



Your Views and Usage of Farming Practices

Dear agricultural producer,

Researchers at South Dakota State University are working with the South Dakota Corn Utilization Council to better understand how agricultural producers in South Dakota are managing their farmland. Your insights will help us understand what farming practices are being used and why and will inform policies that can help South Dakota farmers become more competitive economically. We would greatly appreciate your participation in this survey to help us learn how we might best meet the future needs of agricultural producers and industry in the state.

There are two ways in which you can complete our survey. The most convenient way is for you to enter the following website address online: https://sdfarmersurvey.questionpro.com/. If you choose to complete the survey online you will need to enter the following code: _____. This will indicate that you completed the survey and we will stop sending reminders.

We have also included this paper version with a postage-paid return envelope if you prefer to respond by mail.

We ask that this survey be completed by the person in your operation who makes most of the land management decisions. Your participation in this survey is voluntary. Your answers will be kept confidential and will be released only as summaries where individual answers cannot be identified. Unless otherwise instructed, please check the selection that best describes your situation or opinion. It should take you about 20 minutes to complete the survey.

For more information about this project, please contact Jessica Schad at jessica.schad@sdstate.edu or at (605) 688-4132 or Jim Ristau at jimr@sdcorn.org or at (605) 730-3474. *Thank you in advance for your help!*

Many Thanks,

Jessica Schad, Assist. Prof. of Sociology

South Dakota State University

Jim Ristau, Director of Sustainability, South Dakota Corn Utilization Council

SECTION I: Your Farming Decisions

1. Please rate the importance of the following information sources that may affect your decision making.

	Not important	Slightly important	Somewhat important	Very important	Do not use
SDSU Extension (IGrow, workshops, etc.)					
Government organizations (e.g., NRCS)					
Commodity groups/farmer associations					
Private consultants or companies (e.g., agronomist)					
Family, friends, or neighbors					
Other (specify):					

2. In this section, we would like to know how you make decisions on farming <u>activities that could influence your success as a business</u>. Please indicate if you agree or disagree with the following statements.

	Strongly disagree	Disagree	Agree	Strongly agree
I am constantly trying to find ways to increase my income or profit (e.g., creating new ideas, finding new innovations, trying various technologies and management practices).				
I always have a written business plan for my farm operation.				
I am always taking steps to protect the land I farm from increased weather variability (e.g., diversify crops, build soil quality, adding drainage or irrigation systems).				
I pay close attention to various funding sources (e.g., government subsidies or private loans) that may impact my operation.				
I am often looking for ways to diversify my farm operation.				
I always look for opportunities to create or build social networks that can help my business.				
My social networks help increase my awareness of funding opportunities such as government subsidies or programs.				
I use my social networks to learn new innovative ideas that help develop my business.				
I am always willing to seek training opportunities to grow, improve and/or expand my farm business.				
I constantly update my knowledge and skills to ensure my business remains environmentally sustainable.				
I regularly attend SDSU Extension training workshops.				

SECTION II: Farm Management Practices

 In 2017, what type of tillage practices did you predominantly use on the land you farm? No-tillage Reduced tillage, strip-till, or mulch-till Conventional tillage 										
2. What are your typical crop rotations? Continuous (any crop) 2 year rotation 3 year rotation 4 year or greater rotation										
Fall only Spring only Fall and Spring Spring and Summer 4. In 2017, on the land you operate,	 3. In 2017, what best describes when you applied nutrients to the land you farm? Fall only Spring only Fall and Spring Spring and Summer 4. In 2017, on the land you operate, did you use Enhanced Efficiency Nitrogen Fertilizer products that stabilize or provide controlled release of the Nitrogen fertilizer? (e.g., N-Serve, Poly Coated Ureas, Super U, Agrotain, etc.) Yes 									
e. Hew knowledgedble dre yed abou	at the fellowing proces		NOWLEDGE							
PRACTICES	Unfamiliar with	A little	Monderately	Very						
Conservation tillage (e.g., no-till, strip-till, or mulch-till)										
Cover crops										
Diversified crop rotation (3 or more crops)										
Integrated crop and livestock management										

SECTION II: Farm Management Practices, continued

6. Please indicate how much you agree or disagree with the following statements.

	Strongly disagree	Disagree	Agree	Strongly agree	Not applicable
I manage the land I own differently from the land I rent.					
In general, I follow the manufacturer's recommended guidelines for fertilizer application.					
In general, I follow the manufacturer's recommend guidelines for pesticide application.					
I am willing to change my management practices to reduce my fertilizer and pesticide use.					
I understand how the chemicals I apply work.					
Conducting regular soil tests helps me apply nutrients more efficiently.			Ш		
Timing nutrient applications with plant uptake needs reduces my fertilizer losses.					
Using precision agriculture to vary nutrient application helps me save money.					
Timing nutrient applications with plant uptake needs reduces my fertilizer losses. Using precision agriculture to vary nutrient					

SECTION II: Farm Management Practices, continued

7. Ho	ow many ye	ears have	you been ι	using the f	ollowing p	oractices?	Please of	check the	relevant l	box if you	haven't
adopt	ted certain	practices y	yet or have	discontin	ued usag	e of certain	n practic	es.			

		CURRENT YE	RENT YEARS OF USAGE					Discontinued usage		
								(Please specify years		
PRACTICES	Less than 3	3-5	6-10		10+	Nev	er used	of usage)		
Conservation tillage (e.g., no-till, strip-till, or mulch-till)								years		
Cover crops								years		
Diversified crop rotation (3 or more crops)								years		
Integrated crop and livestock management						l		years		
8. On what percentage of your practices in 2017, just write		nd in 2017 dic	l you use th	e followir	ng practice	s? If yo	ou did not u	se these		
PRACTICES					PE	RCEN	TAGE OF U	SAGE		
Conservation tillage (e.g.,	no-till, strip-till, (or mulch-till)					Pe	rcent		
Cover crops							Pe	rcent		
Diversified crop rotation (3	or more crops))					Pe	rcent		
Integrated crop and livesto	ck managemer	nt					Pe	rcent		
9. How likely is it that you w	vill continue (or	try if you are	not currently	/ using) ι	ısing each	practic	e in the fut	ure?		
					FUTURE	USAG	E			
PRACTICES			Not at all likely	Somew likely		rately ely	Very likely	Extremely likely		
Conservation tillage (e.g., r										
Cover crops										
Diversified crop rotation (3	or more crops)									
Integrated crop and livesto	Integrated crop and livestock management									

Section III: Benefits and challenges to the adoption of farming practices

1. Please rate how much you agree or disagree that each of the following potential **benefits associated with conservation tillage** (e.g., no-till, strip-till, or mulch-till) impact your current or potential usage.

BENEFITS	Strongly disagree	Disagree	Agree	Strongly agree
Builds soil structure and health				
Increases crop yields during water- deficient years				
Reduces fuel and labor costs				
Reduces wear and tear on equipment				

2. Please rate how important each of the following potential **challenges associated with conservation tillage** (e.g., no-till, strip-till, or mulch-till) are to your operation (in your current or potential usage).

CHALLENGES	Not important	Slightly important	Moderately important	Very important
Too much soil moisture				
Delayed planting due to slow soil warming in spring				
Reduced crop yields				
Increased dependence on herbicide/ fungicides				
Negative neighborhood opinions				

Section III: Benefits and challenges to the adoption of farming practices, continued

3. Please rate how much you agree or disagree that each of the following potential **benefits associated with cover crops** impact your current or potential usage.

BENEFITS	Strongly disagree	Disagree	Agree	Strongly agree
Improves soil health				
Increases water infiltration				
Suppresses weeds				
Breaks pest and disease cycle				
Increases subsequent cash crop yields				
Reduces fertilizer inputs on cash crop				
Helps with livestock cropland integration				

4. Please rate how important each of the following potential **challenges associated with cover crops** are to your operation (in your current or potential usage).

CHALLENGES	Not important	Slightly important	Moderately important	Very important
Difficulties in cover crop establishment				
High seed cost				
Not sure about right seed mix				
Narrow planting window				
Lack of time/labor				
Hard to eradicate				
Lack of equipment (e.g. seeder)				
Taking too much soil moisture				
Less predictable N release				
Yield reduction in following cash crop				
Negative neighborhood opinions				

Section III: Benefits and challenges to the adoption of farming practices, continued

5. Please rate how much you agree or disagree that each of the following potential **benefits associated with diversified crop rotations** (3 or more crops) impact your current or potential usage.

BENEFITS	Strongly disagree	Disagree	Agree	Strongly agree
Breaks pest and disease cycle				
Reduces herbicide usage				
Reduces fertilizer requirement				
Increases soil fertility and productivity				
Increases crop yields				
Promotes ecological diversity				
Protects against commodity price volatility				

6. Please rate how important each of the following potential **challenges associated with diversified crop rotation** (3 or more crops) are to your operation (in your current or potential usage).

CHALLENGES	Not important	Slightly important	Moderately important	Very important
Lack of a profitable 3rd / 4th crop				
Lack access to the specialized planting equipment				
Crop insurance constraints				
Lack of marketing information				
Negative neighborhood opinions				

Section III: Benefits and challenges to the adoption of farming practices, continued

7. Please rate how much you agree or disagree that each of the following potential **benefits associated with integrated crop and livestock systems** impact your current or potential usage.

BENEFITS	Strongly disagree	Disagree	Agree	Strongly agree
Reduced fuel and fertilizer cost				
Reduced feed purchase cost for livestock				
Increased soil fertility and productivity				
Increased crop yields				

8. Please rate how important each of the following potential **challenges associated with integrated crop and livestock systems** are to your operation (in your current or potential usage).

CHALLENGES	Not important	Slightly important	Moderately important	Very important
Soil compaction caused by hoof traffic				
No water available for livestock				
No labor available for livestock management				
Negative neighborhood opinions				
Insufficient knowledge on grazing practices				
High fencing cost				

Section IV: Perceptions of costs and benefits

1. On average, how do you rate your **total production cost** change after adopting the following practices? (If you haven't adopted the practice yet, please rate your perceived change).

	TOTAL PRODUCTION COST				
PRACTICES	Reduced by >15%	Reduced by 5%-15%	Very little change (within 5%)	Increased by 5%-15%	Increased by >15%
Conservation tillage (e.g., no-till, strip-till, or mulch-till)					
Cover crops					
Diversified crop rotation (3 or more crops)					
Integrated crop and livestock management					

2. On average, how do you rate your **cash crop yield change** after adopting the following practices? If you haven't adopted the practice yet, please rate your perceived change.

	CASH CROP YIELD				
PRACTICES	Reduced by >15%	Reduced by 5%-15%	Very little change (within 5%)	Increased by 5%-15%	Increased by >15%
Conservation tillage (e.g., no-till, strip-till, or mulch-till)					
Cover crops					
Diversified crop rotation (3 or more crops)					
Integrated crop and livestock management					

Section IV: Perceptions of costs and benefits, continued

3. On average, how do you rate **your profits** after adopting the following practices? (If you haven't adopted the practice yet, please rate your perceived change).

		ı	PROFITABLILIT	1	
PRACTICES	Reduced by >15%	Reduced by 5%-15%	Very little change (within 5%)	Increased by 5%-15%	Increased by >15%
Conservation tillage (e.g., no-till, strip-till, or mulch-till)					
Cover crops					
Diversified crop rotation (3 or more crops)					
Integrated crop and livestock management		Ш			

4. For the practices you already adopted, how much government subsidies did you receive to offset your initial expenses? For the conservation practices that you haven't adopted yet, please provide the amount of subsidies you would require in order to adopt them.

	COST SHARE RECEIVED/REQUIRED				
CONSERVATION PRACTICES	None	Yes, <10%	Yes, 10%-20%	Yes, 20%-30%	Yes, >30%
Conservation tillage (e.g., no-till, strip-till, or mulch-till)					
Cover crops					
Diversified crop rotation (3 or more crops)					
Integrated crop and livestock management		Ш			Ш

,	Nhid	ch of the following programs did you enroll the land you operated in 2017? (check all that apply)
		Conservation Reserve Program (CRP)
		Conservation Stewardship Program (CSP)
		Environmental Quality Incentive Program (EQIP)
		Other (please specify:)
		None of the land I currently operate is enrolled in a conservation program.

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SECTION V: Community and Environment

1. The following questions are about how you feel about the land you farm. Please rate how much you agree or disagree with the following statements.

	Strongly disagree	Somewhat disagree	Somewhat agree	Stongly agree
When I think of home, I think of the land I farm.				
I feel happiest when I am on the land I farm.				
The land I farm is my favorite place to be.				
The land I farm is an important part of who I am.				
My personal history is closely tied to the land I farm.				
Even if I were no longer farming, the land I farm will always be a part of who I am.				
It is important to me that the land I farm stay in my family.				
The friendships I have developed through farming activities in the area where I farm are important to me.				
Farmers in the area where I farm generally have beliefs and values similar to mine.				
I have a trusted network of people I talk with about farming in the area where I farm.				
There aren't many job opportunities available to me other than farming.				
The land I farm is important to my economic well-being.				
The characteristics of the land I farm (soil type, topography, etc.) are largely responsible for my success as a farmer.				
If I could farm anywhere in the world, it would be the land I farm now.		Ш		
Even though there might be better places to farm, I would rather farm in the area where I farm than anywhere else.				
I would feel out of place farming anywhere else.				

SECTION V: Community and Environment, continued

2. A sense of responsibility for one's own well-being and for the well-being of others can play an important role in peoples' decisions and actions. Rate how responsible you feel to the following groups of people for conserving the soil and water resources on the land you farm.

	Not at all responsible	Slightly responsible	Moderately responsible	Very responsible
Previous generations of my family				
Myself				
My immediate family				
My neighbors				
People in the area where I farm				
People in my watershed				
Everyone on planet earth				
Future generations				

3. Soil and water conservation practices can have on-farm and off-farm benefits for the natural environment such as preventing erosion, reducing loss of nutrients into waterways, improving wildlife habitat, etc. In general, how beneficial do you feel the conservation practices on the land you farm are for the natural environment in the following places?

	Not beneficial	Slightly beneficial	Moderately beneficial	Very beneficial
My farm				
The area where I farm				
My watershed				
My state				
The Midwest				
The country				
The planet earth				

SECTION V: Community and Environment, continued

 4. Do you plan to move to a new community in the future? I do not plan on moving to a new community. I plan to move within the next year. I plan to move in the next 5 years. 	?			
5. These questions are designed to measure your attitude agree or disagree with the following statements. There are			Please indicate	how much you
	Strongly disagree	Disagree	Agree	Strongly agree
Technical advances in seeds, fertilizers, and pesticides can offset the adverse effects of soil erosion on productivity.				
I am concerned with how much fuel I use for farming.				
I would be willing to use a bio-based fuel.				
Chemical carry over is a concern for me.				
Reducing soil erosion makes economic sense for my farm.		ш		
Farmers should bear the clean-up costs associated with chemicals entering waterways beyond the boundaries of their farm.				
A farmer's priority task should be profit maximization.				
Receiving a conservation award is worth a great deal and can compensate for lower profits.				
Farmers have a responsibility to use farm practices known to cause minimal soil erosion.				
Maximizing profits this year is more important than maintaining cropland productivity in the future.		ш		
Bailing stover or straw harms soil development.				

SECTION VI: About You and Your Farm

What is the total acreage of farmland you operated this planting season (2017)? acres						
2. Of the land you operated in 2017, how many acres do you own versus rent? Own: acres Lease: acres						
 3. On the acres that you lease, what are your lease terr Share lease Cash lease I own all of the operated land. 4. In 2017, how many acres of the following did you operated 		none, please enter a zero.				
	Acres operated	Average yield				
Corn						
Soybeans						
Small grains						
Clover/alfalfa						
Pasture		N/A				
Conservation set aside/CRP		N/A				
Forest/woodland		N/A				
Non-row crops for energy		N/A				
Other (specify):						
 5. I consider the land I operate to primarily be: Organic (certified and non-certified) Non-organic 6. In 2017, was any of the crop acreage that you farmed impacted by salt impacted soils (e.g., saline or sodic conditions)? Yes If Yes, how many acres? No Don't know 7. Approximately, how many years have you been the primary decision-maker for the operation? years 						
years						

SECTION VI: About You and Your Farm

8. In 2017, what percentage of your total household income came from off-farm employment?
Less than 20%
20% to 40%
41% to 60%
61% to 80%
81% or more
9. Please indicate the level of your gross operation sales in a typical year.
Less than \$50,000
From \$50,000 up to \$99,999
From \$100,000 up to \$249,999
From \$250,000 up to \$499,999
From \$500,000 up to \$999,999
\$1 million or more
10. What is your gender?
Male
Female
11. What is the highest level of school you have completed?
Less than high school (skip to question 13)
High school diploma/GED (skip to question 13)
Some college/technical school (skip to question 13)
College degree (continue to question 12)
Post-graduate degree (continue to question 12)
12. Have you completed an agricultural major or minor in college (e.g., agronomy, animal science, agricultural business)?
Yes
No
13. In what year were you born?
1 9
Thank you for your time and assistance! If you would like to receive a copy of the findings from this survey, please email Jessica Schad
at jessica.schad@sdstate.edu. Please use the space below for any additional comments about this survey or farm management.
As part of the effort to improve farmers' competitiveness and the state economy, SDSU researchers are also conducting field measurements
over the next few years to document the impact of current management practices on soil carbon and nitrogen cycling. Please indicate if you
are interested in participating one of the years in this additional field research. Yes No Maybe, I would like more information.