



AgrAbility Virginia Program Evaluation Brief: 2025 Survey & Interview Results

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Introduction

AgrAbility Virginia promotes safety, wellness, and accessibility on the farm through education, rehabilitative services, and assistive technology. AgrAbility Virginia is a partnership program between Virginia Tech, Virginia State University, Virginia Cooperative Extension, and Easterseals PORT Health. AgrAbility Virginia is funded by the United States Department of Agriculture (USDA) National Institute for Food and Agriculture (NIFA). As a statewide program, AgrAbility Virginia works closely with Virginia's rehabilitation and agricultural service delivery system to increase organizational capacity and provide the best quality education and services for farmers across Virginia. AgrAbility Virginia works in partnership with the Virginia Department of Aging and Rehabilitative Services (DARS) and others to make recommendations for farmers regarding assistive technologies and new farm procedures and protocols that will make farming more comfortable and safer.

To evaluate our programming, we conducted a utilization-focused, summative mixed-methods evaluation to assess changes in quality of life, hopefulness, farm safety, and other outcomes resulting from farmer participation in AgrAbility Virginia. This brief summarizes the findings from two surveys: one for farmers (n=5) and one for service providers (n=12). The evaluation also includes two farmer interviews.

Both farmers and service providers shared positive feedback on the quality and effectiveness of the AgrAbility Virginia program. Farmers reported feeling supported and heard and described discovering better ways to complete farm tasks. Survey and interview participants expressed overall satisfaction with the program, noting improvements in their quality of life, farm accessibility, and productivity. Service providers described AgrAbility as a valuable resource for their clients. The response rate among service providers was higher than in previous years, with 35.2% of those invited participating. Their feedback offered valuable insight into how AgrAbility Virginia meets client needs and how the program might expand engagement statewide. These findings guide AgrAbility Virginia's USDA NIFA grant project aims.

Methods

The methods used in this evaluation were grounded in the work of Kyle et al. (2017), who conducted a similar assessment of Virginia's AgrAbility program in 2016 using a convergent parallel mixed methods design, as outlined by Creswell and Plano Clark (2011). Mason and Niewolny (2021) also employed this design in a subsequent evaluation of the AgrAbility Virginia program.

Following the convergent parallel mixed methods approach described by Creswell and Plano Clark, we collected and analyzed qualitative and quantitative data separately, then conducted a joint analysis to identify common themes across both data sets. For the 2024-2025 evaluation, we based our survey instruments on the farmer survey developed initially by Kyle et al. and later adapted by Mason and Niewolny, as well as the service provider survey created by Mason and Niewolny in 2021. These surveys formed the quantitative component of the study. The

farmer client survey consisted of 36 items, including Likert scales and open-ended questions. The service provider survey included 18 questions of a similar format. For the qualitative component, we followed the interview methodology developed by Kyle et al., conducting semi-structured interviews consisting of 24 open-ended questions. Each interview lasted approximately 30 to 40 minutes.

On January 13, 2025, we sent a pre-recruitment email to farmers who had significant participation in our program since 2019 (n=40). One email was returned as undeliverable. Not included on our contact list were eight farmers who had minimal contact with our staff (service entailed either a brief phone call or email exchange, or farmers had only begun working with AgrAbility Virginia staff in the two months before sending the survey). It was determined that these farmers did not have enough familiarity with our program's offerings and/or interaction with program staff to participate in the evaluation. Additionally, one farmer survey was completed by a family member. Emails with the survey link were sent on Monday, January 20. The survey was mailed to three farmers who do not use the internet or check email regularly; one completed survey was returned by mail. Reminder emails were sent on Monday, February 6, and Thursday, February 13. Due to a low response rate among farmer participants, we decided to reopen the farmers' only survey for an additional four weeks, starting on March 3 and ending on March 28. We conducted phone interviews with two farmers in the second week of April.

We sent a pre-recruitment email to service providers who have interacted with our program since 2019 on January 13, inviting them to complete a survey (n=34). Service providers received the survey via email. Service providers were invited to participate via email on January 20, February 6, and February 13.

Brief Farmer Survey Results and Discussion of Farmer Survey Responses

Of the 39 farmers who were successfully contacted, five responded to our survey (12.8%). Some respondents chose to provide data for only select questions and prompts. One family member completed the survey on behalf of the farmer. The responses, while limited in number, offer meaningful insights into farmers' experiences and perspectives, which are summarized and discussed below.

Demographics

The farmer participants who completed this survey ranged in age from 21 to 73 years old. The mean age was 47. One participant was a 21-year-old farm family member/caregiver. One of the participants was a military veteran. All five respondents reported gender: one female and four male respondents (the farm family member answered this question on behalf of the farmer client). Those who listed their race self-identified as white (n=4), and Black or African American (n=1). These demographics roughly reflect those of our program participants as a whole. Responses from these demographics are reflected below.

Farmer respondents reported growing crops such as feed grain (n=1), vegetables (n=1), flowers (n=1), beef (n=3), swine (n=2), equine (n=1), poultry (n=2), and feed grains, forages, and hay (n=3). Participants have immediate family members who help on the farm (n=3), have unpaid friends and tenant labor on the farm (n=2), and one farmer reported hiring part-time employees. The number of years that survey participants have been engaged in farming varied: three reported that they have been farming for 4-6 years, one for 10-15 years, and one for over 21 years. All survey participants reported being rural farmers. One respondent reported farming 2–5 acres, one farms 6–10 acres, one farms 21–50 acres, and two reported farming more than 200 acres. Farmer survey participants were located in the following counties: Appomattox (n=1), Frederick (n=1), Clarke (n=1), Rockingham (n=1), and Fauquier (n=1).

AgrAbility Virginia also sought to understand where program participants sold their products, the types of products sold, and how far they traveled to reach their markets. One participant was not currently marketing any products. Among the five who reported marketing products, one sold at a farmers market, and one operated both

an on-farm and online retail store. Additional market channels included restaurants (n=1), commodity markets (n=1), and livestock auctions (n=3). Participants who sold products reported traveling the following distances to reach their markets: 26–50 miles (n=1), 51–100 miles (n=1), and “not sure” (n=1).

Technical Assistance Recommendations and Assistive Technologies

Supporting farmers with technical assistance recommendations for assistive technologies and related farm safety, health, and wellness resource needs is a core AgrAbility Virginia aim. Understanding how, if at all, farmers implement recommendations is important for programmatic information. From the survey responses, we learned that one participant received a chemical pump and a drill bit to assist with lowering and raising trailer jacks as a result of their involvement in the program. The remaining participants did not report using assistive technology due to their participation. However, one stated they are now more open to using assistive technologies in the future and would reach out to AgrAbility Virginia for support. Respondents also reported using online educational resources, including the Assistive Technology Toolbox database.

In response to the prompt, “Information/education provided by AgrAbility Virginia has been useful to me and my farm,” most farmers agreed that the educational resources provided to them were helpful in meeting their farming goals. Additionally, most participants indicated awareness of the services and educational materials AgrAbility Virginia provides. One participant reported being aware of additional resources available to them because of AgrAbility Virginia recommendations.

Quality of Life and Changes in Attitudes

Quality of life areas of interest to AgrAbility Virginia encompass a range of topics, from on-farm to personal needs and attitudes. One area that AgrAbility Virginia focuses on is improving the health and wellness of the farmers we work with. This is a large area of intervention that farmers may be seeking other resources for, beyond the scope of AgrAbility Virginia. Additionally, farmers sometimes do not relate their farming practices to improvements in their health and wellness. To that end, the respondents reported making no changes to their farming practices as a result of participating in the AgrAbility Virginia program (Table 1). However, regarding hopefulness, two respondents agreed that AgrAbility Virginia has helped them feel more hopeful about achieving their farming goals. (Table 2). Perceptions of other quality-of-life improvements were mixed (Table 3). One respondent strongly agreed with the statement, “My quality of life has increased due to AgrAbility Virginia,” and two neither agreed nor disagreed. Overall, participants expressed confidence in their ability to farm safely and productively (Table 4). One strongly agreed with the statement, “I am confident in my ability to continue farming safely and productively,” and two agreed. In response to a follow-up question about quality-of-life changes, one participant shared: “I have not used the equipment yet. Spring will be the best time to put the equipment to use.” As stated above, after follow-up interviews with program staff, all participants expressed interest in continuing their engagement with the program due to the perceived health and wellness benefits it provides to their overall ability to farm.

Farm Stress and Mental Health

As another core program area, AgrAbility Virginia sought to understand participants’ perspectives on farm stress and other mental health challenges affecting their ability to farm safely and productively. These insights are essential for shaping support strategies that respond to the complex and often interrelated pressures farmers face. In response to the prompt, “What is currently your biggest physical and/or mental health challenge that impacts your long-term farming success?” participants identified three major themes: access to assistive technology, physical and mental health concerns, and dependence on others (Table 5). When asked, “How would you describe your stress level?” three participants reported low stress, one reported high stress, and one responded unsure. However, during the interview portion of the evaluation, two participants shared that they had experienced high stress and were able to expand on their challenges in more detail. In response to the prompt, “Are you interested

in learning about how to reduce stress as a farmer or a farm family member?” resulted in participants responding: Yes (n=2), No (n=2), and Unsure (n=1). Participants also shared various strategies they use to manage farm stress (Table 6). Only one participant reported actively using stress management techniques or seeking professional support. Two participants did not respond to this question. When asked how they would prefer to receive farm stress education and resources, participants selected the following options: downloadable files (n=2), online modules (n=2), workshops (n=1), physical handouts (n=1), and "unsure" (n=1).

Table 1. Responses to the prompt: “I have experienced positive changes to my farming practices because of participating in the AgrAbility Virginia program.”

Item	Response (n=4)	Percentage
Strongly Disagree	1	25%
Disagree	1	25%
Neither Agree nor Disagree	2	50%
Agree	0	0%
Strongly Agree	0	0%
Total	4	100%

Table 2. Responses to the prompt: “I am more hopeful in my ability to meet my farming goals.”

Item	Response (n=4)	Percentage
Strongly Disagree	0	0%
Disagree	1	20%
Neither Agree nor Disagree	2	40%
Agree	2	40%
Strongly Agree	0	0%
Total	4	100%

Table 3. Responses to the prompt: “My quality of life has increased due to services provided by AgrAbility Virginia.”

Item	Response (n=5)	Percentage
Strongly Disagree	1	20%
Disagree	1	20%
Neither Agree nor Disagree	2	40%
Agree	0	0%
Strongly Agree	1	20%
Total	5	100%

Table 4. Responses to the prompt: “I am confident in my ability to continue farming safely and productively.”

Item	Response (n=4)	Percentage
Strongly Disagree	0	0%
Disagree	0	0%
Neither Agree nor Disagree	1	25%
Agree	2	50%
Strongly Agree	1	25%
Total	4	100%

Table 5. Responses to the prompt: “What is currently your biggest physical and/or mental health challenge that impacts your long-term farming success?”

Type of Challenge	Farmer-reported Outcomes
Assistive Technologies Access	Access to equipment (n=1). Equipment (grants), adapted equipment, and frustration over what I have not been able to accomplish because I don't have what I need to be successful (n=1).
Physical and Mental Health	“My health has went downhill” (n=1). “My PTSD, depression, ADHD, and having a yearlong court battle to remove a Cattle Squatter on the farm” (n=1).
Dependence of Others	Not being able to complete certain tasks without help from someone else (n=1).

Table 6. Responses to the prompt: “What strategies do you use to reduce stress as a farmer or farm family member?”

Type of Strategy	Farmer-reported Outcomes
Talking with Professionals and Self-Care	“Breathing techniques and I attend regular counsellor sessions at the VA” (n=1). “My love for my animals” (n=1).
Asking for Help	“Wait till I have help before performing certain jobs” (n=1).

Feedback and Insights

Feedback from participants reflected a range of experiences and highlighted opportunities to improve both program evaluation design and communication. The evaluation also provided valuable insights into the current status of farmers, including those we regularly engage with and those who have historically been harder to reach. This section underscores the importance of building strong relationships with farmers as a foundation for overall program success. In particular, it highlights specific areas where follow-up and clarification are needed. For example, two farmers noted that they had not yet installed assistive technology or implemented program suggestions, pointing to opportunities for additional follow-up by AgrAbility Virginia staff. One survey was also completed by a family member, who may not have been thoroughly familiar with the program’s technical assistance services. Following up with family members, where appropriate, may help clarify relevant services. In another case, the respondent who “strongly disagreed” indicated that they may have misunderstood the program’s scope, expecting the program to cover the full cost of high-priced assistive technologies, something beyond AgrAbility Virginia’s capacity. During another follow-up conversation, one participant specifically clarified that the dissatisfaction indicated on their survey was not directly related to AgrAbility, but rather to other organizations they interact with related to their farm accessibility needs. It is important to recognize that farmers often engage with multiple organizations to meet their needs. AgrAbility Virginia can play a critical role in helping clients and partners clearly distinguish which services are provided by which organization, especially when the program is brokering support through external providers.

The group of farmers who responded to our survey was demographically representative of the overall population of farmers served by AgrAbility Virginia. These farmers, from across the state, reported a mix of positive and neutral outcomes from their participation in the program. While most expressed satisfaction with the program, two respondents were unfamiliar with several resources available to them.

Following outreach and clarification from staff, all participants expressed interest in continuing their involvement with AgrAbility Virginia. Follow-up conversations specifically reaffirmed participants' appreciation for the program and their interest in continued engagement, highlighting the need for ongoing communication to clarify available services and expectations. Our program could also more clearly distinguish between which providers are delivering specific services, especially when AgrAbility Virginia is assisting in those communication exchanges, and services with other providers.

Interview Findings

Three AgrAbility Virginia farmer clients expressed interest in participating in the interview portion of the evaluation. Interviews with two of these farmers occurred in April 2025. AgrAbility staff connected with the third interested farmer but were unable to schedule the interview via email or phone after several attempts. Instead, AgrAbility Virginia noted the farmer's interest in reopening a relationship with AgrAbility and reinitiated the process of offering services.

The farmers who participated in the interview portion of the evaluation are medium-scale producers from rural Virginia. Both are established farmers and ranchers engaged in commodity grain, forage, swine, and beef production. One is a veteran who uses farming to manage his mental health and find fulfillment during retirement after a long military career. The other is a well-established farmer with over twenty years of experience raising cattle, soybeans, and hay. One of the farmer clients interviewed noted that farmers tend to be fiercely independent and self-sufficient, which can make it difficult for them to ask for help. Both expressed gratitude toward the staff and the program for listening to their needs and supporting their ability to continue farming.

The two farmers who participated in the interview had overwhelmingly positive feedback to share about their experience working with AgrAbility staff and receiving support from the program. However, one of them admitted to not following through with AgrAbility staff suggestions after the on-farm visit. Moreover, he stated that his understanding of the program was limited. During the interview call, he expressed his interest in learning more about the program and requested continued support. The second interview participant reported satisfaction with the services provided by AgrAbility Virginia. However, he stated that he has not yet installed the assistive technology AgrAbility Virginia helped to acquire through the Easterseals PORT Health Bellows Fund, a small grant program for assistive technologies for people with disabilities. Nonetheless, the client highlighted that since he started working with the program, he has begun to think strategically about his farm work.

Two core themes that emerged from the interviews were farmers experiencing "increased access to assistive technologies" and "mental health support" through their work with AgrAbility Virginia. One participating farmer was able to take advantage of the Bellows Fund and participated in one of our AgrAbility National Training Workshops, which included traveling and several days of national farmer and provider engagement and education. As an AgrAbility Virginia farmer client, this farmer also received support in selecting tools that were adapted to fit his unique needs. Another theme included feeling supported by AgrAbility staff, particularly in terms of their mental health and wellness. Notable was the staff's accessibility at events, as well as their responsiveness via email and phone communication, consistent follow-up, and prompt response times. Additionally, both suggested increasing program visibility on the Virginia Cooperative Extension website, making our links easy to find, publishing newsletters with future events, and posting about novel assistive technologies entering the market. Illustrative quotes related to these areas are provided in Table 7.

As in earlier iterations of our program evaluation, some positive responses may reflect self-selection bias, where participants who have had favorable experiences are more likely to provide feedback. In this evaluation, we observed a similar pattern, with the added insight that some farmers openly acknowledged not following through on AgrAbility Virginia's recommendations. It is also important to consider that, because participants provided feedback directly to AgrAbility staff during phone interviews, they may have felt reluctant to share constructive criticism or candid concerns.

Table 7. Interview findings by theme

Theme	Interview findings
Limitations for the adoption of assistive technologies	<p>“To be honest with you, I feel like I would rather do things myself and not depend on somebody, but as I get older, that's beginning to look a little different to me.”</p> <p>“I think a lot of it is that a lot of farmers are independent, and they don't want a lot of help. But it's probably a good thing that you keep advertising or, you know, letting the word get out, because at some point, they may need it. And then, they could know where to go. But yeah, farmers are pretty independent, and they don't want help until they need it.”</p>
Feeling supported by AgrAbility staff	<p>“I really do appreciate everything you guys do. It's one of those things. It's out of sight, out of mind. So, I never think about it (the program). You never think about it when it's not needed, so I guess that's why I had never taken advantage of it.”</p> <p>“I think that AgrAbility Virginia does a pretty good job. I was impressed. Everyone was knowledgeable. Everyone is willing to reach out and help. I felt really good about it. I felt like we have a really good program here in Virginia.”</p>
Feeling heard	<p>“Yeah, I mean, I think knowing that there's somebody there to help you and to direct you. I think that's a big help, as far as stress or anything. Knowing that you don't [have to] stress out. Then, [you think], how am I gonna do this or that, you know? I can pick up the phone and call Jeremy or Roberto and say, 'Hey, I don't know how to go about this.' But yeah, I think the sky is the limit. I mean, there's just so much technology [out] there.”</p> <p>“They [AgrAbility] can help me out with some of the knowledge and stuff like that. Some of it [assistive technology] has good ergonomics for my back.”</p>
Farm stress and stress management	<p>“Oh, my stress levels are pretty crazy lately.”</p> <p>“So, I got my stress level really high, and the other thing is I am new in the area.”</p>
Stop to think - a better way	<p>“Yeah, I think it's got me to think that there's always a better way to do things that's not so strenuous and physical. And maybe think things through a little bit before you just engage in a task or a job, and try to work through it a little smarter. When you start seeing the technology out there today, it gets your curiosity up. Maybe I can do this a little differently than what I've been doing, even if it takes me a little bit longer. It's a little bit easier on your body, and so that's what I would say.”</p> <p>“I will try to use technology to enable me because I am by myself right now. So, finding technology that can help me do some of the work for me, but not robots or anything like that.”</p>

Brief Service Provider Survey Results and Discussion of Service Provider Survey Responses

We contacted service providers with whom we have interacted since 2019 to recruit participants for the service provider portion of our evaluation. Invitations were sent to 34 individuals, excluding our internal team members

(n=7) but including advisory group members (n=5), some of whom are also service providers. Of those invited, twelve (35.3%) responded, representing a 26% increase from our 2023 evaluation. All respondents completed the survey electronically; no paper surveys were distributed.

In addition to the core evaluation data described below, we also collected information related to our outreach efforts. These questions explored where service providers access work-related information, what types of information they would like to receive, and included several prompts related to farm stress. As these responses are intended to guide future outreach rather than evaluate program outcomes, they are not included in this brief.

Demographics

Participating service providers described their organizations as focused on agricultural services (n=5), disability and rehabilitation services (n=5), education (n=1), or nonprofit work (n=1). They primarily serve rural areas (n=10), with a smaller number working in suburban settings (n=2). According to survey responses, the most common conditions affecting their clients include arthritis/rheumatic disease (n=7), hearing impairment (n=7), back injury (n=6), joint injury (n=6), cardiovascular disease (n=5), diabetes/metabolic disorders (n=5), mental health conditions/mental illness (n=4), farm stress (n=4), amputation (n=4), orthopedic injury (n=4), spinal cord injury (n=4), neurological conditions/disorders (n=4), and cancer (n=4).

Service Providers' Perception of AgrAbility Virginia Programming

All but one respondent agreed with the statement, "I am aware of what AgrAbility Virginia services are available to my clients," while one respondent neither agreed nor disagreed. Ten respondents agreed that the information provided by AgrAbility Virginia has been helpful to their clients, with two selecting neither agree nor disagree. Most respondents indicated they would recommend the AgrAbility Virginia program to other farmers or farm families. When asked to share their biggest takeaway from participating in the AgrAbility Virginia program and any additional comments, service providers offered the following responses:

- "Great folks to work with, passionate."
- "AgrAbility has extended my farming life."
- "What a great service to offer the community."
- "Resourcefulness" and "caring staff."
- "It's been a very positive experience."
- "It can be difficult to find true solutions for the needs of producers at no fault of AgrAbility."
- "Better outreach to the farming community - including various colleges in the program."
- "AgrAbility is a great resource for Virginia."
- "Appreciate the connection and ability to refer people as we can."
- "The variety of programs that are offered."

Service Providers' Perception of Their Farmers'/Clients' Stress

In response to the prompt, "How would you describe the stress level of your farmers/clients?" service providers reported the following: low stress (n=2), high stress (n=8), and unsure (n=2). When asked, "Are you aware of which strategies your farmers/clients use to reduce stress at the farm?" nine respondents answered "No," and three answered "Yes." Two service providers reported actively offering resources to help alleviate stress, including referrals to mental health support services, assistive technology, and compensatory techniques.

Conclusion

AgrAbility Virginia promotes safety, wellness, and accessibility on the farm through education, rehabilitative services, and direct assistance with assistive technology. To evaluate whether and how we are meeting our service and educational goals, we implemented a convergent parallel mixed-methods design to explore the experiences of

farmer clients with the program. The evaluation included farmer surveys (n=5), service provider surveys (n=12), and farmer interviews (n=2). Farmers who participated in both the survey and interview components expressed overall satisfaction with the program, noting that they felt supported by AgrAbility Virginia. These findings highlight the program's key strengths, as well as opportunities for improvement, particularly in enhancing communication with clients and clarifying the scope and limitations of available services. Notably, we received our highest response rate from service providers (35.3% of those invited), which offered valuable insights into how AgrAbility Virginia supports its farmer clients and identified potential strategies for expanding engagement across the state.

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