

2024

LENDER PERCEPTIONS AND ACTIONS ON CONSERVATION AGRICULTURE:

Survey insights from four upper Midwest states



LENDER PERCEPTIONS AND ACTIONS ON CONSERVATION AGRICULTURE: SURVEY INSIGHTS FROM FOUR UPPER MIDWEST STATES



179 LOAN OFFICERS
49% have more than 10 years of experience



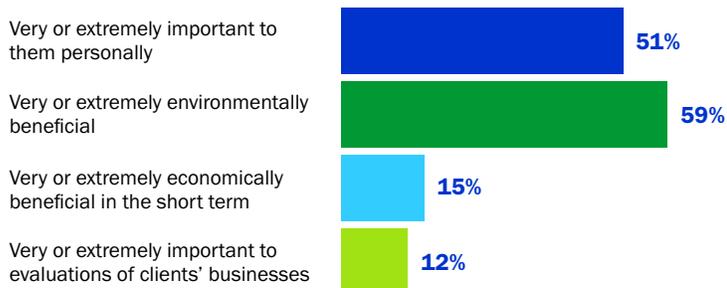
4 UPPER MIDWEST STATES



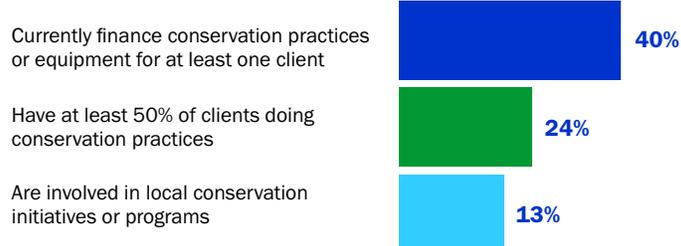
56% USDA Farm Service Agency
24% Farm Credit associations
16% Commercial banks

While many loan officers believe conservation practices are important, less than half responded that they currently finance conservation practices or equipment for at least one client.

% of respondents who think that conservation agriculture is...

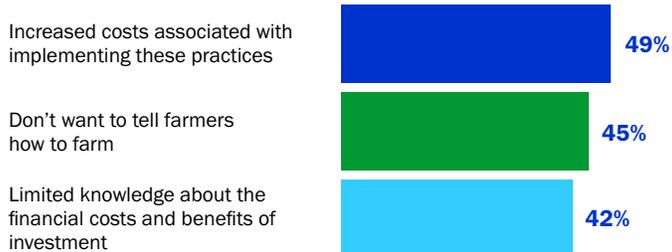


% of respondents who...

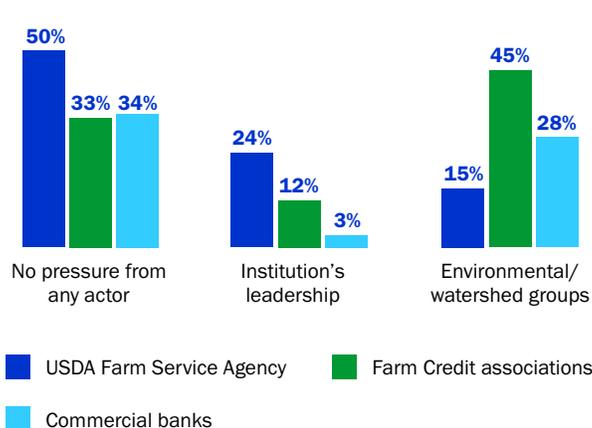


Loan officers face multiple challenges in supporting their borrowers' investments in conservation agriculture, including having limited knowledge about the economics of conservation practices.

Top three obstacles in supporting clients who want to include conservation practices in their loan proposals (% of respondents):



% of respondents who feel increased pressure from the following actors to support climate change mitigation practices:



27%

think they are very or extremely knowledgeable about how conservation agriculture impacts soil and water resources.

15%

think they are very or extremely knowledgeable about the financial costs and profits of conservation practices.

Loan officers need information about conservation practices from trusted sources to better support their clients' investments.

Most desired information:

- Financial implication of conservation practices
- Incentives and funding programs

Most trusted sources of information:

- Local farmers/producers
- University extensions and researchers
- USDA Natural Resources Conservation Service

Actions agricultural finance institutions can take to support conservation investments:

- Develop conservation strategies to support clients in voluntary conservation investments.
- Provide education and training on the financial impacts of conservation agriculture to address knowledge gaps and perceived barriers among loan officers.
- Support conservation financial data gathering and analysis efforts to advance research on the economics of conservation agriculture.

INTRODUCTION

The public and private sectors are making unprecedented investments in agricultural conservation, including major funding increases for United States Department of Agriculture conservation programs and sustainability investments by food and agriculture companies.

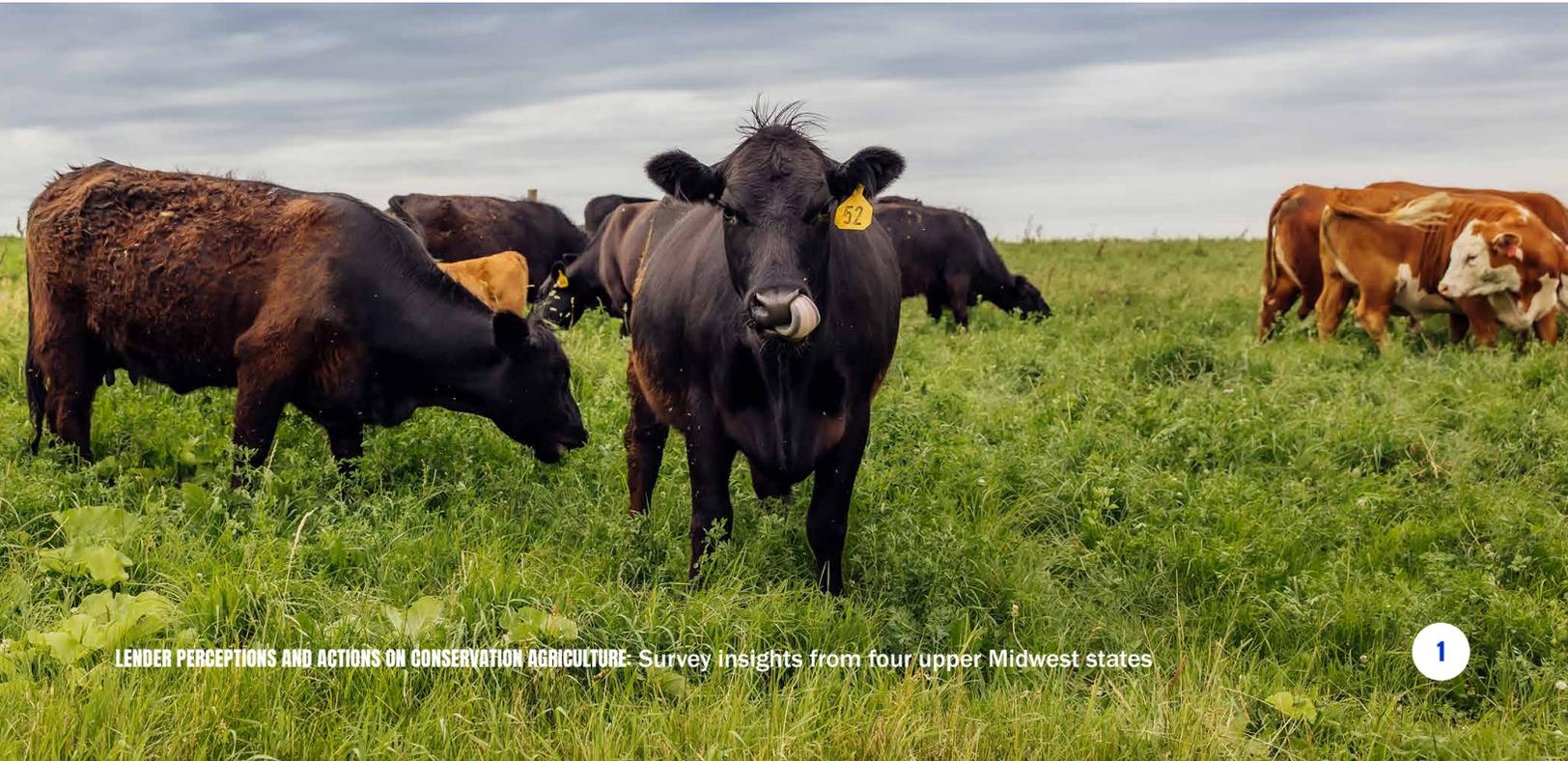
Investments in agricultural conservation can help farmers and ranchers offset the costs of implementing conservation practices and improve the financial profitability of conservation production systems.

As farmers' closest financial partners, agricultural lenders are crucial in supporting farmers' financial decisions, including investments in conservation practices. Loan officers engage directly with farmers on the financing needs of their operations, including securing loans and making sound investment decisions for their operations.

The importance of the relationships between farmers and their lenders and the expanding opportunities in conservation agriculture increase the importance of understanding agricultural lenders' perceptions,

actions, and challenges regarding conservation. To advance this understanding, Environmental Defense Fund, University of Wisconsin-Madison Division of Extension, University of Minnesota Water Resources Center and Compeer Financial conducted a survey of 179 loan officers in Illinois, Iowa, Minnesota and Wisconsin (collectively referred to as the "upper Midwest" in this report).

The survey aims to inform agricultural finance institution executives, conservation professionals and other stakeholders about loan officers' knowledge of conservation practices and their attitudes to financing farmers who utilize those practices. These insights can help agricultural finance institutions better support their farmer borrowers in making conservation investments.



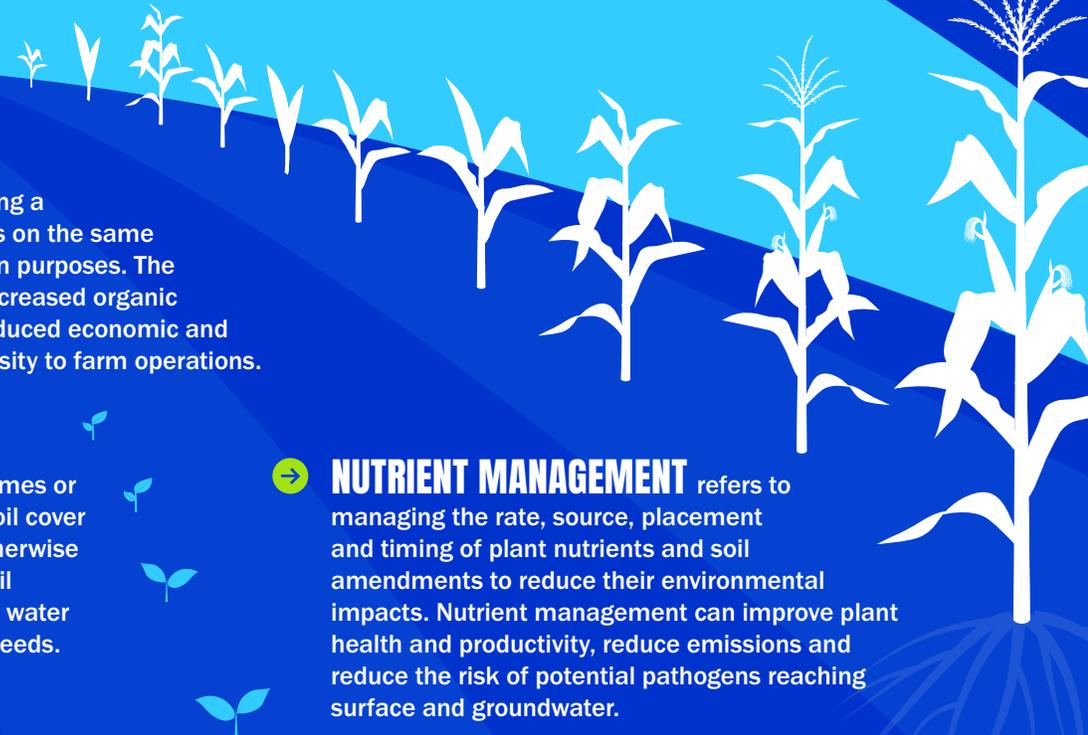
AGRICULTURAL CONSERVATION PRACTICES¹

Agricultural conservation practices refer to a range of sustainable techniques and strategies aimed at improving soil health, enhancing water quality and protecting biodiversity and natural resources. These practices are vital for maintaining long-term crop and livestock productivity and ensuring the resilience of agricultural systems in the face of climate change.

Major in-field conservation practices in the US include:



→ **MANAGED GRAZING** involves managing stocking rates and grazing periods to adjust the intensity, frequency, timing, duration and distribution of grazing and/or browsing to achieve ecological, economic and management objectives. Managed grazing can be used to improve or maintain desired species composition and structure of plant communities, reduce soil erosion and improve surface and subsurface water quality and quantity.



→ **CROP ROTATIONS** involve growing a planned sequence of different crops on the same area of land for various conservation purposes. The benefits of crop rotations include increased organic matter, reduced soil erosion and reduced economic and environmental risks by adding diversity to farm operations.

→ **COVER CROPS** are grasses, legumes or forbs planted to provide seasonal soil cover on cropland when the soil would otherwise be bare. Cover crops can prevent soil erosion, improve soil health, reduce water quality degradation and suppress weeds.

→ **NUTRIENT MANAGEMENT** refers to managing the rate, source, placement and timing of plant nutrients and soil amendments to reduce their environmental impacts. Nutrient management can improve plant health and productivity, reduce emissions and reduce the risk of potential pathogens reaching surface and groundwater.



→ **CONSERVATION TILLAGE** practices such as no-till and reduced till limit soil disturbance and preserve crop residue on the soil surface. Conservation tillage reduces soil erosion, improves soil health, reduces energy use and reduces tillage-induced particulate emissions.

ABOUT THIS SURVEY

This survey was conducted as part of a North Central Region Sustainable Agriculture Research and Education grant called “Closing the Financial Information Gap in Conservation Agriculture.”

The insights gathered in this survey contribute to the project’s objective to increase knowledge about the financial impacts of conservation practices among conservation educators, farm business management educators and agricultural lenders to enhance their abilities to support farmers’ conservation decisions.

A total of 179 loan officers were surveyed across Illinois, Iowa, Minnesota and Wisconsin (Figure 1). Forty-nine percent of the respondents have more than ten years of lending experience. More than half (56%) of the respondents currently work at the USDA Farm Service Agency, 24% work at Farm Credit associations and 16% work at commercial banks (Figure 2).

Figure 1. Number of respondents operating in each upper Midwest state.

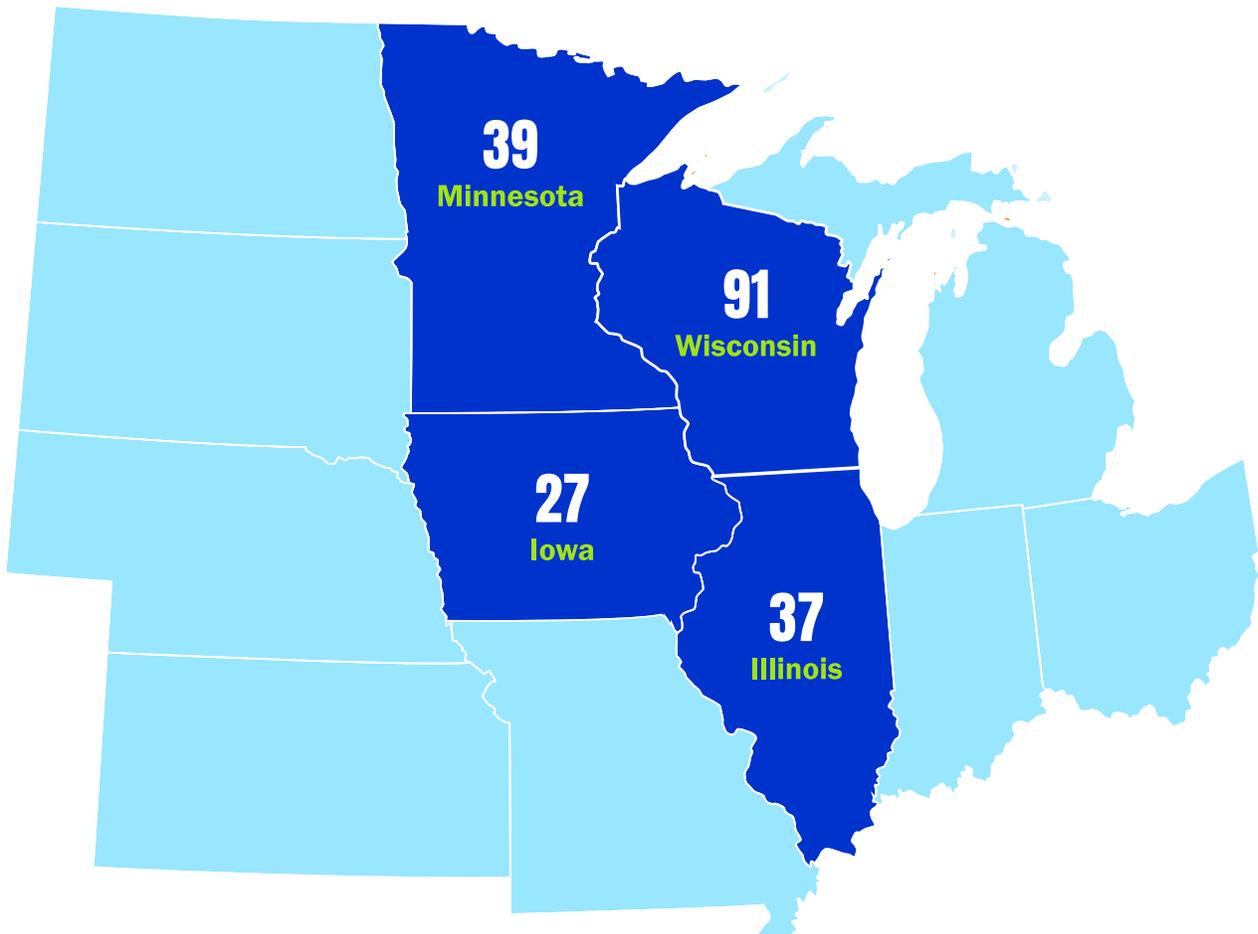
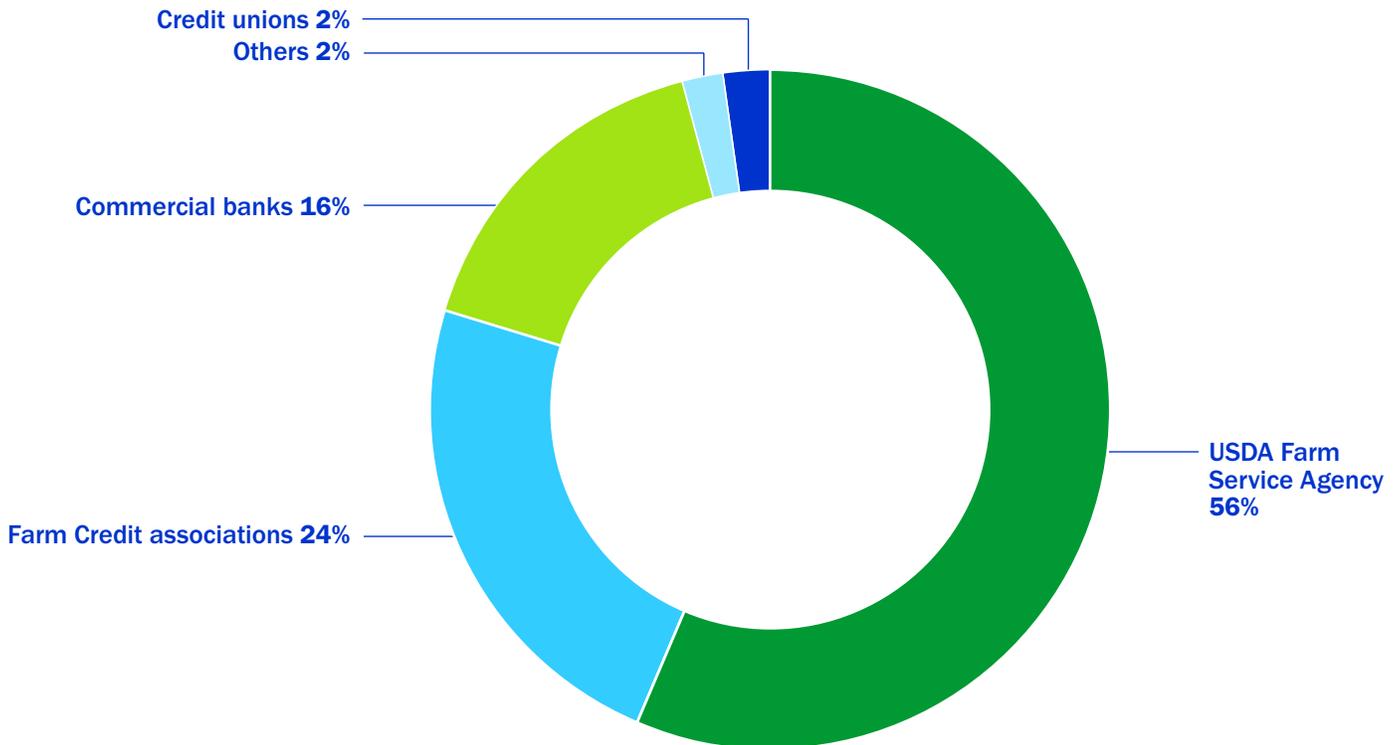


Figure 2. Percent of respondents working at different types of financial institutions.



The survey respondents' distribution across agricultural finance institution categories does not match the market shares of these institution types. According to the USDA, the Farm Credit System accounts for 46% of total farm debt, followed by commercial banks at 35% while the Farm Service Agency only represents 3% of the total farm debt.² In addition, the Farm Service Agency focuses specifically on supporting beginning and minority farmers as well as smaller farm operations that cannot access commercial credit.³

To address the discrepancies between the distribution of respondents in our survey across various financial institution types and their actual market shares, we present the results in disaggregated form by financial institution type in each report section. This approach allows us to appropriately present the perspectives, regulatory contexts and market segments of different agricultural lenders in the upper Midwest.



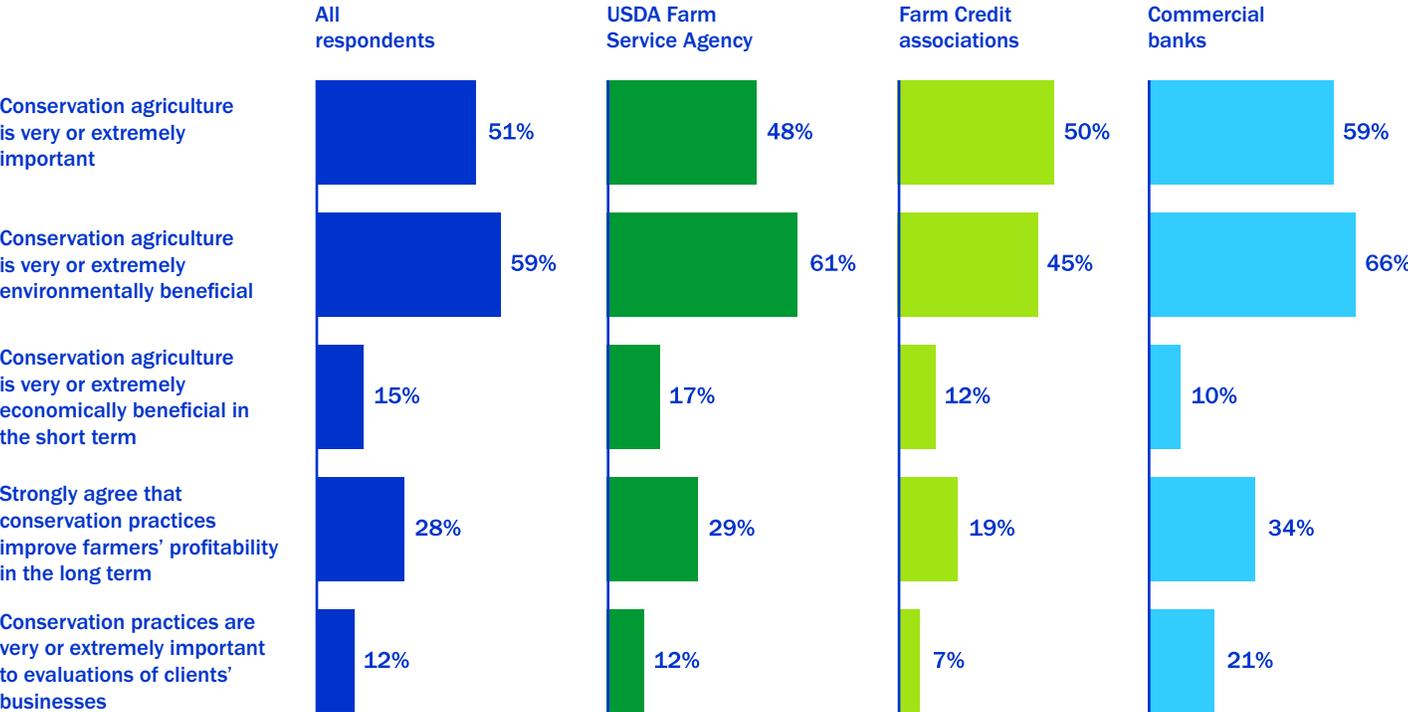
LOAN OFFICERS' PERCEPTIONS AND FINANCING TO CONSERVATION PRACTICES

While many loan officers believe conservation practices are important, less than half responded that they currently finance conservation practices or equipment for at least one client.

Overall, 51% of all respondents said that conservation agriculture is very or extremely important to them personally, and 59% believe it is very or extremely environmentally beneficial (Figure 3). Only 4% stated that conservation agriculture is slightly or not

at all important to them personally and 5% think that conservation agriculture is slightly or not at all environmentally beneficial, indicating wide recognition of the importance of conservation agriculture among the surveyed loan officers.

Figure 3. Loan officers' perceptions of conservation practices.



Only 15% of all respondents believe conservation agriculture is very or extremely economically beneficial to farmers in the short term, with an additional 39% regarding it as moderately beneficial. Forty percent of the respondents think that conservation agriculture is slightly or not at all economically beneficial to farmers in the short term, highlighting concerns about the immediate economic impact of these practices.

While there is concern about the financial profitability of conservation practices in the short term, 28% strongly agree and 39% somewhat agree that these practices improve farmers' profitability in the long term. This suggests that loan officers believe conservation practices present upfront costs but could ultimately enhance their borrowers' profitability.

Twelve percent of respondents consider conservation practices as very or extremely important in evaluating their clients' businesses, with 23% regarding them as moderately important and 20% regarding them as slightly or not at all important.

The survey asked loan officers whether they are financing agricultural conservation practices or equipment and whether the majority of their clients are implementing conservation practices (Figure 4). The survey found that 40% of all respondents are actively financing conservation practices or equipment for at least one of their clients. Furthermore, 24% reported that at least half of their clients are engaged in conservation practices, and just 13% of the surveyed officers are involved in local conservation initiatives or programs, such as farmer-led watershed groups.



FINANCIAL DATA ON CONSERVATION PRACTICES IS NEEDED TO INFORM LOAN OFFICERS ABOUT THEIR FINANCIAL IMPACTS.

Farmers and loan officers have questions about the financial costs and benefits of conservation agriculture and how these impacts materialize in the short and long term.

Projects like the **cover crop financial data gathering** efforts by EDF, the University of Minnesota's Center for Farm Financial Management and the Minnesota State Farm Business Management program are working to answer these questions by gathering financial performance data at scale from Minnesota farms implementing conservation practices and comparing them to farms using conventional practices.

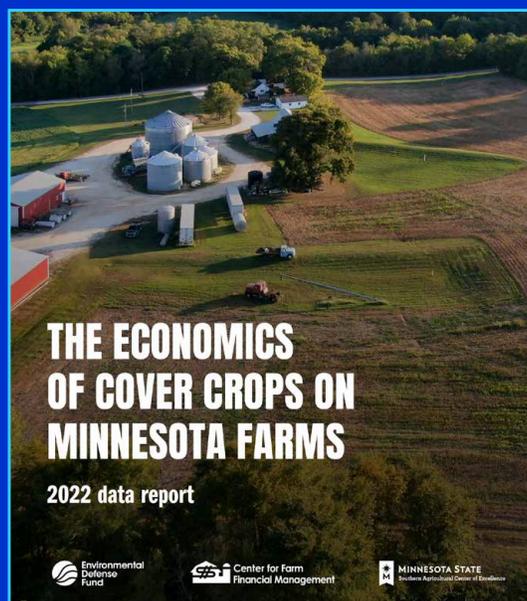
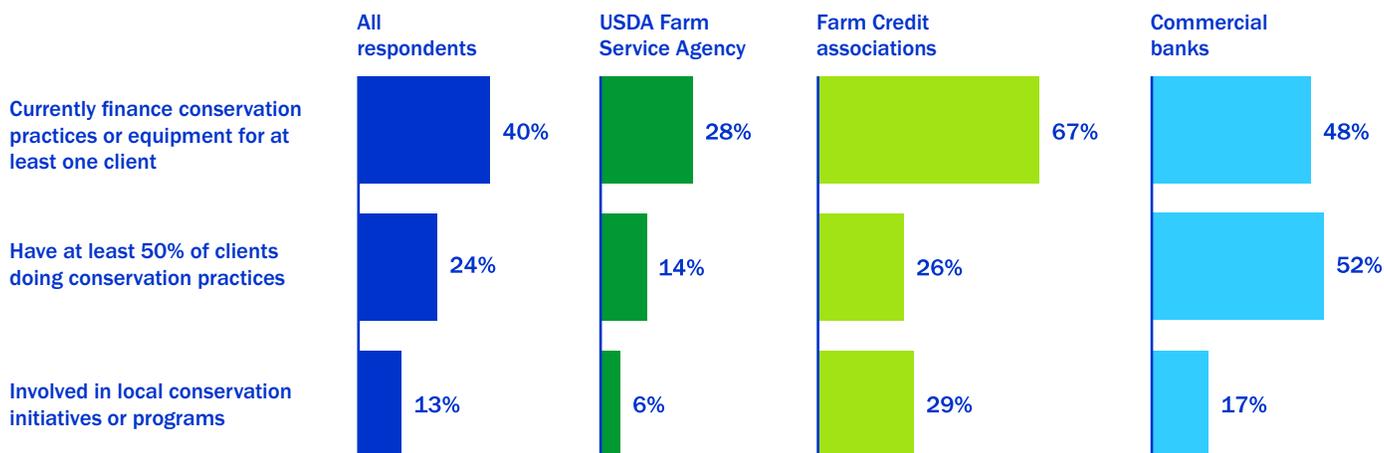


Figure 4. Loan officers' financing to farmers using conservation practices.



There is significant variation in levels of financing across financial institution types. Farm Credit associations have the highest share of loan officers currently financing conservation practices or equipment for at least one client at 67%, followed by commercial banks at 48% and the USDA Farm

Service Agency at 28%. Commercial banks show the highest level of loan officers with at least half of their clients using conservation practices at 52%. Twenty-six percent of Farm Credit associations and 14% of the USDA Farm Service Agency loan officers have at least half of their clients using conservation practices.



LOAN OFFICERS CAN FINANCE MULTIPLE CONSERVATION INVESTMENTS.

Loan officers who stated they actively finance conservation practices or equipment could be financing multiple investments simultaneously including equipment loans for conservation tillage equipment (e.g., seed drills or strip-till machines) or precision agriculture technology (e.g., soil moisture sensors or precision fertilizer applicators). They can also finance conservation expenses like cover crop seeds and nitrogen stabilizers through their clients' operating line of credit.

It is important to consider that loan officers may be unaware of clients who use conservation practices since they often do not evaluate detailed field management practices when reviewing a loan request.





Loan officers report several convincing reasons to support their clients' investments in conservation practices (Figure 5). Sixty percent of respondents highlighted the erosion reduction benefits of conservation practices as a very or extremely convincing reason to support their clients' investments. Other convincing reasons to support client investments in conservation are enhanced client profitability (57%), risk management benefits (50%), water quality improvements (50%) and reduced use of commercial fertilizers and herbicides (49%).

Loan officers were asked about a topic related to conservation agriculture. Many of the recent public and private investments in agricultural conservation

are intended to generate benefits to the climate. For example, efficient nitrogen fertilizer management can reduce greenhouse gas emissions while also protecting water quality. The survey authors were interested to know whether this emphasis was also reaching loan officers. The findings reveal that 44% of the respondents do not feel pressure to support climate change mitigation practices (Figure 6). Only 17% of the respondents feel increased pressure from their institution's leadership to support climate change mitigation practices. Twenty-four percent feel increased pressure from environmental and watershed groups, 4% feel increased pressure from regulators and 2% feel increased pressure from borrowers.

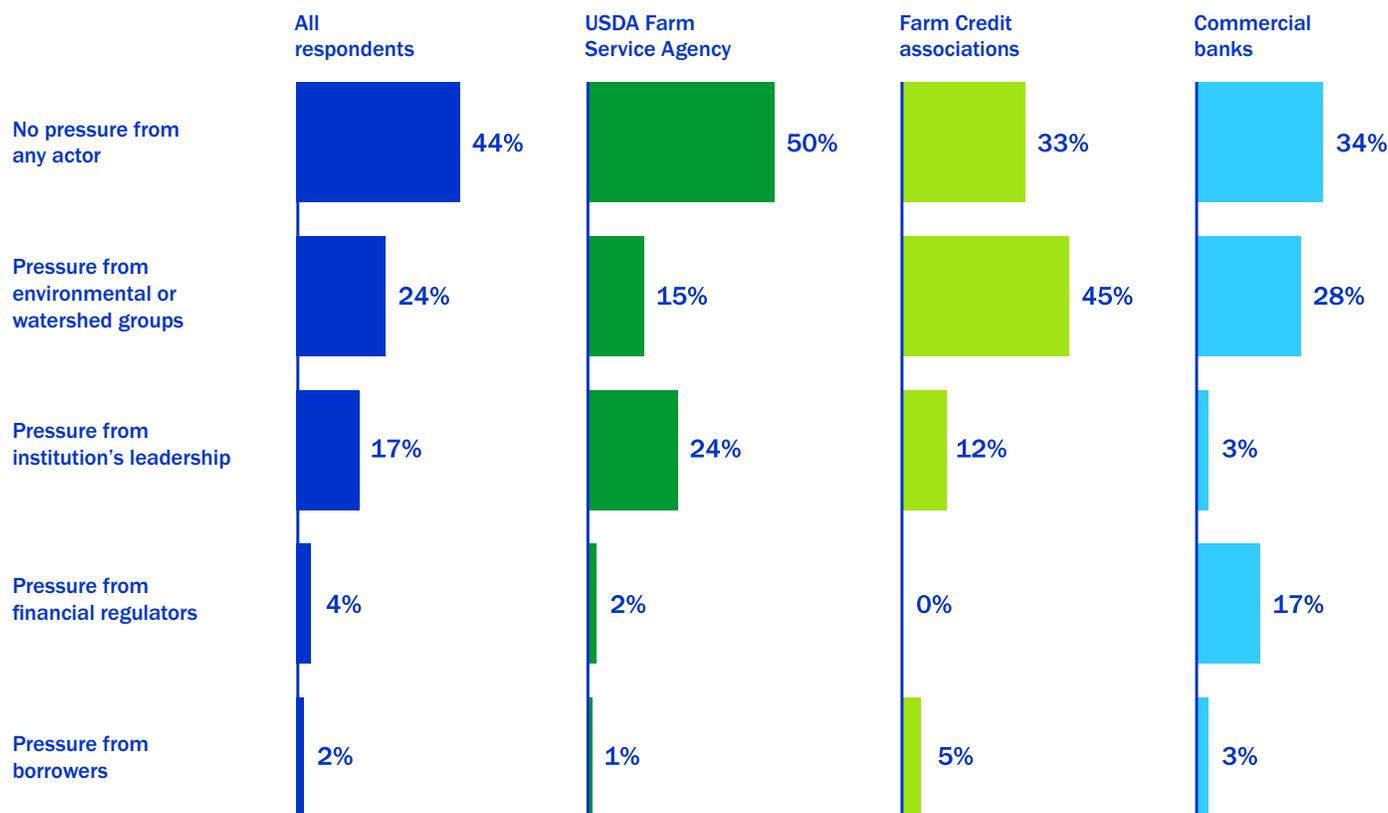
Figure 5. Top five reasons to support clients' adoption of conservation practices.

% of respondents who rate the following reasons to support a client's adoption of conservation practices as very or extremely convincing.



Figure 6. Sources of pressure to support climate change mitigation practices.

% of respondents who feel increased pressure from the following actors to support climate change mitigation practices.



The low levels of pressure from institutional leadership could reflect knowledge gaps at the executive level. A [2022 survey of 167 agricultural lending institution executives](#) on climate risks and opportunities conducted by EDF and Deloitte discovered that 31% of executives express a lack of educational opportunities for leadership, and 34% identified a lack of climate change knowledge among loan officers as top challenges preventing their institution from taking more action to address climate change impacts.

Knowledge gaps on climate change at the leadership level of agricultural finance institutions may also hold back institutional action to address climate change risks to borrowers' production and investments in conservation practices. The EDF and Deloitte survey found that only 8% of agricultural finance institutions in the US are significantly factoring climate change into their decision-making.



FINANCIAL INSTITUTIONS ARE FACED WITH DIVERSE SOURCES OF PRESSURE TO SUPPORT CLIMATE CHANGE MITIGATION.

The survey results demonstrate that the USDA Farm Service Agency, Farm Credit associations and commercial banks are receiving pressure from different sources to support climate change mitigation practices. The USDA Farm Service Agency feels the least pressure overall, but their loan officers are facing the greatest pressure from their institution's leadership. This could be due to the USDA's emphasis on climate-smart agriculture.⁴

Loan officers at Farm Credit associations feel the greatest pressure from environmental and watershed groups. Meanwhile, loan officers from commercial banks feel more pressure from regulators than their counterparts at the USDA Farm Service Agency and Farm Credit associations. This aligns with the recent regulatory developments aimed at monitoring climate-related financial risks at commercial banks.⁵ Some agricultural finance institutions are also beginning to feel pressure from their investors on Environmental, Social and Governance (ESG) issues, which include climate mitigation and climate risk management strategies.



LOAN OFFICERS' CHALLENGES IN SUPPORTING CONSERVATION INVESTMENTS

Loan officers face multiple challenges in supporting their borrowers' investments in conservation agriculture, including having limited knowledge about the economics of conservation practices.

The survey results highlight several challenges experienced by loan officers in supporting their clients' investments in conservation practices (Figure 7). Forty-nine percent of respondents pointed to increased costs associated with implementing conservation practices as a major obstacle in supporting their clients' conservation-related expenses or equipment.

Forty-five percent of loan officers also expressed reluctance to tell farmers how to farm, and 42% lacked knowledge about the financial costs and benefits of conservation investments. Other challenges include concerns about potential crop yield reduction and limited knowledge about conservation practices in general.

Figure 7. Key obstacles faced by loan officers in supporting their clients' conservation investments.

% of respondents who face the following obstacles in supporting clients who want to include conservation practices in their loan proposals.



The perceived obstacle of increased costs associated with implementing conservation practices aligns with the findings in Figure 3 (page 5) that most loan officers do not believe conservation practices are economically beneficial in the short term.

A further analysis of the loan officers' knowledge of conservation agriculture's environmental and financial impacts demonstrates that greater education is needed (Figure 8). Only 15% of loan officers think they are very or extremely knowledgeable about the financial impacts of conservation agriculture and 44% feel moderately knowledgeable. Thirty-eight percent

feel slightly or not at all knowledgeable about the financial costs and profits of conservation practices, indicating a significant gap in understanding the financial implications of these practices.

Meanwhile, 27% of respondents believe they are very or extremely knowledgeable about conservation agriculture's soil and water resources impacts. Forty-nine percent consider themselves moderately knowledgeable and 21% consider themselves slightly or not at all knowledgeable about how conservation agriculture impacts soil and water.



LENDERS CAN SUPPORT THEIR BORROWERS' CONSERVATION DECISIONS IN MULTIPLE WAYS WITHOUT FACING LIABILITY RISKS.

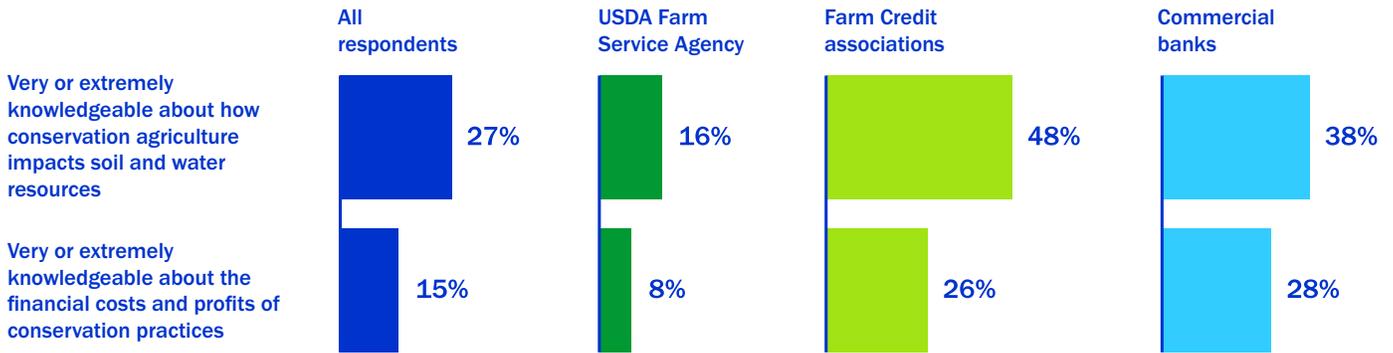
One of the most reported obstacles to supporting clients' conservation investments, not wanting to tell farmers how to farm, relates to lenders' concerns with exposure to lender liability. Lenders can be held liable by their borrowers if they take on a particularly active role in their borrowers' business decisions and the borrowers' business success and repayment ability. They can also be held liable if they present themselves as an expert and the borrower fails financially based on advice given by a lender. In this case, the lender is liable for the business advice it has given.⁶

While lenders should protect themselves against lender liability by not requiring their borrowers to implement specific conservation decisions and by not presenting themselves as an expert and giving business advice on conservation to borrowers, they can still support their borrowers' conservation decisions in many ways. These include sharing educational materials on these topics, supporting peer networking among their farmer clients on conservation topics, connecting farmers with opportunities to receive financial incentives for conservation and developing loan terms and structures that match the borrower's conservation investment needs.



Figure 8. Knowledge about the impact of conservation agriculture.

% of respondents who report they are...



Loan officers from Farm Credit associations and commercial banks reported a higher level of knowledge about the soil, water and financial impacts of conservation agriculture compared to their counterparts at the USDA Farm Service Agency.

The percentage of loan officers with a robust knowledge of conservation practices' financial costs and profits is relatively low across all three financial

institution types. This uniform lack of understanding of the economics of conservation agriculture highlights a common challenge faced by loan officers across various financial institutions. These findings demonstrate an opportunity for agricultural finance institutions and their partners to invest in data gathering, analysis and lender education on these practices' financial costs and benefits.



LOAN OFFICERS DEMONSTRATE DIFFERING LEVELS OF KNOWLEDGE ACROSS VARIOUS CONSERVATION PRACTICES.

The respondents show the highest level of knowledge about crop rotations, with 44% saying that they are very or extremely knowledgeable about how crop rotations benefit soil and water conservation. This is followed by reduced tillage (38%), cover crops (32%) and nutrient management (31%). Fewer loan officers feel very or extremely knowledgeable about the benefits of rotational grazing (29%) and edge-of-field practices such as riparian buffers, prairie strips and bioreactors (21%).



LOAN OFFICERS' INFORMATION NEEDS

Loan officers need information about conservation practices from trusted sources to better support their clients' investments.

Eighty-six percent of the loan officers surveyed believe that having information on the financial implications of conservation practices would enable them to better assist their clients who are using conservation practices (Figure 9).

Furthermore, 79% of the respondents highlighted the importance of information about incentives and funding programs aimed at promoting conservation practices.

Figure 9. Important information that would help loan officers in serving their clients.

% of respondents who think the following information would help them better serve their clients who are using conservation practices.



The survey asked what types of data would help loan officers be more informed when having conversations with their clients about conservation practices. The respondents emphasized the need to quantify both the yield effect and the financial impact of conservation practices. Financial metrics such as projected income and expenses, cash flows and returns on investment across various operation sizes and types are considered important to evaluating conservation investments. The respondents also highlighted the value of specialized training sessions and regular, easily understandable updates on ongoing practices and emerging data about conservation agriculture.

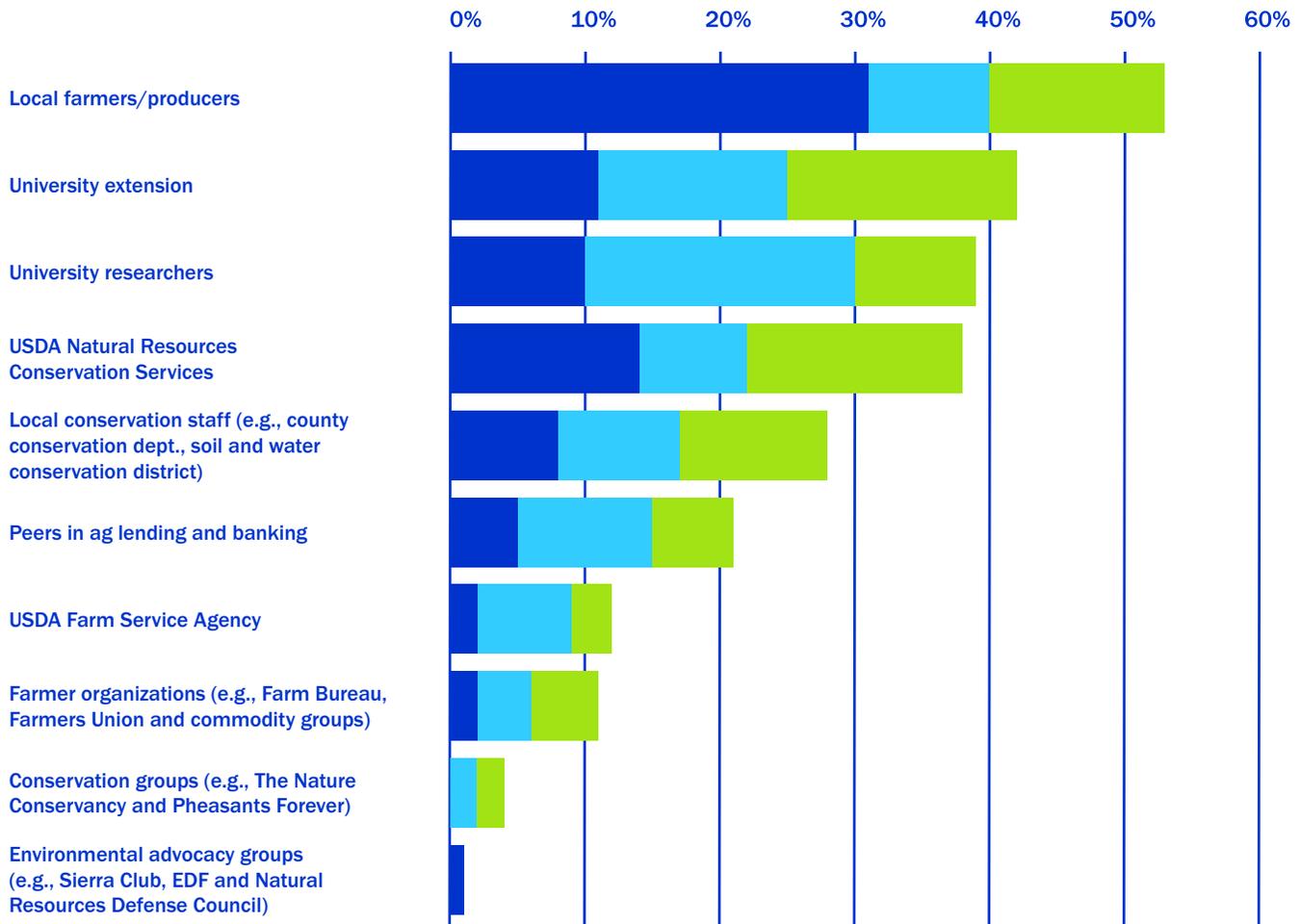
It is important to understand loan officers' most trusted information sources to effectively provide the information and education they need on conservation practices' financial costs and benefits. The survey found that local producers are ranked as the most trustworthy source of information, underlining the value of first-hand experiences and practical insights (Figure 10). University extension services, university researchers and the USDA NRCS are also considered trusted information sources.

Figure 10. Trusted sources of information about financial implications of conservation practices.

For each source of information, the stacked bar shows the % of respondents who trust it the most (ranks 1st, 2nd and 3rd) for information about financial implications of conservation practices.

Rank of how much each source of information is trusted by respondents.

■ 1st ■ 2nd ■ 3rd



While local conservation staff are also considered a reliable source of information, loan officers have limited interactions with them. According to the survey, 28% of the respondents reported interacting with conservation professionals, such as extension educators, soil and water conservation district staff, county land conservation staff and USDA NRCS staff, monthly or less, while 31% mentioned that they seldom or never have personal interactions with these experts. This indicates an opportunity to create more avenues for engagement between loan officers and conservation professionals, which can help facilitate valuable knowledge exchange.



RECOMMENDATIONS FOR AGRICULTURAL FINANCE INSTITUTIONS



This survey highlights the perspectives and actions of loan officers from four upper Midwest states on conservation agriculture, as well as the challenges they encounter, and information that can help them better serve their clients who want to invest in conservation practices. Based on these insights, the authors recommend the following three actions agricultural finance institutions can take to support conservation investments.

- 1** **Develop conservation strategies to support clients in voluntary conservation investments.**
- 2** **Provide education and training on the financial impacts of conservation agriculture to address knowledge gaps and perceived barriers among loan officers.**
- 3** **Support conservation financial data gathering and analysis efforts to advance research on the economics of conservation agriculture.**



1

DEVELOP CONSERVATION STRATEGIES TO SUPPORT CLIENTS IN VOLUNTARY CONSERVATION INVESTMENTS.

Agricultural finance institutions can play a critical and unique role in supporting farmers' and ranchers' conservation investments alongside existing public and private sector actors. As farmers' closest financial partners, agricultural lenders can support producers' conservation decisions in important ways, including sharing educational materials, supporting peer networking among their farmer clients, connecting farmers with opportunities to receive financial incentives for conservation and developing loan terms and structures that match the borrower's conservation investment needs.

Leadership at agricultural finance institutions can develop conservation strategies to lead their organizations in providing this support. They can integrate these conservation strategies into a broader climate or sustainability strategy. **A climate strategies guide for agricultural finance institutions** published by EDF and Deloitte in 2023 presents five strategies agricultural finance institutions can implement to address climate-related risks and opportunities for their business and their borrowers.

Effective strategies should include initiatives to equip loan officers with the necessary knowledge and tools to better support clients' investments in conservation practices as described in the next recommendation.

The conservation and climate strategies should also include collaboration with outside agricultural and conservation experts and organizations. For example, financial institution leadership could facilitate engagement between loan officers and conservation professionals by sponsoring field days or organizing brown bag lunches that can help loan officers learn from and collaborate with conservation professionals. They should also include building the necessary internal capacity and expertise within the agricultural finance institution to be able to effectively engage on these topics.

LEARN MORE



STRATEGIES TO ADDRESS CLIMATE RISKS AND CAPTURE OPPORTUNITIES

A guide for agricultural finance institutions.

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2

PROVIDE EDUCATION AND TRAINING ON THE FINANCIAL IMPACTS OF CONSERVATION AGRICULTURE TO ADDRESS KNOWLEDGE GAPS AND PERCEIVED BARRIERS AMONG LOAN OFFICERS.

Providing education and training on the financial implications of conservation practices can address the information needs expressed by loan officers in this survey. Leadership at agricultural finance institutions can achieve this through targeted industry workshops or training programs conducted in collaboration with trusted partners. Potential partners could include local producers with first-hand experience in implementing conservation practices, university extension services, university researchers, conservation professionals from the USDA NRCS, county governments and soil and water conservation districts.

By leveraging these partnerships, agricultural finance institutions can provide loan officers with valuable information about the economics of conservation agriculture, enabling them to effectively evaluate clients' conservation investments and offer the necessary financial and advisory support. The **Conservation Economics & Finance Resource Hub** developed by the authors of this report provides a helpful resource in developing these trainings. The Resource Hub includes case studies, reports and other research-based materials assessing the profitability of conservation practices on farms in the upper Midwest.

LEARN MORE



Conservation Economics & Finance Resource Hub

A collection of case studies, reports and other research-based materials that have examined the profitability of conservation practices on farms in the upper Midwest.

Explore Hub →



3

SUPPORT CONSERVATION FINANCIAL DATA GATHERING AND ANALYSIS EFFORTS TO ADVANCE RESEARCH ON THE ECONOMICS OF CONSERVATION AGRICULTURE.

The survey showed that substantial gaps exist in understanding the financial implications of conservation practices. This can be addressed by supporting projects that collect, analyze, and disseminate financial information to improve the understanding of conservation practices' financial impacts. One example of such initiatives is the Center for Farm Financial Management at the University of Minnesota's collaboration with EDF, Minnesota Farm Business Management and other partners to **gather and analyze cover crop financial data from 121 Minnesota farms** across four crops and five cover crop types. By providing data consistently gathered from a large sample of producers, this effort can help answer the financial questions that agricultural lenders have about the costs and benefits of cover crops. Continued efforts to gather and analyze financial data on conservation practices are crucial to provide more research that can enable informed conservation decision-making. Agricultural finance institutions can advise the data gathering, analysis and interpretation approaches to ensure the research informs the solutions they devise for their farmer and rancher clients.

LEARN MORE



The Economics of Cover Crops on Minnesota Farms

In-depth cover crop financial data from 121 Minnesota farms helps farmers' cover crop decisions.

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ENDNOTES

- 1 Adapted from USDA Natural Resources Conservation Service. Accessed at: <https://www.nrcs.usda.gov>. This survey focused on cover crops, conservation tillage, managed grazing, and nutrient management and did not include practices such as organic agriculture or on-farm renewable energy production.
- 2 USDA Economic Research Service. Data from 2022. Accessed at: <https://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/data-files-u-s-and-state-level-farm-income-and-wealth-statistics/>
- 3 USDA Farm Service Agency. Accessed at: <https://www.fsa.usda.gov/about-fsa/structure-and-organization/farm-loans/index>
- 4 USDA's Partnerships for Climate-Smart Commodities. Accessed at: <https://www.usda.gov/climate-solutions/climate-smart-commodities>
- 5 Board of Governors of the Federal Reserve System. Accessed at: <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20231024b.htm>
- 6 Bahls, S. C. 1993. Farm and Ranch Credit: Duty-based Theories of Lender Liability. William Mitchell Law Review. Accessed at: <https://open.mitchellhamline.edu/cgi/viewcontent.cgi?article=2251&context=wmlr>

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