Agricultural land use (Excluding Nelson)

This report presents statistics on the area of land used for agricultural purposes in Aotearoa, New Zealand. Agricultural land use has important implications for water quality, as land-use practices directly affect nutrient levels, sediment loads, and the overall health of freshwater ecosystems. Nelson has been excluded from this analysis due to a data quality issue identified by Stats NZ (see "Data for this indicator" for further details).

Key facts

- The total area of agricultural land declined 5.7% from 2017 to 2022.
- Agricultural land as a proportion of New Zealand's total land area fell from 52.4% in 2017 to 49.5% in 2022, with Northland recording the largest decline (6.7%).
- Mixed sheep & beef farms decreased as a proportion of the total area, while specialised sheep farming and forestry expanded.
- Grazing livestock dominates New Zealand farmland, covering 69.3% of all agricultural land.
- Irrigated farmland grew 2% to 761,900 ha in 2022, with Canterbury remaining the largest region, holding 63% of total irrigated land.

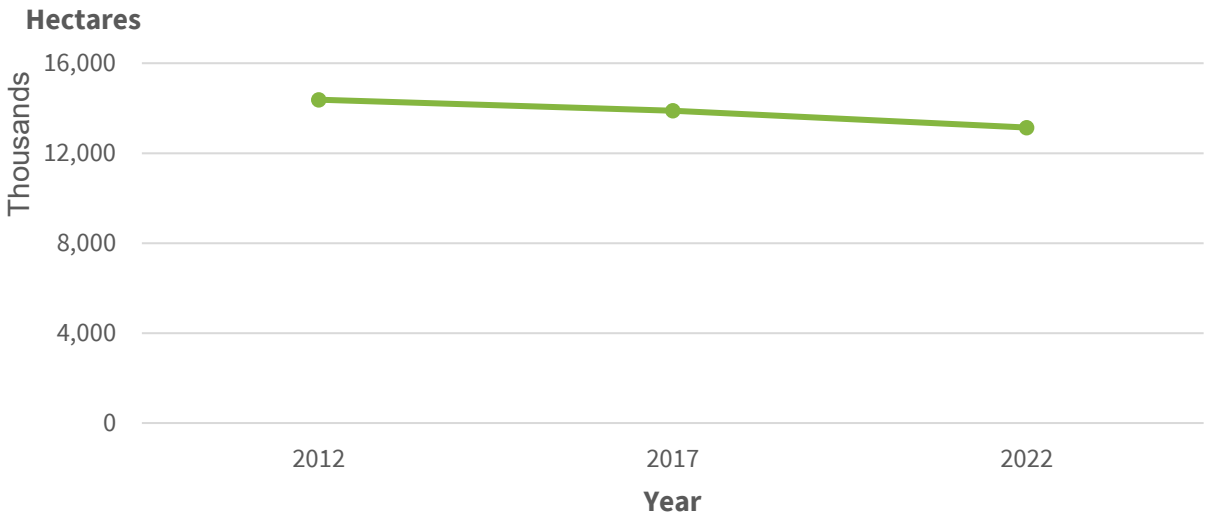
The impact of agricultural land use on water quality

Agricultural land use plays a pivotal role in shaping water quality, as the type and intensity of land management directly influence nutrient and sediment runoff into nearby water bodies. Land-use practices such as intensive cropping or livestock grazing can increase the transport of nitrogen, phosphorus, and faecal contaminants into rivers and lakes, potentially degrading aquatic ecosystems and affecting human water use (Kronvang et al 2020). Understanding these linkages is essential for sustainable land management, as effective mitigation strategies—such as buffer strips, controlled fertiliser application, and improved grazing practices—can reduce the negative impacts of agriculture on freshwater resources (McDowell 2021).

The total area of farmland has declined steadily over the past 5 years

Total agricultural land use (excluding Nelson, due to a data error) decreased from 13.9 million hectares in 2017 to 13.1 million hectares in 2022, representing a 5.7% decline. The decline was consistent across agricultural production census years (Figure 1).

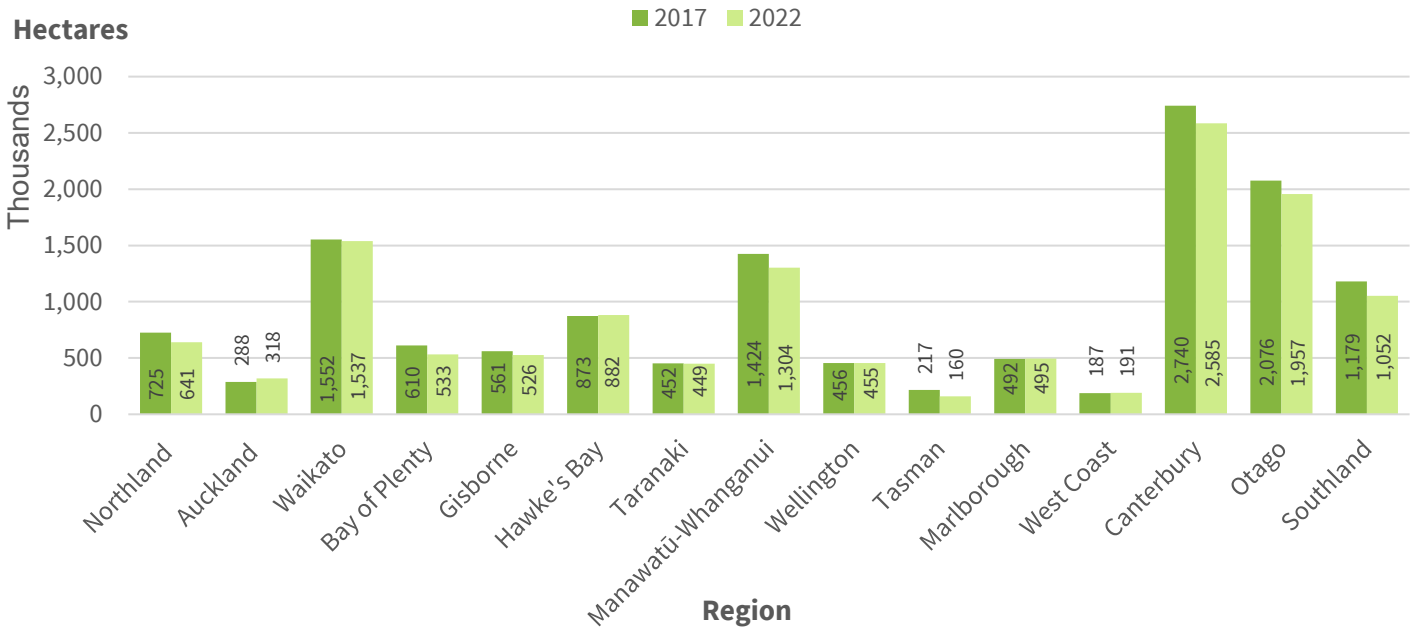
Figure 1: National area of agricultural land (excluding Nelson), by agricultural production census year



Note: Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).
Source: Stats NZ, 2024.

The area of farmland declined in most regions between 2017 and 2022. Canterbury, Southland, and Otago accounted for the largest share of the reduction, contributing 54% of the total decline, with decreases of 155,222, 126,866, and 118,637 hectares, respectively (Figure 2). In contrast, farmland area increased in Auckland (30,125 hectares), Hawke's Bay (8,946 hectares), Marlborough (2,310 hectares), and the West Coast (3,390 hectares.

Figure 2: Area of farmland, by region, 2017 & 2022

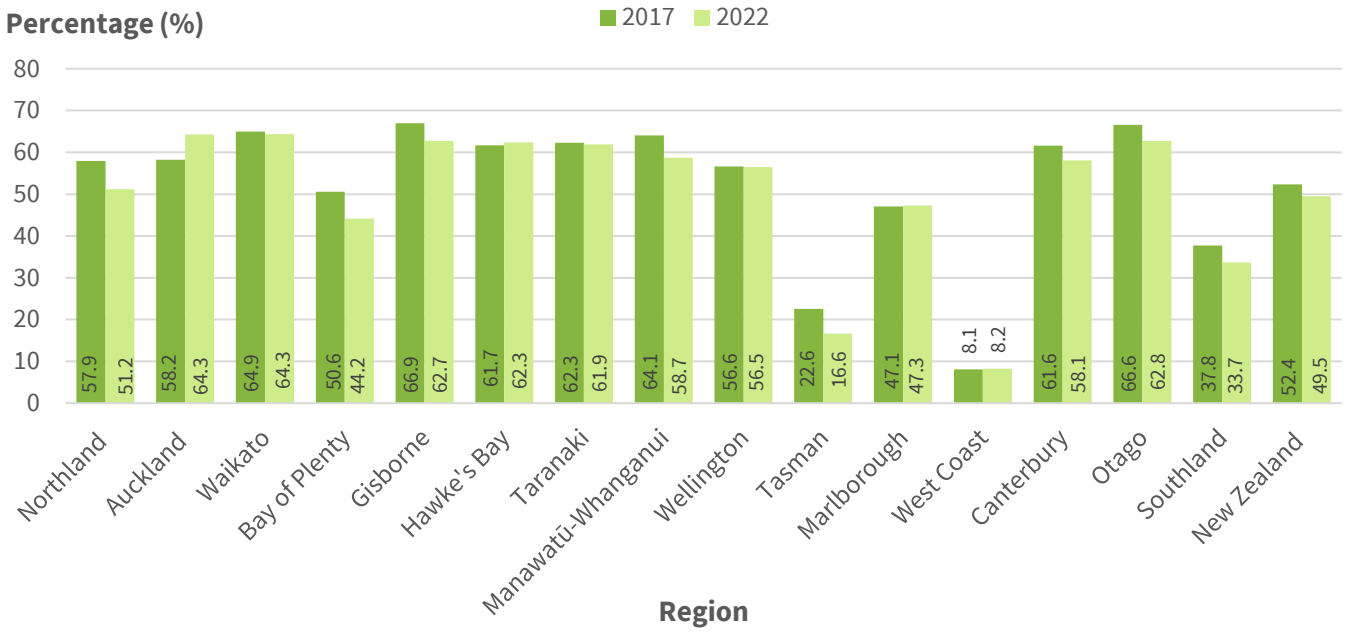


Note: Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).
Source: Stats NZ, 2024.

Nearly half of New Zealand's land area was used for farming in 2022

In 2022, agricultural land accounted for nearly half of New Zealand's total land area (49.5%), down from 52.4% in 2017. The percentage of agricultural land declined across most regions, with the largest reductions observed in Northland (from 57.9% to 51.2%), Bay of Plenty (from 50.6% to 44.2%), and Tasman (from 22.6% to 16.6%). In contrast, agricultural land expanded in four regions. Auckland experienced the largest increase in farmland as a share of the regional area, rising from 58.2% in 2012 to 64.3% in 2022, while there was an increase of less than one percentage point in Hawke's Bay, Marlborough, and West Coast (Figure 3).

Figure 3: Agricultural land as a percentage of regional area, excluding Nelson, 2017 & 2022

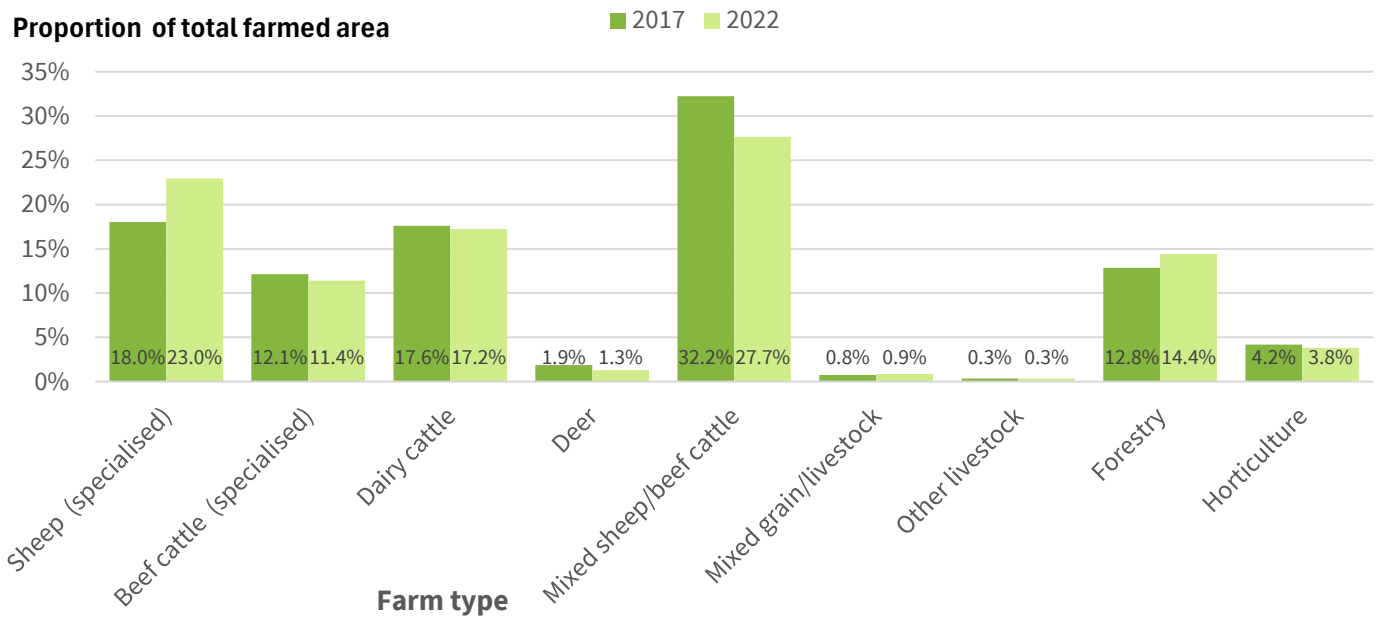


Note: Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).
Source: Stats NZ, 2024.

Mixed Sheep/Beef farming remains dominant despite a declining share of farmed area

Between 2017 and 2022, there were moderate shifts in the composition of New Zealand's total farmed area. Mixed sheep & beef farms continued to account for the largest share of farmed land, despite their proportion declining from 32.2% in 2017 to 27.7% in 2022. Meanwhile, specialised sheep farming and forestry increased their share of the total farmed area by 5% and 1.6%, respectively (Figure 4).

Figure 4: Allocation of farmed area, by farm type, 2017 & 2022

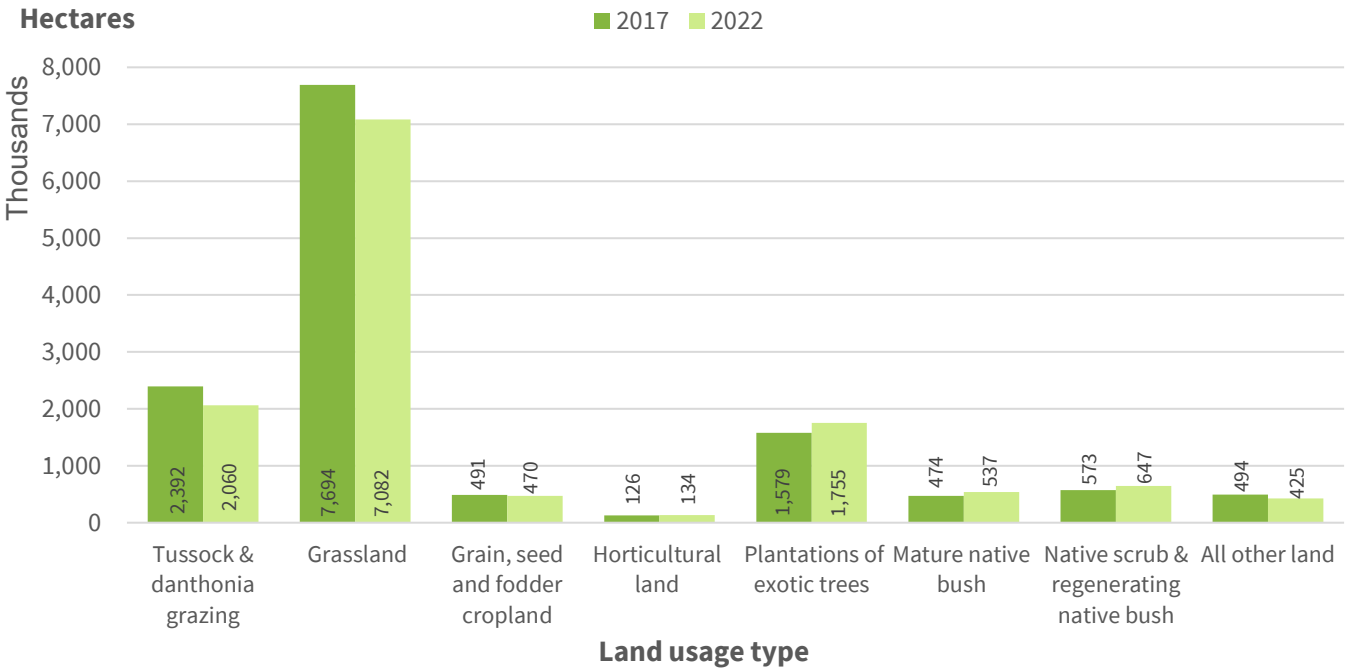


Note: Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).
Source: Stats NZ, 2024.

The area of grazing land continues to decline

Between 2017 and 2022, most of the reduction in farmland was driven by further declines in grassland and tussock/danthonia used for grazing livestock (612,000 ha and 332,000 ha, respectively). Despite these reductions, grazing land remained the dominant land use, accounting for 69.3% of all farmland in 2022. While grazing land continued to contract from 2012 to 2022, several other land-use types expanded. Plantations of exotic trees recorded the largest increase in area, growing by 176,000 ha (an 11.1% increase) over the period. Regenerating native scrub and mature native bush on agricultural land also grew, by 74,000 ha and 63,000 ha (12.8% and 13.4%, respectively) (Figure 5).

Figure 5: Agricultural land use, including Nelson, by type, 2017 & 2022



Note: 'Plantations of exotic trees' includes harvested areas awaiting restock, and areas that have not yet been harvested.
Source: Stats NZ, 2024.

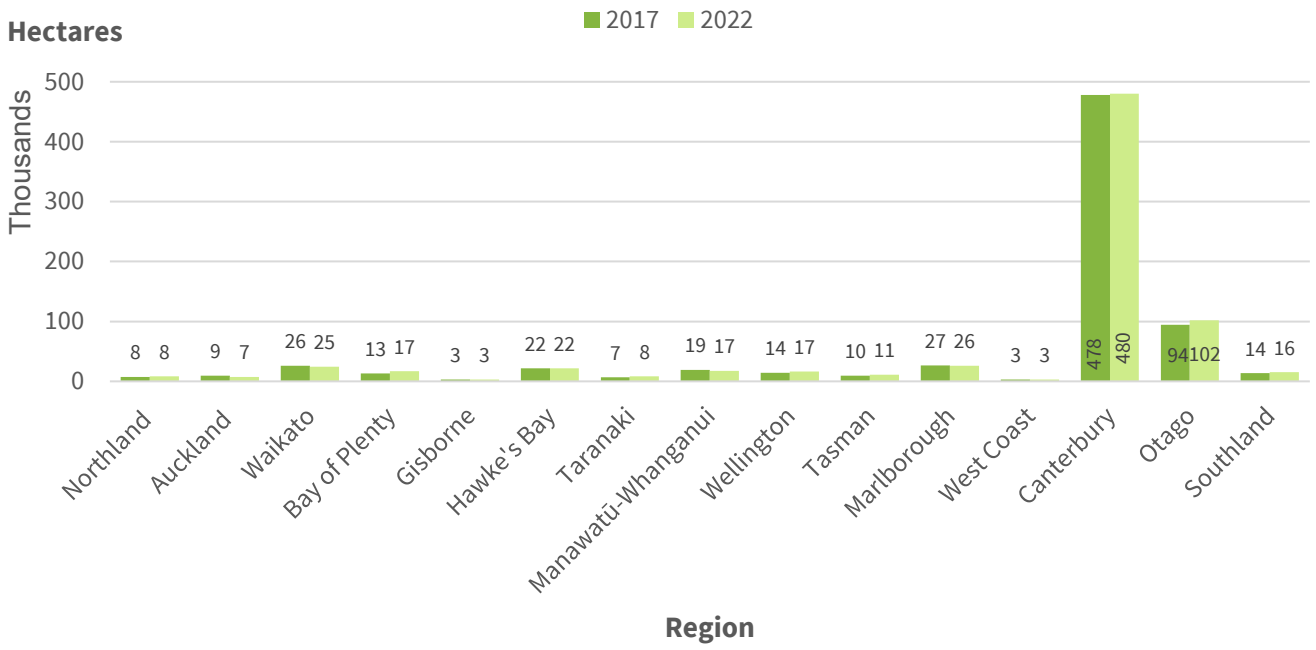
Canterbury still accounts for the most irrigated land as patterns shift across regions

Irrigation of agricultural land can place considerable pressure on nearby recreational water bodies by increasing the runoff of nutrients, pesticides, and faecal contaminants. This runoff can degrade water quality, threatening both human health and the integrity of aquatic ecosystems.

Between 2017 and 2022, the total area of irrigated agricultural land increased by 2%, from 746,800 to 761,900 hectares. Bay of Plenty and Taranaki saw the largest growth, rising 31.5% (from 13,000 to 17,100 hectares) and 22.1% (from 6,800 to 8,300 hectares), respectively (Figure 6). In contrast, Auckland and Manawatū-Whanganui recorded the largest declines, decreasing by 2,200 hectares (23.7%) and 1,800 hectares (9.4%), respectively.

Although there was only a 0.4% growth in Canterbury irrigated agricultural land in 2022, it remains by far the most widely irrigated region, accounting for 63% of New Zealand's total irrigated land.

Figure 6: Area of irrigated land, 2017 & 2022



Note: Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).
Source: Stats NZ, 2024.

Data for this indicator

Data comes from Statistics New Zealand's Agricultural Production Statistics, specifically the Agricultural Production Censuses from the year 2002 onwards. Nelson was excluded from the analysis due to a data quality issue identified by Stats NZ. Specifically, an anomaly in Nelson's 2022 total land area was traced to a forestry response that was incorrectly assigned to a Nelson farm. To preserve the integrity and comparability of the analysis across regions and over time, Nelson was therefore excluded from this indicator.

For additional information, see the Metadata sheet.

References

Kronvang, B., Wendland, F., Kovar, K. and Fraters, D., 2020. *Land use and water quality.* Water, 12(9), p.2412.

McDowell, R. W. (2021). *Land use and water quality.* New Zealand Journal of Agricultural Research, 64(3), 269–270.

Stats NZ. 2024. *Agricultural Production Statistics: Year to June 2024 (final).* Data available from https://www.stats.govt.nz/information-releases/agricultural-production-statistics-year-to-june-2024-final/ (accessed May 2025).

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