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Impacting Leasing, Conservation, and Succession through Iowa's Women Farmland Owners and Operators

Abstract

As extension professionals strive to report program impacts, this study provides an example to draw on. In Iowa, women own nearly half of all farmland, are one-third of all farmers, and make important decisions on three key farmland management issues: leasing, conservation, and succession. Iowa State University Extension and Outreach plays a critical role in educating this important group of managers. Our team completed 9 local workshops, 3 local courses, 4 regional forums, 9 statewide conference sessions, 11 webinars, and 11 Ag Decision Maker news articles from 2021 to 2025. These educational programs were attended by 745 in-person participants and 1,212 online participants. In 2025, participants were invited to reflect on program impacts. There were 8 (n=8) women who attended a follow-up focus group, and 124 (n=124) women who completed a follow-up on-line survey. Survey results indicated 45% of respondents negotiated new leases, 45% enrolled in a conservation cost-share

program, and 43% created or updated estate plans. These and other actions taken led to economic benefits as 43% of respondents reported cost savings and 48% reported added income. Women farmland owners and operators can be effective change agents for more equitable farmland leasing, adoption of conservation practices, and greater efficiencies in land transition to the next generation farmers. All lowans benefit when women are supported in improving the three pillars of agricultural sustainability including the economy, environment, and community.

Key Words: women, farmland, leasing, conservation, succession

Introduction

Extension professionals are often asked to demonstrate the value of their work. This paper provides an example of a follow-up study to identify and report the impacts of a four-year project. The Iowa State University (ISU) Extension and Outreach Farm Management Team led a “Women Managing Farmland” project from 2021 to 2025. At the conclusion of the project, an evaluation of the extension activities was conducted.

Results demonstrate that past participants took actions to increase profitability, add conservation practices, and create connections with people in the community. Women valued the educational programs and supportive environment. Private and public value was generated through the actions women took after participating in the extension programs. All lowans benefit when women are supported in improving the three pillars of agricultural sustainability including the economy, environment, and community.

Background on audience of women farmers

Across the United States, women farm operators make up more than one-third (36%) of all farm operators (USDA-NASS, 2024a). These women make influential farm business decisions and are an important audience for extension.

In Iowa, women have significant roles in agriculture. They own just under half (46%) of all Iowa farmland, and they own a majority (54%) of all leased land in the state (Arbuckle, 2022). Women make key farmland decisions as nearly three-fourths (72.5%) are involved in financial management, and more than half are involved in estate or succession planning (56.3%), and land use decisions (52.4%) (USDA-NASS, 2024b).

Iowa's women farmland owners and operators may face greater challenges than their male counterparts. This is because many women landowners in Iowa currently do not actively farm, live out-of-state, or are 80 years of age or older (Tong and Zhang, 2023).

Across the country, well documented hurdles facing women landowners include a reduced propensity of male tenants to adopt women landowners' proposed conservation practices and women landowners' less frequent interactions with local extension agents (Petrzelka et al., 2018). Extension has a critical role in reaching this audience as women's succession decisions are of considerable importance to the farming community and the future structure of the agricultural sector (Bigelow et al., 2016).

Background on outreach directed towards women farmers

The long-term mission of the ISU Extension and Outreach Farm Management Team is to improve the quality of life in Iowa by providing research-based educational resources and programs that expand agricultural business, improve natural resource management, and support the community of people in agriculture. As part of this, the team recognizes women farmers are influential decision-makers and emphasizes educational programs that meet their unique learning needs and preferences.

The extension team created the "Enhancing Conservation, Access, and Generational Transition of Iowa Farmland Through Women Landowners" project with support from a USDA National Institute of Food and Agriculture – Critical Agricultural Research and Education grant: Award No. 2021-68008-34180, and a Farm Credit Services of America gift.

Our goals with this project were to offer extension and outreach to women farmland owners and operators on three essential and interwoven farm management tasks:

1. Use of equitable leases including economic incentives that may increase conservation and land access to beginning farmers.
2. Adoption of soil and water conservation practices.
3. Implementation of efficient plans to transition farmland to the next generation owners.

A video introduction to the project is available at:

<https://vimeo.com/723489276?share=copy>.

In 2021, our team partnered with the ISU Center for Survey Statistics and Methodology to conduct a baseline survey of Iowa women farmland owners. The team aimed to better understand this audience and inform educators about the needs and interests of women regarding leasing, conservation, and land transition.

A report of the baseline survey results was published in the Journal of the NACAA (2022, Vol. 2). Going deeper into conservation issues, a second report was published in Renewable Agriculture and Food Systems (Tong et al., 2024).

The team used the results of the baseline research to design extension programs and resources that meet audience needs. Education and peer networking were offered through in-person and virtual “Women Managing Farmland” programs. The programs were designed to meet women where they were at and foster connection, follow-up, and support. The team also sought to increase awareness of ISU’s new or legacy websites and handbooks providing research-based information for farmland decisions.

ISU Extension Women Managing Farmland Programs:

- 9 three-hour local workshops (2021–2022)
- 3 nine-hour local courses (2023)
- 4 one-day regional forums (2024–2024)

- 9 one- or two-hour statewide conference tours or breakout sessions (2022–2024)
- 11 one-hour online webinars with question-and-answer (2022–2025)
- 11 Ag Decision Maker online news articles (2023–2025)

ISU Extension Websites:

- Ag Decision Maker - <https://www.extension.iastate.edu/agdm>
- Natural Resources Program - <https://naturalresources.extension.iastate.edu>
- Center for Agricultural Law and Taxation - <https://www.calt.iastate.edu>

ISU Extension Handbooks:

- Farmland Leasing and Management, previously published, updated annually, 100 pages
- Whole Farm Conservation Manual, published in 2022, 80 pages
- Estate and Succession Planning for the Farm, published in 2023, updated annually, 100 pages

Through Women Managing Farmland project activities, the team distributed more than 1,000 copies of these handbooks. Handbooks were developed by the team or colleagues at ISU and are available at: <https://shop.iastate.edu/extension>.

Overall, more than 1,957 women enhanced their farmland management skills. In-person programs reached 745 women. Webinars reached 1,212 participants from 18 states. The online articles were viewed over 10,000 times. Webinar recordings and articles can be found on Ag Decision Maker.

For those interested in additional project information, a shared folder of detailed project materials is available at <https://iastate.box.com/s/c8bh1ksqg7zaojs1ritf0pss0jor90b2> or by writing to the authors.

Methods

Our team partnered with the ISU Research Institute for Studies in Education (RISE) to gather third-party impact results from Women Managing Farmland extension programs. RISE conducted a mixed-methods process of outcomes evaluation using a comprehensive survey of past participants as well as focus groups. The electronic survey and virtual focus group protocol were developed by RISE in consultation with Madeline Schultz to ensure the instruments addressed the objectives stated in the program logic model. The mixed methods approach provided a holistic viewpoint of women's experiences and the outcomes they achieved. This paper summarizes the full reports prepared by RISE.

The survey and focus group participants were farmland owners and operators who attended in-person and/or virtual Women Managing Farmland programs hosted by the team from December 2021 to February 2025.

Virtual focus groups

Three one-hour focus groups were held January 15 to February 13, 2025. Past participants were invited to participate in a focus group through the Women Managing Farmland Forums end-of-session evaluation (Sept. 2024), as well as through an e-newsletter (Nov.–Dec. 2024) published by the team.

The focus groups were conducted by Justin Szabo, Research Scientist, RISE, ISU School of Education. A standard protocol was utilized for each group. The facilitator asked participants questions about their experiences in the programs, what they had learned, practices they have implemented, benefits, and suggestions for future programs. Focus groups were audio-recorded, transcribed using Rev.com, and analyzed for themes.

Electronic survey

In February 2025, a survey invitation was distributed via email as well as a postcard reminder to 648 past participants for whom valid addresses were available.

The survey was administered by Andrew Guhin, Research Scientist, RISE, ISU School of Education. Qualtrics was used to collect quantitative data using Likert scale questions and qualitative data using open-ended responses. Quantitative data was analyzed using descriptive statistics, including frequency, percentage, minimum, maximum, and mean. Respondent demographics were summarized, including the Women Managing Farmland programs they participated in, their age groups, and the total area of farmland they own or lease.

Participation

Focus group participants

A total of eight (n=8) past participants were part of the focus groups.

Focus group members reported participating in multiple types of Women Managing Farmland programs including regional forums (75%), conference sessions or tours (38%) and webinar series (25%). Group members also attended other extension farm management programs including Annie's Project farm business management courses, Women Marketing Grain courses, Farmland Leasing meetings, and Farm Transition conferences.

Group members represented all regions of Iowa and multiple generations, from beginners entering farming to those transitioning out of farming, and included landowners and farm operators, many who were also professionals in diverse fields. Some managed land independently, while others worked with family or farm managers.

Survey participants

A total of 124 (n=124) past participants (19.1%) responded to the online survey.

Survey respondents reported webinars were the most popular program format, with 32% participating, followed by multi-session courses (20%) and single-session workshops (19%). Fewer survey respondents participated in conference sessions or tours (12%), regional forums (11%), and other activities (6%). Many respondents engaged in more than one program.

The largest age group of survey respondents were 60–69 years old (41%), followed by those 70 and older (16%). The smallest group was under 30 years old, representing just 4%.

There were 89 survey participants who reported owning and/or operating a total of 53,821 acres for an average of 605 acres per person. The range was 0 to 8,000 acres. On average, participants leased 150 acres to others to operate and/or leased 224 acres from others to operate themselves.

Results and Discussion

Actions taken

Women taking the survey reported the actions they completed after participating in a Women Managing Farmland program across the areas of learning and planning, leasing, conservation, and transition planning (Table 1). The scale was “I have completed,” “I’m in progress,” “I plan to but haven’t started,” and “I don’t intend to.” The percentages below represent the “I have completed” responses.

Table 1. Actions taken after participating in women managing farmland programs.

Actions Taken	I have completed
LEARNING AND PLANNING	
Access the Ag Decision Maker website or other online information	74%
Share what I learned with family, unrelated business partners, or others	71%
Participated in additional Extension or other educational programs	61%
Improve communication with family or unrelated business partners	55%
LEASING	
Use a written farmland lease	69%
Negotiate new lease terms	45%
As a landowner, lease land or other farm assets to a next generation farmer tenant	44%
As a next generation farmer tenant, lease land or other farm assets FROM a landowner	37%
CONSERVATION	
Talk to a USDA-NRCS or other conservation professional	57%
Enroll in a conservation cost share or other economic incentive program	45%
TRANSITION PLANING	
Talk to an attorney or other planning professional	57%
Gather my ideas, assets, beneficiaries, and other information before talking to an attorney	56%
Create or update estate plans	43%
Transfer land or other farm asset ownership to a next generation farmer; sale, gift, or any other method	10%

Focus group participants discussed the actions they took to manage their farmland. Many used the Ag Decision Maker website for land value data and leasing forms, and developed conservation goals. Increased communication across generations was a common theme, with participants initiating succession discussions. They also expanded their networks by connecting with guest speakers and women in similar situations. The following quotes help contextualize the data in Table 1.

Participant quotes – actions taken:

- *“I know how to access the ISU website. I’m developing this network of people. I know we are very fortunate to have this. So, I hope these programs continue to be adequately supported because it’s very important to us and there’s so many more of us women trying to figure it out, so thank you.”*
- *“I did a lot of soul-searching on what I want to rent the farm for. I feel it’s a working relationship and I know this person is going to take care of my land...It’s not about the money; it’s about their own conservation practices aligning with mine.”*
- *“I was able to start the conversations with my parents. We’re having two generations farming side by side. My sister and I will take over managing the farm, and Dad is 76. So, we’re trying to make sure we have enough knowledge. It’s been a really productive year.”*

Profitability

We asked survey participants to reflect on how the actions they took, as a result of their participation in Women Managing Farmland programs, affected their farm/ranch business profitability on a whole-farm basis. Of the 75 responses to yes/no questions, 43% reported cost savings and 48% reported added income. We also asked participants to estimate the amount of savings and income (Tables 2 and 3).

Cost savings

Of the 32 responses to estimated cost savings, 68% saved \$1,000.01 or more, including the 43% of participants who saved \$5,000.01 or more (Table 2). The most common savings range was \$5,000.01 to \$10,000 (31%), followed by \$1,000.01 to \$5,000 (25%).

Table 2. Estimated amount of cost savings – whole-farm basis.

U.S. Dollar Range	N	Percent
\$.01-\$500	3	9%
\$500.01-\$1000	7	22%
\$1000.01-\$5000	8	25%
\$5000.01-\$10,000	10	31%
\$10,000.01-\$25,000	3	9%
\$25,000.01-\$50,000	1	3%
\$50,000.01 or more	0	0%
Total	32	

Added income

Of the 36 responses to estimated added income, 64% saved \$1,000.01 or more, including the 31% of participants who saved \$5,000.01 or more (Table 3). The most common added income ranges were \$1,000.01 to \$5,000 (33%) and \$500.01 to \$1000 (33%).

Table 3. Estimated amount of added income whole-farm basis.

U.S. Dollar Range	N	Percent
\$.01–\$500	1	3%
\$500.01–\$1000	12	33%
\$1000.01–\$5000	12	33%
\$5000.01–\$10,000	6	17%
\$10,000.01–\$25,000	1	3%
\$25,000.01–\$50,000	4	11%
\$50,000.01 or more	0	0%
Total	36	

Focus group participants commented on the value of the education provided to them. They used the knowledge they gained to make decisions around leasing and marketing that improved profitability. The following quotes help contextualize the data in Tables 2 and 3.

Participant quotes – profitability:

- *“What has been valuable for me, is finding where the resources are, both in Annie's Project and in the forum.”*
- *“I did my leases sooner because...I had the knowledge I needed...So I think that was really an action that I took...and then we had some time to chat with our renters and it's been good... Well, it was definitely measurable in our income.”*
- *“Marketing is very difficult. The thing that we learned, if you take revenue protection*

insurance, then you should be able to do some more creative marketing, which we had not been doing.”

Sustainability and quality of life

Survey takers reported how their participation in Women Managing Farmland contributed to sustainability and quality of life concepts (Figures 1 and 2). The scale for these measures was “A great deal,” “A moderate amount,” “A little bit,” and “Not at all.”

Sustainability

Regarding sustainability, the majority of participants reported “A great deal” or “A moderate amount” of impact on long-term farmland/farm business planning (63%), farm profitability (53%), and conservation practices (52%). Just under half of participants reported “A great deal” or “A moderate amount” of impact on distribution of land/other assets to next-generation farmers (42%).

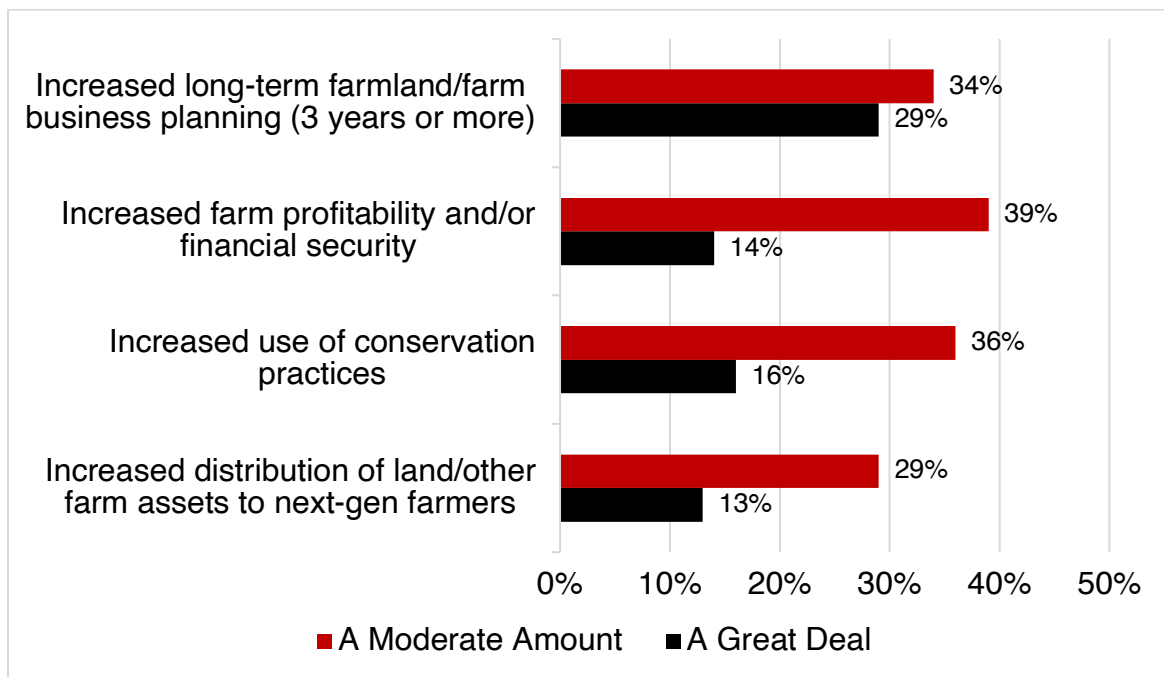


Figure 1. Contribution to Sustainability.

Focus group participants contributed to sustainability concepts by calculating cost of production and taking grain marketing courses to improve profitability, adopting conservation practices—including a beaver deceiver to manage water levels—and partnering with unrelated custom operators to transition land access and income to the next generation.

Participant quotes – sustainability:

- *“I have a very good tenant, and we worked together to put some of the more fragile tillable land into CRP. This action actually increased his yields as he ended up farming the better ground... [And] controlled excessive erosion of fragile land next to the woods... a win/win situation.”*
- *“We have three young kids... it's allowed us to start thinking about that transition, and putting plans in place, or at least knowing what to do if something should happen to one of us.”*
- *“I'm working with a young couple, a beginning farmer couple, who are my custom operators. They're in their 20s... and they provide all the field machinery. We make nearly all our decisions together and I've learned so much about agronomy... and it's been a delightful relationship.”*

Quality of life

The highest quality-of-life improvements were seen in confidence making farmland decisions (79%), satisfaction from operating/owning farmland or a farm business (70%), and social network with supportive agricultural community (67%), when adding “A great deal” and “A moderate amount” together. Still selected by a majority, but at a somewhat lower level, was stress associated with farm family or partners (59%).

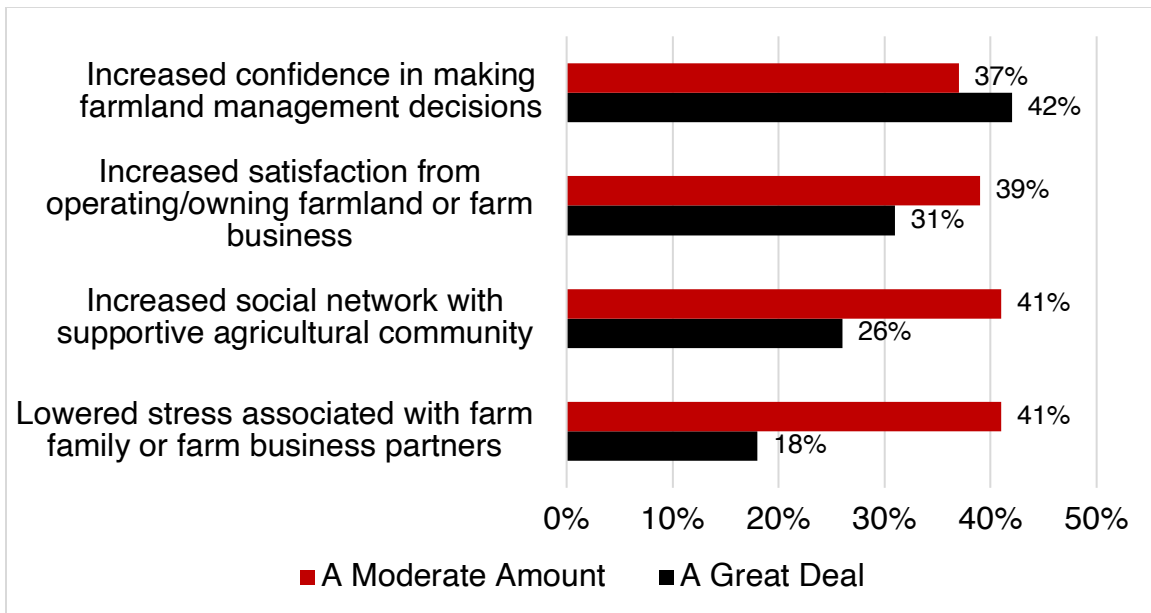


Figure 2. Contribution to Quality of Life.

Improved quality of life was evident among focus group participants. They reported increased confidence and felt supported by a network of women in agriculture as well as local professionals they could turn to for advice. Having handbooks, websites, and other resources was key to reducing stress and barriers to long-term planning.

Participant quotes – quality of life:

- *“Just having that process and that confidence with some forms and information behind me and knowing that what I’m asking for is really standard practice. So, that helped me be more confident when I met with my renter.”*
- *“I thought one of the interesting things that we talked about was communication skills, which you would think... I thought, “Well, what does this have to do with farming?” But it is very important.”*
- *“I saw there are a lot of people searching out. One person was in tears because she didn’t know who to rent her farm to. We need more networking and support because we just don’t have it in the farm community.”*

Expectations and improvements

In open-ended questions, participants shared their comments about the Women Managing Farmland programs.

Expectations

Survey participants expressed strong appreciation, highlighting that the programs addressed the critical needs faced by women landowners and farm operators, and identifying some of the stressors felt. Many women, including non-operating landowners, commented on how the programs helped them better understand lease management, conservation practices, and transition and succession processes.

Overall, focus group participants found the extension programs met their expectations. The events were valuable for personal and professional development. The women enjoyed the knowledgeable speakers, and the variety of topics discussed. A key theme was having a safe space to learn, discuss topics with other women, and build networks.

Participant quotes – expectations:

- “I’m really thankful they bring the real experts to us. We had highly qualified people that I maybe wouldn’t encounter in my local community. And the handouts were excellent and useful to refer to frequently.”
- “I gain so much from being inspired by women who are responsible to farm, manage, make decisions, problem solve, profit, and figure out how to be a farmer. I am learning every time I attend a session.”
- “This is an excellent program. From my own experience and the many attendees I engaged with at events, it is clear there is an unequivocal need for this programming in Iowa. The amount of stress that women farmers and landowners are currently under, and expressed at these events, is enormous. Women are not only managing their farmland, but also their families, who are greatly impacted... Please make sure these

programs continue. They provide ESSENTIAL support for a critical need... The future of Iowa soil and human health depends on it.”

Improvements

Survey participants provided a range of suggestions for improving the Women Managing Farmland programs. They expressed interest in having more hands-on workshops. Some suggested hosting events at ISU research farms, while others recommended programs on marketing strategies, managing farm finances, cybersecurity, and understanding soil test results. There were also calls for more accessible formats, such as Zoom, for out-of-state landowners.

Generally, focus group participants requested more time for networking and getting to know others. Participants shared they want to see trendy programs that encourage and excite young women in agriculture, and some considered the programs as an opportunity for them to mentor and support other women.

Participant quotes – improvements:

- *“Go to the ISU research farms that are doing current research to support the various practices suggested. Go to area farms who have implemented cost savings with relay cropping, multi cropping, water quality improvement, cover crops, soil health and soil conservation.”*
- *“The networking opportunity, more small group discussion type of thing. I know, through Annie's Project, we had a lot of that. The Women Managing Farmland forums I know didn't provide a lot of time to do that kind of thing, but those are always helpful activities for me.”*
- *“And if I'm in a position now that I can be useful because of my, what, 15 years of experience of doing this, great. But I have so much more to learn, that I probably five years ago wouldn't have reached out to offer to help someone else but now I feel like I can.”*

Conclusion

A mixed-methods approach to follow-up evaluation can be an effective way for extension professionals to gather program impact. In this study, women farmland owners and operators were thankful for the extension and outreach offered by ISU and expressed a need for more education and supportive networks. The in-person and online education, along with access to key resources, was effective in supporting their management goals.

Women valued extension's ability to bring the experts to them and to provide knowledge they can turn into actions. The opportunities to gather with women who have similar farm management questions and goals was important to them. An unexpected result was that program participants were interested in helping to mentor and support the next generation of women.

Women indicated the management actions they took saved money, with the most common ranges being \$5,000.01 to \$10,000 (31%) and \$1,000.01 to \$5,000 (25%).

Women also increased farm income with the most common ranges being \$1,000.01 to \$5,000 (33%), and \$500.01 to \$1,000 (33%.)

Sustainability was enhanced as women increased farm profitability, conservation practices, distribution of farm assets, and long-term business planning. Quality of life was enhanced as women gained management confidence, satisfaction from farm ownership, stronger social networks, and also lowered their stress.

When Iowa State University Extension and Outreach extends knowledge and empowers women in agriculture, they can be effective change agents for more equitable farmland leasing and access, greater adoption of conservation practices, and improved efficiencies in transitioning land and businesses to next generation farmers. All Iowans benefit when women farmland owners and operators are supported in improving the

three pillars of agricultural sustainability including the economy, environment, and community.

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