Key drivers of feed cost for New Zealand's dairy sector



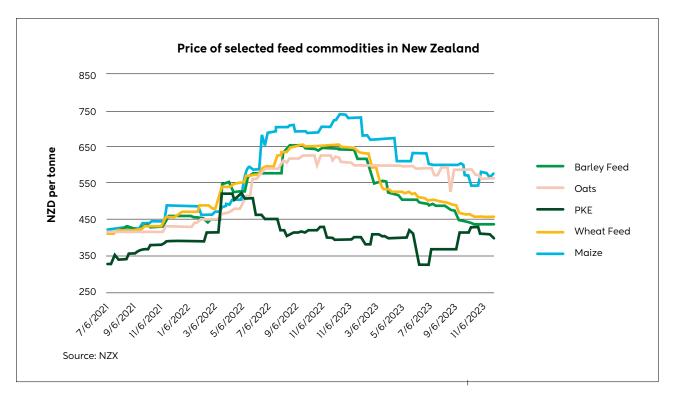
14 December 2023

New Zealand's dairy sector has faced the impact of significant on-farm inflation this season, driven by the rising costs of feed, fuel, fertiliser, labour and interest rates. With the cost of labour and interest rates still on the rise, a recent decline in feed and fertiliser prices has provided some relief to dairy farmers, who have been under financial pressure.

Feed, fuel and fertiliser prices in New Zealand

| ТҮРЕ | NZ Feed Prices express in NZD/tonne | Nov 23 | | 52 Weeks R | Percen | Percentage Change | |
|------------|--|--------|------|------------|--------|-------------------|------------------|
| | | | Avg | Min | Max | YTD | From Jan 2020 |
| FEED | Barley | 439 | 522 | 437 | 650 | -32 | 11% |
| | Maize | 583 | 639 | 545 | 740 | -21 | 39% |
| | Oats | 563 | 591 | 528 | 623 | -8% | 41% |
| | Wheat | 459 | 536 | 458 | 653 | -29 | 13% |
| | PKE spot price | 398 | 391 | 326 | 430 | 1% | 45% |
| FUEL | Diesel Port | 232 | 221 | 194 | 250 | -1% | 40% |
| | Regular Port | 293 | 269 | 239 | 317 | 19% | 21% |
| | Premium Port | 309 | 285 | 256 | 333 | 18% | 23% |
| FERTILISER | NZ Urea | 897 | 1,03 | 807 | 1,39 | -28 | 55% |
| | Gulf Urea | 329 | 370 | 283 | 518 | -28 | 50% |

Source: NZX



During the 2020-21 season, feed costs accounted for 25.4% of the total farm working expenses (FWE) for an average owner-operated dairy farm in New Zealand. Based on early indications from **DairyBase**, feed costs have risen by 28.2%. However, with the recent decline in feed prices, the proportion of feed costs in the total farm working expenses is projected downwards to an estimated 23.2%, or NZD 1.21 per kilogram of milksolids (KgMS) for 2023-24 season.

Farm working expenses and feed costs (in \$/kgMS)

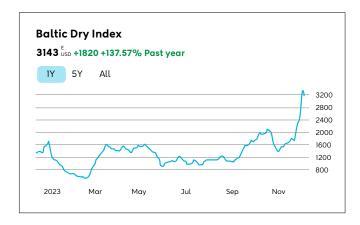
| | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23e | 2023-24f |
|--------------------------------------|---------|---------|---------|---------|---------|----------|----------|
| Net feed made, purchased, cropped | 1.07 | 1.06 | 1.11 | 1.17 | 1.50 | 1.57 | 1.15 |
| Farm working expenses | 4.37 | 4.36 | 4.51 | 4.60 | 5.50 | 5.84 | 5.19 |
| Proportion of working expenses | 24.6% | 24.2% | 24.7% | 25.4% | 27.3% | 26.9% | 22.2% |

Source: DairyNZ Econ Tracker; E: Estimates from limited data; F: Forecast

We expect a reduction in feed prices for the remainder of the 2023-24 season given the favourable prevailing climatic and market conditions. While our projections for the 2023-24 season indicate a decline in feed costs, largely due to increased pasture growth and reduced feed prices globally, the availability of feed, whether from local production or imports, projections remains volatile.

NIWA's Seasonal Climate Outlook indicates a high likelihood of El Niño conditions through the upcoming summer and autumn, forecasting higher temperatures and potentially lower rainfall, which could adversely impact local pasture growth and limit locally grown feed availability. New Zealand dairy farmers rely heavily on pasture growth to drive milk production and build winter feed, especially during summer. El Niño weather patterns significantly affect the North Island where rainfall in the autumn months is largely relied on by these farmers to build feed reserves and pasture cover for calving.

New Zealand dairy farmers may also face challenges with imported feed supply and prices soon. The Australian Bureau of Agricultural and Resource Economics and Sciences reports substantial drops in barley, canola, and sorghum production by 24%, 33%, and 45%, respectively. This is attributed to the El Niño weather pattern, which has induced some of the driest and hottest conditions on record. According to FAO's 'Loss and Damage in Agrifood Systems' report, 40% of the participating countries reported economic loss linked to agrifood sector due to the risk of climate impact.



Freight costs have also escalated, which is reflected in the Baltic Dry Index's surge from 616 points in February 2023 to 3346 points as of 4th December 2023. The Index's significant rise during September 2023, fuelled by conflict in the Middle East, indicates rising shipping expenses for imported feed in coming months. Combined with a diminished feed supply from Australia, these factors are likely to put feed import costs further under pressure. The impact of these trends is already apparent, with Palm Kernel Expeller prices experiencing a 22% increase from July to September 2023.

The risk of limited pasture growth locally and higher costs for imported feed in coming months poses a risk of lower production and higher feed costs in the following Spring season.

Recent improvement in the exchange rate for the New Zealand dollar against the US dollar has the potential to offset some of the upward pressure on imported feed and freight prices. While the effects of market volatility on feed prices are hard to predict we expect some upward pressure on feed prices in 2024-25.

Visit the Econ Tracker tool

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