

**National Organic Standards Board
Certification, Accreditation, Compliance Subcommittee
Climate Induced Farming Risk and Crop Insurance Discussion Document
(Risk mitigation on organic farms in the United States:
Strengths and limitations of organic crop insurance)**

July 11, 2023

Summary

Crop insurance is currently the primary federal program available for farmers. When considering agriculture as a whole, row crop producers use crop insurance most often, while usage is relatively low for specialty crop producers. Thus, when farmers who are accustomed to using insurance transition their operations to organic, they want to buy crop insurance and expect that it will work for their organic crops as well as it does (or did) for their nonorganic crops.

There are farmers who find that crop insurance works well for their operations. Some farmers who do not buy insurance would like to do so, but only if it worked better. Another group of farmers buys crop insurance, either as catastrophic coverage or because their lenders require them to do so. Another group is not interested in crop insurance.

The goal of this Fall 2023 discussion document is to continue building the body of evidence that (1) clearly specifies problems organic farmers are experiencing and (2) offers concrete ways to improve organic crop insurance. This document continues the work presented in the Spring 2023 meeting. It provides a summary of the findings of the Spring 2023 public meeting in addition to providing new information obtained through interviews with farmers and other representatives of the organic sector.

The NOSB firmly believes that crop insurance should provide adequate risk management for organic producers. The increasing frequency of climate events means that more organic farmers require strong risk mitigation tools that add a layer of protection to the benefits provided by their organically managed soil.

While every nonorganic farmer who wants crop insurance is currently able to purchase an effective policy, this is not true for organic farmers. We want to see the Risk Management Agency improve crop insurance for the organic farm sector, so that every farmer who wants insurance will be able to buy a policy that provides more than catastrophic coverage.

Questions for public commenters

1. Does this document accurately reflect the challenges organic farmers face, regarding crop insurance?
2. Is this document missing any important problems or factors or topics?

3. For each problem identified (or for some of the problems), please offer a solution that will improve crop insurance for organic producers.

Introduction

As the Transition to Organic Partnership program rolls out nationwide, with USDA investing up to \$100 million to support transitioning organic farmers, the need for improved risk management tools for organic farmers takes on heightened urgency. The potential expansion of acreage under organic management, which comes with important environmental benefits, means that more organic farmland will be exposed to the on-farm risks that come with climate change. For farmers in transition, who already face new challenges regarding farming methods, yields, on-farm production practices and marketing, some may be unable to successfully manage the transition to organic production. Existing organic farmers also face risks caused by climate change, as reflected by the increasing frequency of events such as flooding, drought, and hail.

In the U.S., the primary risk management tool available to farmers is crop insurance. Evidence is strongly suggestive that crop insurance, in its current iteration, does not work as well as it could for organic farmers and, consequently, does not adequately help organic farmers manage their risk. While the extant body of literature has made great strides towards pointing out problems with organic crop insurance, there is still work to be done, and at the time of this writing there is an insufficient body of evidence documenting the shortfalls of crop insurance for the organic sector.

This discussion document offers new insights into how crop insurance is working for organic farmers. We build on the Spring 2023 discussion document and start by including important background information describing the evolution of crop insurance for organic farmers and a synthesis of the existing related literature and available data. In addition, we provide a summary of primary data, which includes an analysis of public comments submitted for the Spring 2023 NOSB meeting and interviews with organic farmers, technical assistance providers and policy.

Through this discussion document, the NOSB seeks concrete information about which aspects of crop insurance are most problematic for organic farmers and potential solutions. We aim to represent the needs of all organic farmers, not just those who traditionally have used crop insurance to manage their risks.

Background information

Crop insurance is currently the primary federal policy available to help farmers manage their risk from production (low yields) or price (as reflected by uncertainty of input and output prices). Overseen by the Risk Management Agency of USDA, the Federal Crop Insurance Program is a market-based insurance program (USDA RMA, undated). Producers of crops that lack insurance programs are eligible to enroll in the noninsured crop disaster payment program

under the purview of the Farm Service Agency, which targets losses due to natural disasters (USDA FSA, undated).

Historically, crop insurance was one of many federal programs that supported farm income. Insurance would cover losses caused by low prices or low yields. The statute that created crop insurance requires premiums are actuarially fair, so that payouts for crop insurance plus a small reserve are equal to the premiums paid. In addition to setting the insurance premiums correctly, crop insurance policies need to be designed to attract enough farmers so that the program effectively pools risk (Hamilton, 2020). Adverse selection, where only the highest risk individuals opt for insurance, is a well-known problem for insurance, and crop insurance is not exempt from this undesirable possible outcome. An analysis of crop insurance data for farms in Iowa finds that premiums are too high for highly productive land and too low for less productive land (Price et al., 2019). The 2014 Farm Act eliminated many farm income support programs, and made crop insurance the dominant method of federal support for farmers.

Crop insurance for organic farms has been addressed in multiple farm bills; the changes mandated by Congress illuminate the struggles RMA faces regarding creating and operating crop insurance for organic producers. Until the passage of the Farm Act of 2000, organic farming was not a 'good farming practice,' so organic farms were excessively risky from an actuarial standard (Morris et al., 2019). Even after Congress stipulated that organic was to be considered as good farming practice, and producers were able to buy crop insurance for their organic operations, it was unlikely that farmers would receive payment for their losses. Other changes legislated through the Farm Bill followed starting in 2008. The organic price election was required for cotton, corn, soybeans, and processing tomatoes in the 2008 Farm Bill (Carlson et al., 2023). The 2014 Farm Act required RMA to expand organic price elections by 2015 and to allow producers to select a Contract Price Addendum for their crops sold via contract (Carlson et al., 2023). In 2015, Whole-Farm Revenue Protection (WFRP) was introduced, designed for diversified operations including specialty crop farms. The 2018 Farm Act added cover crops to the list of good farming practices, so cover cropping was to be treated like other fertilizer and tillage practices (Carlson et al., 2023). The 2018 Farm Act also required continuing education for crop insurance agents and loss adjusters so they would be familiar with organic practices (Carlson et al., 2023).

Despite the switch to defining organic methods as good farming practices, organic producer use of crop insurance is relatively low (Raszap Skorbiansky et al., 2022). Morris et al. (2019), however, suggest that comparisons of crop insurance adoption should be based on crop type rather than in the aggregate. Grain growers are more likely to use crop insurance (Belasco, 2013). In 2016, between 50-100 percent of the value of organic corn, almonds, rice, wheat, and soybean crops were insured, which was roughly in line with the insurance coverage for agriculture as a whole (Morris et al., 2019).

It is also important to keep in mind that the organic farm sector, compared to the rest of agriculture, has a greater share of farms and acres devoted to specialty crops and a lower share to field crops, in terms of value of sales. More specifically, in 2021, organic farm level sales for

fruits, nuts, berries and vegetables comprised 37 percent of total farm level sales while field crops made up 13 percent (USDA NASS, 2022). In contrast, in 2017, for the agricultural sector as a whole, fruits, nuts, berries and vegetables comprised just 12 percent of total farm level sales while field crops made up 28 percent (USDA NASS, 2019). Thus, given cultural norms, it seems reasonable to expect a slightly lower percentage of organic farmers (as a whole) to use crop insurance.

Moreover, as Morris et al. (2019) report, in many ways organic farming systems and crop insurance are not incentive compatible. Organic farmers manage their risks through improving soil organic matter, rotating crops, and diversifying their operations (Hanson et al., 2004). Improving soil health is viewed as on-farm risk management by many organic producers (Snyder et al., 2022). Other types of risk are price risk related to market access and other market factors. Some producers, especially those growing specialty crops, manage market risk by creating a CSA or by marketing to multiple outlets (Snyder et al., 2022).

Crop insurance addresses risks created by yield or price variability (although a few policies address quality). Decisions to purchase insurance are part of a broader set of farmer actions. For example, crop insurance is often required for producers seeking financing or for participating in some federal farm programs (Raszap Skorbiansky et al., 2022). Highly leveraged producers are more likely to purchase crop insurance (DeLay et al., 2022).

Implications of low adoption of crop insurance by organic farmers are many, including preventing RMA from collecting data on organic production outcomes (Delbridge and King, 2019). At the same time, in 2021, for nine of the ten top organic crops the payouts exceeded the premiums received.¹ For every year between 2012 and 2021, for all crop insurance policies, the payouts exceeded the premiums received (USDA RMA, 2022). Thus, the organic crop insurance program is not meeting its mandate to be actuarially fair. A simulation of the 2014 shift to using organic specific yields (referred to as t-yield) indicates that the use of organic t-yields did improve the actuarial fairness, but farmers might have responded by not purchasing crop insurance (Delbridge and King, 2019).

The work by Morris et al. (2019), funded by OREI, suggests that if more farmers transitioned their operations to organic, overall farm level risk would be reduced, which would translate to lower public expenditures on crop insurance. However, this conclusion is based on the potential for organic farmers to reduce or manage their on-farm risks through their farming practices in addition to purchasing crop insurance. If all farmers who can manage risk through their farm practices opt not to purchase crop insurance, only riskier producers would buy crop insurance. And, at the time of this writing, the evidence points to the need to change the parameters of organic crop insurance to meet the mandate for actuarial fairness, unless the Risk Management Agency agrees to place organic and conventional crops in the same insurance pools.

¹ The ten top organic crops, in terms of liability, are corn, apples, soybeans, wheat, blueberries, potatoes, grapes, citrus fruit, tomatoes and peanuts (RMA, USDA 2022).

Since crop insurance is the primary instrument for sharing producer risk, improving the product to better meet the needs of organic producers is an important next step. A question that remains outstanding is how to design the crop insurance program in a way that is sound and provides the correct incentives to organic farmers. Another related question is whether it is essential to assess organic products separately and require organic farm products to be actuarially fair on their own. As Morris et al. (2019) explain, creating a strong crop insurance product for the organic sector has been problematic.

Adoption of crop insurance by organic producers

Understanding trends in organic farmer crop insurance usage by crop, by region, and over time is challenging because of the lack of publicly available data. Furthermore, there are inconsistencies in the data collected over time. Using data from USDA’s Organic Survey and RMA’s administrative data, this section outlines the general understanding of crop insurance use by organic farmers in the US.

The Organic Survey includes some data on crop insurance for the years 2008, 2014, 2019, and 2021. Crop insurance adoption by organic farmers ranged from 20-27 percent of certified organic farms during the years 2008, 2014, 2019 and 2021 (see table 1). While the number of organic farms with crop insurance rose over the 13 years, the percent of farms increased only slightly suggesting that adoption rates remain relatively constant over time. For 2014, 2019 and 2021, approximately 60 percent of those using crop insurance chose to cover all their farmland.

Table 1. Organic farm crop insurance use: 2008, 2014, 2019, 2021

Year	Operations			Share of farmland insured				
	Insured	Total farms	Share insured	L.T. .25	.25 to .49	.50 to .74	.75 - .99	All
	<i>Number</i>		<i>Percent of farms in each category</i>					
2008	2,141	10,903	20	n/a	n/a	n/a	n/a	n/a
2014	2,781	11,715	24	8	11	14	10	58
2019	4,255	15,548	27	5	10	16	12	56
2021	4,501	16,194	26	5	7	14	15	60

Note: Share of farmland insured presents the percent of operations in each category of farmland insured for those choosing crop insurance.

Source: USDA Organic Surveys 2008, 2014, 2019 and 2021.

A different perspective on the use of crop insurance by organic farmers is provided by the Risk Management Agency’s administrative data, which reports annually on the number of organic crop insurance policies purchased (USDA RMA, 2022). The average number of organic policies per farm (for those using crop insurance), shown in Table 2, increased from 2.18 policies per farm in 2014 to 2.46 in 2021. One notable trend is the decrease in the number of whole farm revenue protection crop insurance policies purchased between 2017 and 2021.

Table 2. Crop insurance policies 2012-2021

Year	Organic policies	Policies per organic farm	Organic Specialty Crop policies	Whole Farm Revenue Protection
	<i>Number</i>			
2012	5,152		na	*
2013	5,716		na	*
2014	6,073	2.18	na	*
2015	6,827		1,789	1,122
2016	7,936		1,922	2,204
2017	8,442		1,984	2,722
2018	9,161		2,213	2,490
2019	9,815	2.30	2,429	2,156
2020	10,763		2,608	2,029
2021	11,078	2.46	na	1,934
2022	11,147		na	na

Notes: Policies per farm are calculated by dividing the number of organic policies in this table by the number of farms opting for crop insurance. *Whole Farm Revenue Protection was created in the 2014 Farm Act, and thus not available prior to 2015. na = data not publicly available. Blank cells similarly refer to data that are not available.

Sources: Raszap Skorbiensky et al., 2022; USDA RMA, 2022.

In 2019 and 2021, the primary reason farmers gave for not using crop insurance is they don't need it or want it (see table 3). In 2021, the next most often given reason for not using crop insurance is lack of familiarity with crop insurance, followed by the cost of insurance. Note that the price of crop insurance was considered prohibitive by a smaller share of producers in 2019 and 2021, compared to 2014.

Table 3. Organic farmer reasons for not buying crop insurance

Year	Too expensive	Farmer unfamiliar	Agent unfamiliar	Not available for crop	No organic price elections	Don't need or want	Other
	<i>percent of farms</i>						
2014	22	24	na	na	na	na	na
2019	11	15	1	9	1	53	10
2021	11	18	1	8	1	50	11

Note: na = not available

Source: Organic Surveys, 2014, 2019 and 2021

Recent work based on primary data shows that the more diverse the organic operation (measured by growing a higher number of farm products) the less likely a farmer is to adopt crop insurance (Belasco and Fuller, 2022). Similarly, farms with more years of experience in the organic sector are less likely to adopt crop insurance, while organic farms with higher gross sales are more likely to adopt crop insurance (Belasco and Fuller, 2022). In contrast, research using USDA's ARMS data finds that relatively more diverse organic farms are more likely to

adopt crop insurance, but Belasco and Fuller argue this may result from the ARMS data, which includes farms with relatively low levels of crop diversity. The ARMS data also suggest that the higher the share of farmland that is organic, the lower the likelihood of purchasing crop insurance. Network effects may be present, as well, given that the more organic farms in a county, the higher the likelihood of buying crop insurance. Relatedly, Morris et al. (2019) find a positive relationship between peer use of crop insurance and producer interest in crop insurance.

Qualitative data suggests that organic farmers who do not buy crop insurance believe their farms are too diversified or too small to make insurance worthwhile (Belasco and Fuller, 2022). Other research, conducted by ERS, suggests that organic producers believe that crop insurance and other USDA programs benefit large scale operations, and furthermore, completing the paperwork tracking yields for each crop is prohibitive (Raszap Skorbiansky et al., 2022). The same study found that specialty crop producers prefer to manage risk through their production practices, rather than purchasing crop insurance (Raszap Skorbiansky et al., 2022).

Organic farmers who purchase insurance based on organic t-yields tend to have higher losses, when compared to organic farmers who have a long enough production history to base insurance on their actual production history (Delbridge and King, 2019). The use of t-yields may be a barrier to organic insurance adoption by beginning farmers. This is especially problematic for the organic sector since, in 2021, 54 percent of organic farmers were farming organically for less than 10 years and thus considered beginning farmers (USDA NASS, 2022).

Crop insurance payouts

The Environmental Working Group's Farm Subsidy database includes aggregated data on crop insurance. Note that organic specific insurance information is not included in the EWG database. Insurance payouts for the period 1995 - 2020 totaled \$144 billion, and four crops accounted for 77 percent of these payouts: corn, soybeans, wheat and cotton (EWG, 2022). For organic crop insurance, for the years from 2012-2021, \$1.4 billion of indemnity payments were made to farmers (USDA RMA, 2022). Four crops – corn, soy, wheat and rice – accounted for 53 percent of the total payments to farmers.

For the years 1995-2020, 61 percent of indemnity payments were for losses farmers realized due to drought (34 percent) and excessive moisture (27 percent) (EWG, 2022). Payments for hail damage made up 7 percent of payouts (EWG, 2022). Since 2000, payments to farmers have increased by an average 15.8 percent annually (USDA ERS, 2023). Since 2000, drought and high temperature has been a leading cause of indemnified loss, accounting for 42 percent of total indemnity payments (USDA ERS, 2023). Excess moisture was the source of 28 percent of payments for the same period (USDA ERS, 2023).

Even though the statistics above do not explicitly refer to organic farms, some conclusions can be drawn from the data. The first is that field crop producers are the most reliant on crop insurance for managing their farm level risk. According to RMA, this is also true for organic field

crop operations, although their share of payouts is slightly less than for conventional producers. Secondly, and most important, drought, heat and excess moisture were the causes of 70 percent of the indemnity payouts since 2000. Changing climate conditions and the recent increase in the number of adverse weather events suggests this trend will continue.

The high taxpayer cost of farm loss from drought and excess moisture similarly suggests that it might be more cost effective to take a different approach to risk management. The Intergovernmental Panel on Climate Change (IPCC) recommends, with high confidence, that resilience to climate change would be increased by using ecosystem based agricultural methods (IPCC, 2022). Thus, organic farming systems are likely to be an important component of managing farm risks related to adverse weather. Supporting organic farming systems may provide important risk mitigation benefits.

Methods used for primary data collection

Analysis of two sources of data form the next section of this document. One source is the set of public comments for the Spring 2023 CACS NOSB Discussion document. Commenters were asked to provide feedback on six questions:

1. What has been your experience (or your members' experience) with crop insurance?
2. What do you see as the most significant obstacle to organic farmer adoption of crop insurance?
3. What benefit do organic producers receive from crop insurance (on other words, what is working for them?)
4. What problems have farmers experienced with their crop insurance policies?
5. What recommendations would you make to improve the functioning of crop insurance for organic producers?
6. In your view, are there other, perhaps better, mechanisms for organic farmer risk mitigation?

For the second source, a research team from NYU (Duncan Orlander, Julia Balsam, and SJ Whelan, under the leadership of Professor and NOSB member Carolyn Dimitri) conducted interviews with organic farmers between January and March 2023. This included 13 interviews with farmers of diversified operations, 2 organic fruit farmers, and 7 organic grain farmers. The team also interviewed 11 representatives of organic organizations, which included technical assistance providers and organic policy experts from different organic organizations. These interviews were conducted as part of a research project examining how well farm policy works for organic farmers, which includes but is not limited to crop insurance.

In the results that follow, ideas, thoughts, and quotes arising from the interviews are referred to as "grain farmer" or "technical assistance provider." Those obtained from the public comments are referred to as "public comment" or are not identified (in other words, if the text does not identify the concept as coming from an interview, it is summarized from the public comments.)

The following sections provide an initial analysis of the qualitative data.

Perceptions of crop insurance for organic producers

While it is true that some producers have terrific experiences with crop insurance, there is a general widespread frustration regarding access to crop insurance. Speaking generally, the interviews and public comments indicate that many organic farmers feel that crop insurance does not work for their operations. One frequent complaint, expressed both through the public comment and interviews, is that the paperwork for crop insurance is onerous, followed by a sense that the payouts for losses incurred by organic crops are unreasonably low.

The farmers who have the best experience with crop insurance tend to grow organic commodity crops, such as soy or corn. That said, according to the public comments, some row crop producers using crop insurance feel that they are taking a gamble when they buy crop insurance. Producers with diversified operations or small-scale farms are either unable to use crop insurance or believe that the crop insurance programs do not work for them. An organic nonprofit reflects this viewpoint in the public comment that their members have a “Range of experiences with insurance from pretty good to very difficult.”

New or beginning farmers struggle with many of the requirements for crop insurance. It is not unusual that farmers in transition to organic production, who are still learning how to farm organically, do not receive adequate payouts in time of loss, the result of either misinformation from crop insurance agents or general complexity of the program. Farmers contemplating transitioning their operations to organic may be unwilling to do so because of the lack of adequate risk management programs, which are equivalent or comparable to those they currently use on their non-organic operations.

Organic producers have mixed views about crop insurance and USDA programs in general. According to one public comment, organic farmers “agree that a farm safety net is important. Possessing crop insurance, regardless of how well it actually functions, has the beneficial side effect of allowing farmers to receive bank loans.” There is a (relatively small) group of producers who have figured out how to make crop insurance work for their operations. Some farmers are not interested in USDA programs or crop insurance. A technical assistance provider suggested that cultural differences means that some farmers take “...pride in the organic movement, of being self-sufficient, and taking care of ... own needs. Not anti-government per se, but wanting to work without government support.” Others, particularly those using Whole Farm Revenue Protection, gave up insurance because of the high paperwork burden and low payouts. But some farmers who believe that crop insurance is not available or suitable for their diversified operations would like to purchase crop insurance, but only if it worked for their operation. Working means it would be easy to use, requiring less time and paperwork, with farmers ‘actually receiving’ money when a loss is experienced, as a farmer expressed in an interview.

Operators of diversified farms provided examples of how crop insurance failed them. One diversified operator told us his farm experienced "... a terrible freeze and it wiped out all the radishes. ...but I thought I have insurance, this is great. The adjuster came to my farm and then I heard nothing. I kept reaching out and got no response." The farmer eventually received \$140 and was very upset because he lost about \$7,000. Another diversified producer indicated that he put in a claim because of a drought. Someone came out to the farm to inspect the crop, and saw evidence of pests and disease on crops, disqualifying him from payment. The farmer mentioned that he stopped caring for the crop because of the drought. Another diversified farmer put in a claim and retrospectively reported that "the process was hell." The process was stressful, the paperwork was endless, and there was no payout: an inspector could not figure out how much the crop was worth.

An organic policy analyst stated that, "In general some folks in organics feel like USDA - points back to rightsizing programs for organics - is not as responsive to organics as for conventional." The Executive Director of a nonprofit said, "organic producers tend to be outside of the USDA system" and many feel like "second class citizens." Feeling excluded from USDA farm programs, or not being understood by USDA, may lead some producers to give up on federal programs such as crop insurance. But others acknowledged the challenges as stemming from a resource allocation issue. As one organic advocate pointed out, organic is such a small share of total USDA expenditures and so has a small voice, while an organic extension agent mentioned that "lawmakers want programs to fit the masses" and that the number of organic farmers is miniscule.

The wide range of perspectives suggests that improving crop insurance for organic producers may result in more producers opting to use crop insurance to manage their risks. That said, it seems that tweaks around the edges of the crop insurance program won't be sufficient to make insurance compatible with organic farming systems.

Data needs on multiple scales

The public comments reflected a theme of needing more data. Three specific needs were mentioned: macro level data covering the organic market and farm sector; improved data on organic farmgate prices; and yield data. The overarching goal of improved data is to improve the underlying information on the organic farm sector so that the Risk Management Agency is better able to assess and establish fair actuarial rates and standards.

A public commenter stated a need for "Trusted and timely data ... to support the development of insurance products and risk management solutions that reflect the unique needs and market conditions of organic farmers." This commenter pointed out the need to recognize the farming systems used by organic producers, along with the wide range of market channels used by organic farmers. Local and regional market channels are important to organic farmers, and in 2021, 54 percent of organic producers sold directly to consumers (including community supported agriculture), through intermediated market channels, and sold value added products (USDA NASS, 2022).

Macro level needs

The availability of data describing the organic sector, through the Organic Census or Organic Survey, provides useful information on farm level growth. The data make it possible to understand how the patterns of farm production – including crops grown and approximate yields – evolve over time. Data collected by NASS and ERS through the Agricultural and Management Resource Survey (ARMS) are especially important for understanding the financial position of organic farms, efficiency measures, farm program participation, and other aspects of the farm operation such as the extent of off-farm work. This level of detail is critical to understanding how well organic farms are coping with stress, which are likely to increase because of climate change. We encourage ERS and NASS to return to oversampling organic producers in the Phase 3 studies, to ensure that the data on organic farms is representative, and so that researchers can effectively study cost of production, farm productivity, and other important economic aspects of the organic farm.

Farm level prices

The Title 1 farm programs (Price Loss Coverage, Agricultural Risk Coverage, Nonrecourse Marketing Assistance Loan, and Noninsured Crop Disaster Assistance Program) depend on market prices (USDA ERS, 2019). The Dairy Margin Coverage Program payments are based on the difference between milk prices and input (feed costs) (USDA ERS, 2019).

Crop insurance, a Title IX program, is based on RMA's projected prices, which is also referred to as the insured price. The extension literature includes guidance on how insurance prices are set; examples include wheat in the Pacific Northwest (Fortenbery, undated) and livestock in Iowa (Christensen, 2023). RMA's method for calculating the insured prices for the organic products is less clear. Two obvious obstacles to estimating the insured price are (1) the thinness of the organic market and (2) differences in production patterns between the organic sector and the rest of agriculture.

One grain farmer thought RMA did a pretty good job forecasting the fall corn and soybean prices. But an organic extension agent stated that organic prices for crop insurance, and the payouts, do not reflect the market. For example, cotton in winter 2023 was over \$3 a pound but the insured price was well below that, at about \$1.50. Another technical assistance provider reported that organic corn is always underinsured, since the insured price is based on a formula that has little to do with the actual market prices.

In addition, USDA's reporting on organic feed prices and other commodities lags far behind the price reporting for the farm sector, as one public comment indicated.

There are many potential benefits from improved knowledge of organic prices. First, the farm bill programs which help farmers manage their risk, including crop insurance, could be improved for organic producers if organic farm level prices were readily available and used for the insurance policies. Benefits extend beyond the application of prices to farm programs.

Organic buyers of livestock and livestock products would be better positioned to adjust prices they pay farmers if they have knowledge of organic feed prices in different regions of the country. All organic farmers would have easier access to knowledge of overall trends in prices of the organic products they sell, which would help them receive prices that are fair. This type of price transparency may even help to identify fraud, such as when an organic product is selling for a low price.

Insured prices for direct marketers

Farmers selling into direct markets receive the retail price, which exceeds the price farmers receive when they sell to a handler (the farm price). Crop insurance does not reflect the direct market or retail price when the insurance price is set; thus, the insurance price is always too low (from the perspective of the direct marketer) and may not provide sufficient coverage. One public commenter indicated that the amount of coverage direct marketers receive may be just 25 percent of the total loss.

Direct markets are important for some organic producers, and furthermore, are an essential entryway for beginning farmers. Many beginning farmers opt to use direct markets rather than intermediated or wholesale markets, as they start out, and the current system means that beginning organic farmers purchasing crop insured would be underinsured. Adjusting the insurance price for direct marketing producers (organic and others) would strengthen the ability of crop insurance to mitigate risk, and potentially reduce a barrier to the organic transition faced by beginning farmers.

Yield data

The yield data used for crop insurance is problematic. From the broadest perspective, because certified organic farming systems have a relatively short history – at least in terms of what we currently know as organic – the understanding of organic’s *potential* production is limited. As one commenter stated, “Agronomic research is still catching up to what best practices and best yields can be for organic.” Delate et al. (2016) examine six long term cropping systems, which point to an improvement in yields as farmers develop experience with weed control and organic farming methods. Anecdotal evidence, including the experience of some organic farmers on the NOSB, indicates that many US organic farms have yields equivalent to their counterparts. In contrast, Carlson et al. (2023) find, based on analysis of the ARMS economic survey of farms, lower yields on organic farms. The closure of the yield gap on organic farms that the long-term cropping systems trials and some farmers have accomplished has not yet been met on the average organic farm, suggesting that there is a large potential payoff from additional research into best practices and the development of organic system specific seed varieties.

The public comments point to several other shortcomings to the current use of yields for crop insurance.

First, experienced farmers who are transitioning to organic production systems and beginning farmers are treated the same way. Forcing transitioning farmers to completely rebuild their actual production history gives those in transition no credit for their prior farming experience. It seems reasonable to assume a good farmer will transition to a good organic farmer, yet RMA does not explicitly recognize the skill transfer. The erasure of prior farming history may be a disincentive for undertaking the transition to organic. A public commenter stated, “This offers poor risk protection to transitioning farmers at time when they are learning a new production system.”

Because organic farmers rotate their crops, getting a production history for four to ten years on the same piece of land would take a very long time. An incentive created by the production history requirement is for farmers to adopt crop rotations that lack diversity, which is likely to constraint improvements to soil health. Furthermore, crop rotation is one of the essential aspects of an organic farm. Risk-sharing programs should not interfere with the very heart of the organic farming system by reducing incentives for on farm diversity.

A grain farmer said that to build robust crop rotations, a farm needs lots of different crops. But since RMA has no actuarial experience with many crops, the farmer must go through written agreements which is time consuming.

The t-yield is used during the transition period before a production history is established for a crop on an organic farm. It is quite clear from the public comments: the t-yield is not liked by anyone. The t-yield is meant to be an estimate of the county average for yields and is assigned to producers without four or more years of production history. One commenter stated “OEFFA farmers are unclear on the source of these numbers and find them to be lacking in logic.”. Another commenter reflected that “T-yields... are confusing in origin and cannot easily be questioned.”

A crop insurance agent, during the oral comment, mentioned that the t-yield for a conventional irrigated corn producer was 223 while an organic farmer has a t-yield that is 67 bushels lower, at 156, which translates to a \$400 per acre difference using this year’s prices. Research suggests that good conventional farmers become good organic farmers, and that the t-yields RMA uses may be too low for an average yielding conventional farmer who is transitioning to organic (Delbridge and King, 2014).

Insights into Whole Farm Revenue Program (WFRP)

It is widely accepted that the whole farm revenue program (WFRP) has a lot of promise, but its current form and the lack of agent knowledge about the program means that farmers find the product unhelpful. This belief appears to be supported by the general decline in WFRP enrollment, as shown in Table 2.

WFRP has many challenges, which include being complicated and confusing. Organic producers are reliant on having a good agent who can run the numbers for different scenarios, to identify

the best options for producers. A technical assistance provider stated that paperwork is more difficult for the agent, when compared to a single crop policy. The same technical assistance provider expounded that once a producer buys an insurance policy for corn, for example, renewing the policy is automatic and easy. The WFRP is more work because it is a different system and uses different forms. Thus, many agents do not want to bother with it. The technical assistance provider continued the “...farm can provide historical revenue, and RMA will support up to 85 percent and it should not matter what is grown.”

There is confusion about whether subsidies are available for WFRP, confirming that the insurance product is complex and confusing. One fruit farmer mentioned that the lack of subsidies for WFRP seems biased against organic farmers and suggested that the logical first step would be to take “..any given year, calculate percentage of subsidy that conventional farms receive, and apply that discount to premiums that specialty crop pays for WFRP...” A technical assistance provider mentioned that there are subsidies under WFRP, which are “just as good and sometimes better than other policies.” The technical assistance provider went on to say that after having done many scenarios with WFP, about 64 percent of the insurance cost is subsidized.

A grain farmer stated that WFRP works better for farms that have achieved their ideal size, but for farms that are expanding there is no production history on the new acres which means the new acres revert to county averages (even when the farmer has other acres with a higher production history). Another grain farmer remarked “If WFRP worked correctly and was easy to use – there should be no need for another insurance.” In contrast, a diversified producer stated that the paperwork for whole farm insurance is too cumbersome for use by diversified operations.

A technical assistance provider suggested that every county around the country should have the same policy and that the insurance policies should let farmers decide what to grow. The premium should decrease as the number of crops grown increases, which would provide incentives for increased diversity.

Access to crop insurance agents with knowledge of organic systems

The availability of organic crop insurance and the ability to find the optimal policy to support an organic farm has long been a problem faced by organic farmers. Whether an organic producer is satisfied with their crop insurance is highly dependent on the effectiveness of their agent. A common theme in the public comments is “...need for better education of agents on organic systems,” although many of the farmers interviewed mentioned having stellar agents that helped them find the right insurance product.

One public commenter mentioned that, in some regions, finding an agent who “would consider organic” is still a problem. Many agents do not understand organic systems, and furthermore do not understand how existing crop insurance programs work for organic farmers. Another public comment called for “...organic literacy within RMA....to better serve organic clients.”

Finally, another stated that the need for “...more education of insurance agents on the body of agronomic evidence on organic practices is necessary to convince insurance that organic best practices and innovation is insurable.”

Agent knowledge of whole farm insurance varies, which limits the effectiveness of the WFRP. Organic producers who are interested in using the whole farm insurance need an agent that understands the program and can run different scenarios to guide the farmer. As one public commenter stated “.....it is imperative to find a good agent familiar with whole farm since the paperwork and payouts can vary depending on how the numbers are entered and compiled.”

Good farming practices definitions

The definition of a good farming practice for crop insurance can still be challenging for organic farmers. One public commenter mentioned that some growers need to help their crop insurance agent understand organic practices as well as explain why organic good practices differ. Specific examples of difficulties reported by farmers include “...difficulty getting coverage for fallow fields, companion planting, no-till (roller crimper) and wider rows for weed suppression.”

There is no consistency across federal agencies about good practices and best management practices. For example, there is no agreement between RMA’s “good farming practice” and NRCS’s “best management practice.” One commenter stated that RMA should recognize that “....any practice approved in a farmer’s Organic System Plan by a USDA-accredited be recognized and approved as a “Good Farming Practice” as defined by the RMA.”

One commenter pointed to tension between the approaches used by RMA and NRCS; while RMA uses historical data from conventional farms over the last 30 years NRCS is looking forward and thinking through what is best for soil health. These differences reflect the divergent purposes of the two federal agencies: RMA is concerned with insurance and risk mitigation, and NRCS is interested in soil and natural resource conservation. Innovative thinking about farming systems from a holistic or broad perspective may be able to reduce the burden on organic farmers caused by the different agendas of the two agencies.

Deadlines and dates do not work for organic producers

The dates set by RMA for crop insurance, which work quite well for nonorganic farms, do not work with organic farming systems. Date specific problems mentioned in the public comments are listed:

1. The crop reporting deadlines (July 15) are difficult to fit within the organic certification process for the crop season. Some organic farmers have had difficulty in obtaining crop insurance when incorporating cover crops in the late spring and inter seeding cover crops into their crops during the growing season.

2. Some crop insurance deadlines come before a grower has had a chance to analyze all the numbers from a previous year. This means a farmer may lock themselves into a policy that runs counter to their needs in the subsequent year. Making last minute changes can be very difficult, if not impossible, and the farmer may be penalized for making a change that would otherwise make economic sense.
3. A policy analyst mentioned that crop insurance premiums are due in August, which does not always work for organic producers.
4. Crop insurance system deadlines do not dovetail well with organic certification deadlines. The systems seem to have no knowledge of one another. This is burdensome for organic producers who are often caught between the two sets of planning, paperwork, and requirements.
5. Planting date requirements are another example of an element of crop insurance that is not designed with organic systems in mind. Cultural practices such as cover cropping which are both typical and necessary in organic systems require time. Additional considerations include waiting for optimal field conditions for planting and coordinating with neighbors utilizing GE seeds. In addition, organic farmer use of untreated, non-GMO seeds which will rot in cold conditions, means organic producers habitually plant later. Crop insurance penalizes late planting by dropping the guarantee by one percentage point each day until planting occurs, even though the previous year's yields were often also planted at that time, because later planting benefits organic farmers' and fits with their systems of management. This means organic producers are penalized coming and going, which is both unfair and unwise in terms of risk management.

A grain farmer said that the final planting date is a huge problem. In his area, the final planting date for corn is too early (June 5). He routinely plants later because of his cover crops, which research suggests should be left on the fields for a longer time. Incorporating the cover crop, while avoiding being out on wet fields, is not easy to do. Another grain farmer spoke about the conflict between the date your cover crop is supposed to be terminated by and leaving the cover crop long enough to fix nitrogen in the soil. These dates are determined based on data from conventional rather than organic farms, and the dates don't work for organic farms.

The planting dates vary by region and appear to work for some, but not all, regions. A public commenter suggested that RMA establish a unique final planting date for certified organic crops in each region *with a non-penalizing grace period* so that organic producers can maintain both productivity and organic status.

Small grains, fruit, and crop insurance

Another way that organic crop insurance does not work well is related to the types of crops that can be covered. Several public commenters mentioned that insurance covers main crops but not small grains. These small grains, or minor crops, are important for organic rotations. Some farmers have petitioned for coverage for the small grains. As one grain farmer stated, "The crops that are most important to the rotation are the least insurable." A technical assistance

provider recognized this problem, mentioning that farmers grow cover crops to improve the soil, but they are not cash crops.

A fruit farmer mentioned that only peaches and apples are insurable, and the remainder of the fruit crops rely on the FSA programs for non-insurable crops. A technical assistance provider acknowledged there is a challenge with insuring specialty crops, and that it is far easier to get coverage for commodity crops.

Special needs of dairy producers and pasture, range and forage land

Several comments pointed to the needs of dairy producers. Rather than being able to rely on RMA risk management programs, dairy producers use Dairy Margin Coverage. The Pasture, Rangeland, Forage Pilot Project could be better utilized by organic farmers. This program provides insurance against drought, and calculates forage losses resulting from lack of precipitation. A commenter suggests that USDA can better promote this program, increase accessibility and awareness, and create improved incentives for enrollment.

Other considerations

Operators of diversified farms self-insure through the diversification of their operations. Furthermore, a technical assistance provider stated that farmers in the northeast learned to mitigate risk in other ways. These farmers felt that crop insurance never helped them, and so they are biased against it and don't look at the program.

A pattern related to crop insurance adoption was observed by an organic researcher: growers of crops like dry beans and corn are more likely to have loans and are required to have insurance. Similarly crops that are concentrated in a geographic area, such as organic apples, are more likely to purchase insurance while growers of crops that are more dispersed geographically are less likely to participate in crop insurance.

One diversified operator mentioned a desire to be able to insure against a weather event in general, including events that corn and soy people wouldn't have to worry about.

Concluding thoughts

This document presents evidence on the organic farmer experience with crop insurance. The CACS committee (and the entire board) appreciate the extensive input provide through written and oral public comment. Similarly, the research team from NYU thanks those who spoke with us in Winter 2023.

The analysis of the comments and interviews identifies the key problem areas with crop insurance by type of farmer. In the next phase, we aim to identify solutions or improvements that will address the problems with the program.

Questions for Fall 2023 meeting

1. Does this document accurately reflect the challenges organic farmers face, regarding crop insurance?
2. Is this document missing any important problems or factors or topics?
3. For each problem identified (or for some of the problems), please offer a solution that will improve crop insurance for organic producers.

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Subcommittee Vote

Motion to accept the discussion document on Climate Induced Farming Risk and Crop Insurance

Motion by Carolyn Dimitri

Seconded by Amy Bruch

Yes: 6 No: 0 Abstain: 0 Recusal: 0 Absent: 3