FOOD & FIBRE CoVE
Learner-Focused, Industry-Led, Government-Enabled

Case Study: The Impact of Export Revenue on Participation in Dairy Sector Vocational Education

Prepared for: Food and Fibre Centre of Vocational Excellence

Prepared By: Geoff Taylor, Associate Consultant, Skills Group

Email: taylor.h.geoff@gmail.com

Date: 13 August 2025

SKILLS

Table of Contents

Methodology

This case study draws on a mixed-method approach combining quantitative data analysis related to export revenues, training provision and workforce characteristics, and qualitative insights from industry stakeholders to reflect the lived experiences of those working within the sector. Primary data collection centred on semi-structured interviews with key stakeholders across the dairy industry. Stakeholders included dairy farm business owners, training providers, and representatives from Dairy NZ. The interview format allowed participants to share their perspectives freely while ensuring coverage of core topics including recruitment challenges, training effectiveness, career pathways, and industry successes and challenges. Secondary research involved analysing enrolment data from various government sources and examining workforce statistics where available. Data analysis followed an iterative process where themes emerged from the interview transcripts and were then tested against the quantitative data and documentary evidence. This triangulation helped validate findings and identify areas where perceptions might differ from measurable outcomes.

USE OF DATA

This report makes extensive use of unpublished data sourced from the Primary ITO and DairyNZ. The data has been released for the express purpose of contributing to this report. **PLEASE DO NOT REPRODUCE OR REUSE DATA MARKED AS UNPUBLISHED** without first seeking and obtaining permission to do so from the organisation.

The author would like to acknowledge and thank both DairyNZ and the Primary ITO for their cooperation and contribution to this report.

1 Executive Summary

Context and Purpose

New Zealand's dairy industry is a cornerstone of the national economy, contributing significantly to export earnings, regional economies and rural employment. Vocational education and training (VET) plays a critical role in developing the skills required to sustain and grow this sector. However, recent years have seen a dramatic decline in VET participation among dairy workers, prompting concern about the sector's long-term capability and resilience.

This report set out to investigate the hypothesis that fluctuations in dairy export receipts, as reflected in milk price, are driving participation in VET. In addition, other possible drivers influencing participation have been identified.

Key Findings

VET Participation

- Dairy enrolments in work-based learning have dropped 90% since their peak in 2008 with only 1,164 learners enrolled in 2024.
- Policy and funding changes have meant that Level 2 and Level 5 provision has all but disappeared from the system and therefore this analysis focusses on Levels 3 and 4, which have declined 82% since their peak in 2011. This has been a nationally consistent occurrence.
- There is no evidence that learners are being trained in other ways, with both industry non-formal and provider-based leaning remaining at similar levels to the past. Some sector participants claim the readily available information online is a major reason for this decline, however there is little evidence to support this.

Relationship of Export Receipts and Enrolments

- Analysis suggests that enrolments once loosely correlated with milk price movements, with decreases in milk price leading to small reductions in participation that were recovered in following years. However, this relationship clearly broke down after 2016, from which time milk price has trended upwards while enrolments have headed in the opposite direction.
- Despite relatively high milk prices since 2016 enrolments continued to fall sharply, showing that milk price is not a reliable predictor of training demand. It is only one input into the profitability of dairy farming, which operates on a cost control strategy.
- Operating profit margin, which is the proportion of income that flows through to operating profit, has also been at historically favourable levels, suggesting good cost control and that cash is available for training should employers choose to invest.

Drivers of Reduced Enrolments

- Immigration reforms post-Covid have had a double impact:

    i. International workers had been incentivised to train to gather points for residency applications, which had previously driven an outsized participation from this group. From 2022 this requirement was removed.
    ii. International workers were also required to pay international fees for training resulting in significant increases in cost that neither employers or learners have wanted to pay. This has effectively excluded them from VET. For reasons of equity, employers with mixed teams will also choose not to train domestic staff if they cannot afford to train their international workers.
- The end of the Targeted Training and Apprenticeships Fund (TTAF) at the end of 2022 and changes to the Apprenticeship Boost have reduced financial support for employers and learners. At the same time fees have increased significantly.
- Industry retention has also improved, in some part due to international workers who tend to stay in the industry longer. This has led to fewer people entering the industry each year and a 45% decline over the last decade in the pool of employees who are most likely to be involved in training – assumed to be those with less than five years' tenure in the sector.
- Constant restructuring of the VET system has created instability in local relationships and disengagement with employers. This appears to have eroded farmer understanding of the VET system and what they can reasonably expect.
- A range of other factors identified in talking with stakeholders suggests that farmer confidence in the system is low.

Future Trends and Outlook

- The work-based learning VET system is under pressure. The current rules around international worker eligibility for training subsidies cuts out approximately 40% of the market.
- It is estimated there are only 3,000 domestic staff with less than five years tenure in the sector who are likely to consider enrolling in Level 3 and 4 VET as it currently stands. This puts a likely ceiling on demand of around 1,500 people, without significant innovation in programmes.
- Future capability demands (e.g., carbon-efficient farming, biosecurity, digital tools) may shift training focus toward micro-credentials and non-formal learning, especially for farm managers, however this is a competitive space with industry extension often providing this learning in non-formal settings (unassessed) and free to levy payers. These topics are unlikely to provide the basis for new programmes at Levels 3 and 4 and instead will be incorporated into them as appropriate.

Recommendations

It is apparent that enrolments are significantly impacted by non-education-based government policies that are beyond the control of the players in the education sector. This report serves multiple stakeholders across the sector, including education providers, industry representative organisations, government agencies, employers etc, with each able to consider the findings relevant to their specific role in the system. Because of this, no specific recommendations are made.

However, the significant decline in participation in VET is a serious warning that capability and capacity issues are ahead for the sector unless action is taken quickly. Rather than a recommendation this report concludes that:

To address New Zealand's dairy sector's future capability and capacity constraints, it is critical both industry and education come together to address an underlying lack of stakeholder confidence in vocational education and training.

2 Introduction

Anecdotally, dairy farmer investment in vocational education and training (VET) work-based learning (WBL) for their staff fluctuates with changes in export receipts. The purpose of this project is to investigate the hypothesis that fluctuations in export receipts within the dairy industry influence the provision of VET.

The investigation will include other factors that may influence enrolments. Including but not limited to factors such as government policies on education and immigration, industry growth, regional factors such as unemployment rates, and other external factors such as the impact of Covid-19 on training numbers.

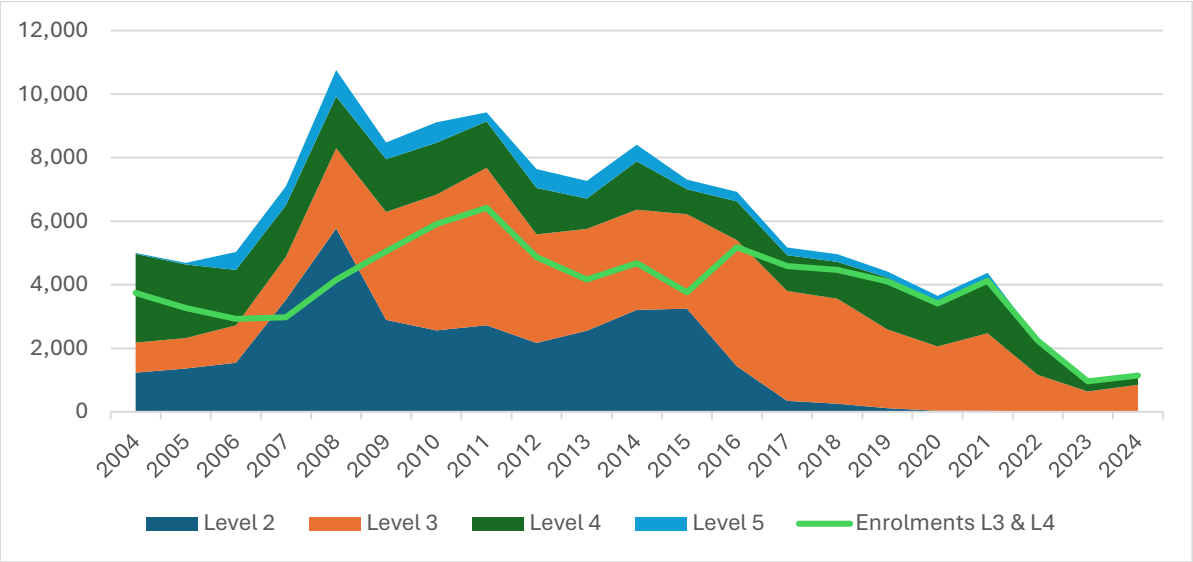
Objectives:

1. To analyse how variations in export receipts impact funding allocations for VET programmes within the dairy industry.
2. To assess the effects of these changes on enrolment numbers, training capacity, and programme sustainability.
3. To identify potential risks and opportunities for the dairy industry's workforce development arising from export market volatility and other factors.

3 Current Situation

Trends in work-based learning enrolments for on-farm dairy programmes through the WBL subsidiary of Te Pūkenga (Primary ITO) have been trending steadily downwards since 2008, when enrolments hit a record 10,757. In 2024 enrolments totalled 1,164, a decline of 90% since peak.

Figure 1: Trend for enrolments in on-farm dairy related training.



Source: Primary ITO enrolment data, June 2025 (Unpublished)

The downward trend has been exacerbated by the reduction in training at levels 2 and 5 which has occurred as a result of:

- A shift in level descriptors resulting from the Targeted Review of Qualifications in 2016 that effectively raised the level of learning and compressed core learning into Level 3 and level 4. As a result, there has been poor uptake of Level 2 programmes since.
- A reclassification of funding category for the Agribusiness Diploma has made the programme unviable for providers and impacted provision at Level 5.

Removing the effects of Level 2 and 5 changes, participation in Level 3 and Level 4 training is also down by 82% compared to the peak in 2011.

NOTE: Due to the external impacts on Level 2 and Level 5 provision, this report will focus further analysis on the factors impacting enrolments at Level 3 and Level 4.

The downward trend in participation is evident across all regions with training down between 75% and 90% compared to 10 years prior. The distribution of staff and learners across the regions has been consistent across time and shows most regions have a similar proportion of learners enrolled to their share of total employees. This is a national problem not a regional issue.

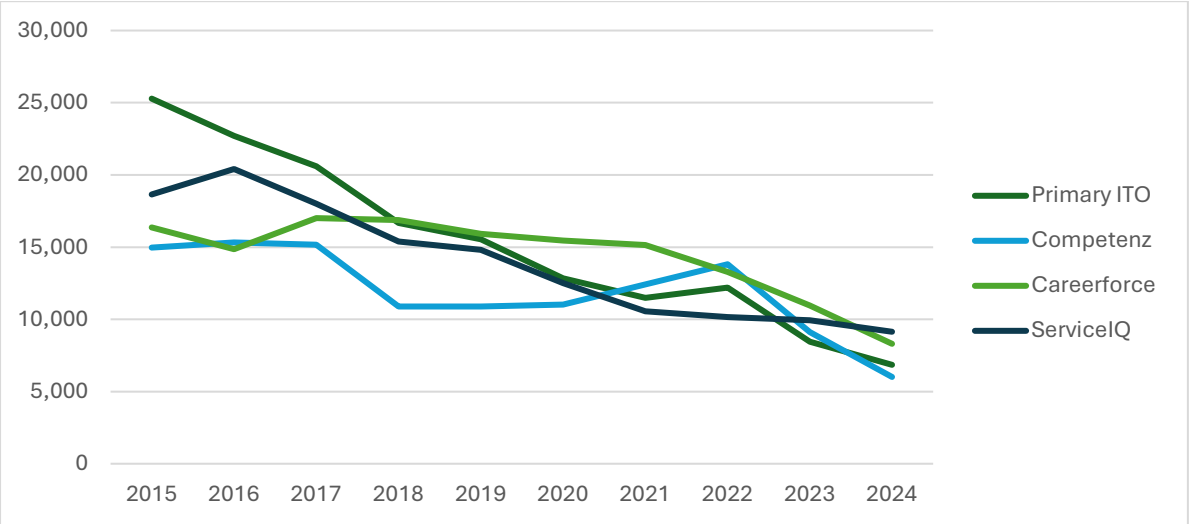
Table 1: Regional trends in enrolment and distribution of learners.

	% of Employees Enrolled		% Change	Distribution of Staff	Distribution of Learners
	2015	2024			
Northland	23%	6%	-75%	4%	3%
Auckland	26%	4%	-85%	1%	1%
Waikato	28%	5%	-81%	20%	20%
Bay of Plenty	39%	5%	-87%	10%	11%
Hawke's Bay	54%	4%	-92%	1%	1%
Taranaki	22%	5%	-79%	8%	6%
Manawatu	47%	11%	-76%	4%	6%
Wellington	16%	3%	-81%	3%	1%
Marlborough	72%	9%	-88%	2%	3%
West Coast	32%	8%	-74%	3%	3%
Canterbury	39%	5%	-87%	24%	29%
Otago	19%	2%	-90%	6%	3%
Southland	30%	3%	-90%	14%	12%

Sources: Primary ITO enrolment data, June 2025 (Unpublished)
Dairy Statistics 2023/24

Primary ITO and the dairy sector are not unique in experiencing this decline in participation. Figure 2 below shows training trends for four WBL subsidiaries of Te Pūkenga, including enrolments for the legacy organisation prior to their transition into Te Pūkenga. While Primary ITO has had the steepest decline, all other WBL providers are also down by 20-50%.

Figure 2: Enrolment trends in four work-based learning providers



Source: Education Counts - Learners in vocational education and training (VET) by field of study (broad and narrow) 2024/2025

Are Staff Training Elsewhere?

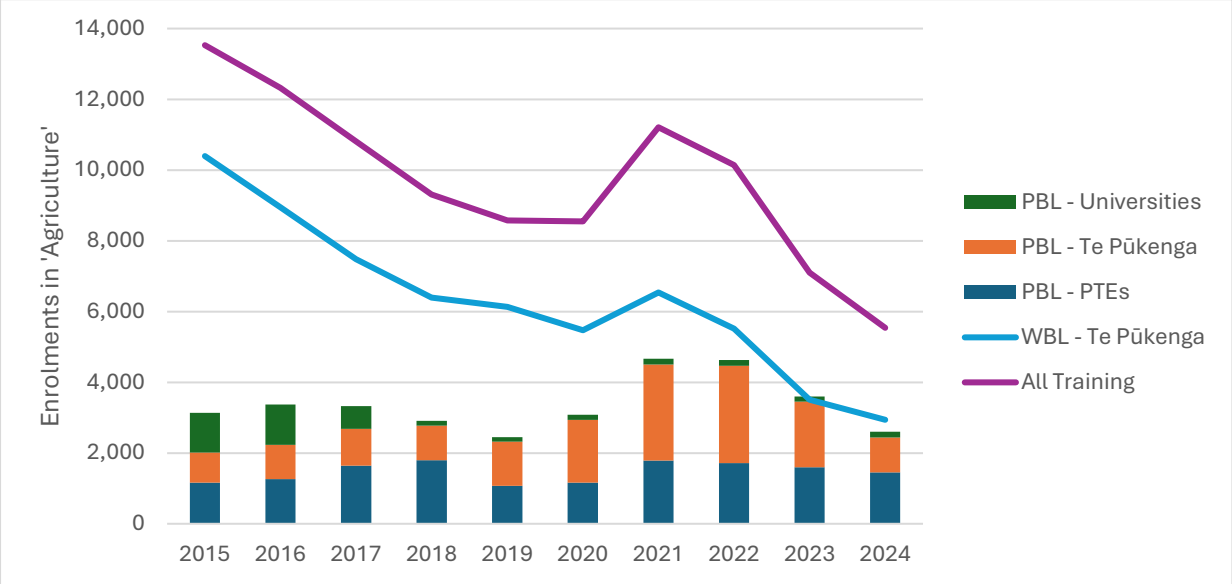
This decline in WBL may not be a problem if training is occurring elsewhere and capability needs of employers are met. Participation in training is increasingly flexible, enabling people to enrol in different formats and as a result the mix of work-based, and provider-based learner training (PBL) is changing. Figure 3 below illustrates Te Pūkenga itself has increased the amount of PBL it delivers.

Last decade WBL was certainly the dominant form of learning for the agriculture subfield in the official statistics[1], accounting for 77% of learners. However, that share has decreased over time and now averages just over 50% of learners from 2022.

With the exception of a jump in PBL provision in 2021/22, most likely the result of fees free initiatives, the trend line for PBL is flat, averaging around 3,000 learners. It should also be noted many of these provider-based learners are hobbyists studying subjects such as general horticulture or beekeeping through Open Polytech.

The drop in WBL participation has certainly not picked up in other areas of the VET sector.

Figure 3: Participation in VET by provider type

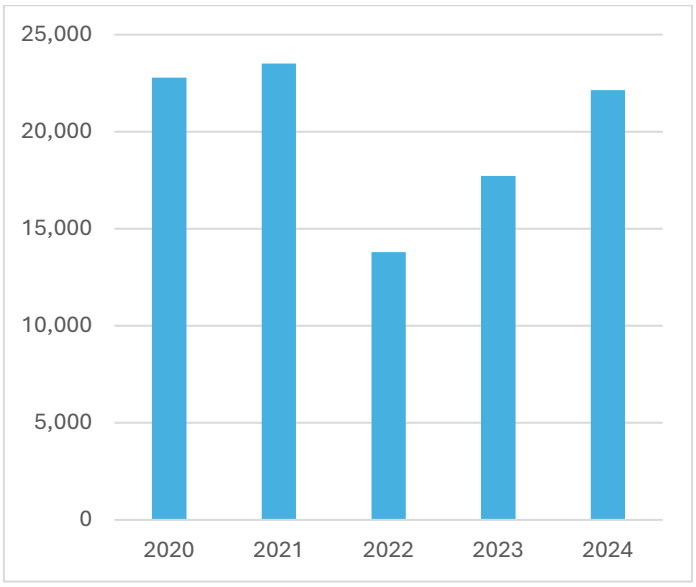


Source: Education Counts - Learners in vocational education and training (VET) by field of study (broad and narrow) 2024/2025

Nor do learners appear to have moved to industry provided non-formal provision. Figure 4 shows attendance at DairyNZ events returned to pre-Covid levels in 2024. These statistics count individuals attending multiple events as unique attendances and is unable to be split into employer and employee attendance.

[1] Unfortunately, this is not broken down further to industry, so the data presented do include some non-dairy agriculture learners.

Figure 4: Trends in non-formal event participation with DairyNZ



Source: DairyNZ People Scorecard 2025 (Unpublished)

Some also speculate that the increased availability and access to online material is cannibalising traditional training delivery. This may be true in terms of people accessing information from sources such as YouTube or the DairyNZ website to solve immediate information requirements, however it is unclear whether new online only delivery models (e.g. Agricademy) are any more successful than traditional models.

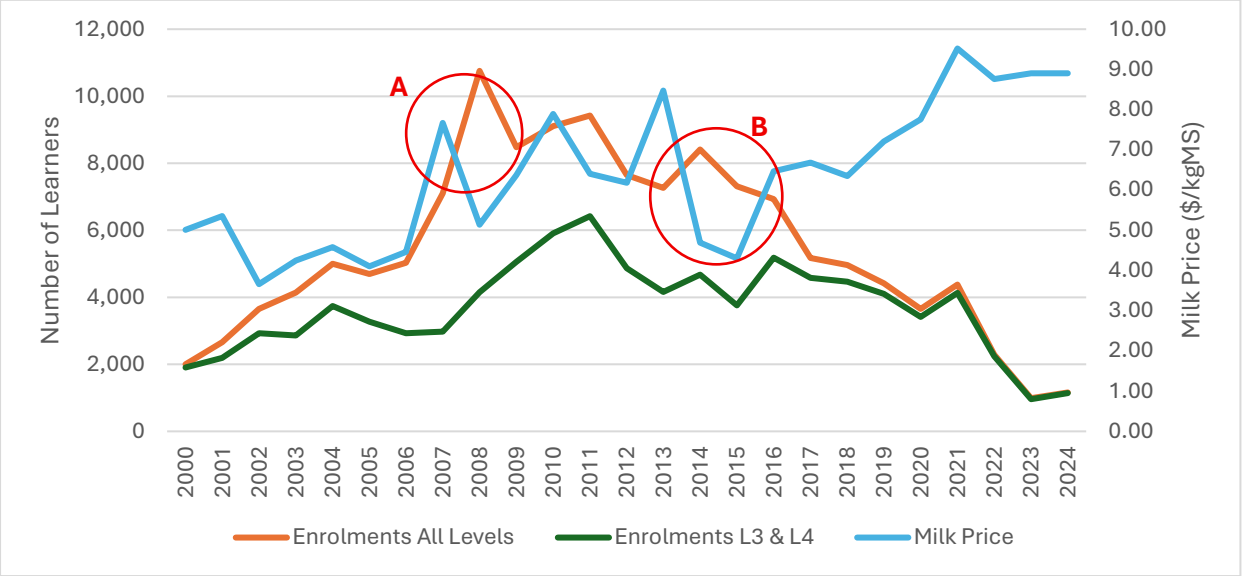
4 Relationship Between Export Receipts and Enrolments

Farmers share in export receipts through the milk price they receive from the processor they supply. Therefore, analysis has been restricted to looking at the impact of milk price on enrolments.

Over time there have been periods when enrolments have mirrored moves in milk price to some extent. In examples A and B in Figure 5 below, a decline in milk price and subsequent recovery was reflected in learner enrolments but delayed a year due to the payment system used by dairy companies that results in a lagged price signal.

Enrolments at all levels have been included in Figure 5, however as noted earlier enrolments in Levels 3 and 4 qualifications are the focus of the analysis. Enrolments at Levels 3 and 4 demonstrate similar trends.

Figure 5: Relationship between milk price and learner enrolments over time.

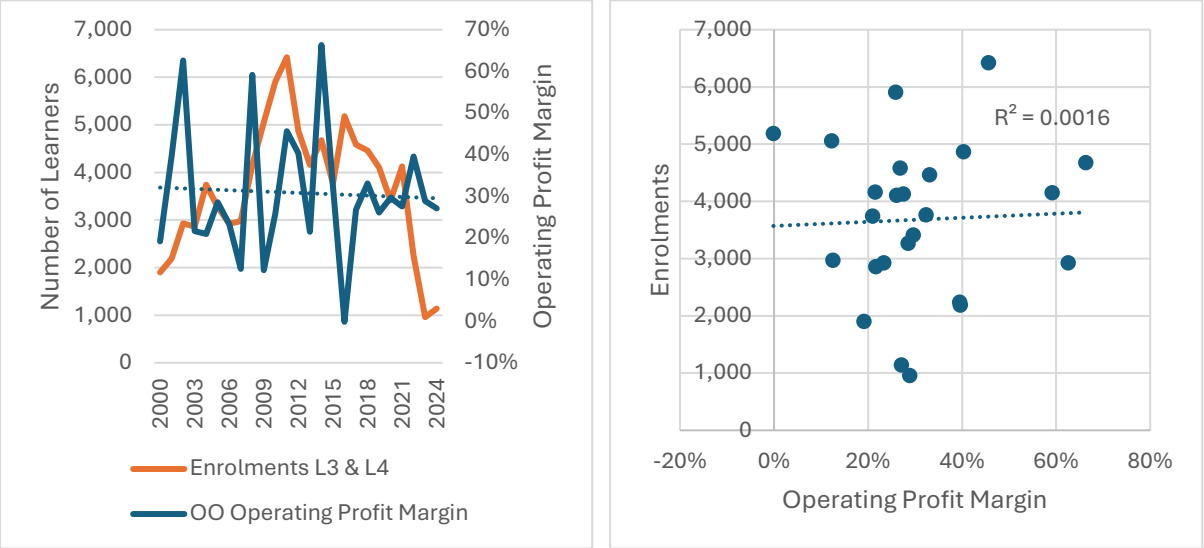


Sources: Enrolment Data sourced from Primary ITO, June 2025 (Unpublished)
Economic Data sourced from DairyNZ Economic Survey 2023/24

Following 2016, where the industry observed a period of an upward trend in milk price and a downward trend in enrolments, it is clear the two no longer track together, although there is no evidence to suggest increased milk price is the cause of declining enrolments.

The use of milk price as a headline indicator of learning demand is somewhat problematic as it does not help us understand the underlying profitability of the business, and therefore its ability to pay for training. While learners should also be expected to invest in their own training, the utility of dairy farming skills is relatively low outside the sector. There are some transferable skills relevant to other pastoral farming, and a smaller set of self-leadership and team leadership skills that may be useful outside the sector. For these reasons, training has often been funded by the employer and affordability to the employer is of interest.

Figure 6: Relationship between enrolments and owner operators' operating profit margin



Sources: Enrolment Data sourced from Primary ITO, June 2025 (Unpublished)
Economic Data sourced from DairyNZ Economic Survey 2023/24

Figure 6 illustrates a weak relationship between enrolments and operating profit margins. While operating profit margin has been declining gradually over time, for the period 2018 to 2024 it has been reasonably stable. This suggests the ability to pay for training in 2024 is similar to recent years.

5 What is Driving Training Numbers?

Having established that export revenues, or at least the milk price paid to farmers is not a driver of training enrolments, this section examines what is driving participation in training.

Initial statistical analysis revealed an expected and moderate association (not causative) between enrolments in training and cow numbers ($r^2 = 0.65$)[2] and other scale related variables when analysis is stopped at 2020. However, when the data from 2020 is included in the analysis, the strength of those correlations drops significantly. For example, the correlation between training and cow numbers drops to 0.35. This is likely because no scale related indicators show the level of rapid change exhibited in learner enrolments over this time period. This suggests that sudden shifts in the operating environment are more relevant in explaining the drop experienced than on-farm economic factors.

The following section examines the policy context, industry trends and demographics in an attempt to explain the rapid change in dairy sector training enrolments since 2022.

5.1 Policy Context

The VET system has been buffeted by policy and contextual changes that have affected the incentives for enrolments by employers and the stability of the delivery organisations, particularly over the last six years. A summary of these is provided below and, where appropriate, the impact is explored through available data in subsequent sections.

2019	**RoVE initiated** The Labour Government initiated a Reform of Vocational Education (RoVE) to address financial stress within the VET sector and to increase consistency and efficiency across the system. While a decline in training numbers was already evident before RoVE, it was hoped by many stakeholders that these reforms would alleviate existing pressures.
Up to 2020	**Immigrant workforce grows** In the decade leading up to 2020, the immigrant workforce rose to approximately 30% of the paid workforce as New Zealand dairy farmers struggled to find staff in a highly competitive employment market. These workers were predominantly on temporary visas ranging between 1-3 years duration with inconsistent renewal experiences. Having invested in training these staff, employers were incentivised to support their staff to achieve resident status to provide greater certainty for their continued employment. At the time, an immigration points system awarded points for New Zealand industry relevant qualifications, which represented the only way many of these staff could accumulate sufficient points to achieve residency. This artificial stimulus led to high rates of participation in training among international staff, artificially supporting training volumes.

[2] The correlation coefficient (r^2) describes the strength of the relationship between two variables. A coefficient of +/-1 represents a strong relationship while values closer to zero suggest no relationship.

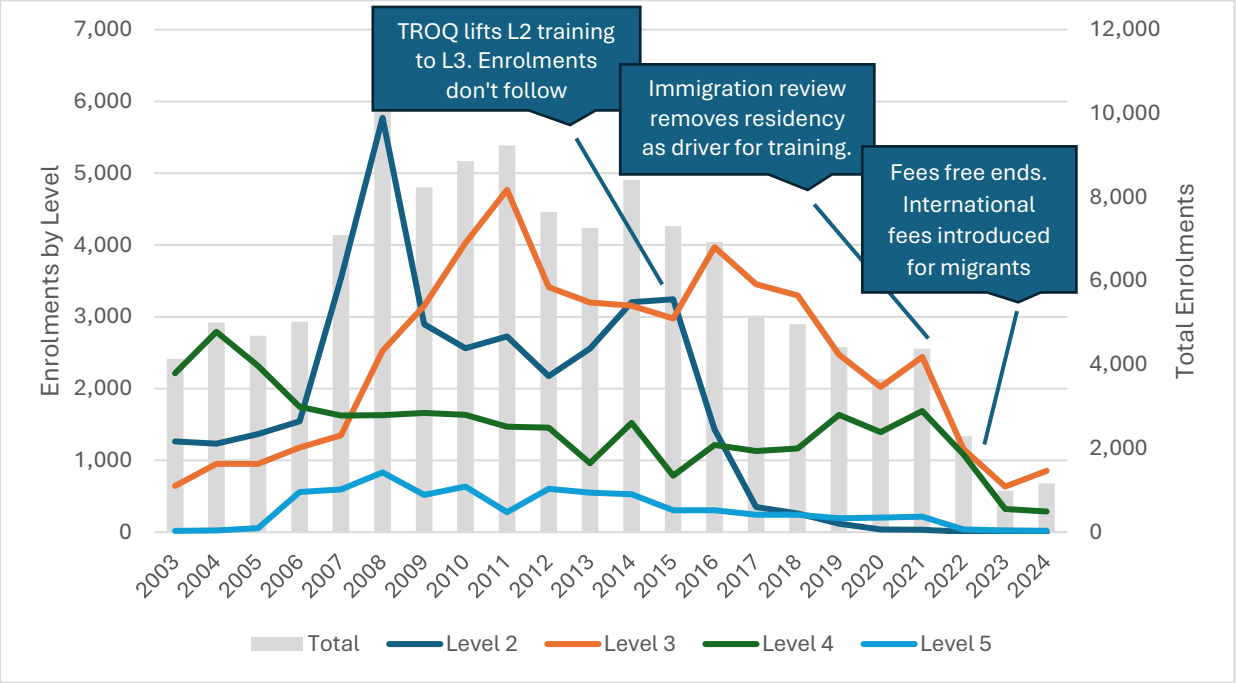
2020	**Covid hits New Zealand and Government moves to stimulate training in essential sectors** The Targeted Training and Apprenticeship Fund (TTAF) and Apprenticeship Boost (AB) were introduced to encourage people to train in essential industries. This was based on an expectation that the pandemic would drive significant unemployment, which in turn would result in work visas being paused and a requirement for residents and citizens to fill the vacancies created in sectors like dairy. The policy saw fees for most dairy related programmes eliminated by TTAF and, at the same time, employers who trained an apprentice were paid $1,000 per month for each trainee, prompting employers to register staff for apprenticeships. Based on the Government effectively picking up the full cost of training, and a shift to the Unified Funding System that promised increasing funding for work-based learning, DairyNZ withdrew its industry subsidy. At the time, industry was expected by the Tertiary Education Commission (TEC) to contribute approximately 30% of the training costs through industry levies toward learner fees. DairyNZ had been providing a subsidy of approximating 15% of the training cost to reduce the cost to dairy sector learners and employers.
2021	**Te Pūkenga, WDCs and CoVEs established** The Reform of Vocational Education (RoVE) resulted in a restructuring of the VET sector, notably the nationalisation of ITOs under Te Pūkenga and separation of skills leadership and quality assurance from provision with the formation of Workforce Development Councils (WDCs)[3]. A Food and Fibre Centre of Vocational Excellence (Food and Fibre CoVE) and Construction and Infrastructure Centre of Vocational Excellence (ConCOVE) were also established to promote excellence in delivery.
2021	**Immigration policy review** In a review of immigration policy, the Government: • Altered the points system so the incentive for international workers to train was removed. • Allowed conversion of temporary visas to resident visas for those international workers that had been in the country through covid, without the need to meet points criteria. This helped many staff in the dairy sector to obtain residency and stabilised retention in this segment of the dairy workforce, reducing the number of new entrants (new trainees). These changes eliminated the drive from international workers to train, almost stopping enrolments from this demographic overnight.
2022	**Primary ITO shifts to Te Pūkenga,**

[3] **Declaration of Interest:** At the time of writing, the author holds a position on the Board of Muka Tangata – People, Food and Fibre Workforce Development Council.

	In October 2022 the Primary ITO becomes a Work Based Learning Subsidiary of Te Pukenga.
2023	**TTAF Ends and Apprenticeship Boost eligibility criteria adjusted** On 31 December 2022 TTAF ends and fees are reintroduced for learners at the start of 2023. Fees almost double for most learners and later this year Te Pūkenga introduces a national pricing model that sees fees double again. Fortunately, the Primary ITO could negotiate a discount for the sector. Apprenticeship Boost eligibility criteria change so that employers are only eligible for $500 per month for one year of study, resulting in a much-reduced incentive to train. **International workers excluded from domestic funding for education** International workers were excluded from being able to receive the domestic training subsidy, unless they were on the 'Green List' for certain occupations. In the dairy sector this included herd managers, assistant managers, and farm mangers. Instead, they were required to pay international student fees which saw the cost to participate increasing them from around $1,000 per course pre-Covid to around $10,000. This cost was too high for most employers and learners, effectively ending participation from these groups. **National Government announces wind back of RoVE** With Te Pūkenga almost fully formed, a change in Government led to a wind back of RoVE. This decision signaled a further period of change for the Primary ITO, WDCs and CoVEs. This creates significant uncertainty about the future of training in the dairy sector.
2025	**Shape of new VET system announced** Following consultation throughout 2024, the future direction of VET system was confirmed: • WDCs will transition to Industry Skills Boards (ISB) • Te Pūkenga will be disestablished with regional polytechnics being reestablished and the work-based learning division (Primary ITO) transitioning to the ISB for a maximum of two years while industry determines how it can enable future provision. Significantly, for Primary ITO staff, this represents two further points of future transition, and their seventh consecutive year of organisational change.

In Figure 7 selected changes in policy context have been highlighted alongside enrolment numbers to illustrate the impact they had.

Figure 7: Timeline showing changes in policy context and enrolment numbers.



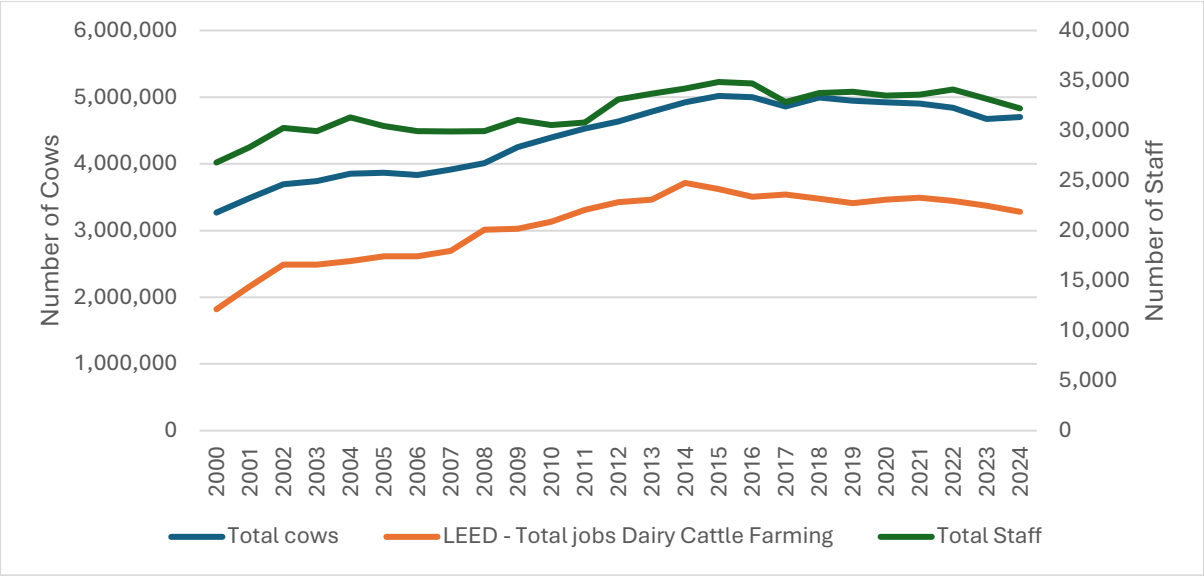
5.2 Number of Cows and Staff

Training participation is often dependent of the number of staff in the sector. Any significant change may affect enrolments.

The number of staff is largely driven by the number of cows milked in the sector. Over the last decade cow numbers have fallen slightly (6%) from 5 million in 2015 to 4.7 million in 2024. Over the same period, total staff numbers have fallen 8% and employees have fallen 9%. Employee numbers are a better indicator of learner enrolments than total staff numbers, because employers tend to access learning or professional development through means other than VET.

This decrease in employee numbers (9%) is much lower than the 90% decrease in enrolments since 2021, so while this is part of the story it falls well short of explaining the drop.

Figure 8: Trend in cow numbers and staffing numbers in the dairy sector



Sources: Dairy Statistics 2023/24 and
NZ Stats Infoshare Linked Employee Employer Database (LEED)

In general, environmental policy is providing a strong headwind for further development of the dairy sector and keeping a lid on cow numbers. In most regions, growth is constrained as land is unable to be converted to higher intensity use. Emissions intensity targets from customers are also driving the sector towards higher milk solids per cow production, to be achieved without increasing overall footprint. If these targets are to be achieved, the sector will see both lower cow and staff numbers.

Interestingly, there appear to be 30 new dairy conversions set to go in Canterbury this coming season, which will be the first in the last five years.

Cow numbers are also being affected by increased avocado production in Northland and lifestyle or urban use in the Waikato. This will continue to impact over time.

5.3 Immigration and Retention

The combined impact of improved staff retention rates resulting in fewer new entrants, and an increase in international new entrant numbers has swung the proportion of staff who are international workers. Accordingly, due to policy disincentives, this appears to have had significant impact on the demand for enrolments.

5.3.1 Visa Status

The changing policy environment has had significant impact on the makeup of the workforce over time. The increasing prevalence of international workers (those on residence or temporary work visas) has grown steadily over time from 17% of employees in 2010 to 37% in 2024.

This has had significant impact on training volumes over the last decade. As previously described, international workers were incentivised for a long time to participate in training to gain points toward residency applications. This significantly distorted their presence in enrolments from 2014 through to 2020. For example, in 2019 they represented 31% of employees but approximately 45% of enrolments.

The conversion of temporary work visa to residency following covid was the first change in policy that significantly changed the impact of this incentive, i.e. once residency is achieved, the desire to participate in training is reduced. Table 2 illustrates the shift in proportion of resident visas relative to other types. This effected demand for training for between 2,500 and 3,000 potential trainees through 2022 to 2024.

Table 2: Number of international workers by visa category

Visa Type	2020	2021	2022	2023	2024
Resident	1,732	1,792	2,046	4,625	5,044
Essential Skills	3,860	3,748	3,152	829	0
Other (Incl Partner & Special Purpose)	1,387	1,569	1,959	1,097	865
Accredited Employer	60	50	152	1,506	2,260
Visa - Total	**7,039**	**7,159**	**7,309**	**8,057**	**8,169**
% Resident Visa	*25%*	*25%*	*28%*	*57%*	*62%*

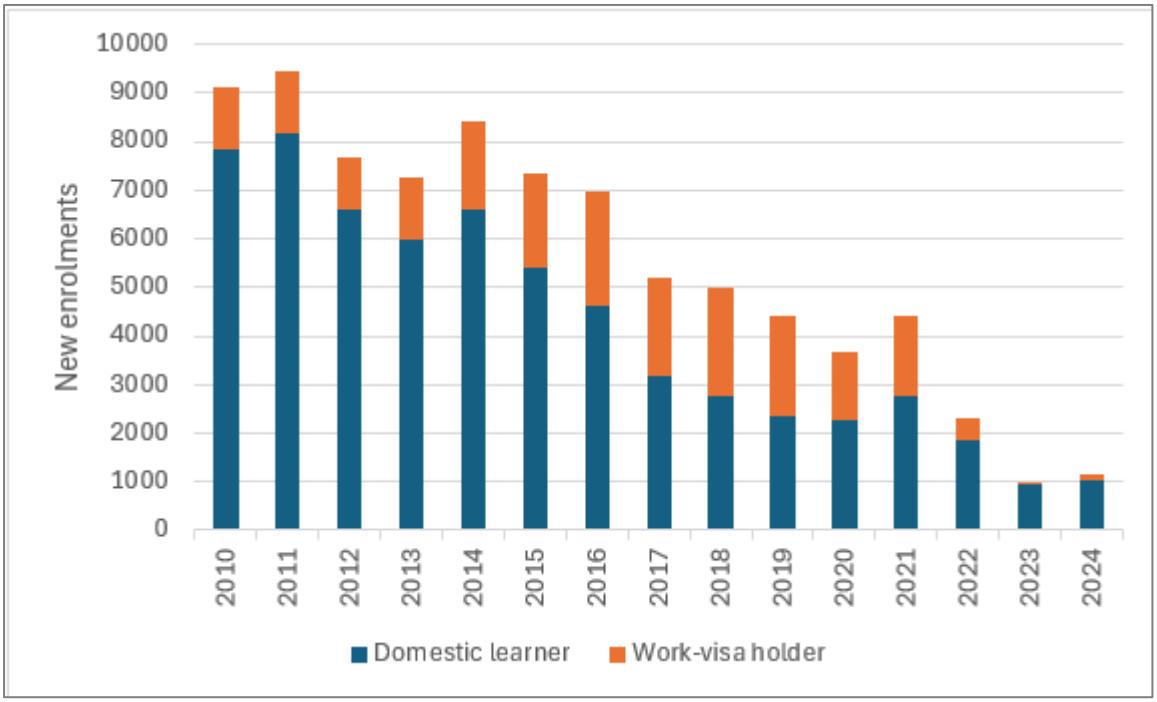
The second change in immigration policy that heavily affected demand for training was the restriction in access to domestic training subsidies for all international workers that are not on the "Green List' of preferential roles. Even those on the 'Green List' are not incentivised to train because it is not a critical pathway to residency.

This effectively removed the incentive to train for 37% of employees who may have enrolled in training. The impact of this can be seen in Figure 9.

Figure 9: Trend in number of international workers in the dairy sector

Source: DairyNZ People Scorecard 2025 (Unpublished)

Figure 10: Trend in new enrolments from international visa workers

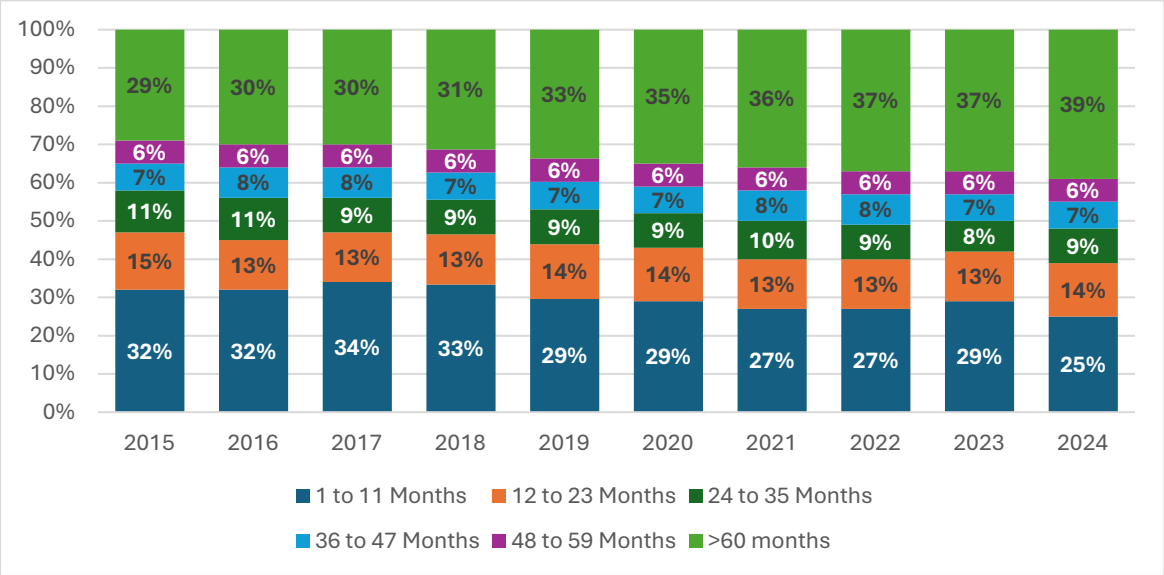


Source: Primary ITO enrolment data, June 2025 (Unpublished)

5.3.2 Retention

The training model has historically been partially dependent on a high rate of staff churn out of the sector, meaning new staff need to be trained annually. Improved retention across the board has reduced the number of new recruits required to fill vacancies and therefore potential candidates for enrolment.

Figure 11: Trend in employee retention in the dairy sector

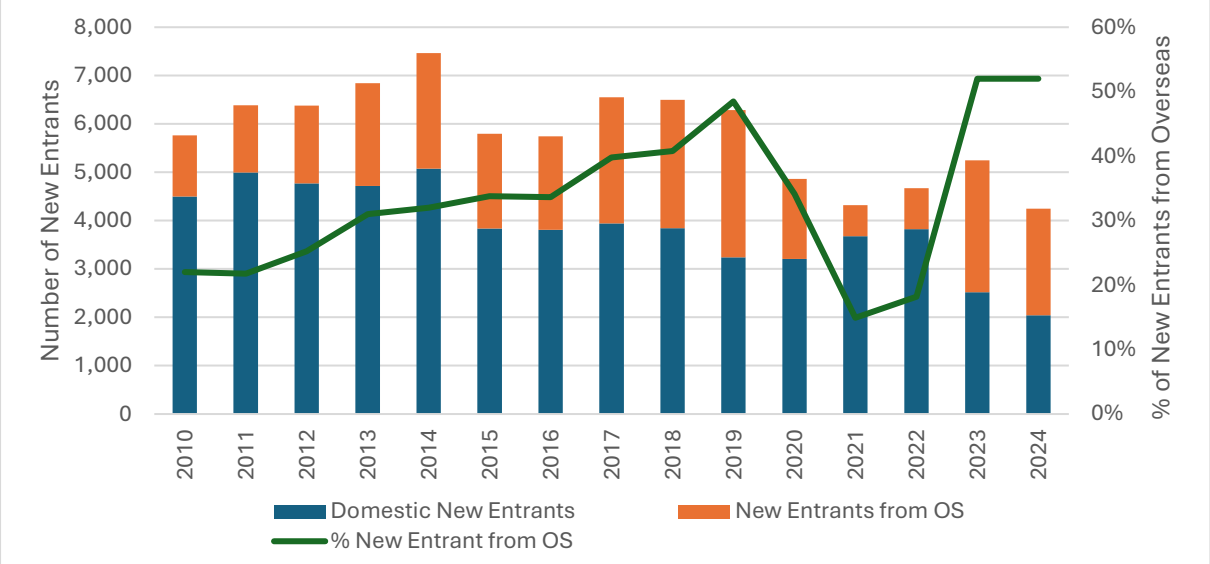


Source: DairyNZ People Scorecard 2025 (Unpublished)

New entrants in 2024 numbered 4,250 (excluding holiday visa workers), compared to an average of approximately 6,500 between 2010 and 2019. This has consolidated a trend of fewer new entrants since Covid employment shocks. The implication is there are fewer staff that need to be trained, and thus enrolments could be expected to fall accordingly. A decrease in a requirement for training because of better retention should be regarded as a good news story.

Following a halt to border crossings during Covid, the proportion of new entrants from overseas has also bounced back and is now at a record 50% of new recruits. As highlighted previously, the cost of training for them is prohibitive and there are no work status incentives to participate.

Figure 12: Trend in new entrants by domestic and international origin

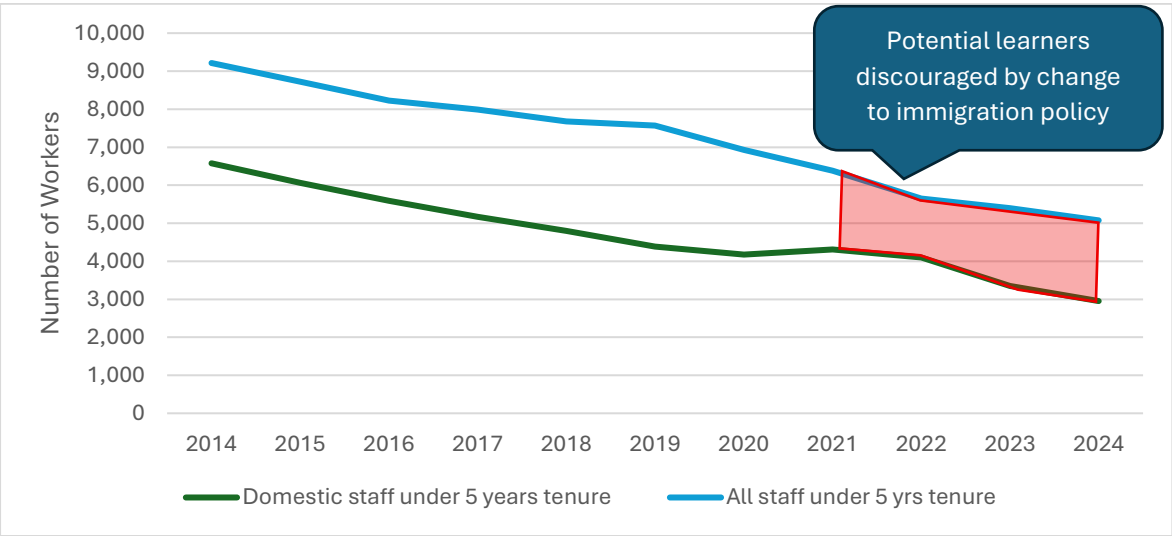


Source: DairyNZ People Scorecard 2025 (Unpublished)

5.3.3 Combined Impact

Improved retention and a large cohort of new entrants coming from overseas has had a significant impact on the number of people likely to be in the market for training. The following graph shows the number of people in the sector with less than five years tenure has decreased by approximately 45% from 9,200 in 2014 to 5,100 in 2024. This demographic is regarded as most likely to enrol in training.

Figure 13: Trend in the number of staff with under five years tenure in the dairy sector



Source: DairyNZ People Scorecard 2025 (Unpublished)

The downward trend in the employee pool has been relatively consistent over the last decade and is not the cause of the rapid decline observed since 2021. The additional impact of disincentives for international workers to enrol in training has had the impact of eliminating demand from approximately 2,000[4] potential trainees a year. This means there are now only around 3,000 employees in the pool, equating to a 68% overall drop from 9,200 employees.

In relative terms, and assuming the pool of employees with under five years tenure are the people enrolling, their participation rate had been sitting at just over 50% on average. Since the changes in immigration settings in 2022 and the international workers exiting the market, rates of enrolment across all staff are approximately 20%. Rates of enrolment among domestic staff are approximately 35%, although there is insufficient data to establish a reliable trend line.

Anecdotally the changes in international worker participation have had a much wider impact, with employers choosing not to train any of the team where they have a mixed international / domestic team for reasons of equity. The extent of this is unable to be established.

[4] The number of international workers on the Green List is unclear from the available data. It is estimated to be 5-10% of international staff which would see up to 200 additional people in the likely to train group.

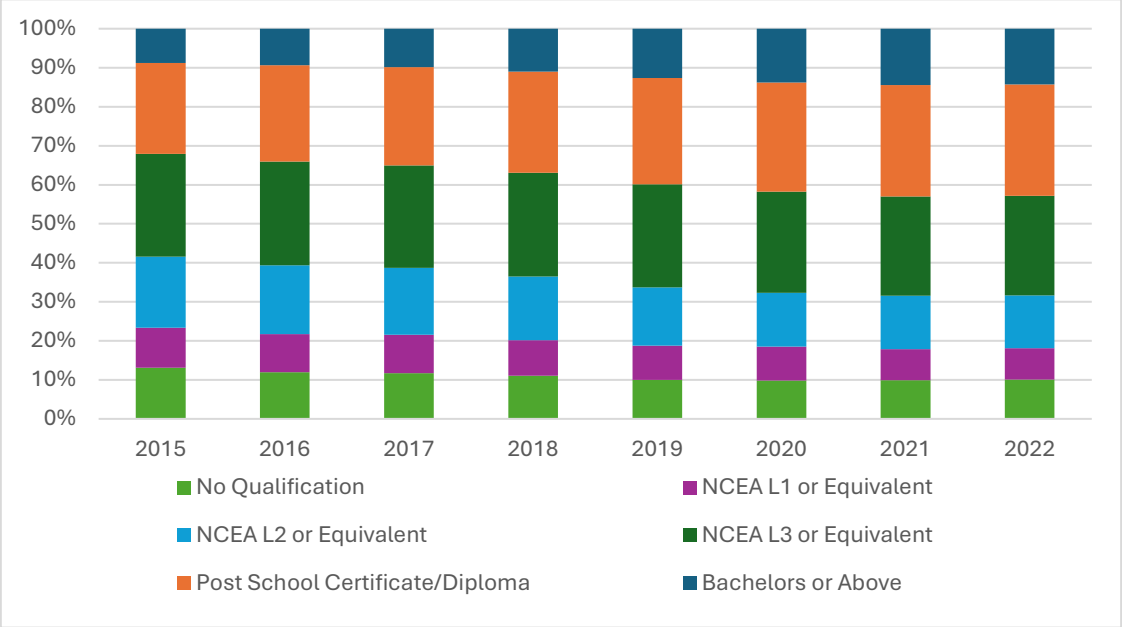
Figure 14: Trend in enrolments of employes with less than five years tenure in the dairy sector

Sources: Primary ITO enrolment data 2025 (Unpublished)
DairyNZ People Scorecard 2025 (Unpublished)

5.4 Qualification Levels

A reduction in demand for training may also be partially explained by rising levels of qualifications across the board. In the last decade the number of staff that now possess a post school qualification has risen from 32% to 43% of employees, a 34% increase. Within this group, those with bachelor's qualifications or higher have increased from 9% to 14% of employees, a lift of 63%. Most of this will be a result of qualifications new entrants are bringing with them, although it is unclear if these qualifications are coming with domestic or international staff.

Figure 15: Trend in qualification levels in the dairy sector



Source: DairyNZ People Scorecard (Unpublished)

Those employees with higher qualifications are less likely to pursue vocational study at Levels 3 and 4. The increase in bachelor's qualifications represents an increase of 1,100 people over 10 years that are unlikely to undertake VET, equivalent to 5% of the workforce.

Anecdotally, those working in the education sector are also reporting a far lower tolerance for what learners see as repeating units of learning. It is worth noting that students in Primary Industry Trade Academies and other transition pathways are often doing Level 3 units which are repeated in WBL. It is reported they see this repetition as a waste of time and choose not to enrol.

Those employees with no qualification have decreased 23%, dropping from 13% of staff to 10%.

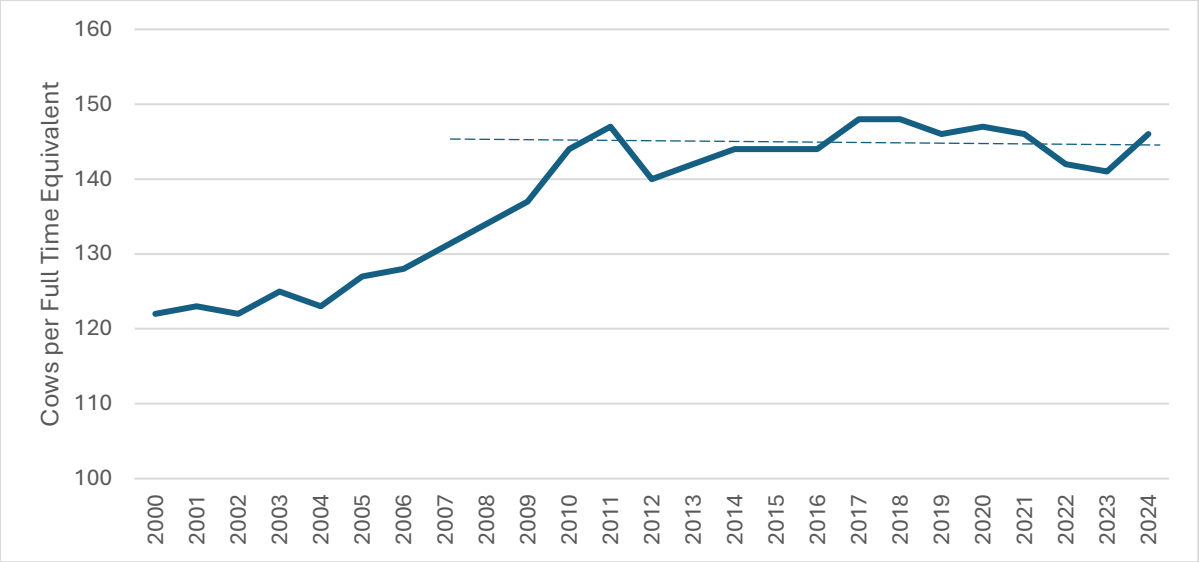
5.5 Workload

An increasing workload on farm is widely cited as a reason for not enrolling staff in training. A higher workload means staff are required to do more hours per week and therefore employers have less flexibility to release staff or give them time off for training.

On the face of it, this is not supported by industry statistics, which show that staff to cow ratios have not changed significantly over the last 15 years. This followed a period of rapid increase leading up to 2010 which was driven by conversions to dairying and the installation of larger, particularly rotary farm dairies that provide greater efficiency.

However, this statistic is based on self-reporting of hours and presumes that all Full-Time Equivalent (FTE) staff are standardised to 2,400 hours. It is a somewhat unreliable measure that is often confused with the number of people working on the farm. It is entirely possible that individuals are working more hours than reported to complete all tasks required within the enterprise.

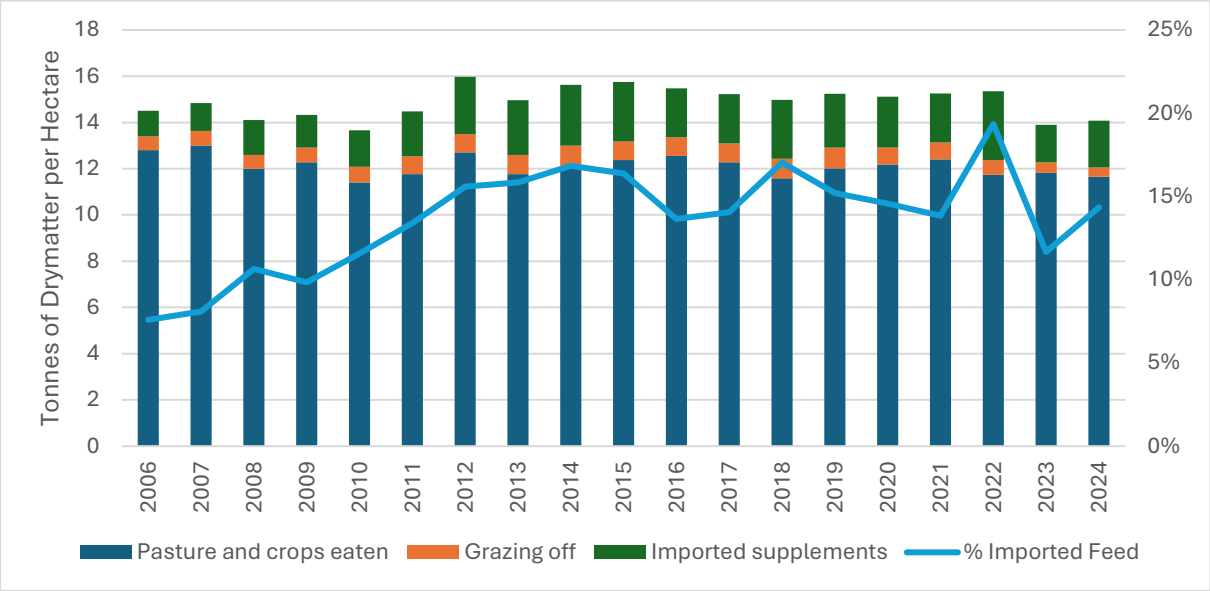
Figure 16: Trend in peak cows milked per Full-Time Equivalent staff member



Source: Dairy Statistics 2023/24 (DairyNZ)

Anecdotally, the level of supplementary feeding and therefore time to feed out has increased, as has the integration of support blocks that utilise the farm team to manage. Figure 17 illustrates the increase in supplementary feeding.

Figure 17: Trend in imported feed use on dairy farms



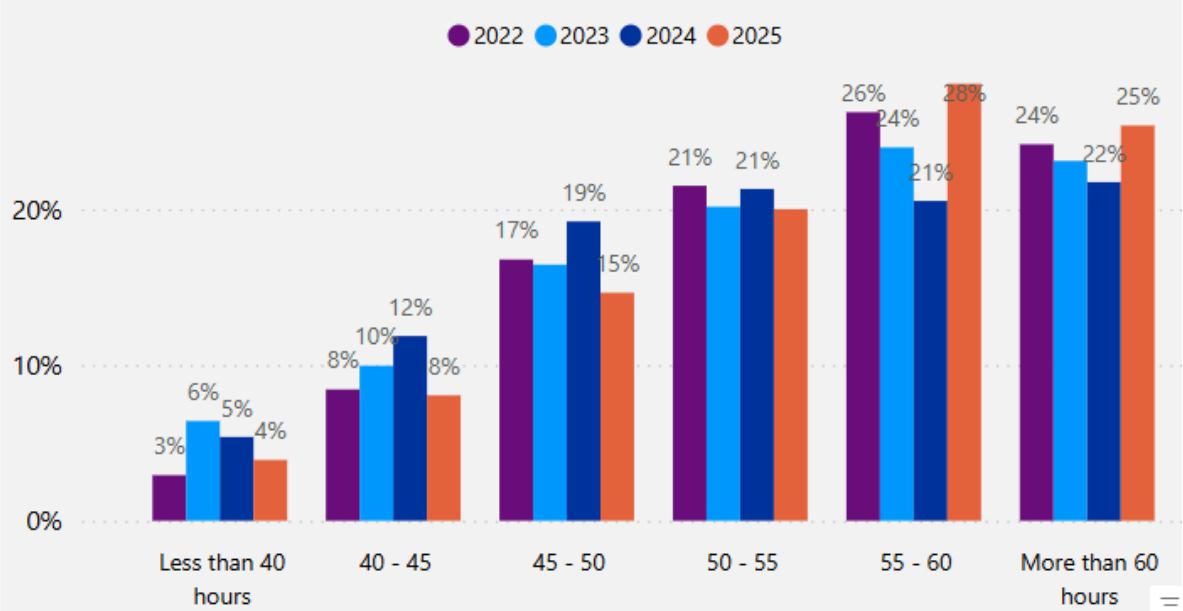
Source: DairyNZ Economic Survey 2023/24

It is also true that roster patterns have changed significantly over time and now require more rostered time off to be covered by the rest of the team. In 2000 many farm staff were only offered one weekend off per month (2 days), whereas the industry today is trending towards meeting 'townie' standards of two days off per week. Industry observers estimate the standard is now 6 days off per month, which is the equivalent as a 'tradie' working Saturday mornings. The impact of this is the team needs to cover an additional day per week to allow for this extra leave, putting pressure on the ability of the employer to provide time out for training.

Hours worked is the ultimate measure of workload. Employee hours of work from self-reported surveys suggest that hours of work both during calving (July to October) and in the balance of the season had been trending down and then ticked up in 2025 (See Figures 18 and 19). However, the differences are under two hours per week on average.

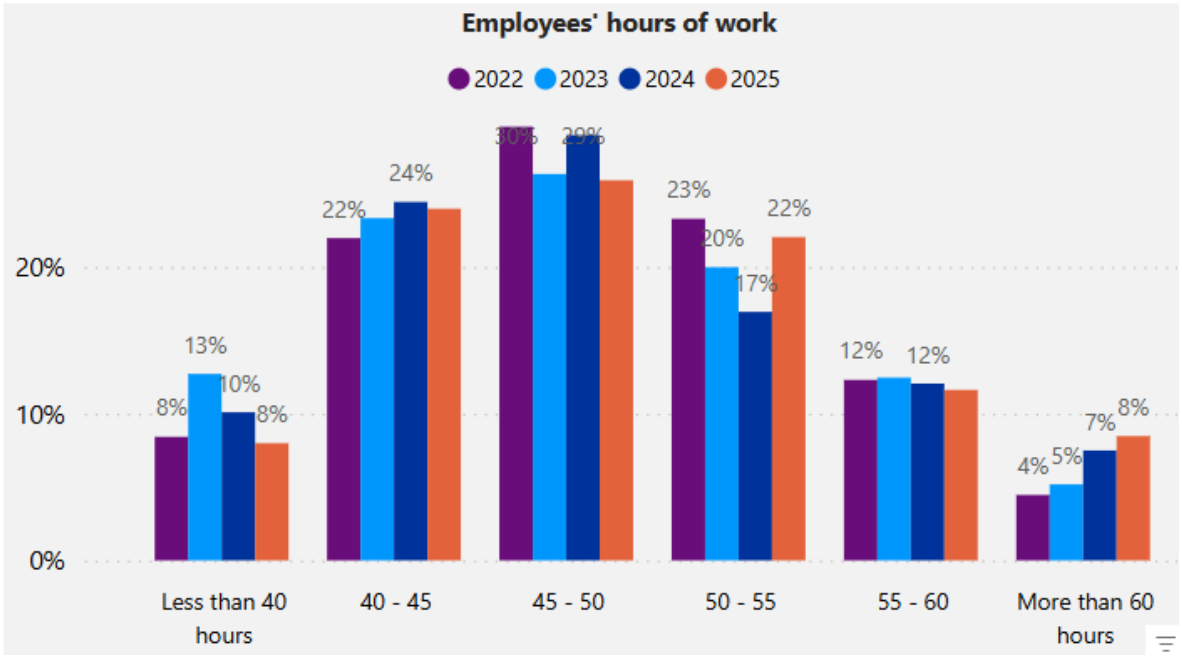
This level of change in hours worked and therefore change in workload is not sufficient to discourage participation in training to the extent seen over this period.

Figure 18: Employees' reported hours of work per week during calving



Source: DairyNZ People Scorecard 2025 (unpublished)

Figure 19: Employees' reported hours of work per week outside calving

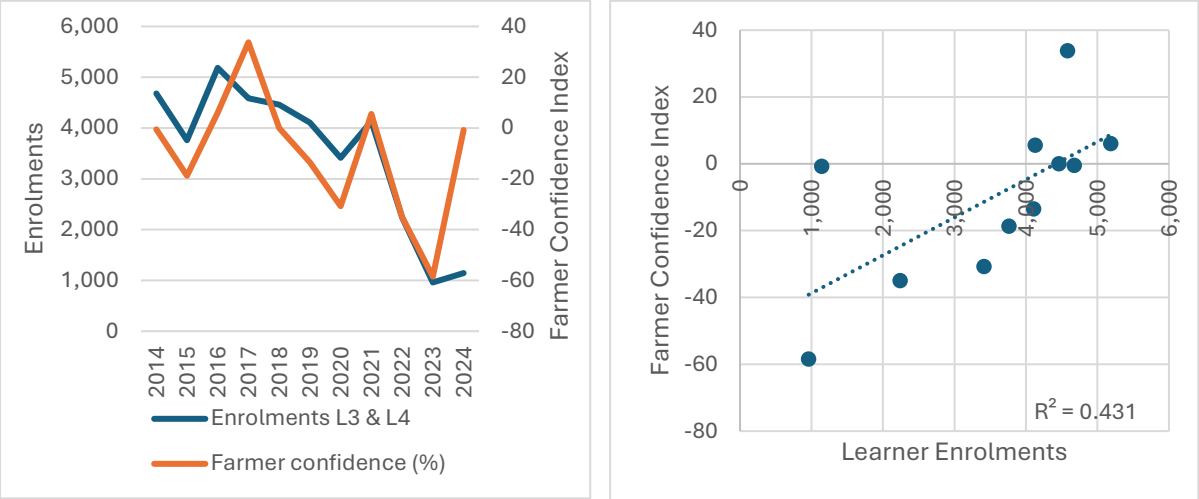


Source: DairyNZ People Scorecard 2025 (unpublished)

5.6 Farmer Confidence

Since 2017 farmer confidence had been on a downward trajectory prior to a significant bounce in 2024 that occurred with the change to a National Government. While there is a reasonable correlation with learner numbers, the data series is too short run to have much confidence that the relationship holds over time. However, farmer confidence is worth considering on several fronts.

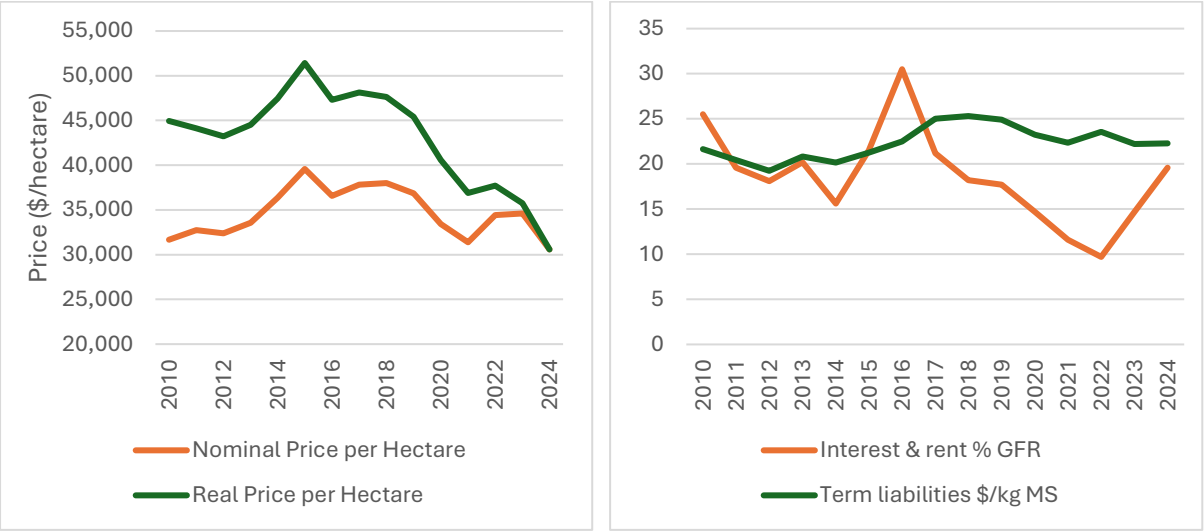
Figure 20: Trend in farmer confidence relative to Level 3 and Level 4 learner enrolments



Sources: Primary ITO enrolment data, June 2025 (Unpublished)
Rabobank Farmer Confidence Survey 2025

Financially, operating returns have been reasonably good, however land values have been flat or declining since 2014 and any improvements in debt reduction have been slow. An increase in interest rates as fixed terms came off from 2022 almost doubled the cost of debt servicing and is serving to keep a lid on real estate prices. This will be tempering confidence and encouraging farmers to tighten their belt.

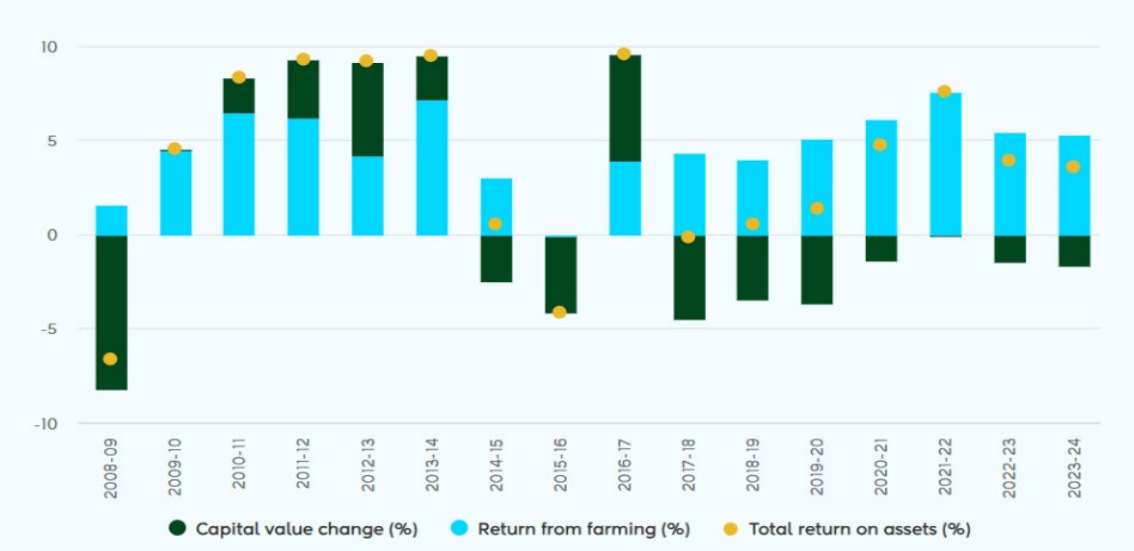
Figure 21: Trend in land prices and debt in the dairy sector



Source: Dairy NZ Economic Survey 2023-24

These factors combined mean any returns are coming from farming and not asset appreciation, which has been a driver of confidence in the past.

Figure 22: Trends in dairy farm owner equity growth

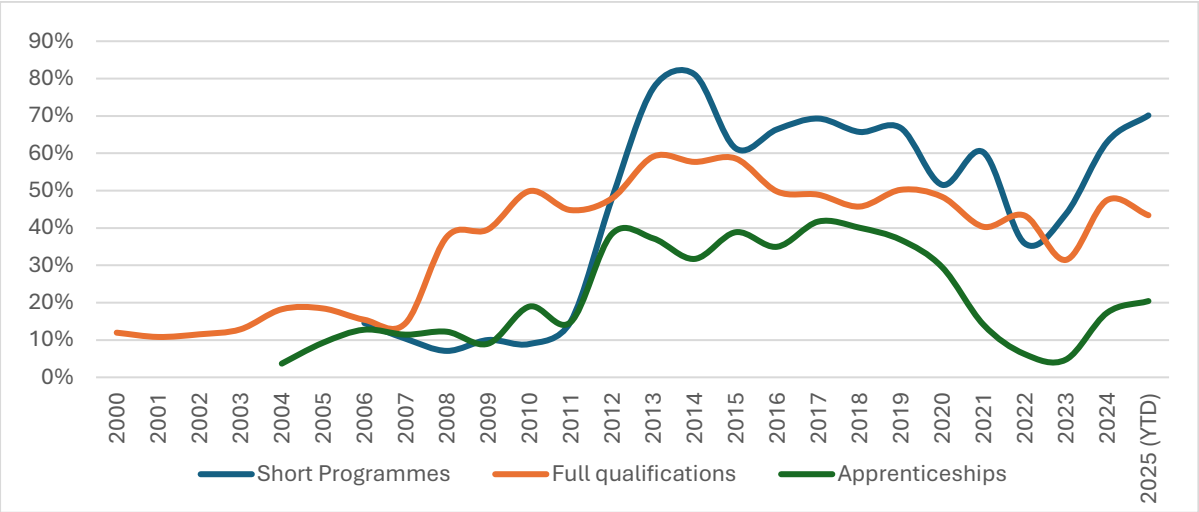


Source: Dairy NZ Economic Survey 2023-24

Confidence in the training system is a further point for consideration. No formal data is available on this, but the declines in completion on exit rate seen from 2020 to 2023, especially in apprenticeships may provide employers cause to rethink investment; if learners aren't achieving why would an employer invest time and cash? A lack of success may have initiated a vicious cycle leading to a lack of trust and non-enrolment.

The role of complex apprenticeships in contributing to low completion rates has been raised by employers, who note that staff can pass Level 3, but then struggle with Level 4 and drop out.

Figure 23: Trends in completion on exit rate by programme type



Source: Primary ITO enrolment data, June 2025 (Unpublished)

5.7 Patterns in Provision and Enrolment

A comparison of programmes offered by level, topic and credit value at five-year intervals was carried out to determine if any clear changes in provision emerged over time, presumably in response to demand. There were no clear patterns, although it should be noted that this analysis is limited by those programmes on offer. There was no comparable system to offer a counterfactual that could illustrate the impacts of choices made in the food and fibre sector. Customers had to enrol in what was available. Therefore, observations are to provoke further thought, rather than to confirm trends.

Observations at Level 3:

- The topics on offer in Level 3 have historically been quite well differentiated with the label being descriptive of what was in the programme.
- In 2009 most programmes were between 40 and 60 credits with only a Modern Apprenticeship (MA) in Dairy Farming Skills exceeding this at 165 credits.
- Over time the average credit value for Level 3 programmes has remained relatively static at an average of around 53 credits.
- To cover off foundational topics a learner would be required to do four programmes; feeding, breeding, health & husbandry and milk quality, which totalled around 200 credits and could take three years if done back-to-back.
- The MA programme contracted requirement to 165 credits, able to be done in 2.5 years. This was a reasonably short-lived experiment only ever achieving 10% of the Level 3 market.
- No programmes exceeded 100 credits until the introduction of the 125 credit New Zealand Certificate in Agriculture (Dairy) in 2021, coincidentally the start of a rapid drop off in participation.
- The current certificate can also be delivered through micro-credentials ranging from 10 to 40 credits. Approximately 70% of learners enrol in these shorter qualifications, suggesting a preference for this style of programme.
- The number of programmes on offer has decreased to 6 in 2024. Lack of options may be a factor in declining demand, however it is also likely to be a response to declining enrolments.

Table 3: Trend in programme enrolments by credit value for Level 3 programmes

Level 3	2009	2014	2019	2024
Total Enrolments	3,394	3,154	2,472	854
Number of Programmes	12	17	14	6
Average Credit Value	57	51	48	55

Source: Primary ITO enrolment data, June 2025 (Unpublished)

Observations at Level 4:

- At Level 4 almost all programmes are full qualifications covering off learning in an integrated systems package.
- In 2009 the standard National Certificate (NC) programme was a 95-credit programme which enjoyed the greatest patronage.
- Modern Apprenticeship (MA) programmes of between 130 and 150 credits became the norm by 2014.

- New Zealand Certificate programmes mirrored these credit values.
- The first complex apprenticeship, which included Level 3 and Level 4 were introduced around 2018 with a range of programme credit values, starting at 237 and rising to 307, which represents 4.5 years study.
- These extended programmes captured 40% of the market, although it is worth noting these are the types of programmes international workers would enrol in to get immigration points.
- The rise in credit values over time can be seen in the Table below, increasing 75% from 2009 and then dropping back.
- In 2024 the high average credit value is underpinned by a 250-credit complex apprenticeship, accounting for 40% of enrolments, albeit a low level of enrolments.
- The number of programmes in 2019 is double that of 2009 and 2014 but enrolment numbers are static, suggesting number of 'offers' has little impact at this level.

Table 4: Trend in programme enrolments by credit value for Level 4 programmes

Level 4	2009	2014	2019	2024
Total Enrolments	1,661	1,524	1,634	288
Number of Programmes	6	6	18	8
Average Credit Value	97	138	171	157

Source: Primary ITO enrolment data, June 2025 (Unpublished)

What is evident in the data is the success of the Milk Quality programmes in term of the volume of enrolments. What is not clear in the data is the industry context for the emergence of this programme. It was developed at a time when there were concerns about milk quality emerging following the rapid expansion of the industry and falling average capability to manage quality. The programme was also coupled with an industry programme that placed a sinking lid on milk quality parameters. This resulted in much more frequent enforcement action through demerits, milk downgrades and reduced payment where quality standards were not met.

This direct incentive generated significant employer interest in achieving quality standards, which the Milk Quality programmes delivered to. The fact that the processor was involved in the development of the programmes was also helpful as it meant they were well tailored to meet industry needs, providing practical, hands-on learning assessed in the learner's own farm dairy.

This model drove high participation and as an industry, milk quality standards improved significantly. It provides a very successful case study, but not one that can be readily replicated due to a lack of other directly and independently measurable indicators such as those available for milk quality.

5.8 Other Influences

The following issues have been identified through interviews with employers carried out in early 2025 related to other projects. They are not backed up by quantitative analysis but certainly came through as themes that warrant further investigation.

5.8.1 Misunderstanding of the VET System

There is a sense that many dairy farmers don't understand their role in the training relationship and have just been 'sold' training. In one particularly confronting example. A tutor reported frustration that she 'sends her staff off to training and can't see any difference in them when they come back'. This points toward her, despite involvement as a tutor, not having a good understanding of what should be expected of training.

Off-job components usually provide theoretical back up for on-farm learning – not new practical skill sets. Getting the most from the off-job components is only likely to happen if the employer engages with the learner to integrate the two.

This abdication of responsibility for training is at odds with WBL and suggests such employers should not have their staff enrolled.

5.8.2 Affordability of Learning / Value for Money

Affordability of learning or, more correctly, value for money has often been raised as a barrier to enrolment. At full course fees dairy farmers were certainly resisting the increase and the Primary ITO WBL division needs to be congratulated for negotiating discounted course fees for full qualifications with Te Pūkenga.

Farmers also report concern that they are being expected to do more of the training and at the same time are asked to pay more for the qualification. They come to this conclusion through the observation that classroom hours for learners have decreased over time.

There appears to be an opportunity to help employers identify that value in some way.

5.8.3 Standards

Closely related is the issue of standards. Farmers are not always sure what they should expect from training as standards are not clear and not consistent. One farmer who is also a Primary ITO tutor observed that in their region there are two other providers offering the same qualification and all three of them are different, so he is confused as to what the qualification stands for and therefore what value it brings to their business. This is not a Primary ITO issue but is certainly a concern for the wider VET sector.

5.8.4 Separation of Qualification and Programme Development

Arguments are made in some quarters that separating programme and qualification development, as a result of the establishment of the WDC's, has led to reduced relevance of qualifications and therefore reduced participation. These claims have some validity in that the separation has caused the cycle times to establish new qualifications to become extended, whereas the ITO as standard setter and programme developer had the ability to do so more rapidly. However, the provider has retained control over the programme and has the ability to tweak this to increase relevancy.

5.8.5 Funding

The funding system has played a central role in the development of the VET sector. It has driven providers to favour longer programmes and tie learners in and help to balance the cost of sales and cost of delivery. Longer qualifications are contrary to what employers are wanting reasons such as time off the job, the suitability of the qualification for all staff and the average tenure of a farm staff relative being less than the duration of the programme.

The advent of micro credentials was seen as a boon for the sector, providing the ability to deliver short, sharp, just in time bites of learning. Unfortunately, the reality of funding means that shorter programmes often do not cover their costs, and micro credentials have not been widely taken up by providers of work-based learning which has contributed to declining enrolments.

5.8.6 Engagement with Employers

Anecdotally, employers in the dairy sector are feeling increasingly disengaged with the VET system. This comes across in a range of observations:

- They report interaction with the Primary ITO as being primarily with the employee and they feel left out of the training relationship. They are unsure where the learner is up to and what they should be doing to support them.
- Farmers who have been in the sector for some time recall the skills days that used to be run by the Agriculture ITO (AgITO) Regional Training Committees. They reported these events as having great value to the learner as well as the employer community as it connected them into the learning.
- Farmers also report the training sales process is focussed on the employee with little regard to how their business could benefit.
- Some employers highlighted the turnover in Training Advisors as a hindrance to both their relationship with training and for their staff who they say value a consistent person to deal with.

It is also noticeable that engagement with employers at a national level had become quite Wellington-centric. Through Regional Training Committees the AgITO would go out to farmers to consult and get feedback. More recently that has been done through Industry Partnership Groups that invite farmers to come to Wellington to speak with the Primary ITO.

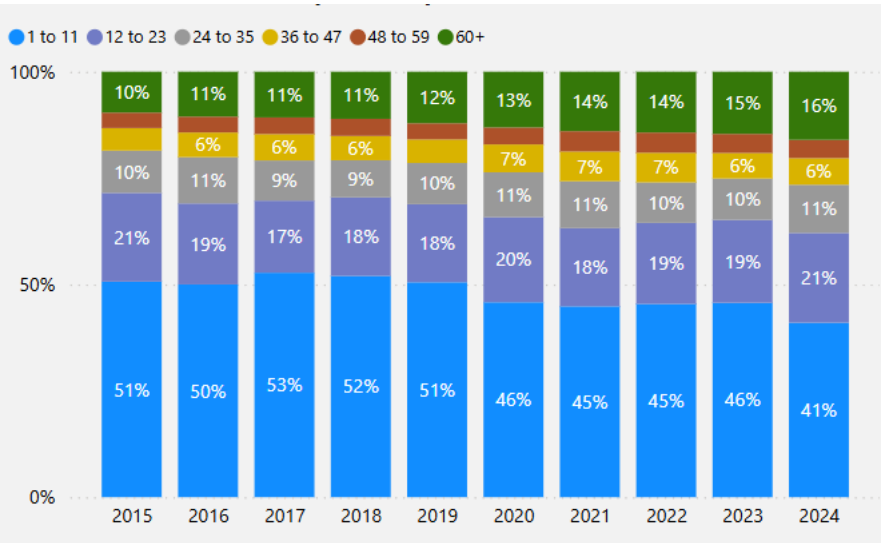
5.8.7 Employers are Less Willing to Invest in Unknown Quantities

With many of the available VET programme options being in excess of 12 months duration, they represent a significant commitment on behalf of the employer to the future of the learner in the business (it is also a commitment for the employee!). Employers are more frequently reporting they want to be more certain the potential of staff before such time as they invest in training.

This may reflect that a large proportion of the workforce accrue less than one year's tenure in any given job and that average tenure is 18 months. This short tenure characteristic of the sector means employers feel they are investing in training for the benefit of the learners next employer and are unlikely to invest.

This causes a significant tension in the system, the provider is incentivised to offer longer programmes, while employers would prefer to manage their risk through investing in shorter programmes.

Figure 24: Trends in job tenure in the dairy sector



Source: DairyNZ People Scorecard 2025 (Unpublished)

Some employers do recognise the benefits of training as a retention tool which is an opportunity for the VET sector, especially if the employer can be helped to identify a high potential individual they want to invest in. They may see longer qualifications as more beneficial.

There is an opportunity to investigate programmes that fit within this 12-month cycle and decrease the risk for farmers of investing in training. This may be a paid rather than a TEC-funded product.

5.8.8 English as a Second Language

The prevalence of international learners in VET over the decade leading up to 2020 had implications for classroom interactions and it has been reported that some New Zealand staff found learning to be a lot less engaging in this situation. This is thought to have resulted in a significant proportion of those staff choosing not to participate.

5.8.9 Online Provision

Connection to learning for the employee is created through the cohort they learn with. Employers note how hard it is for their staff engaging in online formats. It is likely to enable participation by some staff and also be a barrier for others.

5.8.10 Hollowing out of Roles

There is evidence to suggest that roles have become far narrower in their scope and as a result the breadth of learning in New Zealand Certificates is greater than is required by many employers for their staff. This has implications for employers seeing relevance and value as well as for learners being able to complete the programme and apply it in the workplace.

This hollowing out is likely to be accelerated by automation as it has the effect of concentrating information in the hands of a manager for decision making, bypassing the team. For example, oestrus collars remove the need for a staff member to be able to detect cattle heats, report them to the manager, and record them. If paired with auto drafting the need for communication in the shed and stockmanship to draft cows is also removed. There is a significantly reduced need for the team to interact on the technicalities of the farming operation.

This will require great leadership from the manager to overcome the engagement challenge this presents. Inadvertently it is adding work for the manager.

5.8.11 Scarcity of Participants

The demographic and policy changes outlined previously lead to a scarcity of participants which can have a compounding effect on the ability of the provider to form a viable cohort to go ahead with a programme. Providers must invest much more heavily in marketing and sales to generate demand, but in a constrained economic environment this is not always possible.

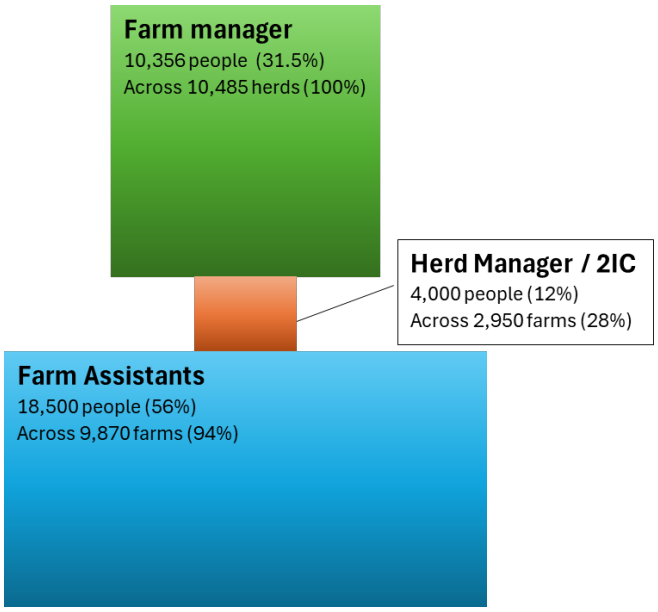
Scarcity can also create frustration with the potential training participants. Often people will sign up to participate in a programme and in doing so will be placed on a waiting list for the programme, which will only go ahead if sufficient learner numbers are available. Often this critical mass is not established, and the programme is cancelled, leading to disillusionment and frustration from the customer. It is likely they will not enquire again.

6 Future Training Volumes

This section sets out an estimate of future training volumes based on current dynamics and potential for innovation.

An understanding of the population dynamics in the sector helps to provide a better estimate of potential future training volumes. Figure 25 illustrates the top- and bottom-heavy nature of the dairy workforce, with a very narrow waist, restricting the number of staff that can step up to middle management.

Figure 25: Dairy employment structure



Source: Estimated from regional herd size data – Dairy Statistics 2023/24

Using estimates for annual churn of farm managers and herd managers out of the sector the number vacancies at each job level can be estimated. In any given year, approximately 600 people are promoted out of herd manager ranks to become farm managers, filling the void created by people leaving the sector. Similarly, this creates an opportunity for 1,025 farm assistants (5.5%) to be promoted to herd manager roles to cover churn out of the sector (400) and promotions to farm manager (600).

Table 5: Estimated flow of staff through roles in the dairy sector

Position	Count	Annual Churn Out of Sector (%)		Promotions Available	Average Tenure in Role (Years)
New Entrants	4,500				
Farm Assistant	18,488	19%	3,475	1,025	5
Herd Manager / 2IC	4,034	10%	403	621	4
Farm Manager	10,356	6%	621		17

For a fully trained workforce assuming one-to-one matching, 1,025 people would need to be trained annually to herd manager level and 621 to farm manager level, assuming a one-to-one match to roles, a total of 1,646 staff. To allow for selection between candidates and departures

from the sector among trainees, a buffer of an additional 50% should be assumed as a minimum.

Training for other staff may well be carried out to develop specific skills. For the purpose of this exercise, it is assumed one training programme per new entrant is sufficient to meet skill needs on farm, although with an average tenure of around five years in assistant type of roles it would be realistic for that person to complete more than one programme.

Obviously not all staff will train as they come into the sector with different backgrounds and skill sets, and they work for employers who do or don't value and encourage training. The table below proposes some scenarios based on a 'fully trained' workforce and what various participation rates in Levels 3 and 4 training would mean for overall enrolments.

Table 6: Scenarios for participation rates in Levels 3 and 4 training

	Fully Trained	Participation Rates			
		50%	30%	20%	10%
New Entrants/ Farm Assistant	4,500	2,250	1,350	900	450
Herd Manager / 2IC	1,538	769	461	310	154
Farm Manager	932	466	279	186	93
Estimated Enrolments	**6,969**	**3,073**	**1,844**	**1,230**	**615**
% of Domestic Staff		***100%***	***60%***	***40%***	***20%***

At 'peak training' in 2015, approximately 30% of employees were enrolled in Levels 3 and 4 training. If this historical peak was achieved, it would result in approximately 1,850 trainees in the dairy sector. The norm for the period was closer to 20% of employees enrolled in training, which would result in around 1,200 enrolments. Today it is closer to 5%.

However, under current funding settings, a maximum of 60% of employees are likely to be involved in training, with the balance being on some form of visa that restricts their ability to access subsidised training. Based on a working assumption that the current VET market is made up of domestic staff with less than five years tenure, there are only 3,000 potential learners in this pool. This means to enrol 1,850 trainees it would require 60% of these domestic staff to enrol. To achieve a 20% overall participation rate, 40% of domestic workers must enrol, or 20% of domestic staff to achieve a 10% participation rate overall.

Without a change in policy regarding international workers, the proportion of the market required to be enrolled to achieve 1,200 enrolments seems to be a stretch based on history. Even if these somewhat heroic assumptions are not correct, ongoing training volumes at Levels 3 and 4 under the current qualification structure are unlikely to be more than 1,000 to 2,000 enrolments.

Other opportunities

Other opportunities may arise for specific training to augment the current suite of products. For example, Dairy Training Ltd is offering a micro-credential for people wanting to go contract milking. This programme operates at Level 5 but is complimentary to the management content at Level 4. It has the advantage of creating a new market that is replenished annually as people look to step up to contract milking. Other similar potential gaps exist in topics like system analysis, advanced feeding strategies, and leading farm teams.

Industry specific goals like increasing milk quality or introducing biosecurity plans have created bow waves of training in the past as the industry is up to speed. However, this type of training, over a period of 5-10 years, appears to become hard to sell separately and is incorporated into the standard offering. Customer requirements may offer some opportunity in the future but are likely to be transitory unless they become part of processor terms and conditions of supply. This is unlikely to happen given competition for supply tends to ensure requirements of farmers remain at legal minimums.

Industry shake-ups that are on the horizon, for example, feeding for reduced carbon intensity will require a capability build in the sector, but are unlikely to initially target Levels 3 and 4 training. The capability build is more likely to target managers and be delivered through non-formal and informal training which is typically offered by industry extension groups. Over time, aspects of it will be picked up and incorporated into Levels 3 and 4 as appropriate, but it is unlikely to require new qualifications.

To enter the farm manager, and especially the business owner market with formal qualifications, it would require:

- A suite of micro-credentials that deliver short, sharp introductions to the topic, as this group is time poor.
- Assessment based on naturally occurring evidence that participants complete as they evaluate a change in practice or go through the implementation process as there appears to be very little appetite in this group for assessment.
- A step change in capability to engage with the manager/owner to sell, deliver to, and support their needs as business owners and learners.
- The ability to create value above what can be obtained from their current community, extension, media and farm consultancy networks.

7 Recommendations

How the content of this report is used will depend on the business context of the user. It is also apparent that enrolments are significantly affected by government policies that are outside the education system and are likely to be beyond the control of the user. Because of this, no specific recommendations are made.

The other influences described are less influential than the broader operating environment but do warrant attention. It should be noted these are based on a set of interviews and are not statistically significant. Before any related action is taken, further investigation is warranted.

However, the significant decline in participation in VET is a serious warning that capability and capacity issues are ahead for the sector. If the sector has the desire to proactively address this situation, confidence in vocational training must be addressed.

Beyond the immigration and fees policy concerns there are multiple other influences listed in this report that relate to confidence of farmers in VET. As a dairy sector, we must collectively address this with both employers and learners. To be successful, qualifications must be recognised and sought out by employers who reward holders of those qualifications based on the significant value they add to the farming business.