that we ask them to take steps to reduce risk on the ground. In the same way that farmers must comply with soil conservation standards ("conservation compliance") in order to receive current federal farm payments, the Farm Bill should link "climate compliance" with eligibility for federally subsidized crop insurance policies. Climate compliance would require that farmers develop and follow a USDA-approved climate adaptation and mitigation plan (either as a stand-alone plan or incorporated into an existing conservation plan) that is adapted to local conditions. In drought-prone regions, this might mean selecting drought-tolerant crop varieties, changing grazing or irrigation management, or other strategies. In flood-prone areas this could mean incorporating more perennial crops, utilizing cover crops or planting buffer strips. Just as climate change will not affect all farms equally, there will not be a one-size-fits-all prescription for adaptation. After creating a climate compliance plan, farmers could receive support from Farm Bill programs such as the EQIP to offset the costs of these transitions.

Farm policy for the future

In this era of budget austerity it may seem radical to propose what appear to be additional Farm Bill expenditures. Indeed, there would be costs associated with expanding Farm Bill conservation title programs and creating new compliance provisions, although those costs would likely be more than

offset through reduced insurance indemnities. But refusing to address climate adaptation while creating a bottomless crop insurance program is a far riskier proposition for farmers, food security and U.S. taxpayers. If anything, this is a cost savings plan. We believe that the extreme weather associated with climate change will make insurance programs much more expensive in future years.

Getting crop insurance right is only the first step in creating farming systems that can provide a stable food supply for a growing population facing climate change. For farmers to implement changes to become more resilient, they'll need to be able to make long-term decisions and have the confidence that markets for a diversity of products will exist. The Farm Bill, in its current form, presents only a limited, short-term vision for agriculture. If we care about sustaining farmers and our food supply, we need to begin a series of conversations about the kind of agriculture we want in the future, and the policy actions we need to get there. Tinkering with crop insurance will get us only so far down that road.

Endnotes

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