

Required Report: Required - Public Distribution

Date: September 20, 2023

Report Number: NZ2023-0012

Report Name: Livestock and Products Annual

Country: New Zealand

Post: Wellington

Report Category: Livestock and Products

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Report Highlights:

Since reaching peak numbers in 2016, the New Zealand national cattle herd has been gradually declining, and this is expected to continue in 2024. In recent years, government policies associated with waterway exclusions, winter grazing restrictions, and mitigating nitrogen leaching have been the main contributors to the decline. In the long term, the national beef industry faces an immense challenge due to the New Zealand Government's intent to price agricultural emissions by 2025. On-farm inflation is forecasted to be the biggest non-climate-related challenge in the next 18 months. Prices for livestock farm inputs increased 16.3 percent between March 2022 and March 2023 – representing the highest on-farm inflation rate for livestock farmers in 40 years. Export volumes to global markets in the first half of 2023 were up 8 percent on the previous year, with strong demand in the United States and China. However, global inflation and recession have seen prices soften by over 7 percent.

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 2024. The main contribution in recent years to the decline is government policies associated with waterway exclusions, winter grazing restrictions and mitigating nitrogen leaching. In the long-term, the national beef industry also faces an immense 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.

On-farm inflation is forecasted to be the biggest non-climate related challenge in the next 18 months. Prices for livestock farm inputs increased 16.3 percent between March 2022 and March 2023. Currently resulting in the highest on-farm inflation rate for livestock farmers in 40 years. Price rises are continuing in all categories of farm inputs; the largest increase in 2023 has been interest on farm debt. Sheep and beef farm term liabilities are approximately 80 percent floating and 20 percent fixed interest rates, leaving many farm businesses exposed to the recent more than doubling of the national Official Cash Rate.

A change in weather pattern is forecasted over the next 12 months following three consecutive years of a La Niña pattern, which brought wet summers in the north and eastern parts of the country. The National Institute of Water and Atmospheric Research (NIWA) are predicting an El Niño pattern. If this comes to fruition it will bring dry conditions to more cattle farming regions at the start of 2024.

As of July 2023, New Zealand's largest dairy processor has added key clauses into their Terms of Supply, where calves of farmers that supply milk to this processor can only be euthanized on-farm when there are humane reasons for doing so. As a result, more non-replacement dairy calves are anticipated to be slaughtered for veal or retained as dairy-beef in the next 18 months. This is expected to slow the rate of decline of the cattle herd in the coming years, as more mature dairy beef cattle are finished for slaughter.

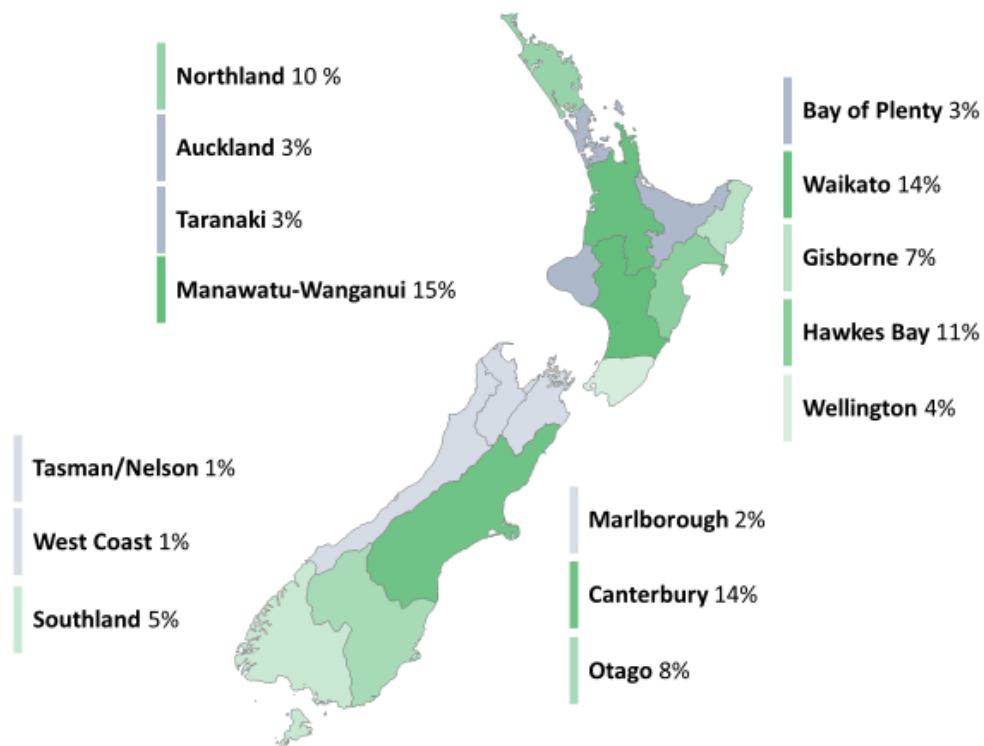
Export volumes to global markets in the first half of 2023 was up 8 percent on the previous year, with strong demand in United States and China. However, global inflation and recession has seen prices soften over 7 percent. Paired with the rising cost of inputs is resulting in what will be a very challenging 18 months for the New Zealand Beef industry.

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\$ 0.61.

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. The national dairy herd makes up 82 percent of the total national cattle herd, with 18 percent being defined as beef breeds. The most predominant of these beef breeds being Angus and Hereford (Figure 2).

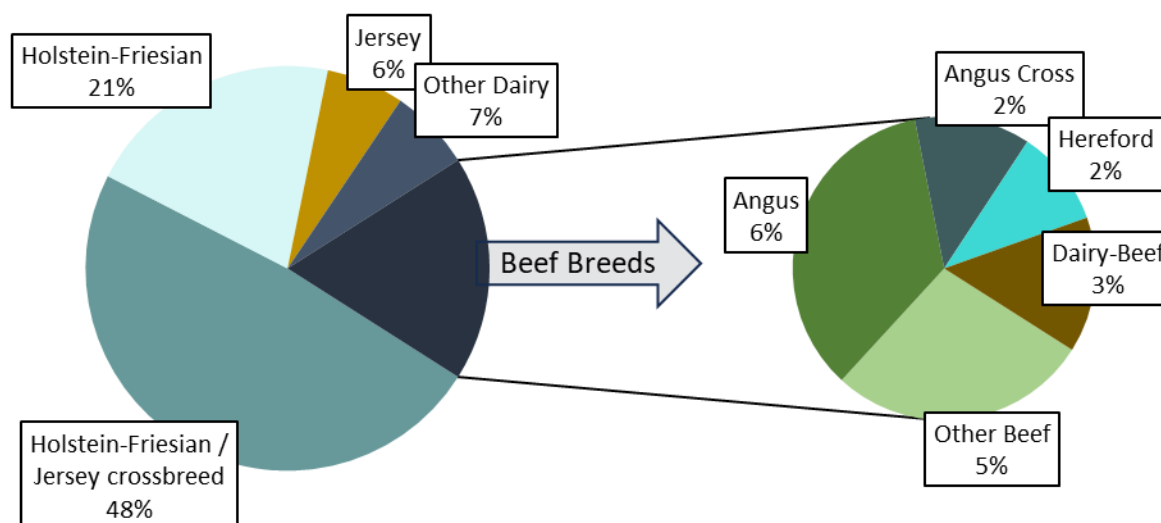
Figure 1: Beef Cattle by Region



Source: StatsNZ, FAS/Wellington

With New Zealand's temperate climate, beef cattle production is almost entirely from pastoral grazing, with only one major feedlot located in Canterbury. As a result, most 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 2: National Cattle Herd Breed Composition



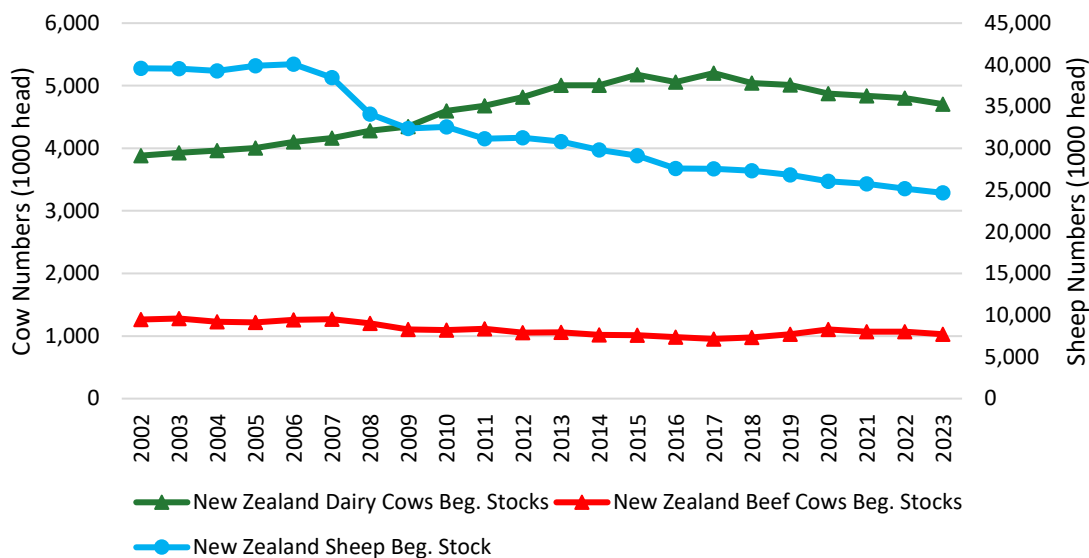
Source: Beef and Lamb NZ & DairyNZ

Cattle Production

National cattle numbers for both beef and dairy have 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 (Figure 3). A slow decline is anticipated to continue in the coming years, as the impact of government policy pricing agricultural emissions, and freshwater management policies come into effect. As a result of these policies, there will be increased focus on changing farming practices on specific land classes. In addition, over the next 18 months the significant rise of on-farm inflation is expected to have a huge impact on the livestock farming sector and the ability to maintain national 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. On August 18, the agriculture minister - Damien O'Connor announced the Government's final plan to reduce agricultural emissions. Which is still on track to be implemented by the end of 2025, despite an election looming in October.

Figure 3: New Zealand Stock Numbers

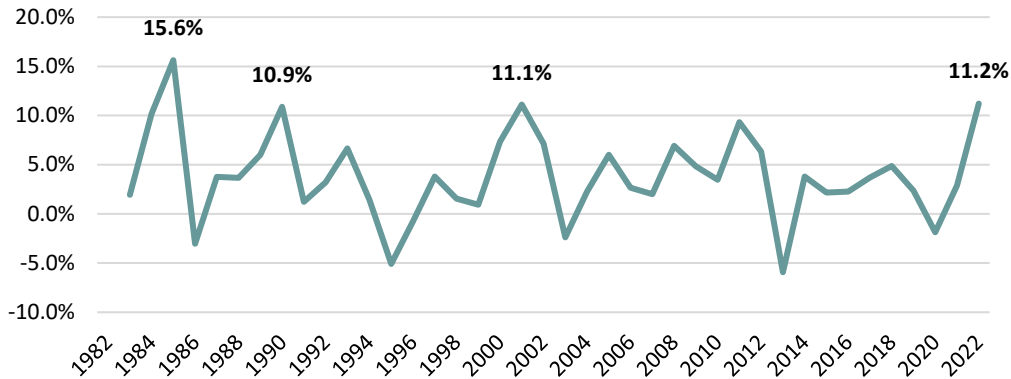


Source: USDA - Products, Supply and Distribution (PSD) & StatsNZ

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 3, 2020. The purpose of these regulations is to mitigate against the risk of sediment loss, phosphate runoff, nitrogen leaching and E. coli. By 2025 cattle will need to be permanently excluded from permanent and ephemeral waterways. Historically, one of pastoral New Zealand agriculture major strengths has been the natural asset for stock to access natural stream 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.

On-Farm Inflation: As reported by the national industry group - Beef and Lamb New Zealand; prices for livestock farm inputs increased 16.3 percent between March 2022 and March 2023 following a 10.2 per cent increase in the previous 12-month period. Currently resulting in the highest on-farm inflation rate for livestock farmers, since 1985 when on-farm inflation was 15.6 percent (Figure 4). Price rises are continued to be seen in all categories of farm inputs; the largest increase in 2023 has been interest on farm debt (Figure 5). This has contributed substantially to the overall increase in on-farm inflation because it comprises over 10 percent of total farm expenditure.

Figure 4: Farm Expense Inflation

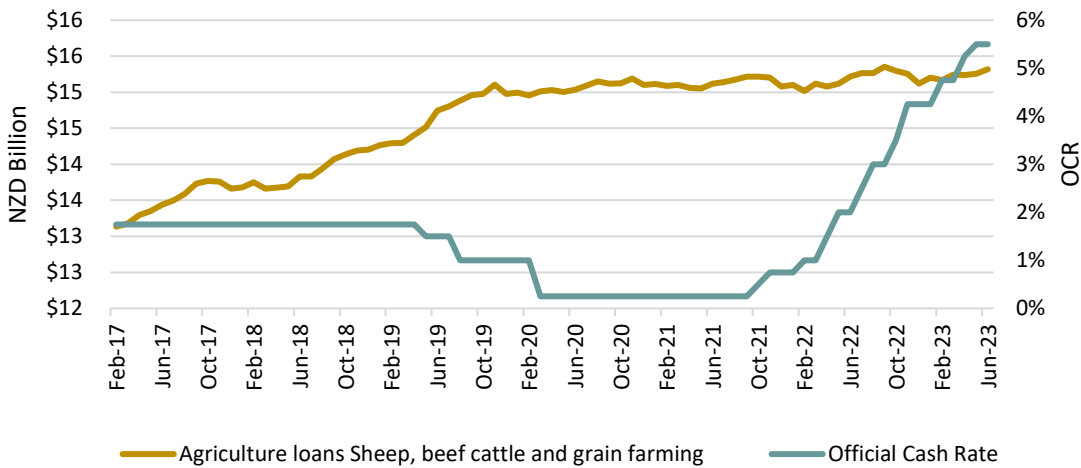


Source: StatsNZ

The primary drivers of on-farm inflation over the next 18 months, will be as a result of:

- **Industry Debt:** According to the Reserve Bank of New Zealand (RBNZ) the nation’s total bank loans to Sheep, Beef and Grain farmers were NZ\$15.3 billion (US\$9.5 billion) as of May 2023. Since 2017 the total value of loans to sheep, beef and grain farmers has increased at a compounding annual growth rate of 1.92 percent per year, compared to all other agricultural industry loans at 0.16 percent per year.
- **Liability Terms:** New Zealand sheep and beef farm term liabilities are approximately 80 percent floating and 20 percent fixed interest rates, which exacerbates the impact of floating rates having doubled over the last year. The 80/20 floating versus fixed is not a long-standing pattern of term debt, in the early 2000s the situation was reversed with around 20 per cent of term debt on floating interest rates.

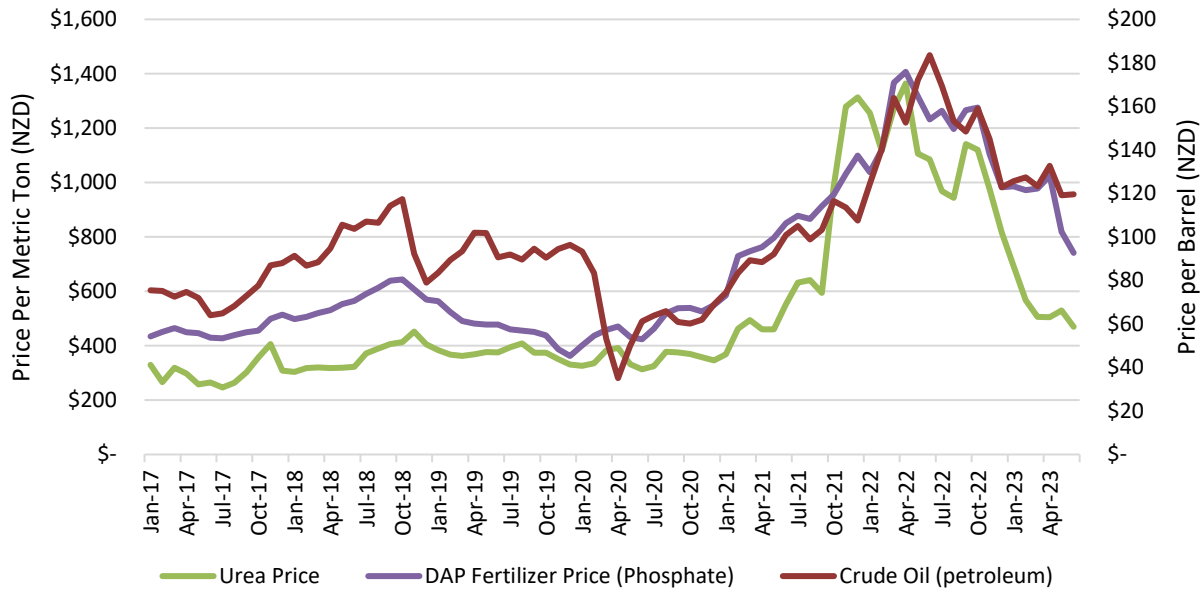
Figure 5: New Zealand Interest Rates and Farm Debt



Source: Reserve Bank of New Zealand

As a result of the recent increases in the Official Cash Rate (OCR) by the RBNZ, debt servicing is anticipated to be the biggest non-climate related challenge for livestock farming operations in the next 18 months. Especially as many operations rely on banking facilities for purchasing a majority of annual farm inputs such as fertilizer, fuel, and animal health treatments, which have already inflated in price in recent years (see Figure 6).

Figure 6: Fertilizer and Fuel Prices

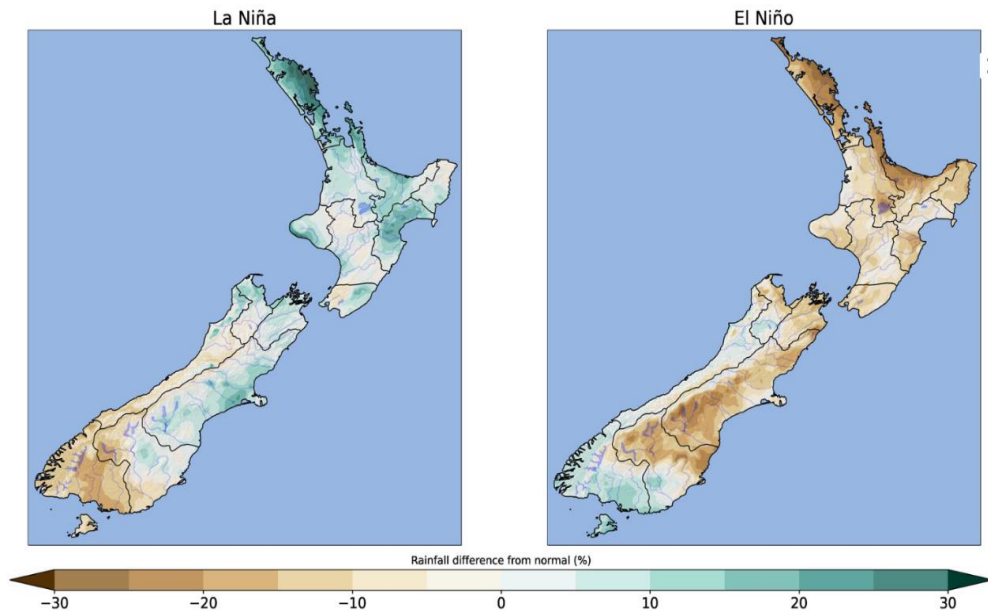


Source: Bloomberg, US Department of Agriculture and World Bank

Following the most recent review by the RBNZ on May 24, 2023, the national OCR was raised to 5.50 percent consistent with projections. RBNZ stated that a pause at this point would allow more time to assess the impact of the significant tightening, and the timing of any further increase that might be needed. Notably as seen in historical on-farm inflation, peaks in inflation have been followed by dramatic drops in the immediate years following (Figure 4).

Summer Dry Forecast: National Institute of Water and Atmospheric Research (NIWA) are forecasting a El Niño weather pattern after the previous three years of La Niña. During El Niño, New Zealand tends to experience stronger or more frequent winds from the west in summer, which can encourage dryness in eastern areas and more rain in the west. Affecting a large portion of the national livestock farming regions and their pastoral production systems (Figure 7).

Figure 7: Effects of La Niña and El Niño Summer Rainfall



Source: National Institute of Water and Atmospheric Research (NIWA)

At the start of 2023 La Niña impacted the country for the third season. During this period the north island encountered two cyclones that impacted the northern and eastern farming regions – Hale and Gabrielle. Beef and Lamb NZ (B+LNZ) has estimated the cost of damage of these cyclones on livestock farming operations to be ~\$NZ395Million (\$US240 Million).

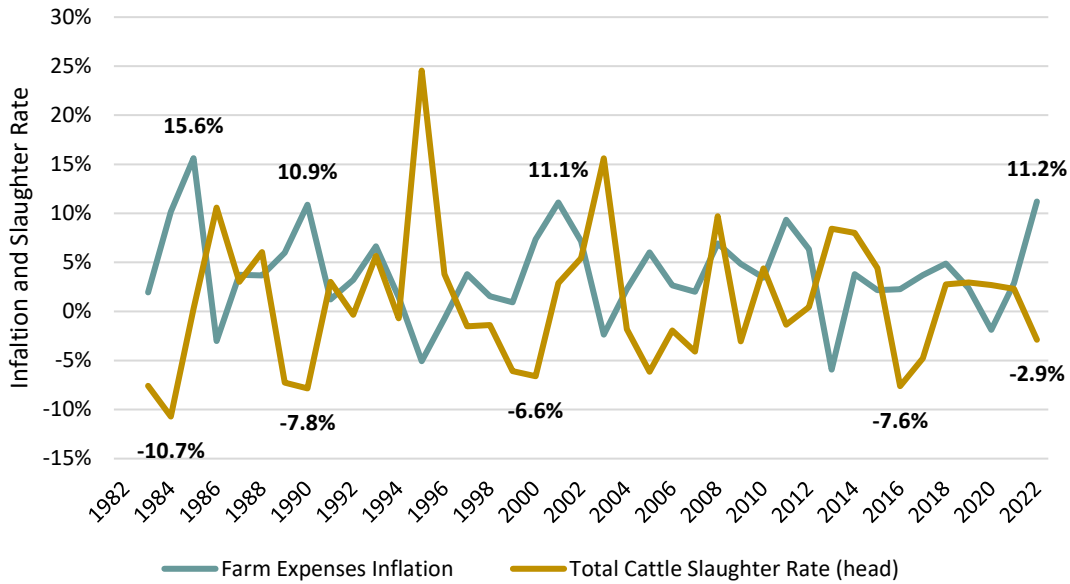
Cattle Slaughter

2024

FAS/Wellington are forecasting a 1.3 percent increase in cattle slaughter in 2024 to 4.73 million head, similar to 2021 results. This is primarily anticipated to be driven by two aspects:

- Firstly, dairy-beef numbers increase with more calves being retained and grown out to 18 months old. As a result of, New Zealand’s largest dairy processor adding key clauses into their Terms of Supply, where calves of farmers that supply milk to this processor can only be euthanized on-farm when there are humane reasons for doing so.
- Secondly, as a result of the high interest rates of farm debt and low commodity prices in the current market year. FAS/Wellington anticipate a retention of some stock by farmers to grow larger animals and wait for gross margins to improve. Since the early 1980’s in periods where high on-farm inflation was encountered, the opposite has been the case for slaughter rates per head in national cattle numbers (see figure 8).

Figure 8: Farm Expense Inflation and Cattle Slaughter Rates

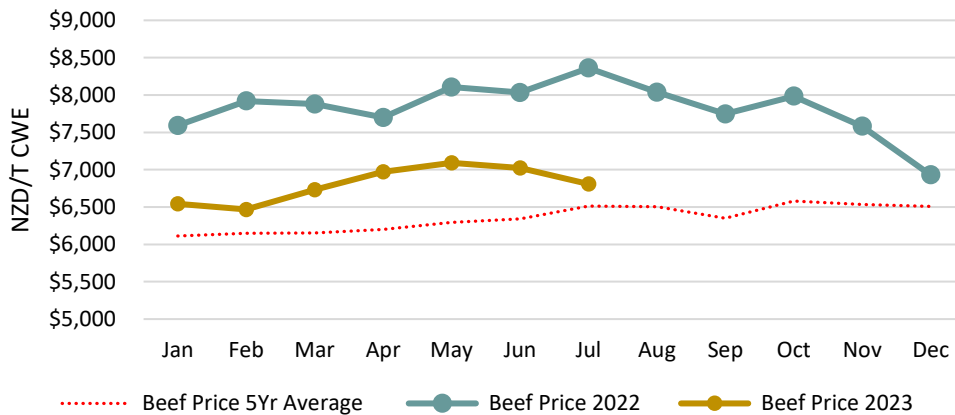


Source: StatsNZ

2023

FAS/Wellington revise cattle slaughter numbers to 4.67 million head, back 10,000 from the official USDA estimate. As already discussed, the New Zealand livestock industry is experiencing a period of high on-farm inflation, brought on by high input prices and interest rates. Coupled by export prices softening for New Zealand beef already this year (Figure 9), FAS/Wellington is anticipating for more cattle to remain on farm until gross margins are more favorable per head.

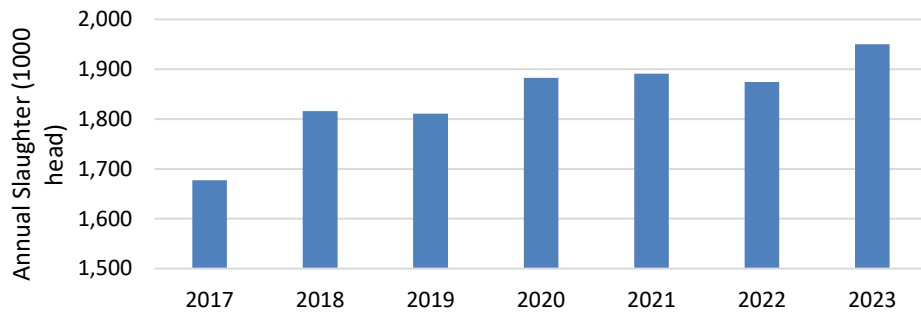
Figure 9: New Zealand Monthly Unit Price for Beef Exports



Source; Trade Data Monitor LLC

Already highlighted the change for the current season implemented by New Zealand’s largest dairy processor, where non-replacement dairy calves of farmers that supply milk to this processor can only be euthanized on-farm when there are humane reasons for doing so, or otherwise must enter the value stream. As a result, FAS/Wellington has already forecasted calf slaughter numbers to increase 75,000 head compared to 2022, as more dairy calves enter the value stream in 2023 (Figure 10).

Figure 10: National Calf Slaughter



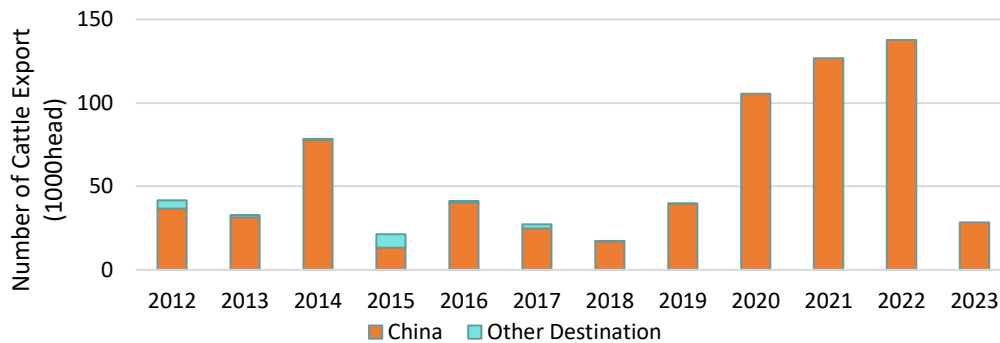
Source: StatsNZ

Cattle Exports

FAS/Wellington has finalized New Zealand live cattle exports, which concluded at 28,447 head in 2023 (Figure 11). New Zealand’s Ministry for Primary Industries (MPI) announced in July 2021 that all exports of livestock by sea would cease on April 30, 2023. This decision followed the sinking of the vessel Gulf Livestock 1 in August 2020 after departing Napier destined for China. The final of live cattle shipment left days before the cutoff date from Timaru port.

In 2022, a record 137,619 head of cattle were exported, all to China. These were all dairy cows and heifers destined for China’s dairy sector.

Figure 11: New Zealand Live Cattle Exports by Destination



Source: Trade Data Monitor LLC

Table 1: Production, Supply and Distribution – Cattle Numbers

Animal Numbers, Cattle Market Year Begins New Zealand	2022		2023		2024	
	Jan 2022		Jan 2023		Jan 2024	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Total Cattle Beg. Stks (1000 HEAD)	10150	10150	9965	9965	0	9790
Dairy Cows Beg. Stocks (1000 HEAD)	4805	4805	4740	4725	0	4710
Beef Cows Beg. Stocks (1000 HEAD)	1067	1067	1030	1065	0	1065
Production (Calf Crop) (1000 HEAD)	5159	5159	5010	5120	0	5100
Total Imports (1000 HEAD)	0	0	0	0	0	0
Total Supply (1000 HEAD)	15309	15309	14975	15085	0	14890
Total Exports (1000 HEAD)	138	138	28	28	0	0
Cow Slaughter (1000 HEAD)	980	980	1000	980	0	970
Calf Slaughter (1000 HEAD)	1875	1875	1950	1950	0	1950
Other Slaughter (1000 HEAD)	1737	1737	1730	1740	0	1810
Total Slaughter (1000 HEAD)	4592	4592	4680	4670	0	4730
Loss and Residual (1000 HEAD)	614	614	500	597	0	580
Ending Inventories (1000 HEAD)	9965	9965	9767	9790	0	9580
Total Distribution (1000 HEAD)	15309	15309	14975	15085	0	14890
(1000 HEAD)						

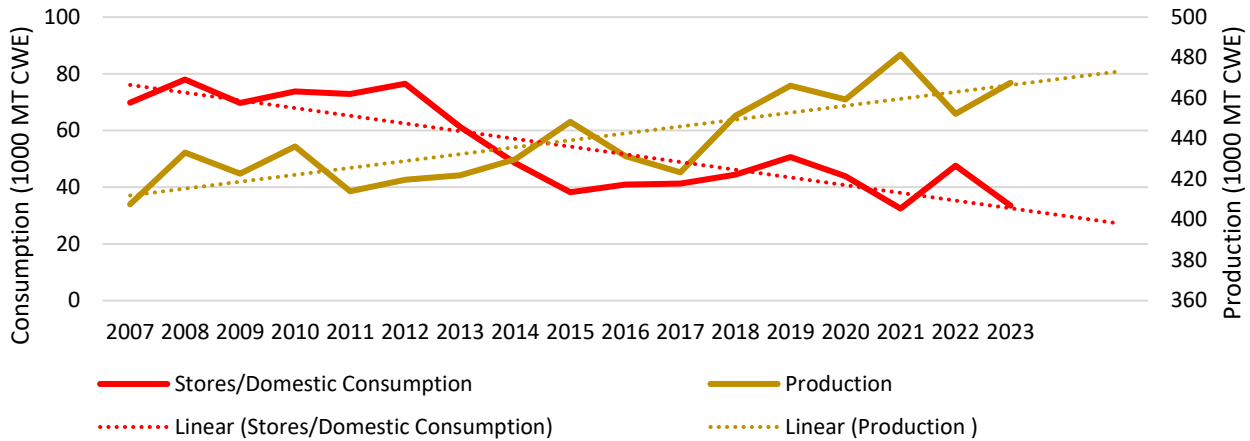
Beef Production

2024

FAS/Wellington are forecasting production to continue to grow with the current trend (see Figure 12) to 745,000 metric tons of carcass weight equivalent (CWE) for the 2024 market year. Despite the gradual decrease in national cow numbers, the retention of more dairy-beef cattle (non-replacement dairy calves) in the outgoing market year to be finished for slaughter in 2024, is anticipated to be a large driver in production. In addition, with retained stock in the current year due to the increase on farm inflation, will be an additional driver. This forecast is only 10,000MT CWE behind 2021 production levels of 754,000 MT CWE, which has been the largest annual production for New Zealand.

As mentioned, the forecast El Niño weather pattern traditionally causes dryer than average summer conditions in key cattle regions. Which for the New Zealand pastoral farming system will result in a decrease in feed reserves heading towards winter in the middle of the calendar year. As a result, cattle operations may sell more stock earlier than carrying through the winter, as well as dairy cows being culled sooner for farmers to prioritize feed. In addition, this can also result in lower carcass weights at slaughter.

Figure 12: January to July Beef Production and Domestic Consumption



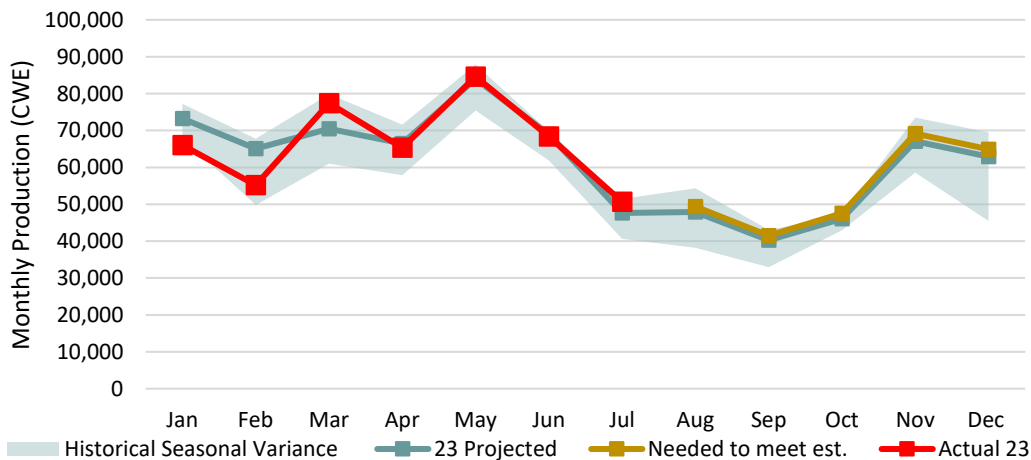
Source: StatsNZ

2023

FAS/Wellington maintain the USDA official estimate for 2023 of 740,000 MT CWE. Production is already four percent ahead in the first half of the year, compared to the previous market year at the same time. Historically almost 60 percent of production volume is done over this same period, with May always being the busiest month for processing facilities.

Volumes are currently on-track with the USDA official estimate. However, there were disruptions felt in January and February as a result of damage caused by cyclones Hale and Gabrielle, cutting off logistics and affecting facilities and staff. Following this extreme weather events production was ramped up to bring production very much back on track (Figure 13).

Figure 13: New Zealand Beef Production Projected Estimate vs Actual



Source: StatsNZ

Domestic Consumption

2024

FAS/Wellington is forecasting domestic consumption to return to 85,000 MT CWE for the 2024 market year. Discretionary spending is anticipated to increase, as inflation and OCR is predicted to slow during the 2024 market year following the Monetary Policy changes made in the current outgoing year.

2023

FAS/Wellington have maintained the USDA official estimate at 75,000 MT CWE, 12,000 MT CWE less than the previous year. With the increase in the OCR by the RBNZ and the already experienced high inflation for food in New Zealand, resulting in discretionary spending is being seen to be reduced particularly around the domestic beef consumption already in the first half of the outgoing year (Figure 12).

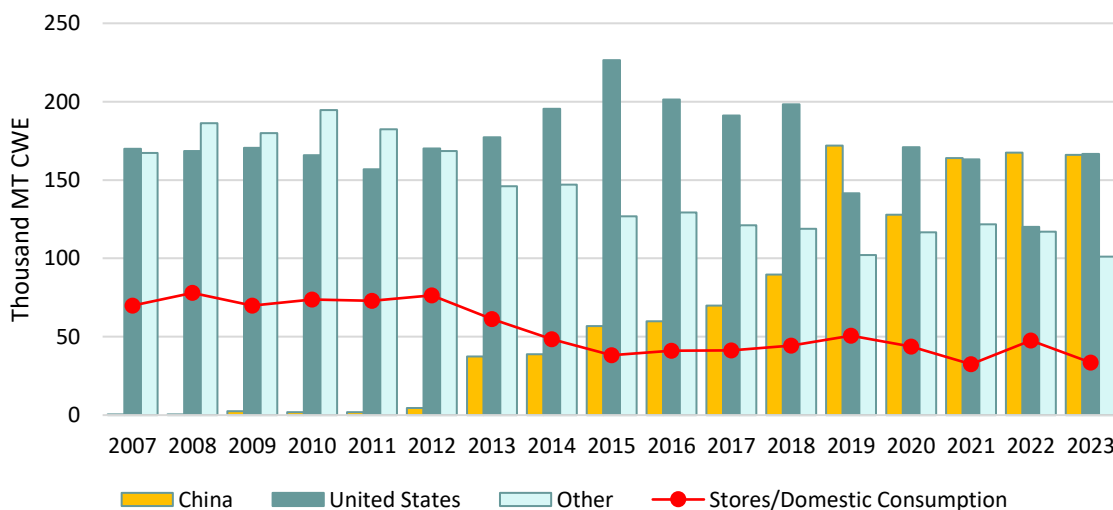
Trade

Beef Exports

2024

FAS/Wellington forecast beef exports for the 2024 market year to be 670,000 MT CWE. As a result of domestic consumption increasing to 85,000 MT CWE, with remaining production exported. The strong growth/return in demand from China and the United States import growth is expected to continue for New Zealand beef products (Figure 14). Exporters have expressed optimism for increasing demand from the United States, as a result of the national herd rebuilding after a multi-year drought. This has resulting in a decline in U.S. domestic cow slaughter, necessitating increased imports of lean manufacturing beef. In addition, as a result of approximately three-quarters of New Zealand beef exports being marketed in US Dollars, the weak exchange rate (currently NZ\$1.00 equates to US\$0.61) is anticipated to continue to benefit export competitiveness.

Figure 14: January to July Beef and Veal Exports



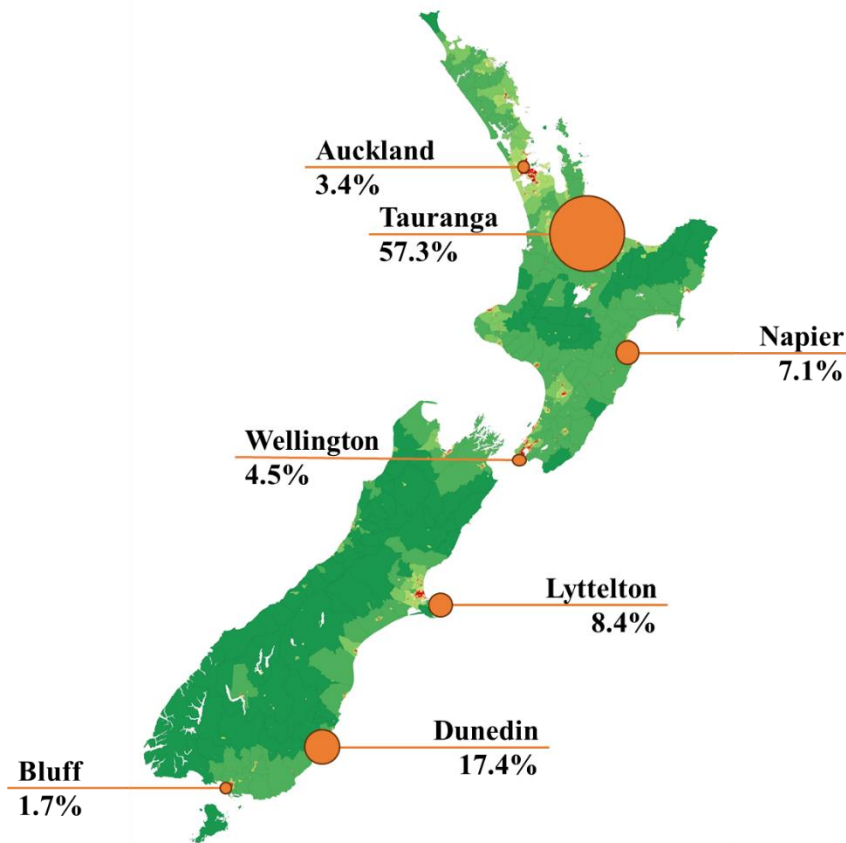
Source: Trade Data Monitor LLC, StatsNZ

2023

FAS/Wellington estimate for beef and veal exports remains unchanged from the USDA official estimate at 675,000 MT CWE, 23,000 MT CWE more exports than in 2022. Historically, 57 percent of total beef export volumes are in the first half of the market year. January to July 2023 export volumes were 8 percent (28,000 MT CWE) up on the previous year. Partially due to the already experienced decrease in domestic demand, resulting in more volumes being redirected for export.

Tauranga continues to be the largest export port for beef from New Zealand, followed by Dunedin (Figure 15). Napier was consistently the third largest export port, however, following the cyclones earlier in the year much of this volume was decreased (less 35 percent on 2022). As a result, more exports have departed Tauranga and Wellington in the first half of 2023.

Figure 15: 2023 January to July Beef Export Ports

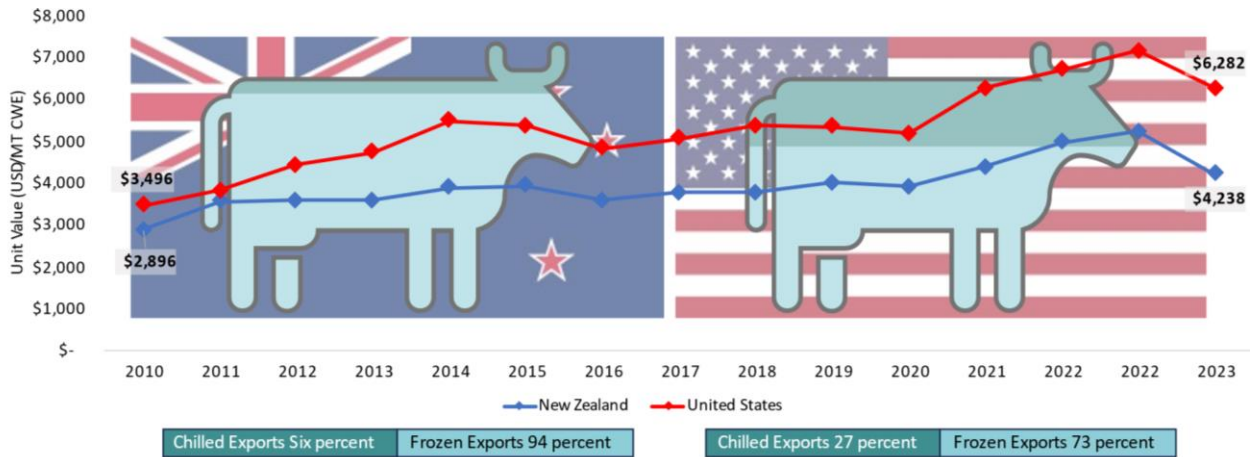


Source: Trade Data Monitor

During January to June 2023 compared to the same period last year has seen the largest growth in exports to the United States (32 percent), signaling an increase in demand due to the national herd rebuild. Followed by China (6 percent), credited to market demand returning following COVID-19 restrictions last year. However, total financial returns on previous season are currently 11 percent down. This is as a result of a softening of global prices for beef (Figure 16). As well as New Zealand's total exports are predominantly frozen beef (94 percent), which always receives lower market price than

chilled beef. (In comparison, only 27 percent of U.S. beef exports are chilled. As a result, the unit price for New Zealand beef is consistently less per MT CWE in value to United States beef exports.

Figure 16: New Zealand and USA Beef Unit Pricing



Source: Trade Data Monitor

Free Trade Agreements – European Union and United Kingdom

During the first half of 2022, New Zealand concluded negotiations on two separate Free Trade Agreements (FTA), one with the United Kingdom (UK) and one with the European Union (EU). The purpose of these FTAs is to provide tariff relief and/or expanded quotas for a number of New Zealand agricultural products including horticulture, seafood, dairy, and meat products. For the first seven months in 2023 meat exports were up for both:

- UK: Increased 26 percent at 911 MT CWE. With a quota of 12,000 MT CWE.
- EU: Increased 29 percent at 2,359 MT CWE. With a quota of 3,333 MT CWE.

These exports still only represent a small amount of the proportion of New Zealand beef exports, less than one percent combined. Compared to China and the United States both at 38 percent in the seven months of 2023.

Beef Imports

New Zealand imports a relatively small amount of beef, almost entirely from Australia. FAS/Wellington forecasts 2024 imports at 10,000 MT CWE, the same as 2023 volumes.

Table 2: Production, Supply and Distribution – Meat, Beef and Veal

Meat, Beef and Veal Market Year Begins New Zealand	2022		2023		2024	
	Jan 2022		Jan 2023		Jan 2024	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Slaughter (Reference) (1000 HEAD)	4592	4592	4680	4670	0	4730
Beginning Stocks (1000 MT CWE)	0	0	0	0	0	0
Production (1000 MT CWE)	728	728	740	740	0	745
Total Imports (1000 MT CWE)	11	11	10	10	0	10
Total Supply (1000 MT CWE)	739	739	750	750	0	755
Total Exports (1000 MT CWE)	643	652	675	675	0	670
Human Dom. Consumption (1000 MT CWE)	96	87	75	75	0	85
Other Use, Losses (1000 MT CWE)	0	0	0	0	0	0
Total Dom. Consumption (1000 MT CWE)	96	87	75	75	0	85
Ending Stocks (1000 MT CWE)	0	0	0	0	0	0
Total Distribution (1000 MT CWE)	739	739	750	750	0	755
(1000 HEAD) ,(1000 MT CWE)						

Attachments:

No Attachments