2024

EVALUATING BARRIERS TO ORGANIC PRODUCTION IN NORTH & SOUTH CAROLINA SURVEY REPORT

REPORT PREPARED BY:

CENTER FOR ENVIRONMENTAL FARMING SYSTEMS (CEFS) AND NC STATE EXTENSION

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Evaluating Barriers to Organic Production in North and South Carolina

Survey Report

Report Prepared By:

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United States Department of Agriculture
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Introduction

This document summarizes the result from a farmer survey conducted in North Carolina and South Carolina as part of the Southeast Transition to Organic Partnership Program (TOPP) funded by USDA-AMS. The purpose of this survey is to understand production, market, and regulatory barriers farmers face to organic certification. This survey also aims to understand which USDA programs farmers engage with and their perceptions of those programs. While not representative of all farms across the two states, the results from this survey will be used to prioritize future educational and research needs. The results from this survey will be shared with regional partners and the program funder.

Acknowledgements

We express gratitude and appreciation to the farmers who took the time to complete this survey while managing a complicated business along with the USDA-AMS for funding this project.

Methodology

The survey tool was developed in partnership between NC State Extension, Clemson Extension, Center for Environmental Farming Systems, Carolina Farm Stewardship Association, Central Carolina Community College, and Organic Growers School. The survey was available in English and Spanish and was distributed through partner listservs via Qualtrics from February 8, 2024 through July 15, 2024. The survey was kept open for a longer period of time due to attempts to capture responses as farmers were starting a new growing season. In adherence to ethical research standards, the study followed the NC State University Institutional Review Board (IRB) protocol number 26663 to ensure participant privacy and informed consent. All questions were voluntary, so response counts vary by question in this report.

2024 North & South Carolina Barriers to Organic Production Survey Results

1. Participant Overview

This section describes characteristics of survey respondents. A series of questions asked them about demographics, farm characteristics and practices, and market channels that they sell to. These results are important for framing the rest of the findings.

A. Participant Demographics

This survey examines the challenges farmers face in transitioning to or maintaining organic production. A total of 72 farmers from North Carolina (76%, n=25) and South Carolina (24%, n=8) participated, with 71 consenting to the research. Table 1 summarizes the demographics that were reported by the participants. Participants were given the option to answer as many or as few questions as they chose, resulting in varying response rates across survey items. Notably, response rates for demographic questions were low, with fewer than half of participants opting to provide this information.

Race, Ethnicity, and Gender

Among the 32 respondents who answered the race and ethnicity question, a significant majority, 69% (n=22), identified as White, emphasizing the overrepresentation of this group within the respondent population. African American or Black respondents constituted the next largest group, representing 12% (n=4). Hispanic, Latinx, or Spanish Origin respondents followed at 9% (n=3). Additional ethnic groups were represented but due to low responses they are not reported for confidentiality reasons. Gender responses (n=32) show that 56% (n=18) identified as female and 37% (n=12) as male. Additional gender identities were reported but not in significant numbers to be included in this report.

Veteran Status

Among 33 respondents, 94% (n=31) reported that they were not U.S. military veterans or active-duty service members.

Economic and Farming Background

Out of 33 respondents, an overwhelming majority (97%, n=32), identified as limited resource farmers, operating under the USDA income threshold of $189,200. This underscores financial barriers that limit access to capital, technical support, and participation in federal programs—critical components for sustaining organic operations. The high response rate for this question suggests that financial constraints are a key concern for survey participants.

Additionally, 70% (n=22) identified as beginning farmers, meaning they have been farming for fewer than 10 years. This suggests a growing interest in organic production among newer entrants, yet also signals key challenges as these farmers often face distinct challenges in accessing affordable land, capital, and technical expertise, and they must also navigate complex administrative processes for conservation and financial assistance programs for the first time. These dynamics have important implications for agricultural policy and support systems. Meanwhile, 30% (n=10) of respondents have farmed for over a decade, indicating a subset of experienced producers who may play a role in mentorship and community resilience.

Table 1. Overview of participant demographics. Percentages may not add up to 100% due to outliers being removed.

Farm Location	*North Carolina*	75.80% (25)
	South Carolina	24.20% (8)
Race / Ethnicity	*African American or Black*	12.50% (4)
	Hispanic, Latinx, or Spanish Origin	9.30% (3)
	White	68.70% (22)
Gender	*Male*	37.50% (12)
	Female	56.20% (18)
US Veteran / Active Duty Service Member	*Yes*	N/A
	No	93.90% (31)
Limited Resource Farmer	*Yes*	97% (32)
	No	N/A
Beginning Farmer / Rancher	*Yes*	69.70% (22)
	No	30.30% (10)

B. Farm Characteristics

Farmers were asked to indicate how many acres of their land are currently certified as organic, in transition to being certified as organic (a three year long process), and how many acres are used for conventional farming. These questions did not ask whether land in production is owned or rented.

Certified Organic Acreage

Among 38 respondents, 63% (n=24) reported no certified organic acreage, while 18% (n=7) managed 1–5 acres, and 16% (n=6) managed 6–20 acres. One outlier was removed for confidentiality. These findings (Figure 1) suggest that while some farmers operate small to moderate certified plots, the majority either lack certification or are operating at a very small scale.

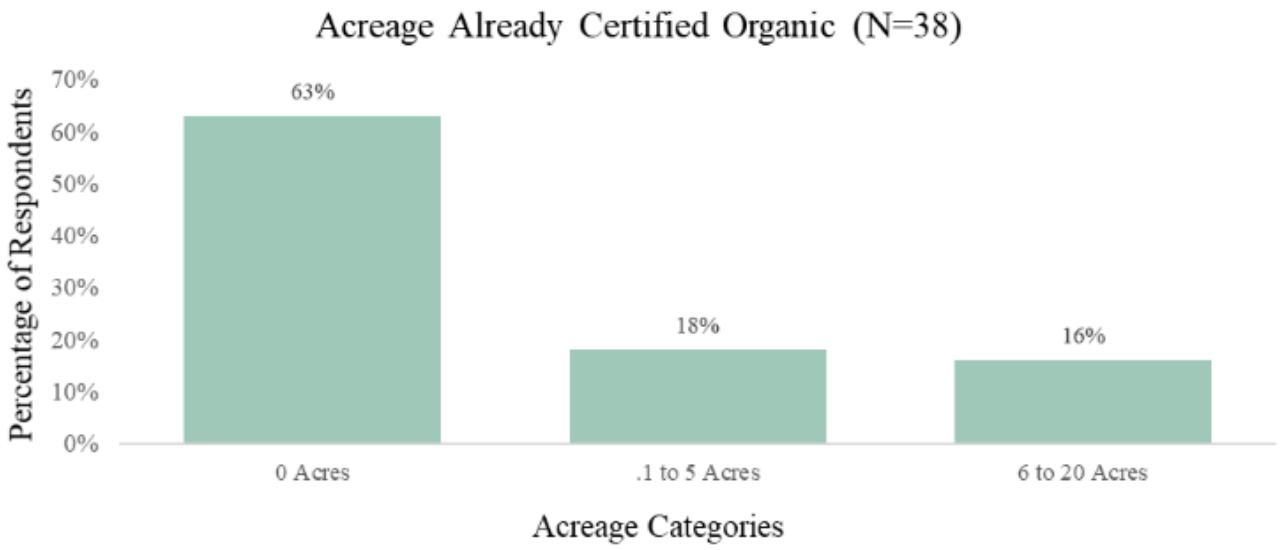

Figure 1. The distribution of certified organic acreage among survey respondents by percentage. The majority report having 0 acres certified organic. Percentages may not add up to 100% due to outliers being removed for privacy considerations.

Transitioning to Organic Acreage

Of 40 respondents, 67% (n=26) reported no acreage in transition to organic, while 21% (n=8) were transitioning 1–4 acres, and 8% (n=3) were transitioning 5–10 acres. A small number reported transitioning over 10 acres but are not reported for confidentiality.

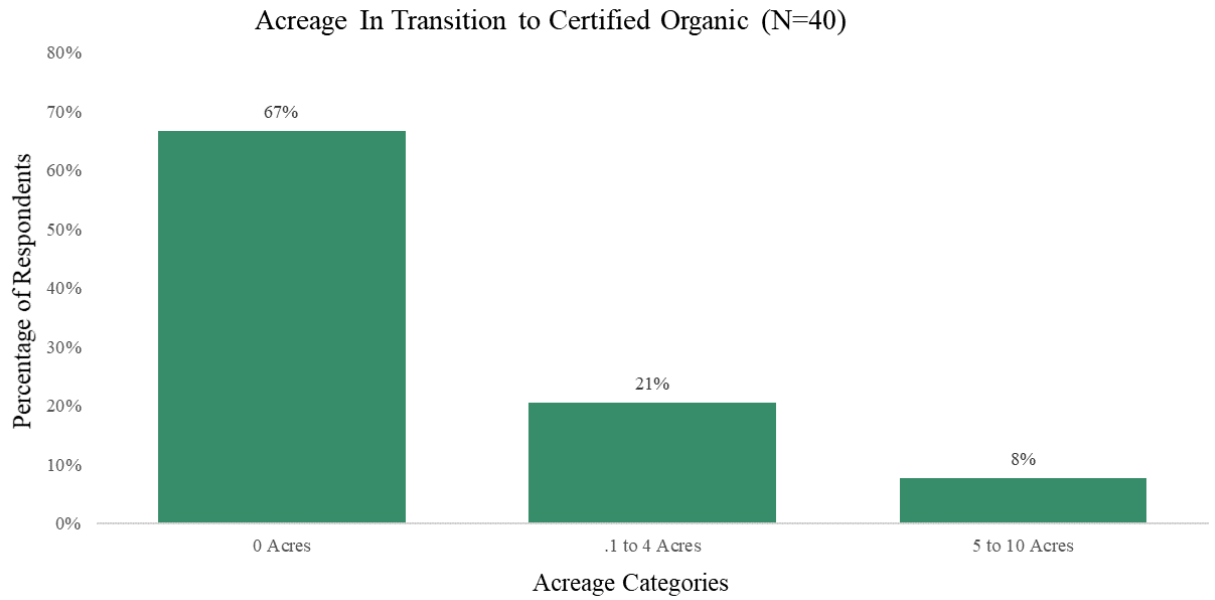

Figure 2. This graph shows the distribution of acreage reported by respondents as being in transition to certified organic status. The majority indicated having 0 acres in transition. Percentages may not add up to 100% due to outliers being removed for privacy considerations.

Conventional Farming Acreage

Among 38 respondents, 45% (n=17) reported no conventional acreage, while 29% (n=11) managed 1–5 acres, 16% (n=6) managed 6–20 acres, and 10% (n=4) managed over 20 acres. Figure 3 illustrates that while some farmers have shifted away from conventional farming, others maintain small to moderate conventional plots, with a minority managing larger acreages. Figure 4 provides a comparative visualization of land use categories.

Taken together, these distributions reveal that most respondents are managing very limited acreages across all production types— certified organic, transitional, and conventional. This points to a broader pattern: farmers in this sample are largely operating on small farms, with few managing more than 20 acres in any category. The prevalence of small-scale operations has important implications for how these farmers navigate certification processes, market access, and resource constraints. It also raises questions about the types of support and infrastructure best suited to meet the needs of producers working at this scale.

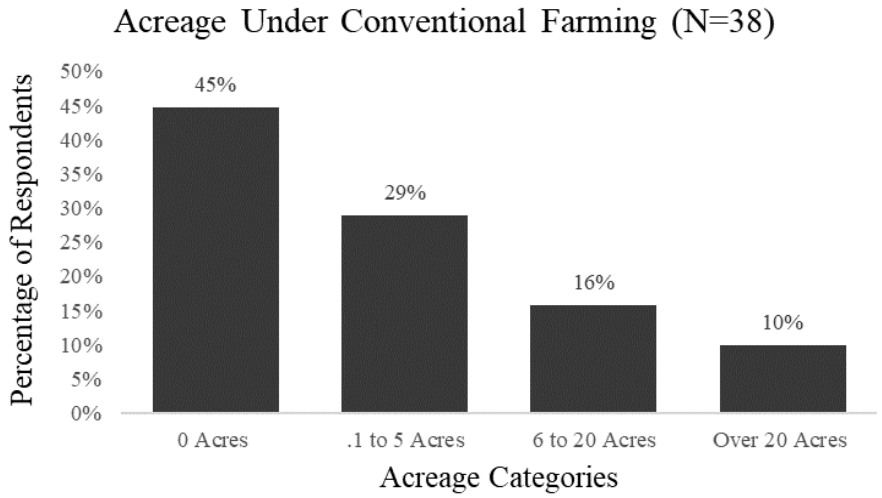

Figure 3. This bar graph shows the distribution of acreage dedicated to conventional farming practices among survey respondents, by percentages. These findings indicate that while a significant portion of respondents do not engage in conventional farming, others maintain varying levels of conventional acreage, with most managing small plots.

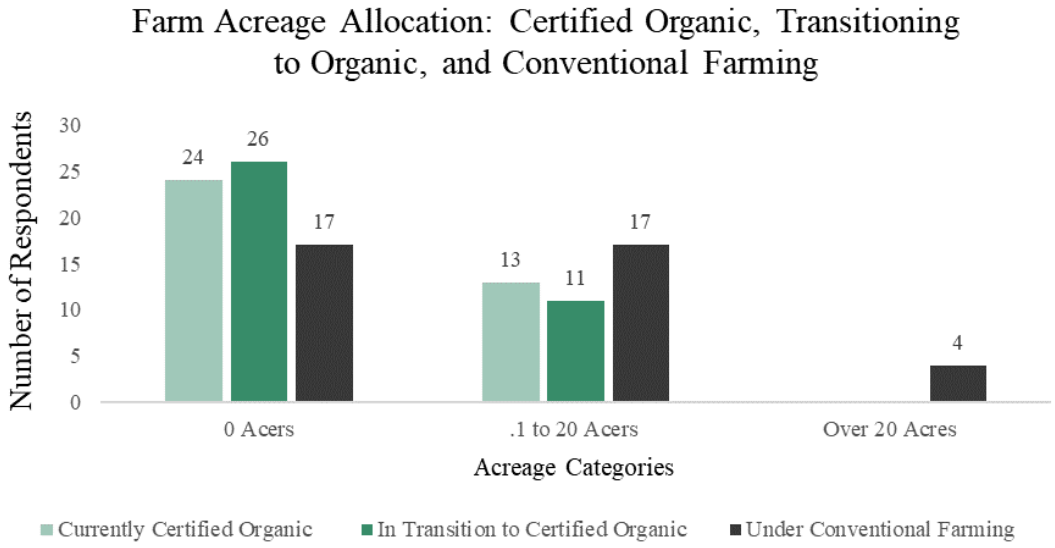

Figure 4. This bar graph compares the number of respondents reporting acreage allocated to three categories: certified organic, transitioning to organic, and conventional farming. Notably, only 4 respondents reported managing over 20 acres under conventional farming, indicating that most operations are small in scale.

Farm Products

The bar graph below (Figure 5) illustrates the distribution of farm product types reported by respondents who were prompted to select all that apply. Out of 110 product types, vegetables represent the largest category, comprising 26% (n=29) of the total responses, followed by fruit (16%, n=18) and culinary or medical herbs (17%, n=19). Eggs account for 13% (n=14), with poultry (7%, n=8) and beef, pork, or other livestock (5%, n=6) making up the next tier. On the lower range are hay and forage at 5% (n=5) and grains and row crops at 4% (n=4). Other products (6%, n=7) were reported but at such low percentages that they cannot be analyzed alone, and thus make up the"other" category which includes mushrooms, fiber, and dairy. This distribution highlights a strong emphasis on vegetable, fruit, and poultry production, while other categories reflect more specialized or less common farm outputs.

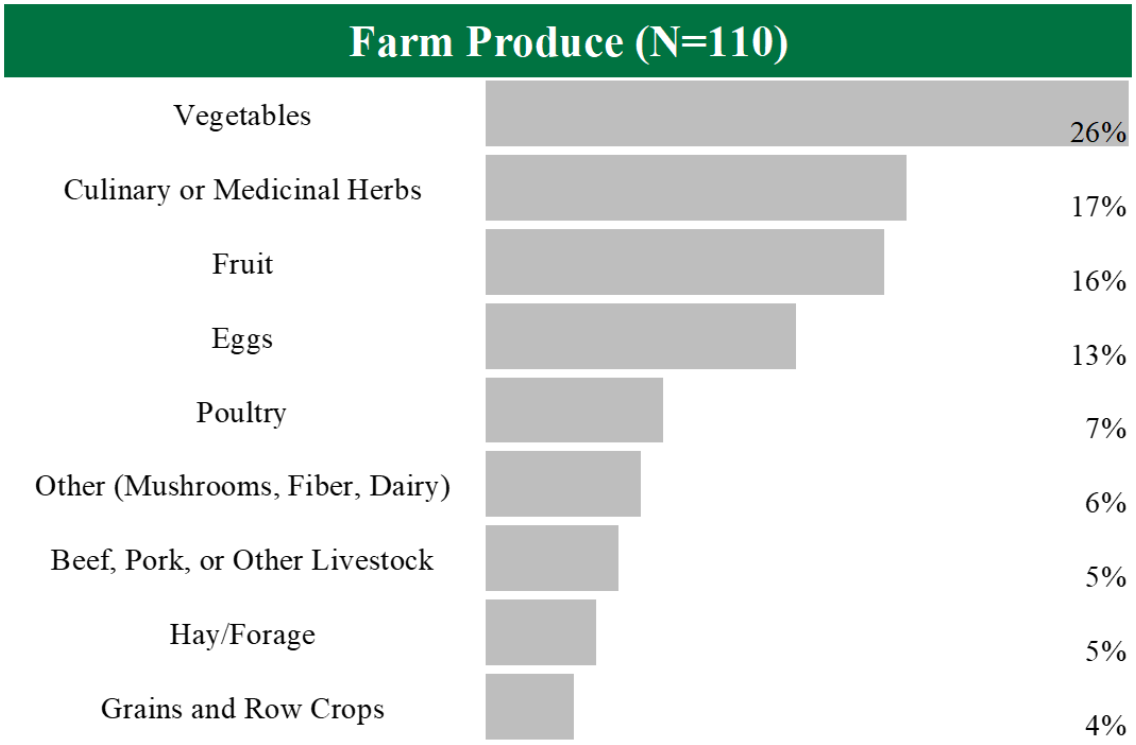

Figure 5: This bar graph illustrates the types of produce cultivated by survey respondents. The diversity of produce types reflects a wide range of farming operations among the respondents. Participants were told to select all that apply.

Adoption of Sustainable Practices

Table 2 summarizes respondents' current production practices, and those they are interested or uninterested in adopting. Please note that total counts vary. Organic practices emerged as the most widely adopted production method, with 84% (32 out of 38 respondents) reporting current usage. Given that 63% of farmers previously reported no certified organic acreage, many may be using organic methods without formal certification or see value in organic practices without an official label. Notably, no respondents reported disinterest in organic practices.

Crop rotation (83%, 30 out of 36) followed as the next most widely adopted method. Cover crops (68%, 26 out of 38) and integrated pest management (68%, 25 out of 37) also showed strong adoption rates. Lower adoption rates were observed for high tunnels (43% currently using, n=15) and seed saving (39%, n=14), with future interest at 31% and 33%, respectively. This suggests moderate appeal but potential growth in these areas

Value-added production had the highest future adoption interest, with 55% (21 out of 38) indicating plans to implement it. Conservation tillage (47%, 17 out of 36) and no-till farming (47%, 17 out of 36) also showed notable interest for adoption despite lower current usage. These findings suggest a strong commitment to sustainable practices, with emerging interest in diversification and reduced tillage methods. It is noteworthy that no-till farming, despite having notable future interest, also displayed 22% (8 out of 36) of respondents expressing disinterest, indicating some polarization regarding its applicability.

Overall, the data reflect a landscape of diverse production practices, with widespread adoption of organic methods and crop rotation, coupled with growing interest in conservation-based and value-added practices. The variation in adoption and interest across practices highlights both established priorities and emerging opportunities for innovation and resource support within the farming community.

Table 2. This table presents respondents' engagement with a range of sustainable agricultural practices, indicating whether they are currently using them, interested in using them in the future, or not interested in using them. Organic practices are the most widely adopted, demonstrating a strong commitment to organic production methods. Percentages may not add up to 100% due to outliers being removed for privacy considerations.

Sustainable Agricultural Practices						
Production Type	*Currently Using*		*Interested in Using in the Future*		*Not Interested in Using*	*Total*
Cover Crops	68%	26	26%	10		38
Organic Practices	84%	32	16%	6	0% 0	38
Value-Added	32%	12	55%	21	13% 5	38
Integrated Pest Management	68%	25	30%	11		37
Conservation Tillage	36%	13	47%	17	17% 6	36
Crop Rotation	83%	30	8%	3	8% 3	36
Financial Recordkeeping, Monitoring, and Planning	67%	24	31%	11		36
No Till	31%	11	47%	17	22% 8	36
Seed Saving	39%	14	33%	12	28% 10	36
Food Safety Procedures	60%	21	29%	10	11% 4	35
High Tunnels	43%	15	31%	11	26% 9	35

Production Practices

The pie chart in Figure 6 highlights production practices among 33 respondents. The majority, 58% (n=19), indicated that they use some organic practices but are not certified, underscoring a significant population of farmers adhering to organic methods without formal certification. This suggests widespread devotion to organic methods despite potential barriers to getting certified. A notable 21% (n=7) are certified organic, reflecting a committed group meeting formal certification standards, while 15% (n=5) are in transition, signaling a shift toward certified production. Together, these findings illustrate a nuanced landscape of organic production adoption, where a majority embrace organic methods informally, while smaller groups pursue or consider certification. Supporting farmers through this transition will require targeted resources to address cost, technical, and administrative barriers.

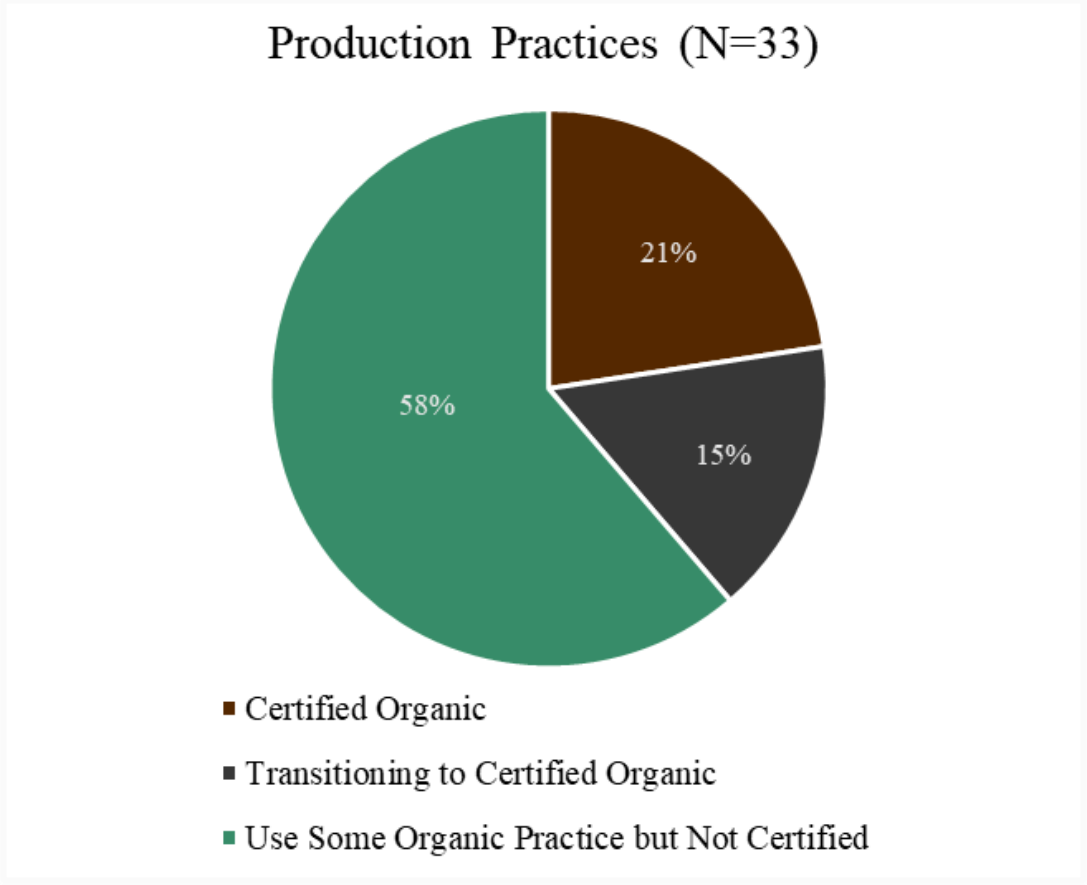

Figure 6. The distribution of respondents based on their production practices. A majority use some organic practices but are not certified. The prominence of uncertified organic practices suggests that many respondents adhere to organic methods without seeking formal certification. Percentages may not add up to 100% due to outliers being removed for privacy considerations.

C. Primary Market Channels

The graph in Figure 7 highlights the distribution of primary market outlets utilized by farmers to sell their produce, emphasizing a strong reliance on direct-to-consumer channels. Out of 89 responses, farmers markets (26%, n=23), other direct-to-consumer outlets like farm stands (24% or 21 responses), and community supported agriculture (CSA) programs (13%, n=12) dominate the market landscape. Secondary channels, including agritourism (12%, n=11) and restaurant sales (9%, n=8), reflect efforts to diversify income streams. However, engagement with wholesale (7%, n=6) and food hubs (6%, n=5) remains limited. Institutional buyers and food processors were also mentioned but are not included in the figure due to low response rates.

These findings become more revealing when considered alongside acreage data, which suggests that most respondents are operating at a small scale. As previously mentioned, while many farmers indicate practicing organic methods, few hold USDA organic certification. The strong reliance on direct-to consumer outlets— such as farmers markets, farm stands, and CSAs— may suggest the realities of farming at a smaller scale, where farmers rely on personal relationships and community-based trust rather than formal certification to communicate their farming values. This emphasis on local, relationship-based marketing may help explain the limited engagement with wholesale and institutional markets, which typically require larger volumes and certification status.

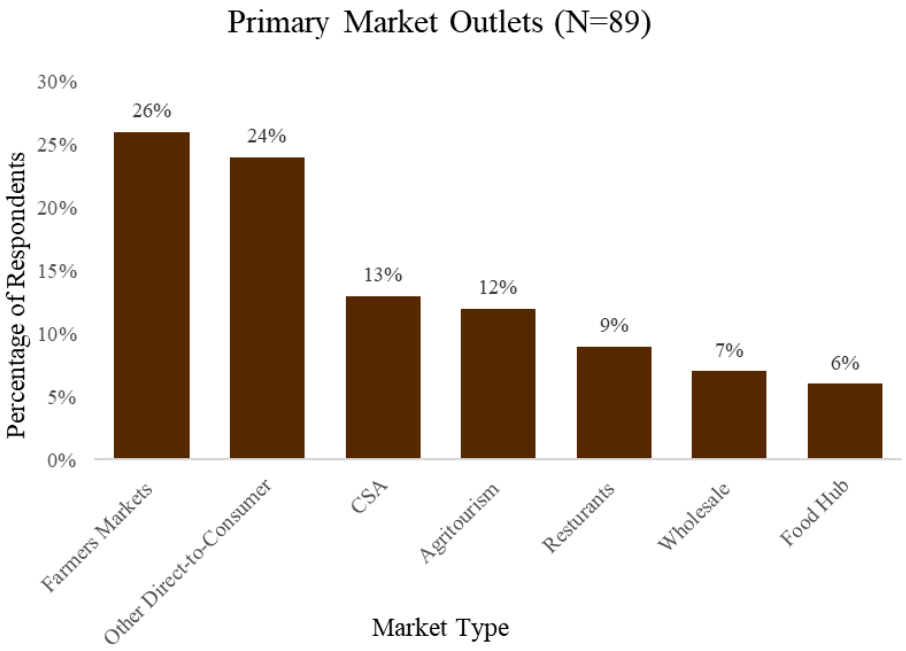

Figure 7. This graph shows the primary market outlets utilized by respondents to sell their produce. These results highlight a preference for direct-to-consumer sales over institutional or wholesale markets. Participants were told to select all that apply. Some data has been removed for privacy considerations.

2. Transitioning to Organic

A. Certification Barriers

Administrative and Financial Barriers

The bar graph in Figure 8 illustrates the proportional distribution of barriers reported by farmers during, or preventing, their transition to organic certification, providing insight into the challenges associated with this process. The data reveal that economic constraints dominate the challenges faced by farmers. Of 161 response counts, the initial cost of certification ranks as the most significant barrier, with 17% (n=28) of respondents identifying it as a challenge, followed closely by general recordkeeping (17%, n=27) and the costs of annual inspections (17%, n=27). These financial and administrative burdens suggest that the transition to organic production involves substantial upfront investments and ongoing compliance costs, which may deter participation.

Administrative complexities are further reflected in the mid-tier barriers including managing an Organic System Plan (OSP) (10%, n=16) and a lack of knowledge and information about the certification process (8%, n=13). These challenges underscore the complexity of the certification process, which demands significant technical expertise and operational adjustments. Furthermore, concerns about government oversight of production practices, the 3-year organic transition period, and interactions with the organic certifier were all cited by 7% respondents (n=11), reflecting apprehensions about regulatory requirements and institutional interactions. A less frequently reported barrier includes the lack of nearby organic certifying agencies (6%, n=9). This lower count indicates that while logistical and unspecified challenges exist, they are less pressing compared to financial and procedural obstacles.

However, the standardized response categories alone do not capture the full spectrum of certification challenges faced by farmers, as reflected in the additional insights provided by open-ended responses. The responses categorized as "other" accounted for 5% (n=8) of findings, and provide valuable short answer responses that speak to systemic, philosophical, and procedural challenges that extend beyond the commonly cited barriers to organic certification. Collectively, these responses underscore three overarching themes: the perceived misalignment of certification with small-scale farming realities, philosophical objections to the organic industry, and frustrations with inconsistencies in the certification process.

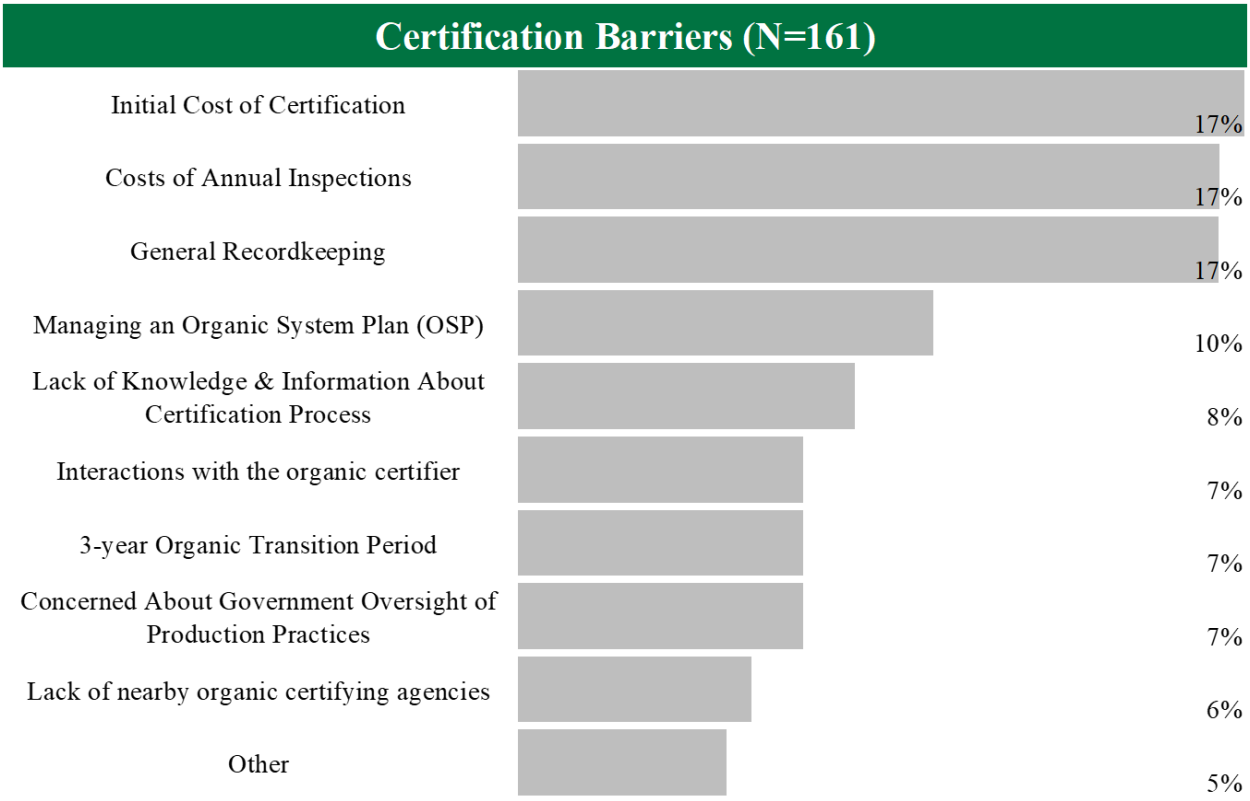

Figure 8. This graph shows the reported certification barriers to transitioning to organic among respondents. The findings suggest that financial and administrative burdens are the primary obstacles encountered by farmers. Participants were told to select all that apply.

Misalignment of Certification

A key concern is the structural mismatch between organic certification systems and the needs of small-scale, direct-to-consumer farms. Farmers expressed frustration with the burdensome nature of the certification process, particularly the System of Organic Enforcement (SOE), which was described as overly restrictive for small operations. One farmer also mentions SOE limits market infrastructure for sourcing organic-certified inputs and buyers, as handlers must also be organic certified, creating a significant challenge.

Philosophical Objections

Philosophical objections to the organic certification process further complicate its adoption. Several farmers questioned the value of certification in local markets, with one farmer questioning the necessity of certification in areas where direct consumer trust and local identity

negate the value of formal labels: "*Market is great in the area so what is the point in being certified? Customer[s] identif[y] with farm and farmer, so trust is built. So, organic [is] not as important."* Another farmer's response reveals a deeper tension between personal definitions of organic production and institutionalized standards, reflecting how moral and philosophical interpretations of "organic" shape their willingness to pursue certification. By framing hydroponics as *"just adding chemicals to water"* the farmer challenges the legitimacy of regulatory definitions, signaling a broader critique of how certification processes can dilute the ideological purity of organic farming.

These critiques reflect a broader skepticism of the certification system's alignment with the foundational values of organic farming, with some farmers perceiving it as antithetical, and as a commodified industry that prioritizes profit over ecological integrity. For example, one farmer reported: "i*t's not about the product. It is about the organic industry.*"

Inconsistencies in Certification Process

Lasty, a recurring theme among the "other" responses was dissatisfaction with the procedural and regulatory inconsistencies within the certification system. More than one farmer noted that rules under the National Organic Program (NOP) have shifted from their original intent and are subject to arbitrary interpretation by inspectors. Inconsistent enforcement, coupled with inadequate oversight mechanisms, undermines trust in the system's legitimacy and fairness. These concerns highlight the need for greater standardization and transparency in how certification rules are implemented and enforced.

Overall, the data here suggests that financial and administrative hurdles represent the most significant barriers to transitioning to organic production, potentially limiting participation among small-scale farmers who lack the necessary resources. Small-scale farmers require a system that is both flexible and accessible, with improved market infrastructure to support their participation. Furthermore, rebuilding trust in the certification system will require a renewed focus on its core principles, accompanied by mechanisms to ensure uniform rule enforcement and accountability. These findings suggest that the success of organic certification depends not only on reducing barriers to entry but also on realigning the system with the diverse needs and values of the farming community.

B. Production Barriers

Operational Constraints

The bar graph in Figure 9 reveals the diverse and interconnected barriers faced by farmers transitioning to certified organic production, offering valuable insight into the structural and operational challenges inherent in this process. Out of 76 responses, the most frequently cited issue, representing 24% (n=18), is the lack of allowable inputs from local suppliers, such as certified organic seed, fertilizer, and pest control. This highlights a significant gap in the availability of necessary resources, which undermines farmers' ability to comply with organic standards and creates a reliance on external supply chains that may be inaccessible or prohibitively expensive.

Complementing this challenge are two operational constraints: loss of flexibility with respect to pest and disease treatments (16%, n=12) and loss of flexibility in crop rotations and fertility management (9%, n=7). Together, these issues reflect a broader tension between the regulatory rigidity of organic certification and the adaptive strategies required to address the dynamic realities of agricultural production. Such rigidity may deter farmers who perceive these standards as impractical or misaligned with the ecological complexities of farming systems.

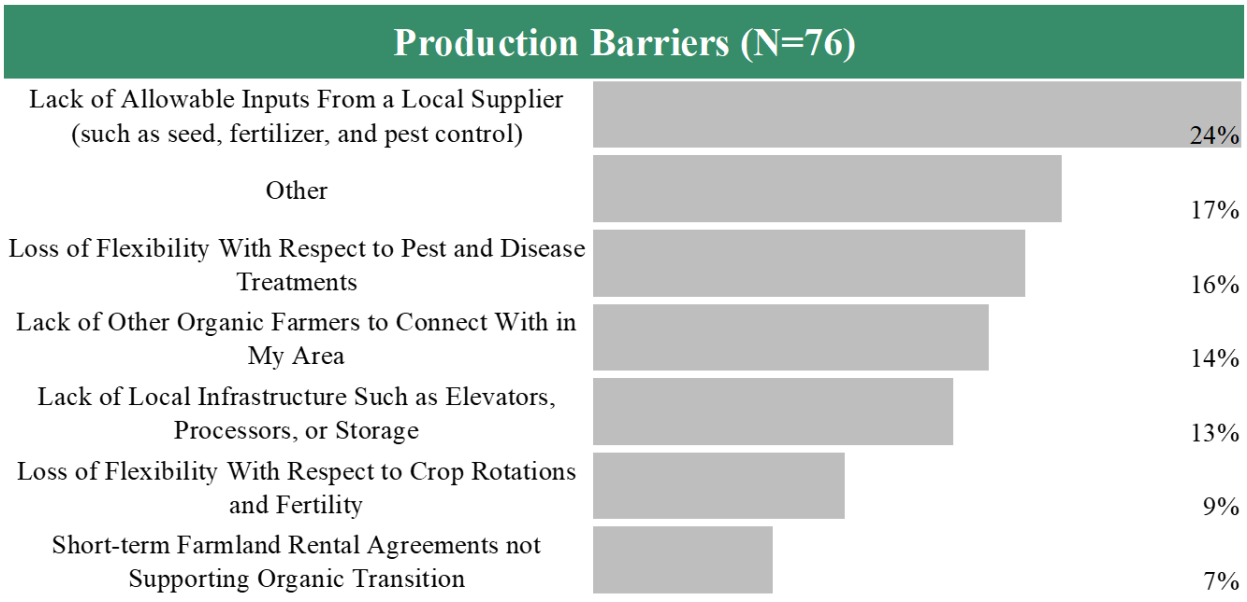

Figure 9. This graph shows the reported production barriers to transitioning to organic among respondents. The most commonly cited production barrier is limited access to certified organic inputs. Overall, these findings reveal challenges rooted in the perceived inflexibility of organic production requirements and the rigidity of approved organic practices. Participants were told to select all that apply.

Structural Barriers

Structural barriers further compound these difficulties. The lack of local infrastructure, such as elevators, processors, and storage facilities (13%, n=10), underscores the systemic weaknesses in the organic supply chain, which are especially detrimental to small and mid-sized operations. Farmers specifically emphasize a lack of affordable farmland as an infrastructural barrier to production. Similarly, short-term farmland rental agreements (7%, n=5) present unique challenges for tenant farmers, who may lack the long-term security needed to invest in organic transitions. These findings align with previous research on organic production that suggest farmers managing rented land face additional hurdles (Bruce, Farmer, Giroux, Dickinson, Chen, Donnell, & Benjamin, 2022). The absence of connections with other organic farmers in the area (14%, n=11) adds another layer of difficulty, as social networks and peer learning often play a critical role in supporting knowledge exchange and fostering resilience during transitions.

Collectively, these findings point to the intersectionality of logistical, operational, and structural barriers in transitioning to organic production. Overcoming these obstacles requires a multifaceted approach. Policymakers and industry stakeholders must invest in strengthening local organic supply chains, enhancing access to certified inputs, and creating infrastructure that supports organic practices. Additionally, flexible certification standards that allow for adaptive pest, fertility, and crop management practices could alleviate farmers' operational concerns without compromising the integrity of organic principles. Fostering farmer networks and providing targeted support for tenant farmers could bridge critical gaps in knowledge, collaboration, and resources, enabling a broader and more inclusive adoption of organic farming.

In addition to the challenges identified in figure 9, open-ended responses provide a deeper look into less visible but equally significant barriers. The "other" short answer responses makeup 17% (n=13) of the results, bringing to light a spectrum of additional systemic, structural, and resource-specific issues faced by organic farmers. These responses emphasize the complexity of transitioning to and sustaining organic practices, reflecting issues that intersect across economic, infrastructural, and environmental dimensions.

Resource Inadequacy

A prominent theme emerging from the “other” short answer responses is the resource inadequacy faced by organic farmers, particularly small-scale operations. Several respondents noted the difficulty of accessing essential inputs, such as organic seeds, affordable compost, and

specialized equipment, which are critical for meeting organic standards. These challenges underscore the broader gaps in infrastructure supporting organic agriculture, particularly for small-scale farms that lack the economies of scale needed to overcome these constraints. Similarly, the lack of organic-specific facilities, such as *"organic slaughter"* services, points to significant weaknesses in the supply chain, which inhibit the production and distribution of organic goods.

Labor Shortages

Labor shortages represent another critical barrier, with farmers explicitly stating their inability to "*find labor*." This challenge reflects broader trends in agriculture, where the labor-intensive nature of organic farming amplifies the impact of declining availability of skilled and affordable farm labor. The absence of sufficient workforce support exacerbates operational inefficiencies and creates an additional layer of difficulty for farmers navigating the already challenging organic transition process.

Policy Disconnect From Reality

A final central theme emerging from the "other" short answers is the disconnect between organic farming policies and the practical realities faced by farmers. Many respondents highlighted the lack of regionally tailored support, particularly in navigating climate-specific challenges. As one respondent noted, some crops are *"difficult to grow organic in our climate,"* underscoring the need for localized research and extension services. At the same time, disillusionment with the organic certification process was evident, with some farmers opting out due to the time and financial burdens, despite their commitment to organic practices: *"We were among the first certified organic farms in NC… but over the years we no longer needed to be certified… [we] dropped the time and money required to maintain certification. We still grow organically.*" This quote illustrates that for some farmers, the decision to opt out of certification is not a rejection of organic principles, but a practical response to the burdens associated with maintaining certification. The mention of "time and money" points to the administrative and financial demands that can outweigh the perceived benefits of formal recognition. Rather than indicating a shift in growing practices, this decision reflects a mismatch between policy structures and the day-to-day realities of farming. It suggests that organic certification, while intended to support transparency and trust, may inadvertently exclude those who continue to grow organically but

find the process too costly or cumbersome to justify. Together, these responses point to the need for more adaptable and regionally relevant support structures that bridge the gap between organic farming ideals and on-the-ground challenges.

C. Market Barriers

Market Access

In the Market Barriers to Organic Production bar graph in Figure 10, the findings highlight significant structural and economic challenges that impede farmers' ability to benefit fully from certified organic production systems. Out of 61 responses, the most prominent barrier, cited by 33% (n=20), is the lack of access to markets with enough demand. This underscores a core issue of economic viability, where insufficient or localized consumer demand fails to justify the additional costs and labor associated with organic certification. This finding is consistent with existing literature (e.g., Bruce et al., 2022) that identifies limited market access as a critical bottleneck for organic producers, particularly in rural or underserved areas.

The second most prevalent barrier, reported by 30% (n=18), is the perceived lack of market benefits for organic products to consumers or buyers. This response reflects a perception or reality that consumers or buyers do not recognize or value the benefits of certified organic products, indicating that market demand for organic certification is weak, likely because consumers do not see significant differences between organic and non-organic products, or buyers are unwilling to prioritize organic options. This suggests a broader systemic issue: the limited awareness, trust, or education around organic production's environmental, health, and ethical advantages.

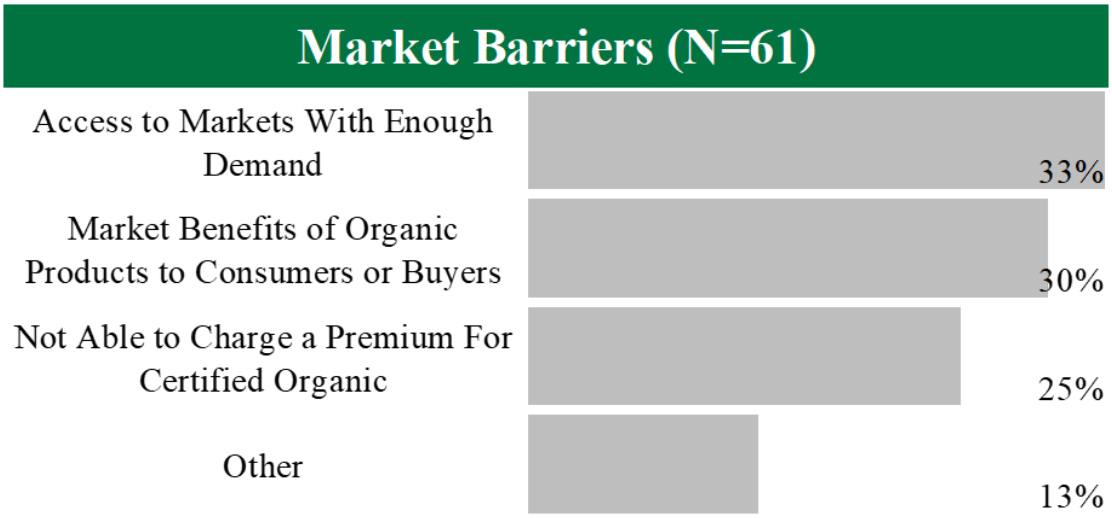

Figure 10. This graph presents the primary market-related barriers to transitioning to organic, identified by respondents. Access to markets with enough demand is cited as the most significant challenge. These findings indicate that many farmers struggle to find profitable market opportunities and face challenges navigating a competitive marketplace. Participants were told to select all that apply.

Market Demand and Economic Value

Additionally, 25% (n=15) of respondents noted difficulties in charging a premium for certified organic products. This finding reflects a pricing barrier rather than a demand barrier. Even when farmers produce certified organic goods, they may struggle to translate the certification into higher prices that reflect the increased costs of organic production (e.g., certification fees, labor-intensive methods, or organic inputs). This suggests that while markets may accept organic products, they fail to provide sufficient price incentives to compensate for the added investment and risk. Furthermore, it highlights the price competitiveness within agricultural markets, particularly in sectors where conventional produce is sold at lower costs due to subsidies or economies of scale.

The distinction between market perception (demand) and pricing mechanisms (economic value) is critical for understanding the challenges organic farmers face. If consumers or buyers fail to recognize organic benefits, the solution requires targeted education, marketing strategies, and consumer outreach to build trust and awareness of certified organic practices. However, if farmers cannot charge a premium, even in a market that supports organic products, it reflects market failures, economic pressures, or competition that undermine the financial sustainability of organic farming

Although these quantitative findings highlight key barriers to market access and economic viability, responses categorized as “Other” reveal additional barriers that were not fully captured by the predefined options. To continue, a total of 13% (n=8) of responses came from farmers who selected “other”. The short answer responses provided within this option identify additional key themes to market barriers: perceived devaluation of organic certification, issues of return investment, operational and logistical challenges, and trust and transparency.

Perceived Devaluation of Certification

The perceived devaluation of organic certification is cited as due to market dynamics and competing claims. For instance, one respondent noted that other farms at their farmers' market verbally claim organic practices without certification, diminishing the perceived value of their own verified organic status: *“Most other farms at our farmers market claim to use organic practices. Some even claim that their produce is organic - orally only of course - not in writing. So the consumer does not see value in our certification. We are the only organic farm at our market but we cannot charge a premium and have some difficulty making organic certification a differentiator.”* This reflects a systemic problem where consumers lack a clear understanding of certification's legitimacy, leading to pricing pressures and an inability to differentiate certified organic products within competitive local markets. This finding speaks to the erosion of organic certification's economic advantage in direct-to-consumer sales.

Return on Investment (ROI)

The issue of return on investment (ROI) surfaces prominently as the next key theme mentioned in multiple of the “other” short answer responses, with farmers questioning the economic feasibility of certification. Comments such as "*getting premium prices already on produce*" indicate that some producers achieve sufficient returns without the need for certification, particularly in markets where direct relationships with consumers build trust and value. This suggests that for certain farmers, the cost and labor associated with certification may outweigh its benefits, especially if they can already command competitive prices for non-certified but pesticide-free or sustainably grown products. Relatedly, one respondent described foreign competition as a significant concern, noting that organic markets are beginning to resemble conventional grain markets, where imported products—produced under differing labor standards

and oversight—undermine the competitiveness of domestic organic farms. This highlights a broader structural issue wherein globalization exacerbates price disparities and erodes local producers' market advantages.

Operational and Logistical Challenges

Several responses also highlight operational and logistical challenges that contribute to barriers in organic production. For instance, "*record keeping*" is mentioned as a specific difficulty, reflecting the administrative burdens that accompany certification compliance. This aligns with longstanding critiques in the literature regarding the disproportionate burden that paperwork and audits place on smaller farms. Additionally, logistical constraints such as labor shortages ("*too old to haul produce to restaurants*") and marketing inefficiencies ("*not good at marketing*") underscore the barriers some producers face in accessing premium markets or effectively promoting their organic products.

Trust and Transparency

The notion of trust and transparency in organic markets is also questioned by respondents, with one noting that the "*organic market is misleading*." This critique points to perceived inconsistencies or misunderstandings within the organic system, including concerns about regulatory standards, certification interpretations, or consumer perceptions. Combined with the observation about foreign competition, this response reflects a deeper skepticism about the integrity and equity of organic markets on both local and global scales.

3. Resource Development

To better understand how to support farmers in transitioning to or maintaining organic production, respondents were asked to identify the specific types of information and educational resources they need. Their responses reflect a range of technical, financial, and regulatory challenges that influence both daily decision-making and long-term planning. The following section explores these needs in detail, as well as the preferred formats and sources through which farmers seek information and training.

A. Educational Resources Needed

The responses to the question "*What information or educational resources do you need to successfully transition to organic production or continue organic production?*" reflect a layered set of challenges that farmers encounter, with a clear emphasis on practical, technical, and economic barriers. The results from the 94 responses are represented in Figure 11. Pest management stands out as the most frequently cited need, with 19 respondents (20%) identifying it as a key area for support. This highlights the complexities of organic pest control and a need for tailored resources that move beyond generic recommendations and instead provide regionally specific, crop-focused guidance.

The second most significant concern, cited by 17% (n=16) responses, is the cost difference between conventional and organic production. This mirrors a recurring theme in organic production debates: while organic markets promise long-term financial rewards, the short-term costs can be prohibitive for many farmers without economic guidance or incentives. Despite this being a prominent issue, these results show there is still a need for clearer and actionable information on how to manage the financial burdens associated with organic transitions.

Soil health management is also cited by 17% (n=16). Maintaining soil fertility in compliance with organic standards is a knowledge-intensive process that requires farmers to rethink crop rotations, cover cropping, and input use. Simultaneously, challenges with allowable inputs (16%, n = 15) suggest that farmers may struggle to navigate the regulatory landscape of organic-approved amendments, while access to organic markets (16%, n= 15) underscores an enduring issue: farmers need reliable and profitable pathways to connect their organic products to consumers. Variety selection (8%, n=8) surfaced as a smaller, yet meaningful concern,

indicating the need for research and information on crop varieties that are not only suited to organic production but also resilient to local growing conditions.

The “other” short answer respondents (5%, n=5) while individually distinct, collectively point to barriers in both the administrative and interpersonal aspects of organic transition and maintenance. Record keeping emerged as a recurring theme, with responses like *“Paperwork and management of records*” and *“Easy record keeping”* pointing to the administrative burden of organic certification. Many farmers find the documentation requirements cumbersome, signaling a need for streamlined tools that ease compliance without compromising certification standards. Responses also raise a need for personalized, on-farm support, as one farmer notes, *“Someone to see my setup and give ideas.*” This reveals the value of in-person, site-specific guidance over general resources. Lastly, the comment, *“I was certified for 5 years and then had an awful inspector after Tropical Storm Fred,*” reveals frustration with inconsistent and inflexible inspections. For farmers managing environmental hardships, a negative inspection experience can be a tipping point, leading them to discontinue certification.

Taken together, these responses point to a need for educational resources that are practical, accessible, and tailored to the realities of organic farming. Farmers are not only navigating complex production and regulatory demands, but also seeking support that is regionally relevant and grounded in experience. Effective educational resources must move beyond one-size-fits-all approaches to offer clear, actionable guidance for diverse farming contexts.

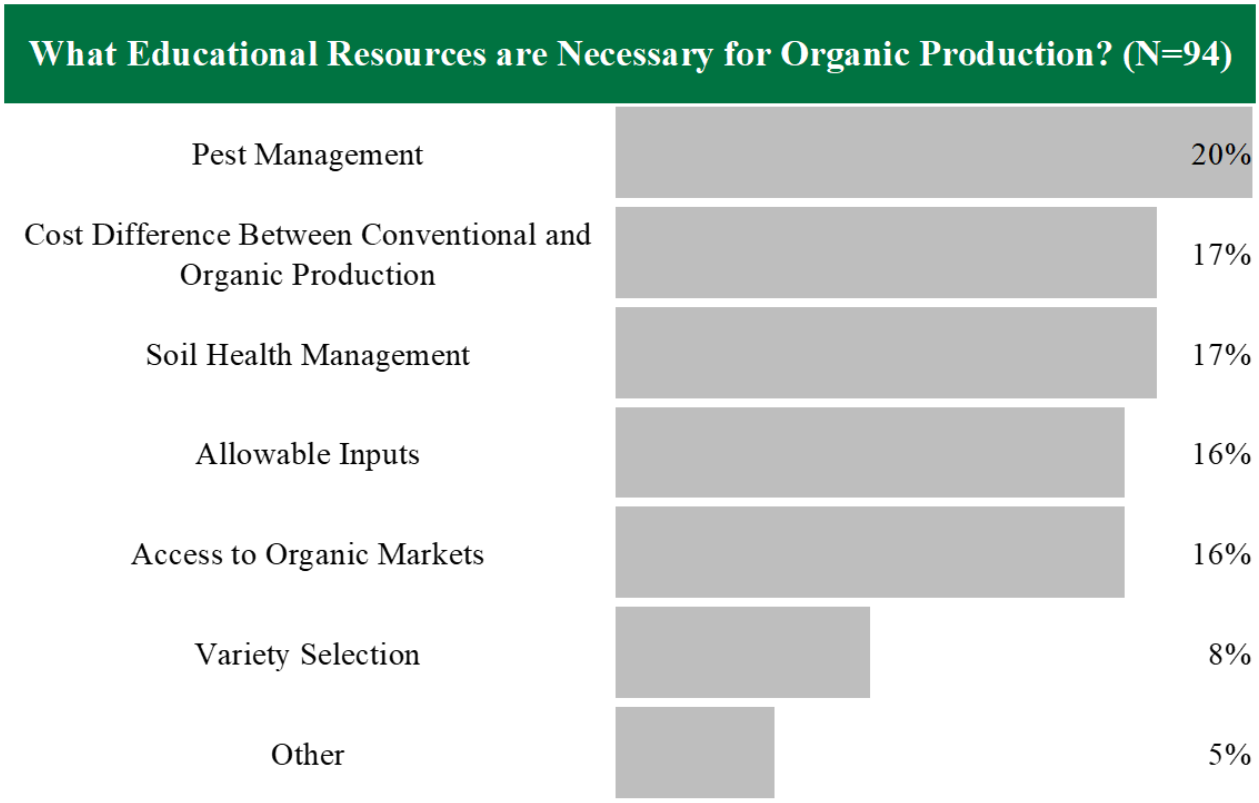

Figure 11. This graph shows the various educational resources identified by respondents as necessary for successful organic production. Pest management emerges as the most frequently cited need. Participants were told to select all that apply.

Preferred Resource Training and Information Formats

In addition to identifying specific educational resource needs, respondents were also asked to share their preferred formats for receiving information and training. The 131 responses to this question (Figure 12) show a clear preference for flexible, digital learning. Webinars were the most selected format (21%, n=28), followed by online resources (18%, n=24), pointing to the importance of remote, self-paced tools that fit within farmers' time and labor constraints. In-person formats such as workshops and field days were selected by 15% of respondents each (n=20), showing continued relevance for hands-on learning. Farmer-to-farmer networking opportunities were the third most preferred format (17%, n=22), highlighting the value of peer-based knowledge-sharing. Printed resources were the least selected option (12%, n=16), suggesting a shift away from static materials toward more interactive and responsive approaches.

These patterns align with responses to a related question about primary information sources for organic production (n=32). As shown in Figure 13, the Internet was cited by over half of respondents (53%, n=17), reinforcing the role of digital access in meeting farmers' informational needs. Extension services were the second most common source (25%, n=8), while "Other Farmers" (9%, n=3) further supports the significance of peer-to-peer learning. Lastly, of 36 respondents 17% (n=6) expressed that training materials for organic certification in Spanish would benefit their farm.

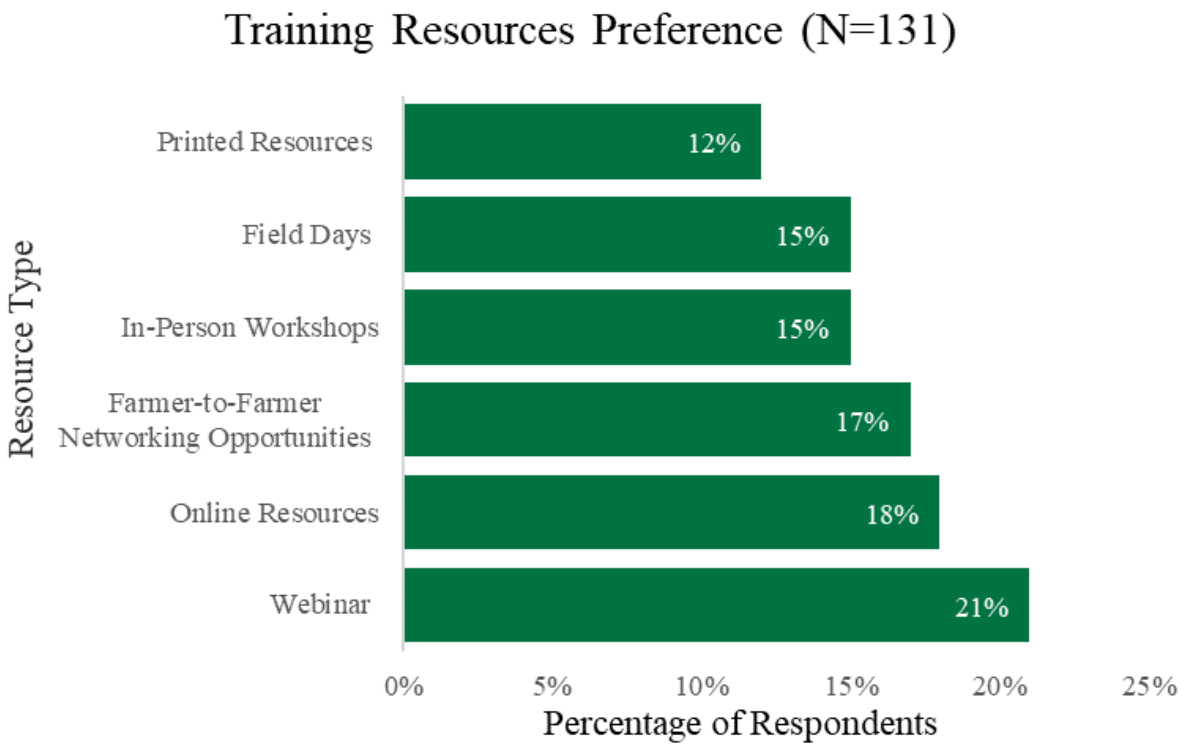

Figure 12. This graph illustrates the preferred training resources among respondents, with webinars and online resources ranking highest. Participants were told to select all that apply. Some data has been removed for privacy considerations.

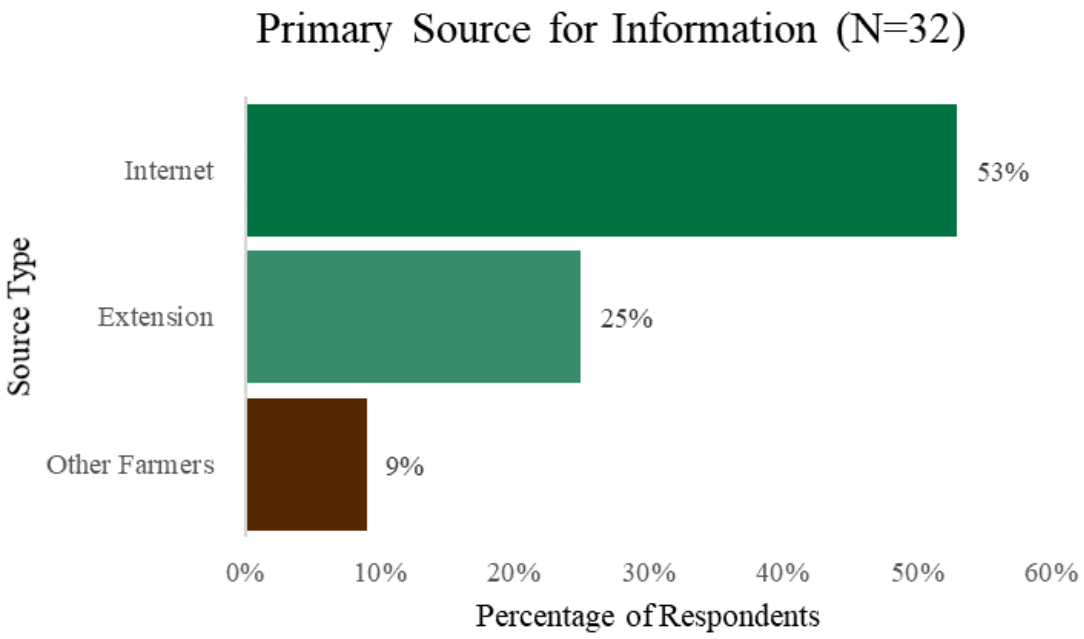

Figure 13. This graph shows respondents' primary source used for accessing information. The most commonly used source of information among respondents is the Internet. Some data has been removed for privacy considerations.

4. USDA Aid Programs

The final set of findings provide insight into which USDA programs farmers engage with and their perceptions of those programs. Understanding farmer engagement with, and perceptions of, USDA aid programs is crucial to identifying barriers to successful participation in organic production. Organic agriculture presents unique economic, regulatory, and environmental challenges, making targeted support essential for farmers transitioning to or maintaining organic practices. This survey includes several key USDA programs, each designed to address specific challenges within organic farming contexts.

A. USDA Aid Programs Overview

The Environmental Quality Incentives Program (EQIP), administered by the Natural Resources Conservation Service (NRCS), supports farmers in implementing conservation practices critical

to meeting organic production standards. Similarly, the Conservation Stewardship Program (CSP) aids producers in maintaining and enhancing existing conservation strategies and adopting new practices addressing critical resource concerns. The Conservation Reserve Program (CRP) offers financial assistance to organic farmers establishing protective natural borders that can mitigate environmental risks. Additionally, the Organic Certification Cost Share Program (OCCSP) directly alleviates financial burdens associated with organic certification, a common barrier cited by producers. The Noninsured Crop Disaster Assistance Program (NAP) provides essential financial support to mitigate crop losses due to natural disasters, significantly reducing economic risks for organic producers. USDA Microloans offer targeted financing for small-scale, beginning, niche, or non-traditional farm operations that frequently face heightened financial constraints. Lastly, Whole-Farm Revenue Protection (WFRP) delivers comprehensive risk management tailored to diversified, specialty, and organic operations, providing stability critical to sustaining organic farming endeavors. See Table 3 for a condensed overview of each program. Evaluating farmer awareness, participation, and attitudes toward these programs allows stakeholders to pinpoint gaps, optimize resource allocation, and improve program effectiveness and accessibility, ultimately supporting the expansion and success of organic agriculture.

Table 3. Summary of USDA programs that can support organic oppoorations by providing financial assistance, disaster relief, or risk management.

USDA Program	Program Overview
Environmental Quality Incentives Program (EQIP)	Provides financial and technical assistance for conservation practices.
Conservation Stewardship Program (CSP)	Supports enhancement of existing conservation strategies.
Conservation Reserve Program (CRP)	Offers financial assistance for protective natural borders.
Organic Certification Cost Share Program (OCCSP)	Alleviates certification costs.
Noninsured Crop Disaster Assistance Program (NAP)	Provides relief for crop losses due to natural disasters.
Microloans (Micro)	Targeted financing for small or non-traditional farms.
Whole-Farm Revenue Protection (WFRP)	Risk management for diversified and organic operations.

B. Farmer Engagement with USDA Aid Programs

Farmers participating in this survey were asked a structured series of questions regarding their engagement with each specific USDA aid program. Initially, respondents were queried about whether they had applied to each listed aid program. Those who indicated they had not applied were subsequently prompted to specify their reasons for not engaging with the respective program. Conversely, respondents who affirmed their application were further asked whether they successfully received funding. Individuals who confirmed receipt of funding were then queried regarding the perceived helpfulness of both financial and technical assistance provided by the program.

Figure 14 provides striking evidence of limited farmer engagement with USDA aid programs. Application rates are uniformly low, even for the most utilized program, EQIP, where only 36.1% (n=13) of respondents have applied, indicating that nearly two-thirds of respondents are not accessing this support. Participation in other programs, including OCCSP (21%, n=34), CSP (15%, n=5), CRP (9%, n=3), NAP (9%, n=3), and Microloans, is even lower, suggesting

widespread gaps in awareness, accessibility, or perceived usefulness. Most notably, WFRP—a newer program tailored specifically for diversified and organic operations—had zero applicants among respondents, raising important questions about the effectiveness of outreach and the alignment of USDA program structures with farmers' practical needs and experiences. These consistently low application numbers indicate that significant improvements are needed to ensure USDA support programs effectively reach and benefit their intended audiences.

These findings raise significant concern because consistently low application rates suggest that USDA programs are not effectively reaching or serving their target audience. Such low engagement implies a critical disconnect between the resources intended to support farmers and the actual uptake of those resources, underscoring a clear need for improvements in program communication, design, and delivery.

Noting that respondents are predominantly low-resource and beginning farmers is particularly important. USDA programs are specifically designed to provide financial assistance, risk management tools, technical support, and resources aimed at enhancing sustainability and resilience—benefits that are especially critical for farmers with limited capital, infrastructure, or institutional knowledge. For beginning farmers, who often lack access to traditional credit and established networks, programs like Microloans and Whole-Farm Revenue Protection (WFRP) can be essential tools for securing financial stability and mitigating risks. For low-resource farmers, programs like EQIP, OCCSP, and NAP offer cost-sharing opportunities, disaster relief, and technical guidance that can help them transition to organic production or improve conservation practices with minimal upfront investment. Effective engagement with these programs can be a pivotal factor in enhancing their economic resilience, productivity, and long-term viability. Therefore, low application rates among these groups not only highlight a missed opportunity for support but also suggest that existing programs may not be adequately designed or promoted to meet their specific needs.

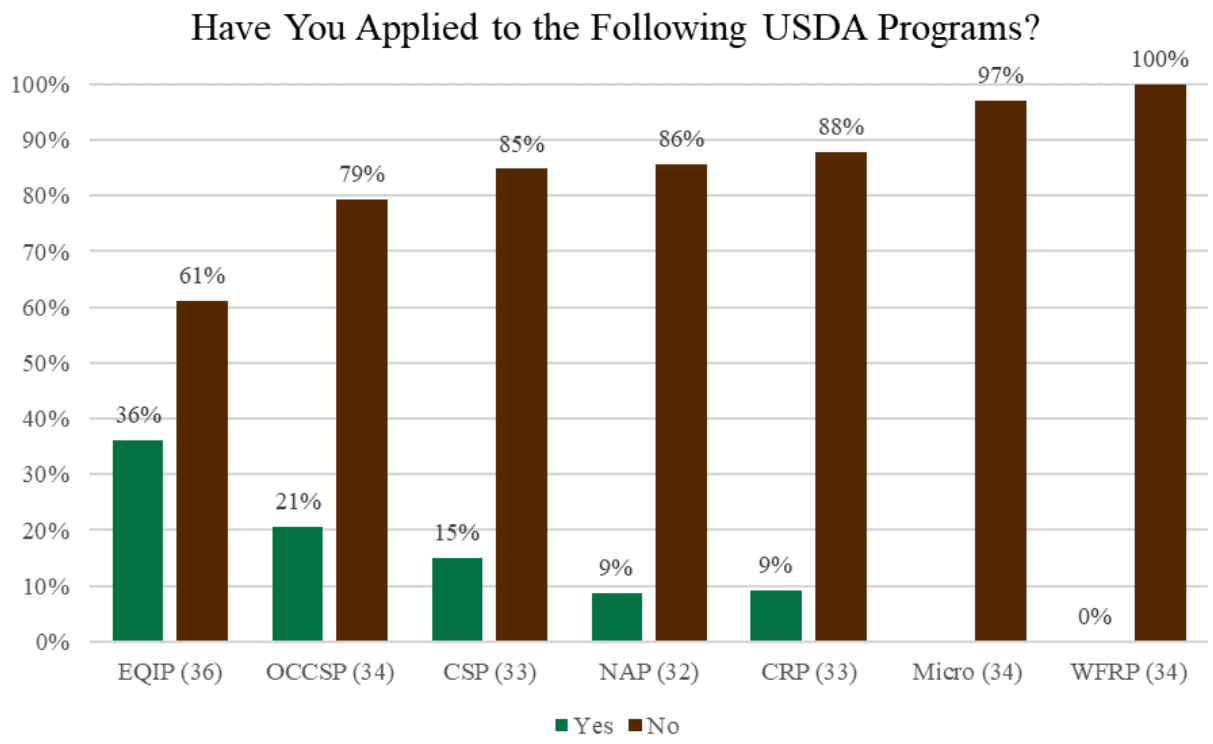

Figure 14: This bar graph displays the percentage of survey respondents who have applied to various USDA programs, with "Yes" responses shown in green and "No" responses shown in brown. The graph illustrates a general trend of low application rates across all programs.

C. Farmer Perceptions of USDA Aid Programs

Due to the notably low number of affirmative responses for each individual program, subsequent questions regarding funding and the helpfulness of received assistance yielded insufficient data for rigorous analysis. Consequently, to circumvent limitations related to low individual program response rates and to provide meaningful analysis of farmer perceptions, Figure 15 aggregates responses across all USDA aid programs (n=239). This aggregation enables an overall evaluation of respondents' perceptions regarding the usefulness of financial and technical assistance provided by USDA aid initiatives, here technical assistance refers to the assistance provided by USDA staff in completing, submitting, and managing the funding related to the program.

Notably, only 13% of respondents (n=32) reported applying to USDA programs, while 87% (n=207) indicated they had not applied. Among those 32 respondents who applied to programs, 66% (n=21) successfully received funding, indicating that once farmers engage with the programs, access to aid is relatively achievable. This relatively high approval rate suggests

that funding is readily available to eligible applicants who complete the application process. Furthermore, of the 21 respondents who received funding, the majority reported that the financial aid was helpful (86%, n=18), which demonstrates the potential efficacy of these programs when farmers are able to access them. However, the limited pool of applicants underscores a broader issue of underutilization. In contrast, the perceived effectiveness of technical assistance is notably low, with only 33% (n=7) of recipients finding it helpful, while 67% (n=14) reported dissatisfaction. This imbalance likely reflects a mismatch between the type of guidance offered and the specific, localized challenges faced by respondents. The high rate of dissatisfaction (67%, n=14) suggests that technical assistance provided by USDA programs may be overly standardized or generalized, failing to adequately address the complexities of small-scale and organic operations.

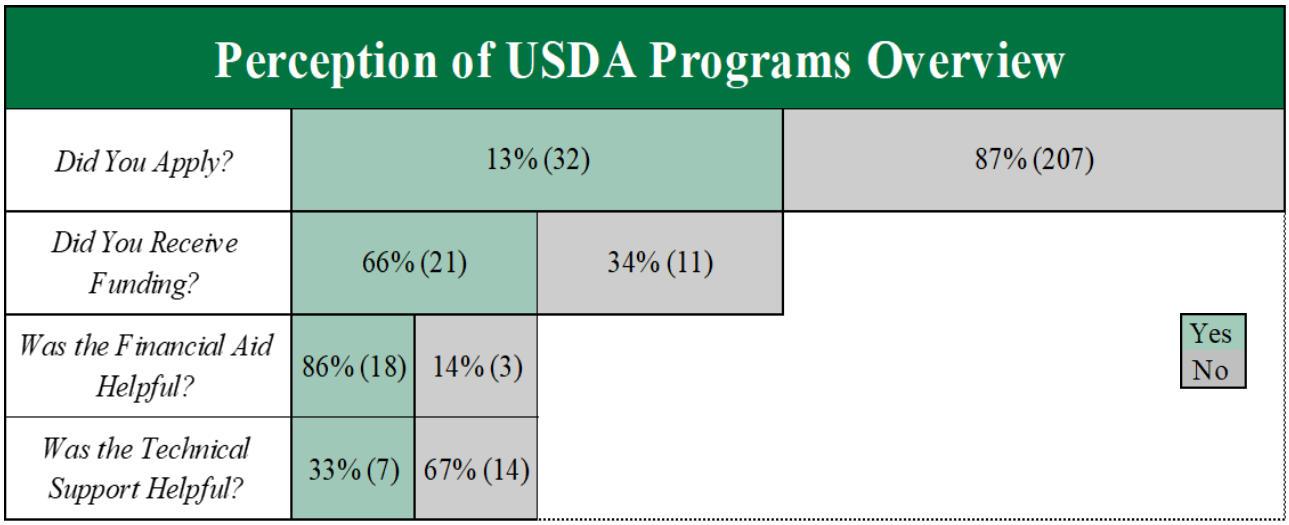

Figure 15: This graph charts an overview of respondents' engagement with all 7 USDA aid programs (N=239). While only 13% of respondents applied for USDA programs, findings suggest that there is a relatively high likelihood that applicants successfully receive funding support.

D. Reasons for Lack of Engagement

The results presented in Table 4 reveal multiple barriers that deter survey respondents from applying to USDA aid programs. The blank boxes indicate that the presented option was not an available response for the program, as some options were program specific. The most prominent barrier across all programs is unfamiliarity, with a substantial proportion of respondents indicating that they were “Not familiar with the program.” This was the most frequently cited

reason for non-engagement with EQIP (70%), CRP (80%), OCCSP (75%), and Microloans (65%). Even NAP, which had the lowest unfamiliarity rate, still reported 47% of respondents who were unaware of the program. The high prevalence of unfamiliarity across all aid programs suggests significant shortcomings in outreach and communication efforts, raising concerns about whether these programs are being effectively promoted or whether they are accessible to target audiences. If respondents are unaware of available programs, then the intended purpose of providing support to low-resource, beginning, or organic farmers is fundamentally undermined.

Perceived ineligibility also emerged as a notable barrier, particularly in relation to program-specific criteria. Farmers frequently reported feeling excluded due to their farm size or the nature of their operations. This concern was especially evident for NAP, where 19% of respondents indicated that their farms were too small or did not meet size eligibility requirements. Structural and procedural concerns also contribute to non-participation. A number of respondents indicated that the coverage provided by programs was not worth the effort or resources required to apply. This sentiment was most prevalent for NAP (10%) and WFRP (14%), suggesting that respondents perceive the application process as burdensome relative to the potential benefits. Additionally, financial concerns are evident in the Microloans program, where 10% of respondents cited high interest rates as a deterrent. For programs intended to provide financial accessibility to small and beginning farmers, perceived affordability is a critical concern that undermines overall effectiveness.

While these structured responses highlight prominent barrieres, they do not fully capture the nuanced reasons why farmers may choose not to engage with USDA programs. The qualitative responses listed under "Other" highlight additional reasons for non-participation that are not captured in the categorized table. By examining all the short answer responses collectively, several overarching themes emerge: Distrust and Negative Perceptions of Programs; Perceived Ineligibility or Misalignment with Program Criteria; Practical Barriers (Time, Financial Risk, and Application Burden); Lack of need or relevance; Inconsistent Communication and Follow-Up; and Risk Aversion and Financial Caution.

Concerns about the fairness and reliability of USDA programs, particularly regarding Microloans and WFRP. Statements such as *"FSA is often predatory in lending"* and "*Lots of sketchy providers out there that have burned growers"* suggest mistrust in the institutions or third-party entities associated with these programs. This theme points to potential issues of perceived exploitation or inconsistency in service delivery. Additionally, multiple respondents expressed that their farming operations did not qualify for particular programs. For example, *"I grow Medicinal Herbs in the field and the woods. These do not qualify"* (EQIP) and *"I'm on leased land so I don't want to invest too much in land I'll be leaving"* (CSP). These comments suggest that the scope or eligibility criteria of programs do not align well with the realities of certain farming practices, particularly for niche or unconventional operations.

To continue, several respondents indicated logistical or practical barriers preventing them from applying. For instance, "*On the to-do list. Just need to make the time to complete the paperwork"* (EQIP) reflects administrative burden or competing priorities. Additionally, *"We don't do loans. We save till we can afford to purchase"* (Microloans) suggests a preference for self-reliance over incurring debt, indicating financial risk aversion. Some respondents stated outright that they do not want or need the offered programs, such as, *"I don't want it"* (NAP, WFRP) and *"haven't experienced crop loss"* (NAP). This theme suggests that certain USDA programs may not address the specific needs or perceived vulnerabilities of particular farmers. Moreover, some responses indicate inadequate communication or follow-up from USDA agents, particularly regarding program clarity and responsiveness. One respondent noted, *"I used my local Soil Conservation agent, but the agent told me that they didn't understand my problem very well, and I am waiting for them to call me back"* (CSP), highlighting frustration with unresponsive or ill-informed representatives. Another respondent stated, *"Not sure if the cost*

share I mentioned above was CSP or some other program. I don't pay much attention to the program name, just the practices and funding." This suggests that USDA programs are not being communicated in a way that ensures participants understand which programs they are engaging with, especially when practical benefits are prioritized over program distinctions. Poor follow-up and lack of clarity may undermine farmers' ability to fully utilize available resources.

Lastly, particularly within the Microloans program, comments reflect an aversion to debt and a cautious approach to financial assistance. Statements like *"I don't like to borrow money"* and *"We save till we can afford to purchase"* highlight a preference for financial independence over perceived risks associated with formal lending structures. Overall, many of these themes are interconnected and suggest that USDA programs are perceived as either inaccessible or irrelevant by certain respondents. These themes provide valuable context to specific reasons why engagement with USDA programs remains low.

Table 4. This table outlines various reasons provided by respondents for not applying to USDA aid programs. The most cited reason for not applying to USDA aid programs is lack of familiarity. Some data has been removed for privacy considerations.

For Those That Did Not Apply, Why Not?	Not Familiar With the Program	I Heard its Hard to Get a Contract	My Farm is Too Small / I Don't Meet Size Eligibility	My Farm is too Diverse	Coverage Amount is Not Worth the Money and Time	Interest Rates Are Too High	I Don't Fall Under it's Coverage	Other
EQIP (n=23)	70%	13%	-	-	-	-	-	13%
CSP (n=30)	60%	10%	-	-	-	-	-	23%
CRP (n=31)	80%	-	-	-	-	-	-	13%
OCCSP (n=28)	75%	-	-	-	-	-	-	14%
NAP (n=32)	47%	-	19%	16%	10%	-	-	9%
Microloans (n=31)	65%	-	-	-	-	10%	-	23%
WFRP (n=35)	63%	-	-	-	14%	-	11%	6%

5. Conclusion

Respondents to this survey represented mostly small farms that largely sell direct to consumers. The results from this survey are not generalizable to the population of farmers across North and South Carolina, however, these results provide some pragmatic insights into perceptions about and engagement, or lack thereof, with organic certification. These insights can inform future resource and program development for small-scale farmers focused on transitioning to organic production. For example, support organizations can continue to support farmers practicing organic while providing education about strategies for addressing financial and supply chain challenges. An area for future work as identified by these findings is continued outreach and education about USDA programs, including organic certification. Awareness and trust-building should be considered when programs and resources are developed. Strategies may include farmer-to-farmer learning, relationship building with USDA staff and other technical assistance staff, and other strategies. Future work to expand organic certification in North and South Carolina can benefit from reflecting on these findings and should take into account the specific audience they aim to serve.