FACT SHEET

Otago/Southland – climate risk, vulnerabilities and impacts 2025

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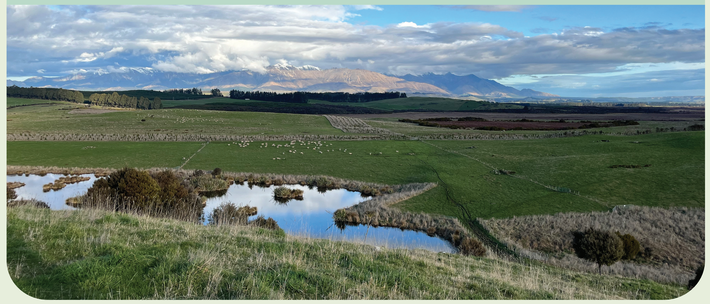
LANDCORP FARMING LIMITED

2050 climate outlook

- **Drought**: Moderate increase in risk. 50–100% rise in frequency of historically impactful events by 2050. Impacts likely more pronounced in drier Otago systems (soil moisture often limiting), while Southland farms are more buffered by reliable rainfall.
- **Rainfall/flooding**: ~Doubling in frequency of extreme rainfall events. 5–15% increase in intensity, with generally low flood risk across most farms but moderate exposure in lowland Otago systems such as the Clutha Valley.
- **Heat stress**: Risk ranges from low to moderate across both regions, mitigated by cool overnight temperatures and limited extreme heat events.
- **Cool hazards**: Currently a significant constraint, especially in Otago uplands with shorter growing seasons, but declining overall due to warming, though still influential across both regions.
- **Fire**: Risk remains low and storm patterns are expected to remain broadly similar, with only minor increases in exposure in some inland Otago areas.

Vulnerability to climate change

- Farms are predominantly rainfed with moderate water security, but have increasing exposure to drought, with sensitivity varying depending on soil depth and water holding capacity.
- Soils on the farms are commonly low fertility, shallow or stony, and have moderate to low water holding capacity, making them a key constraint on productivity and drought resilience.
- Most farms have low flood risk, although lowland systems such as the Clutha Valley have moderate exposure to floodplains and potential storm surge impacts.
- Erosion risk is generally low to moderate but higher on steeper hill country and upland farms and is likely to increase with more intense rainfall and drought-recovery cycles.



Improving climate resilience

Pasture and feed
- Diversify pasture species.

Animals and technology
- Utilise livestock with heat tolerance, feed efficiency and low-methane genetics.
- Use wearable technologies (e.g. e-collars).

Infrastructure
- Improve energy resilience through localised generation.
- Expand water storage and reticulation infrastructure.

Trees, shade and shelter
- Increase tree cover for shade, shelter and erosion control.
- Increase riparian planting and restore wetland.

People and operations
- Improve staff capability in adverse weather response and PPE use.

Climate change risk