

South Dakota Farmers' Usage of Diversified Crop Rotations

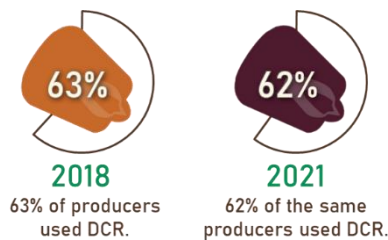


Researchers at South Dakota State University (SDSU) conducted producer surveys in the eastern part of South Dakota in both 2018 and 2021. Producers could take the survey online or via mail and were asked questions about their farm, soil and water conservation practices, and their values.

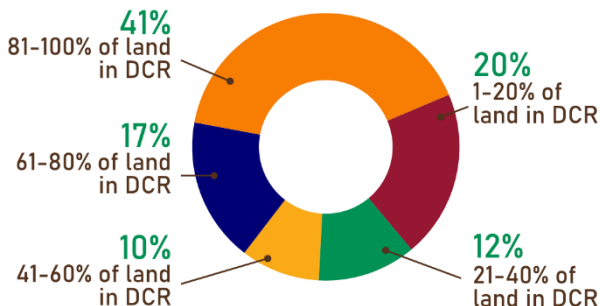
Using publicly available addresses from the Farm Service Agency, a random sample of 3,000 producers were sent the survey in 2018. 650 were ineligible, and 708 responded to the survey for a response rate of 30%. In 2021, the same producers who took the survey in 2018 were asked to take a follow up survey. 94 were ineligible, and 350 responded for a 59% response rate.

This factsheet shows results based on the responses of the same participants who answered conservation practice questions in both surveys. Our focus here is only on the diversified crop rotation (DCR) (3 or more crops) questions.

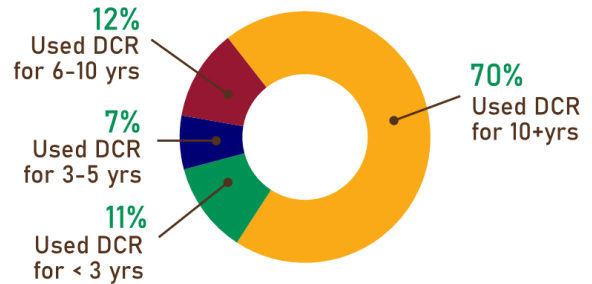
Over *half* of South Dakota farmers used diversified crop rotations.



In 2021, *most* diversified crop rotation (DCR) users (58.2%) used this practice on most (>61%) of their farmland.



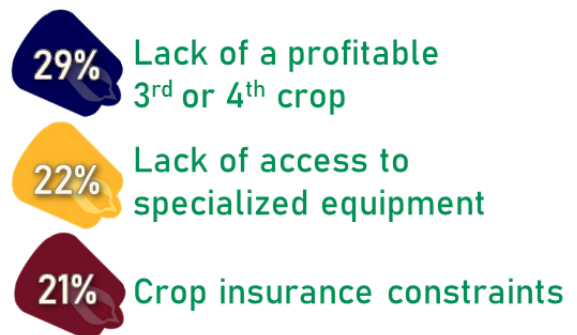
Most of South Dakota producers using diversified crop rotations (DCR) in 2021 had been doing so for >10 years.



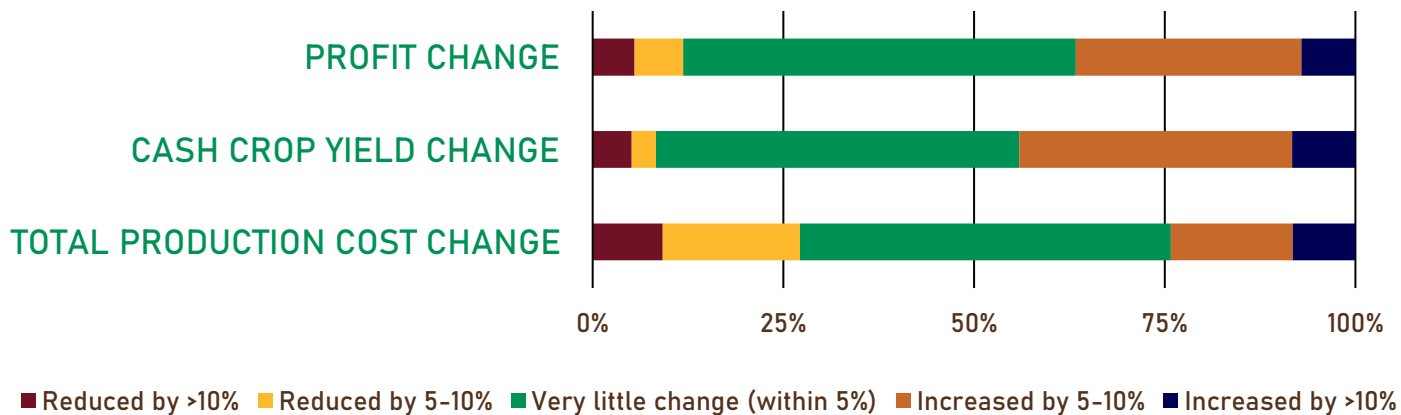
In 2018, the top three *benefits* that South Dakota farmers associated with diversified crop rotations (those who strongly agreed) were:



The top three *challenges* that South Dakota farmers had with diversified crop rotations in 2018 (those who said very important) were:



In 2021, producers were asked about *changes* to their total production costs, cash crop yields, and profitability of diversified crop rotations. While the majority saw very little change for each (e.g., within 5%; see green in figure below), for most who did see a change, it was an increase by 5-10% (see orange in figure below) in profit and yield and a decrease by 5-10% in cost.



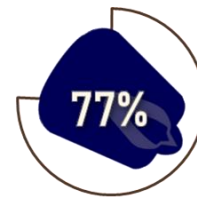
Most South Dakota farmers who use diversified crop rotations, are *not* getting cost shares to adopt them.



NO COST SHARE

Most producers (71%) using diversified crop rotations did not receive cost share to adopt them.

The majority of those surveyed said they *plan to use* or are *likely to continue using diversified crop rotations*.



FUTURE USAGE

Most producers surveyed in 2018 will likely continue to use diversified crop rotations.

Many South Dakota farmers are planning to use diversified crop rotations to *protect* their conventional fields most affected by droughts and/or floods.



NATURAL DISASTER PROTECTION

In 2021, many (38%) producers indicated they were likely to use diversified crop rotations to protect fields affected by droughts and/or floods.

To learn more about this survey of South Dakota farmers, please visit SDSU Open Prairie (<https://openprairie.sdstate.edu/sdfarmsurvey>). You may also contact Dr. Tong Wang (tong.wang@sdstate.edu), Associate Professor and Advanced Production Specialist at SDSU or Jim Ristau (jimr@sdcorn.org), Director of Sustainability at SD Corn for more information.

