

Fitting a square peg in a round hole: Applying U.S. farm policy to organic farms

Sara Jean Whelan,^{a*} Duncan Orlander,^b Julia Balsam,^c and Carolyn Dimitri^d
New York University

Submitted December 21, 2023 / Revised March 15 and May 3, 2024 / Accepted May 3, 2024 /
Published online August 22, 2024

Citation: Whelan, SJ, Orlander, D., Balsam, J., & Dimitri, C. (2024). Fitting a square peg in a round hole: Applying U.S. farm policy to organic farms. *Journal of Agriculture, Food Systems, and Community Development*, 13(4), 135–152. <https://doi.org/10.5304/jafscd.2024.134.002>

Copyright © 2024 by the Authors. Published by the Lyson Center for Civic Agriculture and Food Systems. Open access under CC BY license.

Abstract


The suite of U.S. federal farm programs available to organic farmers includes conservation programs through the Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP), risk management through crop insurance, and the Organic Certification Cost Share Program (commonly referred to as Organic Cost Share or just Cost Share). Of these programs, the Organic Cost Share is the most widely used. Many organic farmers do not enroll in conservation programs or purchase crop insurance. The under-utilization of federal farm programs by organic producers is well known in the organic community, but there is a lack of systematic evidence about the

rationale for not applying for or using programs. Using qualitative data collected through structured interviews, we find that many organic producers want to participate in the Organic Cost Share, EQIP, CSP, and crop insurance. Many are successful, but others face institutional, cultural, and programmatic barriers that prevent them from participating. A key recommendation from this study is the creation of specialized, highly trained crop insurance and conservation agents with expertise in organic farming systems to facilitate the application process and program use for conservation programs and crop insurance. The Organic Cost Share Program would have more impact if its funds were used to support beginning organic farmers in addition to small-scale farm operators.

^{a*} *Corresponding author:* Sara Jean Whelan, MA, Graduate Student, Department of Nutrition and Food Studies, New York University; 411 Lafayette Street, 5th Floor; New York, NY 10003 USA; sw5228@nyu.edu

^b Duncan Orlander, Graduate Student, Department of Nutrition and Food Studies, New York University; do2115@nyu.edu

^c Julia Balsam, Graduate Student, Department of Nutrition and Food Studies, New York University; jlb819@nyu.edu

^d Carolyn Dimitri, Professor, Department of Nutrition and Food Studies, New York University;  <https://orcid.org/0000-0001-9741-7862>; cd87@nyu.edu

Author Notes

This work is part of a team effort conducted while SJ Whelan, Duncan Orlander, and Julia Balsam were graduate students in the Department of Nutrition and Food Studies at New York University.

Funding Disclosure

The work was partially supported by the U.S. Department of Agriculture National Institute of Food and Agriculture (USDA NIFA) Organic Research and Extension Initiative Award 2020-51300-32182.

Keywords

organic farm programs, conservation, policy, crop insurance, organic cost share, certified organic

Abbreviations

Conservation Stewardship Program	CSP
Environmental Quality Incentives Program	EQIP
Farming Service Agency	FSA
Natural Resource and Conservation Service	NRCS
Organic Certification Cost Share Program or Organic Cost Share	OCCSP
Risk Management Agency	RMA
U.S. Department of Agriculture	USDA
USDA National Agricultural Statistics Service	USDA NASS
USDA Natural Resources Conservation Service	USDA NRCS
Whole Farm Revenue Protection	WFRP

Introduction

Since the Agricultural Adjustment Act of 1933, policies aiming to conserve farmland and support farm income have provided important lifelines to U.S. farmers. Since the New Deal, farm policy has evolved in response to changes in public sentiment regarding food, farming, and budgetary pressures. The Agricultural Risk Protection Act of 2000 defined organic as a good farming practicing, making organic farmers eligible to participate in crop insurance (Carlson et al., 2023). The Food, Conservation, and Energy Act of 2008 incorporated organic in the conservation title, allowing organic farmers to participate in on-farm conservation programs (Carlson et al., 2023). Yet the process of including organic farmers in existing farm programs was, and remains, bumpy. While not all organic farmers are interested in such programs, research has demonstrated that many organic producers would participate if barriers were removed (Morris et al., 2019). Anecdotal evidence suggests that producers who transitioned from conventional farming systems, and thus were accustomed to relying on farm assistance that supported their operations, were interested in federal support and familiar with the process.

Key U.S. Department of Agriculture (USDA)

voluntary programs available to organic farmers include (1) conservation support administered by the Natural Resource and Conservation Service (NRCS) through the Environmental Quality Incentive Program (EQIP) and Conservation Stewardship Program (CSP); (2) crop insurance provided through the Risk Management Agency (RMA); and (3) the Organic Certification Cost Share Program (OCCSP), which offsets the cost of certification. Other than the Organic Cost Share, created in the 1990 Organic Foods Production Act (OFPA), these major farm programs have been amended for use by organic growers. The retrofitting of long standing programs to make them applicable to organic farms has led to administrative challenges, farmer frustration, and, consequently, low participation by organic growers.

EQIP and CSP are both working lands conservation programs that provide farmers with financial and technical support for adopting conservation practices on land they are actively farming (Baylis et al., 2022). It is at this point that the Food, Conservation, and Energy Act of 2008 opened EQIP to organic farmers. These conservation programs provide financial and technical assistance to farmers who adopt new conservation practices that target specific natural resources, such as soil, water, and air. Organic and transitioning producers are eligible for technical assistance under the general EQIP program or its component the National Organic Initiative. The CSP is available to farmers who want to build on their existing conservation practices. Farmers who are accepted to the CSP receive funding to maintain their existing practices in addition to implementing new conservation practices. CSP participants apply to enter five-year contracts for adopting conservation practices for organic operations, with payment capped at US\$200,000 a year for the 2019–2023 farm bill cycle (Schnepf & Stubbs, 2020). At the time of this writing, rather than passing new legislation in 2023, Congress voted to extend the Farm Act of 2018 to the end of 2024 (Monke et al., 2024)

Historically, crop insurance has been one of many federal programs that supported farm income, but the 2014 Farm Act made crop insurance the dominant method of federal support for farmers by repealing the direct payment program.

As the 2000 Farm Act specified that organic farming is a good farming practice, organic farmers were thus eligible to apply to the crop insurance (Carlson et al., 2023). Overseen by the RMA, the Federal Crop Insurance Program is a market-based insurance program covering losses resulting from low prices or low yields (RMA, 2023b). The crop insurance program is legally required to be actuarially fair, so that payouts for crop insurance plus a small reserve are equal to the premiums paid. Another feature of crop insurance is the need to design policies that attract enough low-risk farmers so that the program effectively pools risk (Hamilton, 2020). Setting the correct price is an important aspect of insurance, especially due to the mandate for actuarial fairness.

The OCCSP, known as the Organic Cost Share, was first funded in the Farm Security and Rural Investment Act of 2002 and was created to reduce the barriers created by certification costs, which might be prohibitive for smaller-scale producers (Carlson et al., 2023). Organic Cost Share applies to both certified organic producers and handlers. The funds are disbursed through either Farming Service Agency (FSA) county offices or select state departments of agriculture, the amount of the cost share varying over the years. The Farm Act that covered 2018–2023 specified that eligible certified organic businesses may receive up to 75% of their certification costs per scope paid during the program year, not to exceed US\$750 per certification scope (FSA, 2023a). Producers are required to pay for certification annually and then later apply for Organic Cost Share reimbursement. Any certified organic operation, producer, or handler that has paid the certification fee is eligible for the cost share, and funding is not contingent upon the size or type of organic operation.

The conservation and risk management programs, and nearly all farm programs outside the Organic Cost Share, were created and designed to meet the needs of producers who rely on synthetic chemicals to increase yields, manage pests and diseases, and feed plants. The fact that farm programs were rooted in conventional farming systems created two problems: exclusion of farms under organic management, and a poor fit between program design and program performance for organic

producers. As the organic food and farming sector grew to command a larger presence in the U.S. food system, advocates have consistently called for a broader inclusion of organic systems and farms into existing federal farm programs (National Sustainable Agriculture Coalition, 2017). As farmers face increased pressures created by climate change, need for these programs is likely to increase because of their value in terms of supporting environmental and economic sustainability of organic farms. However, an equitable insertion of organic farmers into traditional crop insurance and agri-environmental programs has faced numerous hurdles (Delbridge & King, 2018).

Researchers have suggested that the relatively low participation by organic producers is the result of multiple programmatic obstacles to using the farm programs (Carlson et al., 2023). The one exception is the OCCSP, which is used by many organic entities, including newer operations, that may otherwise find organic certification costs prohibitive. Few have examined organic farmer use and barriers to participation for other programs. Most of the extant body of research has examined crop insurance, which only a small number of scholars has studied (Belasco & Fuller, 2022; Delbridge & King, 2018; Morris et al., 2019; Raszap Skorbiansky et al., 2022). Belasco and Fuller (2022) found that organic farmers were less likely than conventional producers to purchase federal crop insurance.

The body of peer reviewed research does not directly address organic farmer participation in the suite of farm programs discussed. This paper takes a first step toward filling this knowledge gap. Our work strives to understand organic farmer perceptions of these programs, their decisions to participate, experiences with the application process, and how the programs worked for their operations. To address these questions, we adopted a two-pronged approach. First, we pieced together evidence from publicly available data to describe organic producer participation in farm programs. To understand motivations, obstacles, and experiences, we then conducted 34 interviews with organic farmers and other experts. Analysis of this qualitative data contributes to understanding (1) where farm programs fail to support organic farmers, and (2) what types

of support organic farmers believe they need to be economically successful.

Background of Organic Farmer Participation in EQIP, CSP, Crop Insurance, and Organic Cost Share

Understanding the extent to which organic farmers use USDA farm programs is challenging because of the scarcity of data. The USDA Organic Survey reports acreage and sales of organic farms by state and commodity, along with reporting on some other topics including organic farmer crop insurance use (USDA National Agricultural Statistics Service [USDA NASS], 2022). The statisticians overseeing Organic Survey data collection use weighting methods to adjust for nonresponse and undercoverage, thus improving the precision of the estimates so that the data accurately represents the organic farm sector. The RMA publishes administrative data on crop insurance policies by commodity in their Summary of Business for Organic Production report (RMA, 2023a). Organic Cost Share funding allocations and disbursements are reported to Congress each year (FSA, 2023a). Usage of EQIP and CSP by organic farmers is more difficult to determine, but EQIP participation is described in Carlson et al. (2023). Two challenges of tracking program usage are that organic farmers are eligible for both the general EQIP program and the organic EQIP program, and that the administrative data reported by RMA and FSA and the statistical data reported by NASS are not directly comparable. The four agencies—National Agricultural Statistics Service, Farm Service Agency, Natural Resource Conservation Service, and Risk Management Agency—collect data for different purposes and thus are not directly comparable, which exacerbates the challenge of measuring the efficacy of programs accessed by organic farmers. We put those vexing issues aside and piece together the publicly available data from these disparate sources to provide the best possible insight into organic farmer use of these federal farm programs.

Organic Farmer Participation in EQIP and CSP

The two conservation programs EQIP and CSP are crafted as working lands programs so that farmers can improve the environmental quality of

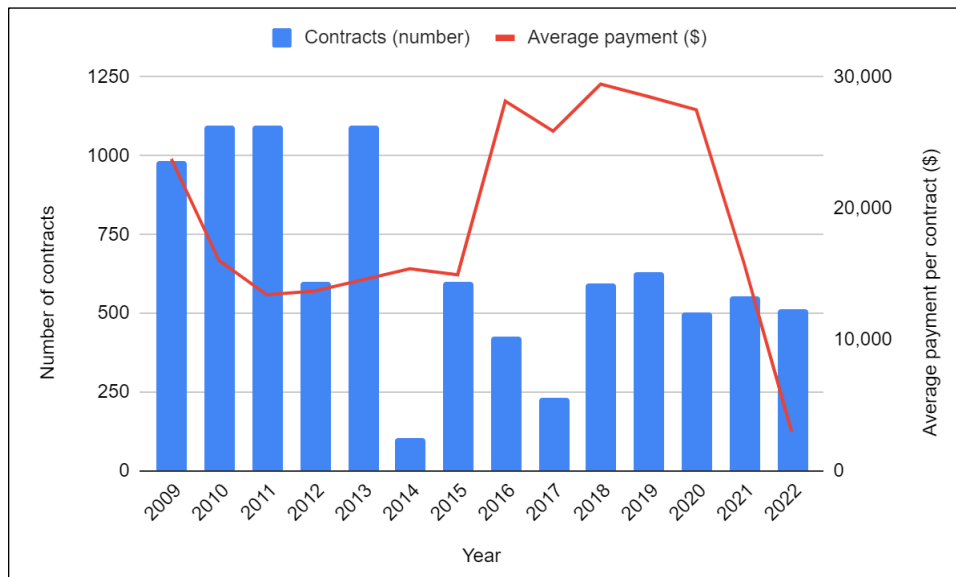
their farms while raising crops and/or livestock. For each program, participating farmers work with an NRCS agent to develop a plan that addresses a particular area of concern, such as preserving resources, increasing biodiversity, or improving stewardship practices. The producer and NRCS agent collaborate to identify the operation's most needed conservation improvement. The programs provide funding for agreed-upon practices and no-cost technical assistance to producers. In order to participate in CSP, farmers are required to be already successfully implementing stewardship practices. CSP then provides funds and technical support for additional conservation practices.

The number of contracts for organic farmland, total EQIP payments, and payments per contract varied 2009–2022 (Figure 1). The annual number of contracts prior to 2014 exceeded the annual amount during 2014–2022, and overall the program use declined over time. The average payment per contract was higher for 2016–2020. Cover crops and crop rotation for conservation purposes were among the most popular practices supported by this program for organic producers (Carlson et al., 2023). In total, only 0.2% of EQIP contracts administered in 2022 went to organic operations (USDA NASS, 2023; USDA NRCS, 2022).

Certified organic payments and participation in CSP have varied over time but generally remain quite low. Figure 2 shows the annual number of CSP contracts and payments for certified organic farms 2010–2022. Average payments exhibit a downward trend over 2010–2022, with a slight increase 2014–2016. The lack of usage is surprising, given the synergies between organic practices and the practices encouraged by CSP and the fact that organic farmers are already engaged in the baseline level of stewardship required for participation in CSP.

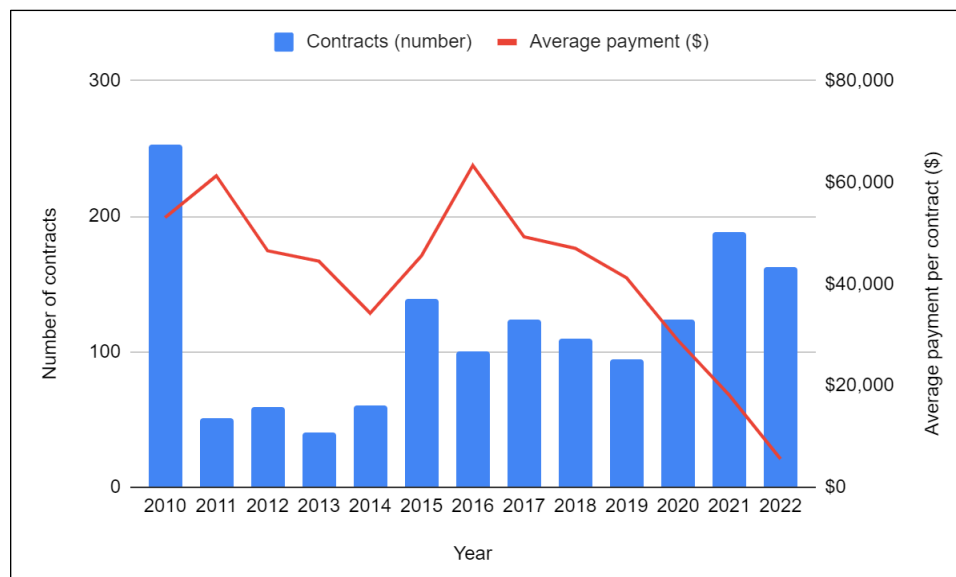
In 2019, organic producers had approximately 74% fewer EQIP contracts per organic farm compared to all farms (0.04 contracts per organic farm and 0.15 contracts per non-organic farm). Conversely, while the number of contracts remained low, organic farms maintained twice as many CSP contracts per organic farm as compared to all farms (0.006 contracts per organic farm versus 0.003 per

Figure 1. Environmental Quality Incentives Program (EQIP) Contracts and Payments for Organic Farmland, 2009–2022



Notes: Data reflects contracts granted for organic farmland under both the general EQIP program and the Organic Initiative. For 2022, 13 “incentive” plans lacked payment information and thus were excluded from the table. The table does not include contracts for transitioning farmland. The decline in the number of EQIP contracts shown above is comparable to the findings of the USDA Economic Research Service, which shows a decline in funding over time but does not offer an explanation (Carlson et al., 2023). Source: Authors’ analysis of U.S. Department of Agriculture (USDA) data obtained through a 2023 Freedom of Information Act (FOIA) request.

Figure 2. Conservation Stewardship Program (CSP) Contracts and Payments for Organic Farmland, 2010–2022



Note: Transitioning farmland is not included in this figure. Source: Author analysis of U.S. Department of Agriculture (USDA) data obtained through a 2023 Freedom of Information Act (FOIA) request.

non-organic farm) (USDA NASS, 2023; USDA NRCS, 2022).

Organic Farmer Participation in Crop Insurance

Information on the adoption of crop insurance by organic farmers is available from two sources, the USDA NASS, and administrative data reported by the RMA. The main difference between the two datasets is that NASS collects data for statistical purposes, aiming for statistical representativeness of the dataset, while RMA reports data on the number of policies sold, as the 2014 Farm Act mandated annual reporting on crop insurance for organic producers to the U.S. Congressional House and Senate committees on agriculture (Shields, 2014).

The NASS Organic Survey includes data on crop insurance usage for the years 2008, 2014, 2019, and 2021. While the number of organic farms with crop insurance rose over the four periods, the share of organic farms that purchased insur-

ance ranged between 20 and 27% (Table 1), suggesting that adoption rates remained relatively constant over time. For 2014, 2019, and 2021, approximately 60% of those using crop insurance chose to cover all their farmland.

A different perspective on the use of crop insurance by organic farmers is provided by the RMA administrative data, which reports annually the number of organic crop insurance policies purchased (USDA RMA, 2023b). The total number of policies purchased increased each year 2012–2021. Organic producers are allowed to purchase multiple policies when insuring their operations. For those using crop insurance, the average number of policies per organic farm (Table 2) increased from 2.18 in 2014 to 2.46 in 2021. One notable trend is the decrease in the number of Whole Farm Revenue Protection (WFRP) crop insurance policies purchased between 2017 and 2021. RMA reports that just 274 WFRP policies in 2023 included an organic product (Tolle, 2023). It should be noted that WFRP was a pilot insurance program introduced in 2015 to provide insurance for those excluded from the

traditional forms of crop insurance, with the aim of providing insurance for diversified farms and specialty crop operations (Carlson et al., 2023).

Organic Farmer Participation in the Organic Cost Share

The Organic Cost Share is the federal program most widely used by certified organic producers and has the simplest design. For 2023, all certified organic producers and handlers were eligible for a

Table 2. Crop Insurance Policies, 2012–2022

Year	Organic policies	Policies per organic farm	Organic Specialty Crop policies	Whole Farm Revenue Protection
	Number			
2012	5,152		n/a ^a	b
2013	5,716		n/a ^a	b
2014	6,073	2.18	n/a ^a	b
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	n/a	1,934
2022	11,147		n/a	1,804

Notes: The average number of policies per farm was calculated by dividing the number of organic policies in this table by the number of farms opting for crop insurance, as reported by the U.S. Department of Agriculture (USDA) and shown in Table 1.

^a n/a = data not publicly available. Blank cells similarly refer to data that are not available.

^b Whole Farm Revenue Protection was created in 2014, and thus not available prior to 2015.

Sources: Raszap Skorbiansky et al., 2022; USDA Risk Management Agency, 2023a

Table 1. Organic Crop Insurance Use, 2008, 2014, 2019, 2021

Year	Operations			Share of farmland insured				
	Insured farms	Total farms	Share of farms with insurance	<25%	25%–49%	50%–74%	75%–99%	Total
	number		%					
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 percentage of operations in each category of farmland insured for those choosing crop insurance.

Source: U.S. Department of Agriculture (USDA) Organic Surveys 2008, 2014, 2019 and 2021.

reimbursement of 75% of their certification costs, up to US\$750. If an organic operation holds a crop, livestock, or handling certificate, the business is eligible to receive up to US\$2,250 (that is, US\$750 per scope). In 2019, cost share payments were 75% of the certification costs, up to US\$750 per scope (Carlson et al., 2023). In 2020, the USDA reduced the share to 50% and the maximum payment to US\$500 per scope (Carlson et al., 2023). The initial levels of cost share were reinstated in 2023, retroactively to October 2022 (USDA FSA, 2023b).

Total funding available for Organic Cost Share varied widely during 2010–2021, from US\$1.4 million allocated in 2014 to \$11.7 million in 2016 (Table 3). Except for 2014, the aggregate amount paid to organic operations was typically well below the amount allocated. Since the creation of the OCCSP, the program covers a smaller portion of certification costs because the average cost of certification increased to about US\$2,800 per operation in 2019, from US\$1,500 in 2014 (Carlson et al., 2023).

Methodology for Interviews and Sample Description

The main purpose of interviewing farmers and organic advocates was to better understand the usefulness of these farm programs, including how effectively the programs work for organic farmers and obstacles to achieving success. To gather data, we conducted structured informant interviews, which allowed us to delve deeper into both behavior and knowledge. Two groups of interviewees were identified as key informants: certified organic farmers and organic-interested non-farmers, which included advocates, researchers, and policy analysts. Different guiding questions were included in the two interview scripts (Table 4), targeted to the two groups.

The farmers interviewed were identified through the research team’s networks. Prior to the interview, the research team had no knowledge of whether an individual farmer participated in conservation programs, received the organic cost-share, or purchased crop insurance. The non-farmers interviewed represented most of the advocacy, policy, and research organizations involved in

Table 3. Organic Cost Share Funds, 2010–2021 (All in US\$)

Year	Allocated	Disbursed
2010	\$9,730,000	\$6,981,739
2011	\$6,748,000	\$5,005,724
2012	\$7,247,000	\$6,104,376
2013	\$8,028,200	\$6,605,991
2014	\$1,352,850	\$1,335,595
2015	\$11,231,500	\$8,267,868
2016	\$11,657,736	\$7,971,730
2017	\$7,806,114	\$6,683,840
2018	\$7,073,755	\$6,717,840
2019	\$10,396,941	\$7,587,388
2020	\$5,553,600	\$4,600,300
2021	\$5,158,600	\$4,270,438

Note: The U.S. Department of Agriculture (USDA)’s National and Agricultural Management Assistance (AMA) funding and expenditures are combined.

Source: USDA Farm Service Agency (2023a).

the organic sector. Many of the non-farmers interviewed were involved in farmer organizations through their work providing research, technical assistance, and advocacy. They were selected for their ability to share their understanding of farmers’ experiences with the programs based on their contact with many organic farmers. Because of our sampling methodology, the results do not represent the entire organic sector.

The interviews were conducted over the phone and lasted approximately 30–60 minutes. Each interviewer took notes, storing the data on a secure, shared Google Drive. The research team used the same semi-structured interview instrument for each group of interviewees (e.g., farmers, policy analysts). The interview began with the research team member stating that the project’s purpose was to understand organic farmer participation in and perception of Organic Cost Share, crop insurance, and EQIP and CSP conservation programs. The semi-structured, open-ended questions allowed interviewees to share their personal experiences and professional knowledge of these programs. Each person interviewed had the opportunity to open the discussion by talking about their farm or organization. Farmers discussed their expe-

riences with programs as well as reasons for not participating, in some cases. The non-farmers discussed their perceptions of these programs, vis-à-vis organic farmers, as well as ideas for how to improve the programming.

We interviewed 34 individuals between January and March 2023; 23 were conducted with certified organic farmers: 14 had a diversified or specialty crop operation, two operated fruit farms, and seven managed grain farms. The remaining 11 interviews were with individuals who worked as policy analysts, technical assistance providers, researchers, and advocates with supporting organi-

zations. The 23 producers operated farms in 13 states in the New England, Mid-Atlantic, Midwest, and Southern regions of the U.S. The farms and farmers varied dramatically in terms of production acres and years of experience (Table 5). The smallest was a 3-acre diversified operation and the largest was a 12,500-acre grain farm. The typical diversified operation started as an organic farm, while the other operation types began as conventional but transitioned to organic production.

Thematic analysis was used to analyze the interview notes. First, each of the four members of the research team read the notes from every inter-

Table 4. Structured Interview Instrument Questions

Questions for advocates, researchers, and policy analysts
What are the most useful farm programs currently available? Does this vary by crop or farm size or farm location?
In your opinion, why do organic producers participate in farm programs? What do you think are the biggest predictors for participation?
In your opinion, why do organic producers opt not to participate in farm programs?
Do you think there is a discrepancy between how lawmakers/agencies design these programs compared to what farmers want or need?
Do you see the goals of farm programs as connected or distinct?
Do you have any ideas for how crop insurance, EQIP, Organic Cost Share, and any other programs should be improved or changed to make them work better for organic producers?
Questions for farmers
What farm programs do you currently participate in? Particularly, but not limited to, crop insurance, EQIP, CSP, and the Organic Cost Share.
What has your experience been? Any notable success or failures? (Asked for each program)
What specifically would you change, if anything, to make the program more useful? (Asked for each program)
What do you see as the role of USDA or other relevant agencies (local, state, or federal) in supporting farmers?
How often do you consult your local USDA office, local certifiers, or local extension service regarding risk management products like crop insurance? Have you found these representatives are knowledgeable about organic operations and the relevant risks?
How did you think about risk when you converted to organic (or chose to start as organic)? Did you feel it was more or less risky for your business?

Table 5. Select Characteristics of Farmers Interviewed

Operation focus	Average farm size	Smallest farm	Largest farm	Age of farm (Years)	Years certified as organic
		# of acres		Average (#)	Average (#)
Diversified (n = 14)	53	3	250	21	21
Fruit (n = 2)	54	8	100	40	28
Grain (n = 7)	3,105	750	12,500	30	13

Source: Author-conducted interviews.

view and color-coded the important themes. The team met numerous times to discuss the themes and the coding, until we reached agreement on the salient themes for each farm program.

Findings on Perceptions of Conservation Programs, Crop Insurance, and Organic Cost Share

Of the 23 farmers interviewed, 17 participated in EQIP, six were enrolled in CSP, and ten reported buying crop insurance (Table 6). The rate of participation in the conservation programs did not vary substantially by product grown on the farm. In contrast, crop insurance had a notable divide in participation between the diversified farms and grain farms: while few of the diversified growers purchased crop insurance, all grain growers did. Of the three program types discussed in our interviews, the Organic Cost Share was the most widely used, with just one diversified operation not seeking reimbursement for certification costs.

Conservation Programs of EQIP and CSP

Overall, farmer opinions of the EQIP and CSP

programs were mixed. Those who were able to access the technical assistance and funds for conservation practices were largely positive about the conservation programs. One diversified grower said of EQIP, “I’ve used it several times. I’ve used it for high tunnels, land leveling, nutrient management...I’ve had a positive experience and have been able to do a lot.” Similarly, a large-scale grain grower who participated in CSP felt it was a “unique and fantastic program. It’s a great fit for our farm and a model for how conservation support should be. ... It’s the only place you can get funding for something you’ve already done.” In contrast, those who were unable to make use of EQIP or CSP reported feeling excluded from available funding. Our analysis of the interviews revealed four key themes regarding conservation programs (Table 7).

The knowledge and helpfulness of the agent administering the program significantly influenced farmers perception of the program. A farmer with a positive experience stated, “Without [my local NRCS agent] I would be so confused and would have given up. My agent is proactive and reaches out about opportunities.” By contrast, another farmer who lacked such a knowledgeable agent said, “EQIP is very confusing—I don’t know what’s funded and how funding is delegated or granted. ... I need more transparency—what is the program, who is targeted, what practices on farm will be covered.” The farmers lacking support from an agent need to devote a significant amount of

Table 6. Participating Farmer Reported Use of USDA Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Crop Insurance, and Organic Cost Share

Type of farm	EQIP	CSP	Crop insurance	Organic Cost share
Diversified (n = 14)	11	3	2	13
Fruit (n = 2)	2	1	1	2
Grain (n = 7)	4	2	7	7
All farms (n = 23)	17	6	10	22

USDA = U.S. Department of Agriculture
 Source: Author-conducted interviews.

Table 7. Key Themes Regarding Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP)

Aspects of these programs are well received, such as funding for hoop houses, support of pollinators, CSP supporting existing efforts, etc.

Success with the program is reliant on knowledge NRCS agents have, which tends to be inconsistent.

The programs are not designed with organic farm practices in mind.

The economic benefit of participating is not always worth the administrative burden.

Note: CSP = U.S. Department of Agriculture (USDA) Conservation Stewardship Program; EQIP = USDA Environmental Quality Incentives Program; NRCS = USDA Natural Resources Conservation Service

time and effort to learn about available technical assistance and funding. A technical assistance provider explained, “Farmers have to be proactive to get their funding since agents don’t always know about the program they’re supposed to be administering. ... More consistent training is needed for USDA staff to understand the programs they oversee.”

The types of practices funded by EQIP vary across the country, depending on local environmental priorities, and the awards granted may reflect values in the local community. This means that organic farmers located in an area dominated by nonorganic producers may face support for conservation practices that are not suitable for use by organic farmers, and in such cases organic growers may be unable to successfully compete for funds. As a nonprofit leader states, “EQIP, typically determined by county—does not lend itself towards organic producer interests—priorities vary and influence where dollars go.” A farmer states, “Local committees are often made up of farmers that don’t think like [organic farmers] and prioritize doing things how they’ve always done. Local control can be a recipe for status quo.” Many farmers felt that EQIP was not a good fit for their operations because commonly awarded projects tended to be practices that are already an essential part of an organic farming system, such as cover cropping. While the USDA began funding a new cover crop initiative for EQIP in 2022 (USDA, 2022), none of those interviewed mentioned this new source of funding.

Even with the Organic Initiative offered under EQIP, the farmers expressed reservations about the program. One farmer stated, “I haven’t used the organic option...it has a payment limit I’ve never understood...I think it’s good they have an organic option, but it should have the same payout.” The Conservation Stewardship Program, which provides funding for conservation practices already happening on the farm if farmers add new conservation practices, was described by a researcher as the “ideal program” for organic farmers. Many of the farmers interviewed were unfamiliar with the CSP program, despite the program’s suitability for organic farms.

Several growers who have participated in

EQIP and CSP reported that funding levels were not high enough to bother with the lengthy and cumbersome application process. One diversified grower recounted their EQIP experience: “It was successful, but nothing is easy. The paperwork is time consuming and the monitoring of progress and follow through [of NRCS agents] is inconsistent. If the process gets too complicated, I’ll lose interest. ... I weigh the pros and cons of time vs money.” Similarly, another grower said of his experience with CSP, “I applied, but decided not to go forward. There was no economic benefit for it. I wanted to do more work on non-production land. ... I filled out so much paperwork and [the NRCS] came back and had a prescription that didn’t include anything I asked for.” Although the Conservation Assessment Ranking Tool (CART) was created in 2020 to help modernize and streamline the application process for both EQIP and CSP (Conservation Assessment Ranking Tool, n.d.), nevertheless, farmers continue to experience challenges with program administration. An expert from a nonprofit stated, “The CART tool is complicated. ... Several things are going to have to be changed systematically. ... Farmers who apply and put in all that work and don’t get funding get frustrated.”

The interviews indicate that under the right circumstances, EQIP and CSP can provide helpful funds and technical assistance for conservation on organic farms. It is clear the programs provide real benefits to organic producers when successfully implemented. Another clear finding is that numerous problems prevent these programs from being used by more producers. A significant obstacle is the inconsistent level of NRCS agent knowledge about how organic producers can use EQIP and CSP. Our data suggests that many organic farmers are frustrated by their interactions with USDA agents and thus forgo conservation funding and assistance. Not all producers give up seeking funding; some overcome this barrier by developing their own understanding of how the programs might help their farm operations, and ultimately succeed in securing conservation funding. Compounding the problem of inadequate USDA institutional knowledge of organic farming is the bias towards non-organic farms in program design in

some communities, which creates barriers in areas where organic farming is uncommon. A first step would be to improve USDA agent knowledge of conservation for organic farms, followed by further modernization of administrative systems and establishing equal funding opportunities for organic producers. By improving these three barriers, EQIP and CSP would likely provide higher satisfaction to farmers and a broader impact on farmland conservation goals.

Findings Regarding Farmers' Perceptions of Crop Insurance

Most farmers expressed strong opinions about crop insurance and ways that they felt the program could be improved or changed, regardless of whether they purchased crop insurance. It should be noted that in interviews farmers were free to discuss any type of crop insurance, including Whole Farm Revenue. Participation in crop insurance varied by operation type, with diversified and specialty crop growers unlikely to buy insurance and grain farmers more interested in doing so. Many of the farmers who had diversified operations did not purchase crop insurance and expressed little to no interest in doing so in the future. The main findings of the thematic analysis of the interviews are outlined in Table 8.

Most diversified and specialty crop growers offered, as an explanation for how they managed on-farm risk, that organic farming in itself is a form of risk management. A diversified grower said, "The little I know about conventional crop insurance is a racket, taken advantage of by the majority of conventional farmers. ... It bolsters what would be considered a terrible business practice by farmers ... keeping them in business, creating market

and supply chain problems." A specialty crop grower said that it is "not relevant for me or any of the vegetable farmers I know of," while another diversified grower said that they "don't think we're qualified." A technical assistance provider suggested that cultural differences mean 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."

The few operators of diversified farms that did participate in crop insurance provided examples of how it 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 US\$140 and was very upset because he had lost about US\$7,000 in potential revenue. Another diversified producer indicated that he put in a claim because of drought. Someone came to inspect the crop and saw evidence of pests and crop disease, disqualifying him from payment. The farmer said that he had stopped caring for the crop because of the drought. Another diversified farmer put in a claim and reported that the "process was hell." The effort was stressful, the paperwork was endless, and there was no payout: an inspector could not figure out how much the crop was worth.

By contrast, a large-scale organic grain grower said of crop insurance, "We wouldn't be growing without it. ... That's the reality of farming and climate change." A technical assistance provider for organic grain growers confirmed "producers largely participate in crop insurance and it's an important part of their production, especially with climate

Table 8. Key Themes Concerning Crop Insurance for Organic Producers

The program is designed for conventional and/or large-scale grain producers.
Many best practices for crop insurance are not in line with organic farming techniques.
T-yields (county yields) for organic crops are too low.
Price elections for organic crops are too low.
WFRP would be an ideal choice, but the program is cumbersome and hard to use.
Crop insurance sales agents are insufficiently knowledgeable about organic insurance and farming systems.

change.” This pattern of organic grain producers relying on crop insurance more often than diversified producers echoes the patterns of insurance usage in agriculture in general, where 70% of the insured liability covers row crops and 18% applies to specialty crops (Tsiboe & Turner, 2023). Even the organic growers who purchased crop insurance suggested that program reforms are needed. Of particular concern was the lack of consistency across federal agencies about what constitutes good practices and best management practices. For example, there is no agreement between RMA’s good farming practices for crop insurance and NRCS’s best management practices for conservation payments. Farmers must follow the RMA good farming practices to be eligible for crop insurance payments, but competing priorities for organic or conservation programming might put them at fault with RMA. An organic grain grower explained, “There were several instances in which were funded through EQIP or CSP for practices that preclude our ability to insure a crop—so one hand of USDA paying you to do something, and the other hand of USDA taking away our insurance.” Another grain grower stated that 120 acres of wheat became uninsurable in their last growing season by following no-till and intercropping, typical practices used by organic growers: “There’s definitely tension with organic and these practices, but more broadly there is tension between RMA and NRCS for best soil health practices. RMA is using data from conventional [farms] over the last 30 years, whereas NRCS is looking forward and thinking through what is best.”

Research points to challenges with yields on organic farms. From the broadest perspective, because certified organic farming systems have a relatively short history, the understanding of organic potential production is limited. Delate et al. (2015) examined six long-term cropping systems, which indicated improvement in yields as farmers develop experience with weed control and organic farming methods. In contrast, analysis of the USDA Agricultural Resource Management Survey indicates consistently lower yields on organic farms (Carlson et al., 2023). There remains a yield gap between production on the average organic farm, as shown in Carlson et al. 2023 and long-term

cropping systems trials (Delate et al, 2015), suggesting that there is a large potential payoff from additional research into best practices and the development of organic system-specific seed varieties.

These real and important differences translate into how crop insurance is applied. If a grower lacks a long enough history of growing a particular crop organically, typically less than four years, their insured yields are assigned as county-level averages—the so-called “T-yield” (Behar & Stein, 2019). Organic growers argue that T-yields do not reflect actual farm-level yields, and that they are regularly assigned T-yields that are significantly lower than actual yields. A grain grower explained, “My yield is higher than the county. ... When we went organic, they gave me ‘county’ numbers, I have no idea where they came from, and were significantly depressed ... about 50–60% of our production. ... If you can’t insure actual output then you’re in a lot of trouble.” Because organic farmers rotate their crops, getting a production history for four to 10 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 constrain improvements to soil health through use of cover crops and crop rotations. Furthermore, crop rotation is one of the essential practices of an organic farming system. Risk-sharing programs should not interfere with the very heart of the organic farming system by reducing incentives for on-farm diversity. Farmers willing to build robust crop rotations and seek insurance must go through the time-consuming process of making specific written agreements with RMA to gain coverage for crops with which the agency has no actuarial experience.

In addition to T-yield concerns, price elections for organic crops are another point of contention. Crops are insured based on organic prices, called the organic price election in crop insurance jargon, and the insurance is available for 84 crops. Producers argue that the RMA organic prices are too low. A large-scale grain grower explained that the organic price elections available to him are based on a percentage of contracted conventional acreage; however, his market prices tend to be much

higher, so the crop insurance policy does not properly cover his risk. A nonprofit director confirmed this concern: “There are a lot of barriers to crop insurance. ... You may not be reimbursed at a rate that reflects the organic marketplace.” A technical assistance provider stated, “Organic pricing for crop insurance and payouts is nowhere near where organic commodity price is. ... Cotton is over [US]\$3/lb. but crop insurance is at about [US]\$1.50 ... so payments are not commensurate with the market.” Another technical assistance provider claimed that organic corn is always underinsured, because the insured price is based on a formula that has little to do with the actual market prices.

It is widely accepted that the WFRP has a lot of promise for organic and specialty crop systems. Its current form and the lack of agent knowledge about the program, however, mean that many farmers find it unhelpful. A technical assistance provider stated that paperwork is more difficult for the agent compared to a single-crop policy, and 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 other forms. A grain farmer stated, “If WFRP worked correctly and was easy to use, there should be no need for another insurance.” Similarly, a diversified producer stated that the paperwork for whole farm insurance is too cumbersome for his operation.

A prevailing issue with WFRP is that it is not helpful for farmers who also purchase single-crop policies. As a grain grower who had previously tried WFRP explained, insurance claims for other policies are deducted from what WFRP will pay: “If we insure one crop, it’s nearly impossible to ever get a payment for WFRP—it’s a double jeopardy.” Payment rates and subsidies for certain commodity crops are so good that many growers wouldn’t opt to cover their entire operation with WFRP; it is more profitable to only insure select crops, rather than the whole farm.

Crop insurance interest among organic farmers and their opinions about insurance vary. On the one hand, our analysis suggests crop insurance is helpful to those who purchase it, and some of the producers seek higher levels of risk mitigation. This

finding applies not just to organic grain producers, who tend to have the most successful experiences with insurance. On the other hand, some diversified growers are satisfied with the self-insurance provided by the combination of the organic farming system with the diversification of crops, and see no need for insurance. Another view is that while WFRP is promising, only a small number of organic producers purchase this type of insurance. We speculate that poor support from crop insurance agents, due to paperwork complexity, has contributed to declining enrollment of farmers in WFRP. This divergence in views suggests that even if all the kinks were worked out of the farm programs, not all producers would decide to buy insurance.

The structure of crop insurance, starting with the RMA definition of good farming practices and extending to assigned T-yields and price elections, poses barriers for organic growers, who believe the insurance provided is insufficient. Even still, organic grain growers consistently purchase crop insurance, which may indicate that crop insurance is needed for risk management for this subset of organic growers, although this may be a legacy of reliance of non-organic grain farmers on crop insurance. That said, intensifying climate change is likely to mean that farmers will need better tools for risk management. Reforming the design of the crop insurance program for organic producers would provide producers with better coverage, perhaps encouraging more farmers to protect their operations by purchasing insurance.

Findings Regarding Organic Producers’ Views of the Organic Cost Share

The Organic Cost Share is the only federal financial support specifically targeting organic producers; the program also applies to organic handlers. Organic Cost Share is generally well received and utilized across many operation types and sizes, and is viewed as the crucial USDA program available to support new and beginning organic farmers and handlers by partially offsetting organic certification costs. Among the farmers interviewed, reported certification costs ranged from about US\$1,500 to more than US\$9,000, depending on how many scopes are in the application and the certifying

agencies' pricing structures. The price of certification is set by each certifier, with varying pricing structures. Some certifiers base prices on operation sales levels, some have baseline fees, and others offer reduced fees to new operations. Handlers typically pay higher certification fees than producers. In addition to the certification costs, farm operators pay fees for their annual inspections. To receive the Organic Cost Share reimbursement, producers and handlers apply either to their state agency or to a USDA FSA office, submitting a completed application form, proof of certification, proof of payment, and an invoice listing certification costs.

Most organic farmers were positive about the Organic Cost Share, although many recommendations were made to increase its efficacy (Table 9). Large-scale and well-established operations view the Organic Cost Share amount as negligible, while smaller-scale and new producers realize more benefit from Organic Cost Share. As a diversified farmer said, "[Organic Cost Share is an] inherently wonderful program that has potential to make organic certification more reasonable." A representative from a nonprofit said that Organic Cost Share "is really important for smaller farmers and new farmers." By contrast, a large-scale grain grower explained that the program "makes [certification] super cheap, but even full certification cost is not much for me. I can absorb that cost very easily."

The interviewees offered many ways that Organic Cost Share could be restructured to better support new, beginning, young, and small-scale producers and handlers. For example, many felt that the program payments should be based on business income rather than everyone receiving the current flat rate amount. Many thought the amount was inadequate for newer farmers who can struggle to make certification payments. One farmer suggested that Organic Cost Share should "cover certi-

fication costs for all farms grossing less than US\$250,000 per year. ... I think this would lead to more certifications and more small farms thriving," and another argued that "certification for beginning farmers under 35 or in their first ten years should be free." Another affirmed providing more support for smaller-scale operations: "Payment should be based on farm income ... should cover 100% of costs for lower income farms, US\$75,000–100,000 per year." Another offered a different mechanism, in which producers transitioning to organic would be completely covered, and then "other farmers should have some skin in the game ... some ownership over [their certification] ... only paying 10–15% feels fair."

Some suggested ways to improve the administration of Organic Cost Share funds. A farmer stated, "The farmer should be able to work directly with their certifier and opt in/out of the program." To another individual working at a nonprofit, "Certifiers know how much [the farmer] paid, the cost of inspection. ... If they could administer it directly that would really streamline the program." A common suggestion was to have Organic Cost Share administered directly through the certifier, rather than reporting costs to a separate administering agency.

Certification costs can be a major obstacle to businesses considering transitioning to organic operation, which is layered on top of learning new ways of farming and handling. The mixed feedback from interviews suggests the program is falling short of its potential impact. By restructuring payments towards smaller-scale producers and new farmers, the program would be more equitable and impactful for new and lower-income farmers needing support. Furthermore, the inconsistencies in program administration across the country put farmers in some states at a disadvantage. These reforms could have a dramatic impact on the number of new certified operations in the future.

Table 9. Key Findings Regarding the Organic Cost Share

The program is more important for smaller and new operations.

The payment structure should be adjusted, sharing more of the certification costs for new and/or lower-income operations.

The administration and application of the program need to be improved.

Discussion

This research identified barriers that we loosely categorize as programmatic or institutional, although they are closely related. Programmatic obstacles are related to program design, such as T-yields, prices for crop insurance, and level payments for Organic Cost Share. Institutional barriers are related to the incentives facing agents, knowledge of organic operations, and other factors. Farm programs have strong potential to provide economic support to organic producers, yet due to the two kinds of barriers contain many shortfalls in implementation. Reasons for divergence between the potential and realization of farm program benefits are numerous. One may be cultural, the result of trying to adapt the longstanding support for nonorganic farms to programming suitable for organic producers, thus trying to fit a square peg into a round hole. Many commented on the mismatch between the operation of farm programs and organic farming methods. An organic policy analyst stated, “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 that “organic producers tend to be outside of the USDA ‘system’ and many feel like second class citizens.” 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 thus has a small voice. Similarly, an organic extension agent stated that “lawmakers ... want programs to fit the masses” and that the number of organic farmers is minuscule. Feeling excluded from USDA farm programs, or not understood by the USDA, may lead some producers to give up on EQIP, CSP, and crop insurance.

The Organic Cost Share lacks the cultural barrier to adoption by organic farmers, as evidenced by the program’s historically strong participation rates. The relative ease of application and the lack of requirements for paperwork beyond organic certification and receipts mean that the barriers for participating are low. That said, many interviewees suggested improvements to the program that would shift it to mainly supporting new and small-scale organic farmers and handlers. Another sug-

gestion was to streamline the reimbursement process, by during the initial or renewal certification having the certifier automatically apply on behalf of the producer or handler.

A main finding of this work is that retrofitting existing USDA programs, as has been done for EQIP, CSP, and crop insurance, is an ineffective way to support organic growers. Too many barriers exist, so that some farmers who want to participate are excluded for institutional or programmatic reasons. But the decline in Organic Cost Share disbursements in recent years points to additional programmatic challenges, which appear to be related to the amount of funds available for the program. Nevertheless, the interviews highlight that this program, developed specifically for organic growers, is the most widely used although it also delivers the smallest benefits.

Each farm program examined has room for improvement. While not all organic farmers wish to participate, improving the programs would make them accessible to those who are interested. To do so is an important step.

Policy Recommendations and Looking Ahead

Congress and the USDA are aware of the friction that has been caused by retrofitting farm programs to include organic farmers. As a result, since 2008 farm bills have included provisions to reduce obstacles faced by organic farmers to access farm programs (Carlson et al., 2023), although the types of obstacles were not specified. Unquestionably, the small size of the organic farm sector makes delivering EQIP, CSP, and crop insurance challenging. After all, in 2021 slightly more than 17,000 farms in the U.S. were certified as organic, of 2,012,500 farms (USDA NASS, 2022), and only four states had more than 1,000 certified organic operations (USDA NASS, 2023). In 2023, more than 9,000 NRCS employees worked in 2,300 service centers around the nation (USDA NRCS, n.d.). Thirteen private companies were selling crop insurance, through agents, in 2022 (U.S. Government Accountability Office, 2023).


It appears likely that agents, both for crop insurance and NRCS, do not encounter organic producers enough to develop a strong base of

knowledge. A significant finding of our work is the significant barrier organic farmers face in the inconsistent and inadequate knowledge that agents possess, resulting in lower use of conservation and crop insurance programs. There have been calls for more consistent training for years, but as an advocate at a nonprofit pointed out, “Most success I’ve seen is when a local agent cares about organic and wants to make it work. ... Even with billions of dollars of investment, it comes down to individual people and their relationships with individual farmers.” Others have identified lack of NRCS agent knowledge about organic systems as problematic (Han et al., 2022).

In 2023, RMA announced that new guidelines for organic producers are being written, intended to improve farmer knowledge about crop insurance requirements (Tolle, 2023). A step RMA is taking towards improving crop insurance for organic farmers is revising the Good Farming Practices handbook, stating that all conservation practices supported by NRCS will be considered good farming practices for crop insurance (Tolle, 2023; USDA RMA, 2023b). Coordinating federal agency requirements—the Organic System Plan for organic certification, best practices for conservation program participation, and good farming practices for crop insurance—would reduce the burden on organic producers. Efforts to improve the farm programs need to be evaluated to ensure that the changes are improving the programs for organic producers. An opportunity is at hand, with the planned RMA training materials and the planned coordination of the NRCS and RMA good farming practices standards.

Conceptually, the incentive that would result in increased knowledge about organic operations will differ for conservation and crop insurance agents. For conservation program agents, typically government employees, incentives for improving their delivery of conservation funds and technical assistance to organic producers might be required annual training. For crop insurance agents, who are paid on commission and are private sector employees, a different approach is needed. Research finds evidence supporting a “volume effect” for agent behavior, agents seeking to sell as many policies as possible to maximize their com-

missions (DeLay et al., 2020). The agent who is maximizing commissions is unlikely to write time-consuming policies such as WFRP or spend time learning about the needs of organic producers. Our findings indicate that some agents, both insurance and conservation, are knowledgeable about and interested in organic farming, and helpful to organic producers. However, the lack of general knowledge plus the current incentive structure suggests that institutional barriers are keeping some organic farmers from these programs. Agents are the main point of contact that organic farmers have with crop insurance and conservation programs, and clearly their effectiveness has an impact on farmer participation in such programs.

An alternative solution could be to instate USDA agents, perhaps on a regional basis, specifically tasked with providing technical support to organic and transitioning farmers, ensuring that growers are working with agents who are fluent in organic farming practices and knowledgeable about the programming best suited to their needs. This could be accomplished through the creation of an Organic Agent Corps, consisting of agents with deep knowledge of EQIP, CSP, and crop insurance for organic producers. Depending on the program, these agents would work regionally, their names provided on the RMA and NRCS websites. Given the differences between the conservation and crop insurance programs, it would seem that a greater number of organic conservation experts would be needed. By sharpening the delivery and design of programs through addressing the points raised by those we interviewed, and tackling the institutional barriers with specialized organic agents, the Organic Cost Share, EQIP, CSP, and crop insurance program would be better positioned to help organic farmers navigate the challenging years ahead. 

Acknowledgments

We thank the two anonymous JAFSCD reviewers for their helpful comments and feedback. We also thank the many farmers and representatives of organic food and agriculture organizations for their willingness to talk with us. Any remaining errors belong to the authors.

References

- Baylis, K., Coppess, J., Gramig, B. M., & Sachdeva, P. (2022). Agri-environmental programs in the United States and Canada. *Review of Environmental Economics and Policy*, 16(1), 83–104. <https://doi.org/10.1086/718052>
- Behar, H., & Stein, M. (2019). *Introduction to crop insurance for organic and transitioning producers*. U.S. Department of Agriculture Risk Management Agency, Organic Farming Research Foundation. <https://ograin.cals.wisc.edu/wp-content/uploads/sites/65/2019/03/Introduction-to-Crop-Insurance.pdf>
- Belasco, E. J., & Fuller, K. B. (2022). Who buys crop insurance? Predictors of the participation gap between organic and conventional farms. *Applied Economic Perspectives and Policy*, 44(3), 1554–1572. <https://doi.org/10.1002/aecpp.13187>
- Carlson, A., Greene, C., Raszap Skorbiansky, S., Hitaj, C., Ha, K. A., Cavigelli, M., Ferrier, P., & McBride, W. D. (2023). *U.S. organic production, markets, consumers, and policy, 2000–21* (ERR-315). U.S. Department of Agriculture Economic Research Service. <https://www.ers.usda.gov/publications/pub-details/?pubid=106015>
- Conservation Assessment Ranking Tool. (n.d.). *The Conservation Assessment Ranking Tool: Initial observations and next steps*. U.S. Department of Agriculture. <https://the-conservation-assessment-ranking-tool-nrcs.hub.arcgis.com/>
- Delate, K., Cambardella, C., Chase, C., & Turnbull, R. (2015). A review of long-term organic comparison trials in the U.S. *Sustainable Agriculture Research*, 4(3), 5–14. <https://doi.org/10.5539/sar.v4n3p5>
- DeLay, N. D., Chouinard, H. H., Walters, C. G., & Wandschneider, P. R. (2020). The influence of crop insurance agents on coverage choices: The role of agent competition. *Agricultural Economics*, 51(4), 623–638. <https://doi.org/10.1111/agec.12576>
- Delbridge, T. A., & King, R. P. (2018). How important is the transitional yield (t-yield)? An analysis of reforms to organic crop insurance. *Agricultural Finance Review*, 79(2), 234–254. <https://doi.org/10.1108/AFR-03-2017-0022>
- Hamilton, S. (2020). Crop insurance and the New Deal roots of agricultural financialization in the United States. *Enterprise & Society*, 21(3), 648–680. <https://doi.org/10.1017/eso.2019.43>
- Han, G., Grudens-Schuck, N., Arbuckle, J. G., & Martin, R. A. (2022). Adoption challenges, needs for extension programming, and program delivery formats for organic grain producers in the U.S. Corn Belt. *Agroecology and Sustainable Food Systems*, 46(2), 200–233. <https://doi.org/10.1080/21683565.2021.1988800>
- Monke, J., Stubbs, M., & Aussenberg, R. (2024). *Expiration of the 2018 Farm Bill and Extension in 2024* (No. R47659). Library of Congress, Congressional Research Service. <https://crsreports.congress.gov/product/pdf/R/R47659>
- Morris, M., Belasco, E., & Schahczenski, J. (2019). *Is organic farming risky? Improving crop insurance for organic farms*. National Center for Appropriate Technology. <https://attra.ncat.org/publication/is-organic-farming-risky/>
- National Sustainable Agriculture Coalition. (2017). *An agenda for the 2018 Farm Bill*. <http://sustainableagriculture.net/wp-content/uploads/2017/10/NSAC-2018-Farm-Bill-Platform-FINAL.pdf>
- Raszap Skorbiansky, S. R., Astil, G., Rosch, S., Higgins, E., Ifft, J., & Rickard, B. J. (2022). *Specialty crop participation in federal risk management programs* [EIB No. 241]. U.S. Department of Agriculture Economic Research Service. <https://doi.org/10.22004/ag.econ.329075>
- Schnepf, R., & Stubbs, M. (2020). *U.S. farm programs: Eligibility and payment limits*. Library of Congress, Congressional Research Service. https://www.everycrsreport.com/files/20200303_R46248_ef8ab1772585fd2b4bfba0f842771ed526b8d952.pdf
- Shields, D. (2014). *Crop insurance provisions in the 2014 farm bill* (P.L. 113-79). Library of Congress, Congressional Research Service. https://www.everycrsreport.com/files/20140422_R43494_f17af399fbec96ef6b3c95d152a53289a8b9e118.pdf
- Tolle, F. K. (2023, October 25). *Federal crop insurance update*. U.S. Department of Agriculture, Risk Management Agency. https://www.ams.usda.gov/sites/default/files/media/Tolle_RMA_Final_Organic_PPT_2023.pdf
- Tsiboe, F., & Turner, D. (2023, May 3). *Crop insurance at a glance*. U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/topics/farm-practices-management/risk-management/crop-insurance-at-a-glance/>

- U.S. Department of Agriculture [USDA]. (2022, January 10). *USDA offers expanded conservation program opportunities to support climate smart agriculture in 2022* [Press release]. <https://www.usda.gov/media/press-releases/2022/01/10/usda-offers-expanded-conservation-program-opportunities-support>
- USDA Farm Service Agency [FSA]. (2023a). *Organic Certification Cost Share Program (OCCSP)*. <https://www.fsa.usda.gov/programs-and-services/occsp/index>
- USDA FSA. (2023b). *USDA announces new steps to enhance organic markets and support producers*. <https://www.fsa.usda.gov/news-room/news-releases/2023/usda-announces-new-steps-to-enhance-organic-markets-and-support-producers>
- USDA National Agricultural Statistics Service [NASS]. (2022). *Certified Organic Survey 2021 summary. Appendices A. Statistical methodology*. <https://downloads.usda.library.cornell.edu/usda-esmis/files/zg64tk92g/2z10z137s/bn99bh97r/cenorg22.pdf>
- USDA NASS. (2022). *Farms and land in farms 2021 summary (February 2022)*. https://www.nass.usda.gov/Publications/Todays_Reports/reports/fnlo0222.pdf
- USDA NASS. (2023). *Surveys. Organic agriculture: About the Organic Program*. https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Organic_Production/index.php
- USDA Natural Resources Conservation Service [NRCS]. (n.d.). *About NRCS*. <https://www.nrcs.usda.gov/about>
- USDA NRCS. (2022, October). *RCA Data Viewer. NRCS conservation programs: Acres receiving conservation by program and fiscal year*. https://publicdashboards.dl.usda.gov/t/FPAC_PUB/views/RCAAcresReceivingConservationbyProgramandFY/AcresReceivingConservationbyProgramandFiscalYear?embed=y&:isGuestRedirectFromVizportal=y
- USDA Risk Management Agency [RMA]. (2023a, May 1). *Federal crop insurance summary of business for organic production*. <https://www.rma.usda.gov/-/media/RMA/SOB-Reports/SOB-Organics/2022organic.ashx?la=en>
- USDA RMA. (2023b, December 6). *USDA improves crop insurance to better support conservation, climate-smart practices* [News release]. <https://rma.prod.usda.gov/news-events/news/2023/washington-dc/usda-improves-crop-insurance-better-support-conservation>
- U.S. Government Accountability Office. (2023, November 7). *Crop insurance: Update on opportunities to reduce program costs*. <https://www.gao.gov/products/gao-24-106086>