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Report Highlights:

Since hitting peak numbers in 2016, the New Zealand national cattle herd has been very gradually declining and this is expected to continue in 2023. This is largely a result of policies associated with waterway exclusions, winter grazing restrictions, nitrogen leaching, and pricing agricultural emissions all impacting the sector and driving some land use change from livestock to forestry. FAS/Wellington is forecasting slightly lower adult cattle slaughter in 2023, although calf slaughter is expected to rise. Overall beef production and exports are also forecast to decline slightly. Although New Zealand beef exports are forecast to ease, they are still expected to remain strong as a result of robust demand in key markets, improved logistics, and a weak New Zealand dollar.

Executive Summary:

Since hitting peak numbers in 2016, the New Zealand national cattle herd has been gradually declining and this is expected to continue in 2023. The main contribution to the decline in recent years is government policies associated with waterway exclusions, winter grazing restrictions, and mitigating nitrogen leaching. In the long-term, the national beef industry also faces a challenge as a result of the New Zealand Government's intent to price agricultural emissions by 2025. Because of these factors, there has been a shift of some land out of beef and sheep farming and into forestry, and this trend is expected to continue. However, despite these factors current farm gate beef prices have held quite consistent for farmers, particularly compared to lamb. As a result, many farmers remain optimistic towards beef enterprises on farm and the decline in cattle is expected to be much more gradual than the fall in sheep numbers.

Because of the slowly shrinking herd, in 2023 FAS/Wellington is forecasting slightly lower adult cattle slaughter numbers. However, calf slaughter is expected to rise to the highest since 2015. This is due to the changing terms of supply for the country's largest dairy processor, where calves of farmers that supply milk to this processor can only be euthanized on-farm when there are humane reasons for doing so. This change is being implemented in 2023, and as a result more calves are expected to either enter the value stream at slaughter or enter into the beef herd.

Climatically, the year has got off to a turbulent start, as cyclones in the North Island severed logistics and processing in two major regions (accounting for 18 percent of the national beef herd). However, the full effect of the cyclone damage is still very unclear at the time of this report. In addition, the South Island has experienced a third dry summer, impacting pasture growth in the region. Although labor remains a consistent concern, COVID-19 impacts on beef processing waned in the second half of 2022 and is expected to have minimal impact on 2023.

Although beef exports are expected to fall slightly due to reduced slaughter, volumes are still expected to remain strong, and optimism is present in the industry post-pandemic. A weak New Zealand dollar, improved logistics, as well as expected strengthening import demand in the United States and continued demand in China are supporting export volumes.

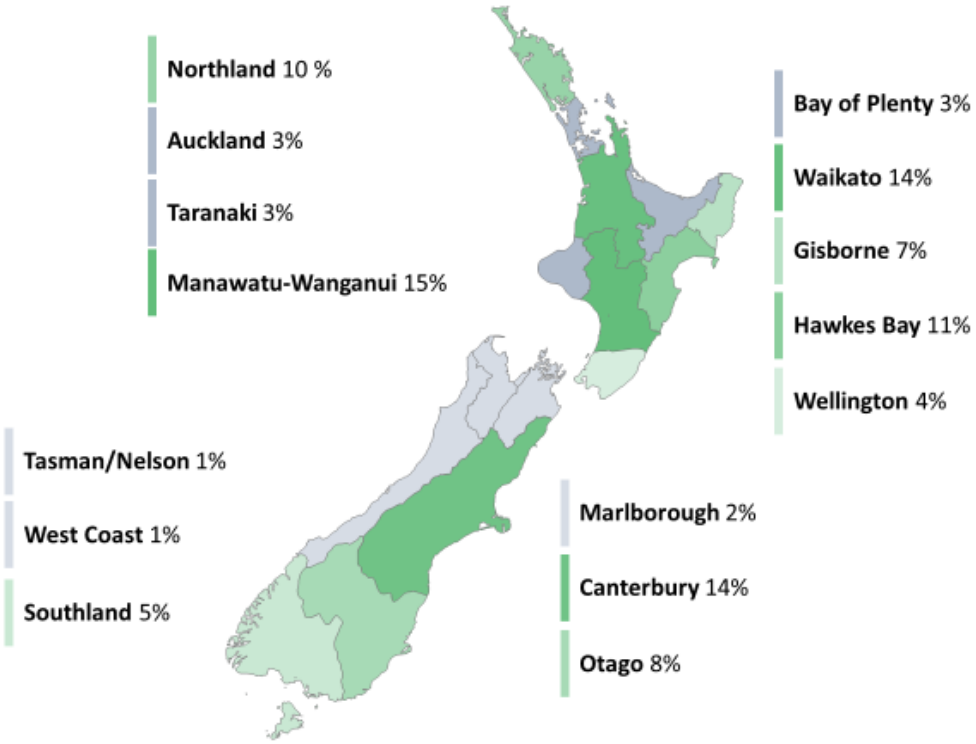
Note: The GAIN Marketing Year (MY) is the same as the calendar year (CY), January 1 to December 31. For the purpose of this report always refer to MY unless otherwise stated. For foreign exchange rate between New Zealand Dollar and United States Dollar, the rate used in this report is NZ$ 1.00 = US$ 0.62.

Background

New Zealand is a major beef producer and exporter, and typically is the sixth largest exporter in the world. The beef herd is spread throughout the country, with 70 percent situated in the North Island and 30 percent in the South Island (see Figure 1). The New Zealand cattle sector is unique because of its integration with the huge dairy industry, and approximately 70 percent of the adult cattle slaughtered each year (and essentially 100 percent of the calves slaughtered) have their origin in the dairy industry. Of the animals raised specifically for beef, many of them are dairy breeds or crosses.

With New Zealand's temperate climate, beef cattle production is almost entirely from pastural grazing, with only one major feedlot located in Canterbury. As a result, the vast majority of exports are grass-fed beef. Since the beef industry is pasture-based, and the dairy industry has a huge contribution to beef production (for example culled dairy cows), beef production and beef exports are highly seasonal in New Zealand. These peak before the winter in May and June, and then fall sharply until recovering in November and December with the onset of summer.

Figure 1: Beef Cattle by Region



Source: StatsNZ, FAS/Wellington

New Zealand Herd Size

National cattle numbers for both beef and dairy has been in a gradual decline since the national herd peaked at 6.1 million in 2014 and 2016. In the last three years the national dairy herd has been decreasing by less than one percent per year, while the beef herd has been static. A slow decline is anticipated to continue in the coming years, as government policy becomes more enforced around pricing agricultural emissions, carbon sequestration, and freshwater management. As a result of these policies, there will be increased focus on changing farming practices on specific land classes. In particular more marginal pastoral country that currently has sheep and beef but has potential for forestry would be the most effected. This is expected to result in some hill country land continuing to shift from livestock, reducing herd numbers. Some of the key factors impacting this trend include:

Agriculture Emissions Pricing: On October 11, 2022, New Zealand Prime Minister during this time - Jacinda Ardern - announced the Government's consultation document to establish a farm-level, split-gas levy to price agricultural greenhouse gas emissions. Modelling work that was completed has shown that this proposal should meet the government's Zero Carbon Act 2030 methane reduction target. However, the modelling highlighted that pricing agricultural emissions may cause a reduction in overall output from the red meat sector (estimated 20 percent less) and some reduced output from dairy (5 percent less). Much of this attributed to land use change from extensive pastoral operations into forestry. This would have a significant effect on the national beef herd numbers. As a result, the reaction from industry organizations and lobby groups was this would severely impact rural communities. However, the legislation is still yet to be passed through the Government and will not be in force until 2025, therefore the potential impact is still yet to be understood.

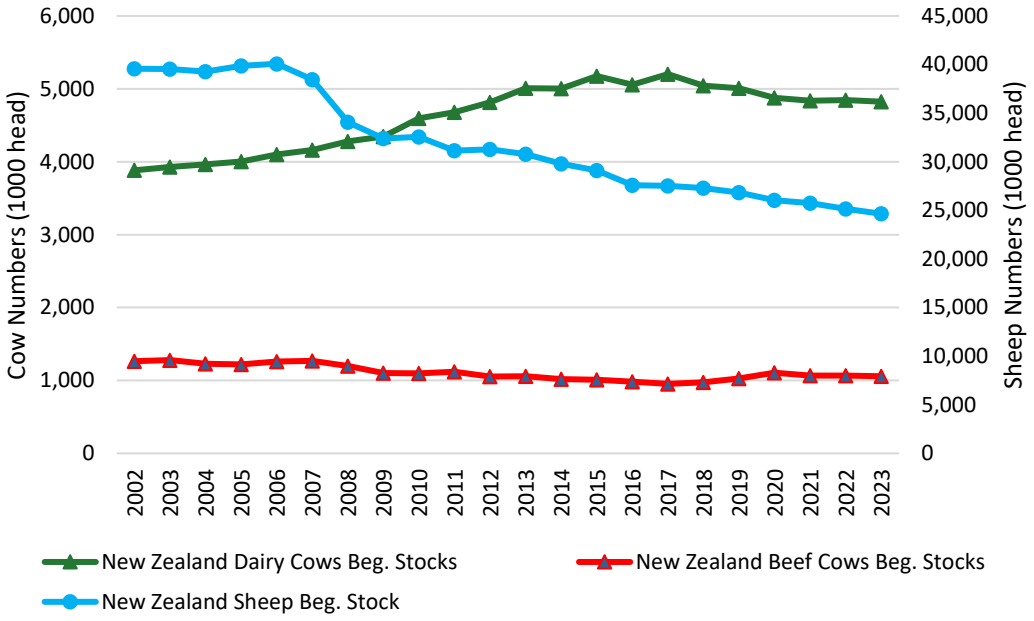
Carbon Sequestration: Since 2008, agricultural operations have been able to contribute to the Government's emissions trading scheme (ETS) through the establishment of forestry blocks of more than one hectare. Recognized forestry stands under the ETS are awarded units (NZUs), which can be sold to organizations to lower their greenhouse gas footprint, recognizing the benefits of forestry carbon sequestration. As a result, forestry has become more financially feasible for land-use on marginal-classed pastoral land typical for sheep and beef operations, where through planting, NZUs become available to sell and later landowners collect revenue at harvest. The recent Government announcement on emissions pricing still regards the ETS as the best recognized carbon sequestration method. As a result, industry is anticipating that even more sheep and beef farmland in the future will be destined for forestry planting as the country targets net zero emissions and introduces emissions pricing.

National Policy Statement for Freshwater Management 2020 (NPSFM): This statement sets out the objectives and policies for freshwater management under the Resource Management Act 1991 and also came into effect on September 3rd, 2020. The purpose of these regulations is to mitigate against the risk of sediment loss, phosphate runoff, nitrogen leaching and E.coli. The biggest impact for cattle is that it regulates by 2025 the exclusion of cattle from permanent and ephemeral waterways and the management of winter forage crops (intensive grazing). Historically, one of pastoral New Zealand agriculture major

strengths has been the natural asset for stock to access clean drinking water. As a result of these plans, the capital cost that will occur for farmers to implement permanent fencing and re-subdivision of properties, including the install of reticulated water schemes, will be substantial. This will no doubt become a tipping point to the long-term feasibility of extensive pastoral operations, including cattle, where most of the New Zealand beef production is derived.

These factors will have the largest impact on the New Zealand sheep and beef industry and are expected to cause a decline in the numbers of both sheep and cattle. Sheep farming is the largest land use competitor to beef cattle, and the national sheep herd continues to decline at a rate of two percent per year with no indication of a change in trajectory (see Figure 2).

Figure 2: New Zealand Stock Numbers



Source: USDA - Products, Supply and Distribution (PSD) & StatsNZ

Industry analysts estimate that sheep numbers will continue to decline at a faster rate than cattle. Recent beef prices on-farm in relation to lamb has influenced farmers deciding between sheep and cattle. So far in 2023, the premium of prime lamb over prime steer has fallen to the narrowest level in the last three years, dropping to only about NZ$1.15 to NZ$1.20 per Kilogram (Kg) of carcass-weight equivalent (CWE) (US$0.71 to US$0.74 per Kg CWE). This is compared to a spread of NZ$2.85 per Kg (US$1.77) as recently as September 2022 (see Figure 3). In addition, sheep production continues to be impacted by very low wool prices and is even more impacted by labor issues for shearing and shepherding. As a result, many industry contacts have expressed that producers are likely to focus on maintaining cattle numbers over sheep.