

# MANITOBA

## Adoption of Sustainable Farming Practices in Manitoba

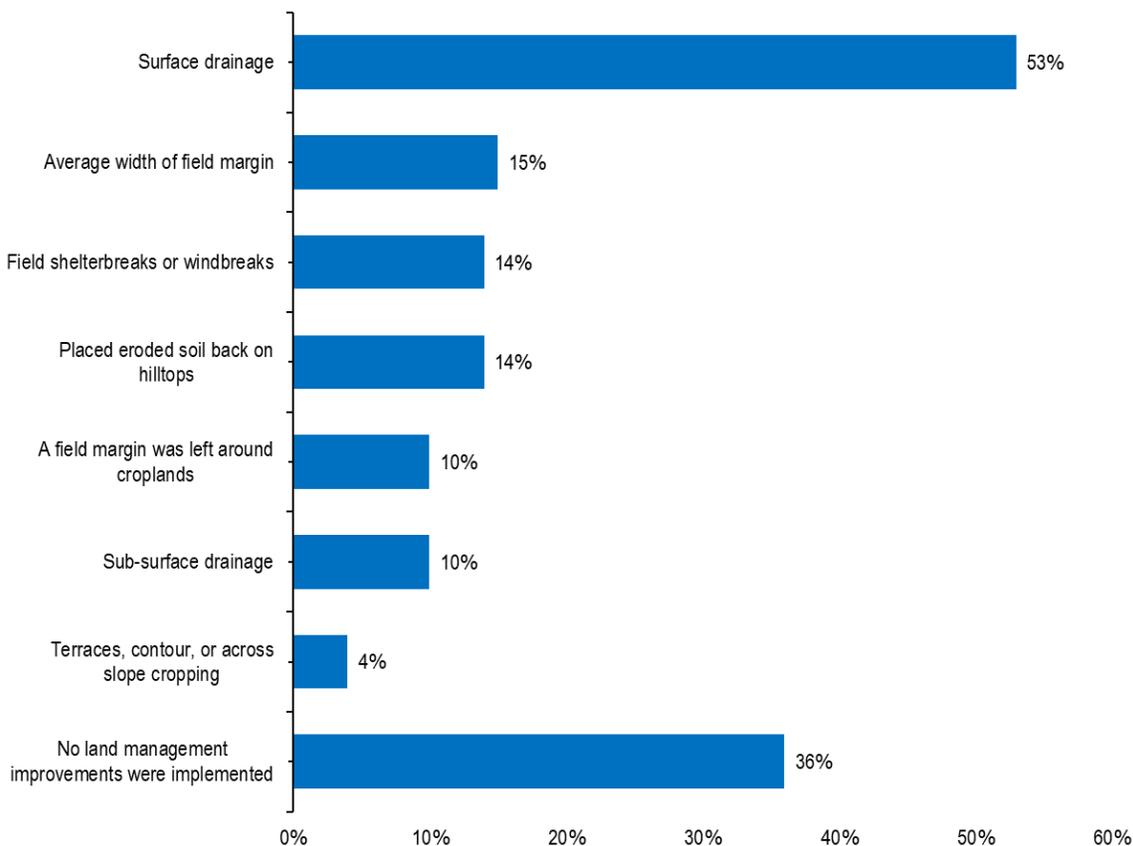


Statistics Canada, in collaboration with Agriculture and Agri-Food Canada, implement the Farm Management Survey (FMS) every five years, as a follow-up to the Census of Agriculture. The survey collects production and farm management practices data from Canadian farm operators. The most recent FMS, conducted in 2021, surveyed 18,000 crop and livestock farms across Canada that had a total agricultural sales value of \$10,000 or more.<sup>1</sup> This report provided insight into the progress Manitoba farms made in adopting sustainable farming practices, including soil testing, cover crops, and crop rotation.

### Land Management Practices

Producers implement land management practices to improve soil health and/or to minimize erosion on farms. Overall, 64 per cent of field crop producers in Manitoba implemented land management in 2021. As shown in Figure 1, the main land management producers implemented include surface drainage (53 per cent), leaving field margin around the farm (15 per cent), developing field shelterbelts or windbreaks (14 per cent), and placing eroded soil back on hilltops (14 per cent).

Figure 1. Percentage of Field Crop Producers Reporting Land Management Improvements in Manitoba in 2021



Statistics Canada, Table 32-10-0208-01

Manitoba Agriculture, Foresight and Analysis, 2023-04-14

<sup>1</sup> For more information about the FMS, visit:

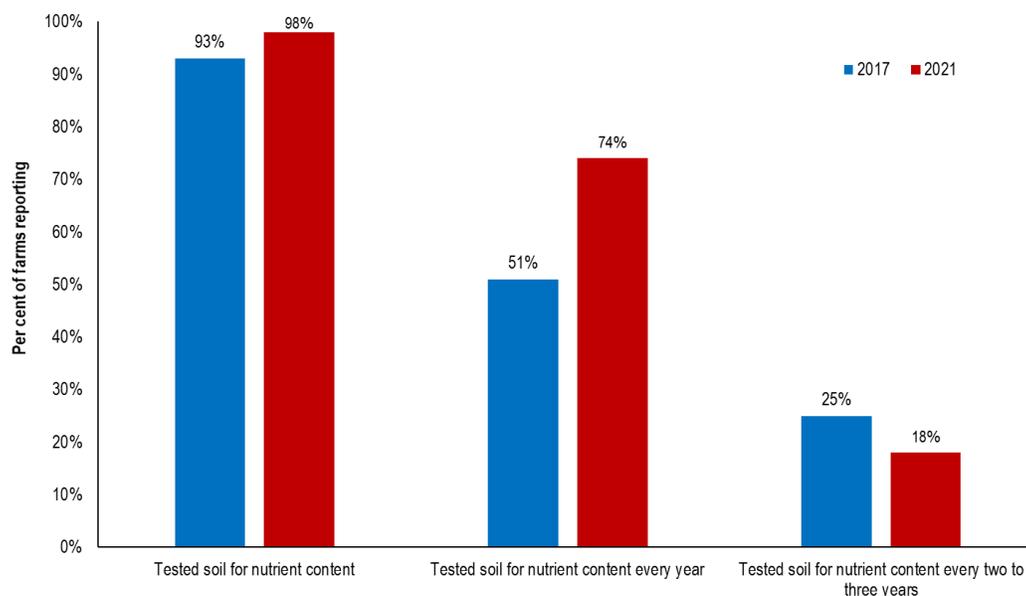
[Surveys and statistical programs - Farm Management Survey \(FMS\) \(statcan.gc.ca\)](https://www150.statcan.gc.ca/n1/pub/28-263-x/2023001/article/00001-eng.htm)

## Soil Testing a Common Practice in Manitoba

Soil testing has several benefits, including reducing input costs (e.g. helps producers match fertilizer application to crops' nutrient requirements), avoiding excessive vegetative growth, delaying maturity, and lodging in crops due to over-fertilization; and protecting the environment by minimizing water contamination and greenhouse gas emissions.

In 2021, 98 per cent of producers who applied commercial fertilizer and used Global Positioning Systems (GPS) to target or vary fertilizer application rates across a field, tested their soil for nutrient content (Figure 2). This represents a five per cent increase, compared to 2017. Among these farms, 74 per cent tested their soil every year, while 18 per cent tested their soils every two to three years. Overall, 92 per cent of field crop producers in Manitoba reported performing soil tests in 2021, an increase of five per cent from 2017. Among provinces, only Quebec field crop producers who apply commercial fertilizer, and use GPS to target or vary fertilizer application rates, reported higher proportion of soil testing than those in Manitoba.

**Figure 2. Percentage and Frequency of Soil Testing among Producers who Apply Commercial Fertilizer and Use GPS to Target or Vary Fertilizer Application Rates in Manitoba**



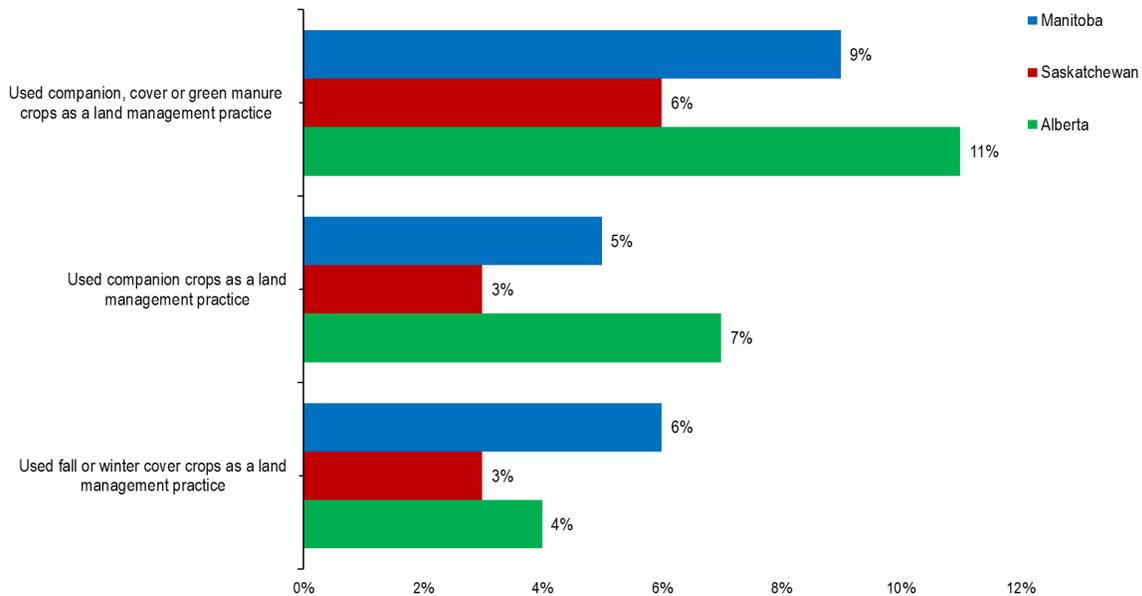
Source: Statistics Canada, Table 32-10-0386-01

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## Sustainable cropping techniques

Cover crops are used primarily to reduce erosion, improve soil health, and to control weeds, pests and diseases. Figure 3 shows various crop management techniques used in the prairie provinces including fall or winter cover crops, companion crops, and green manure crops. In 2021, a higher percentage of Manitoba producers used fall or winter cover crops, compared to both Alberta and Saskatchewan, while Alberta producers reported using a higher percentage (11 per cent) of companion, cover or green manure crops (11 per cent) as land management practice compared to the other prairie provinces.

**Figure 3. Use of Various Crop Management Techniques in the Prairie Provinces in 2021**



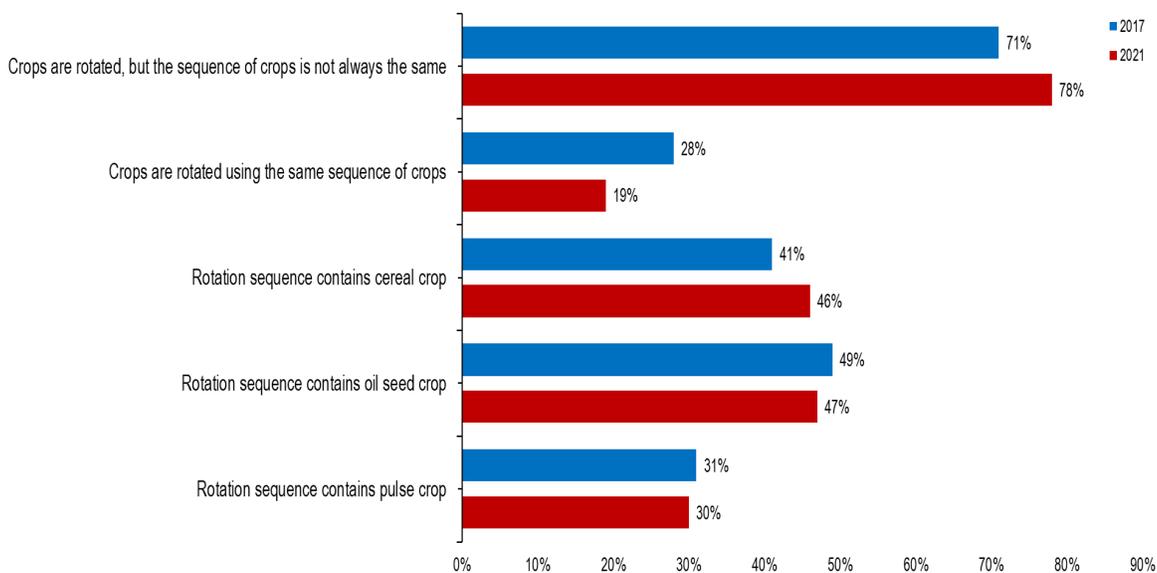
Source: Statistics Canada, Table 32-10-0387-01

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**Crop Rotation is a Common Practice on Manitoba Farms**

In 2021, 97 per cent of field crop producers practiced crop rotation. Most of them (78 per cent) used different crop sequences in the different rotation cycles, while 19 per cent used the same sequence of crops (Figure 4). In 2021, rotation sequences included cereals (46 per cent), oilseeds (47 per cent), and pulses (30 per cent).

**Figure 4. Percentage of Field Crop Producers Reporting Use of Crop Rotation in Manitoba in 2021**



Source: Statistics Canada, Table 32-10-0385-01

Manitoba Agriculture, Foresight and Analysis, 2023-04-21

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- Email us at [industryintelligence@gov.mb.ca](mailto:industryintelligence@gov.mb.ca).
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