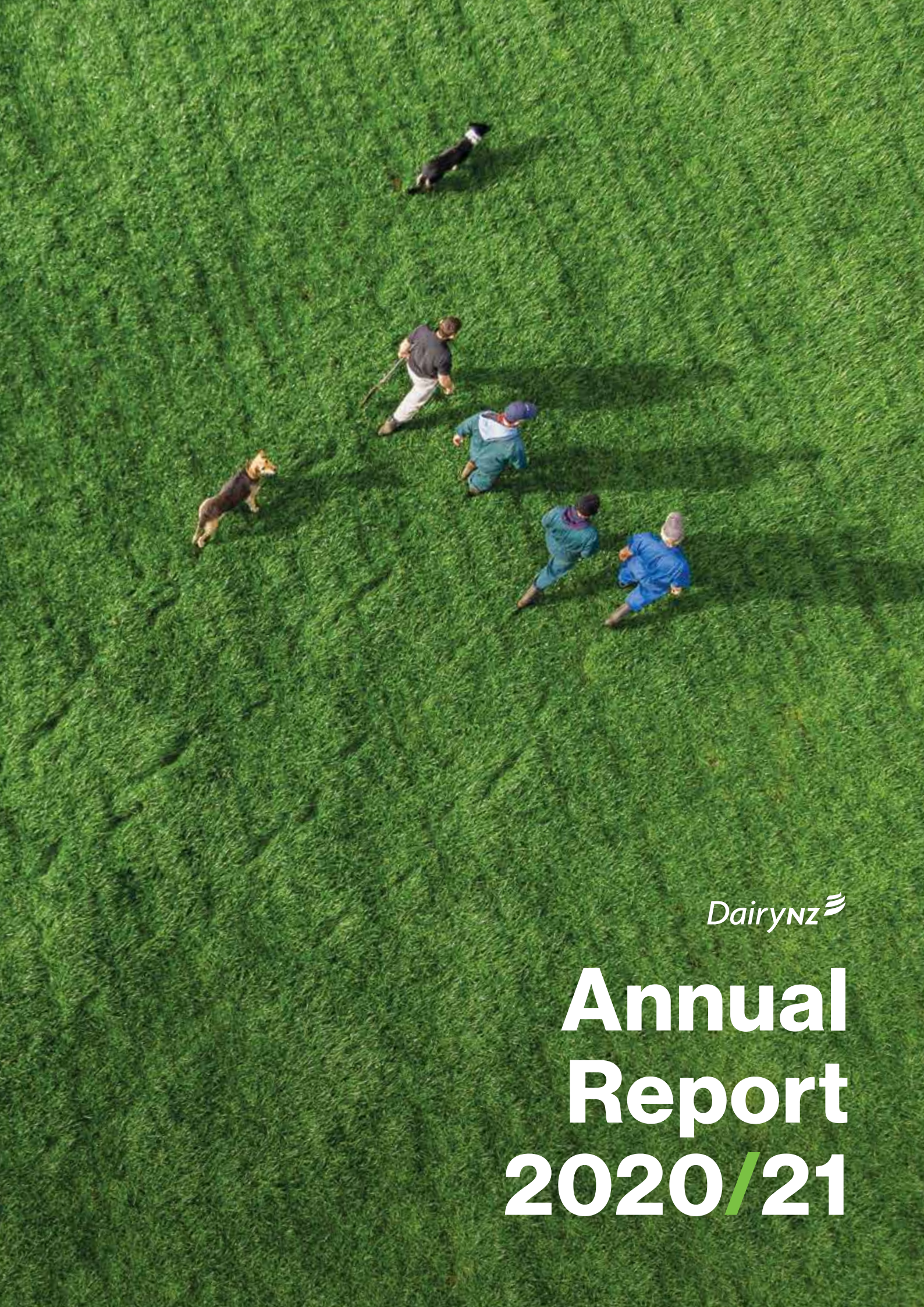


DairyNZ

# Annual Report 2020/21

# Contents




Visit **dairynz.co.nz** for more information

DNZ01-024

# DairyNZ your levy in action

**We invest dairy farmers' money into a wide range of programmes, guided by the dairy sector strategy.**

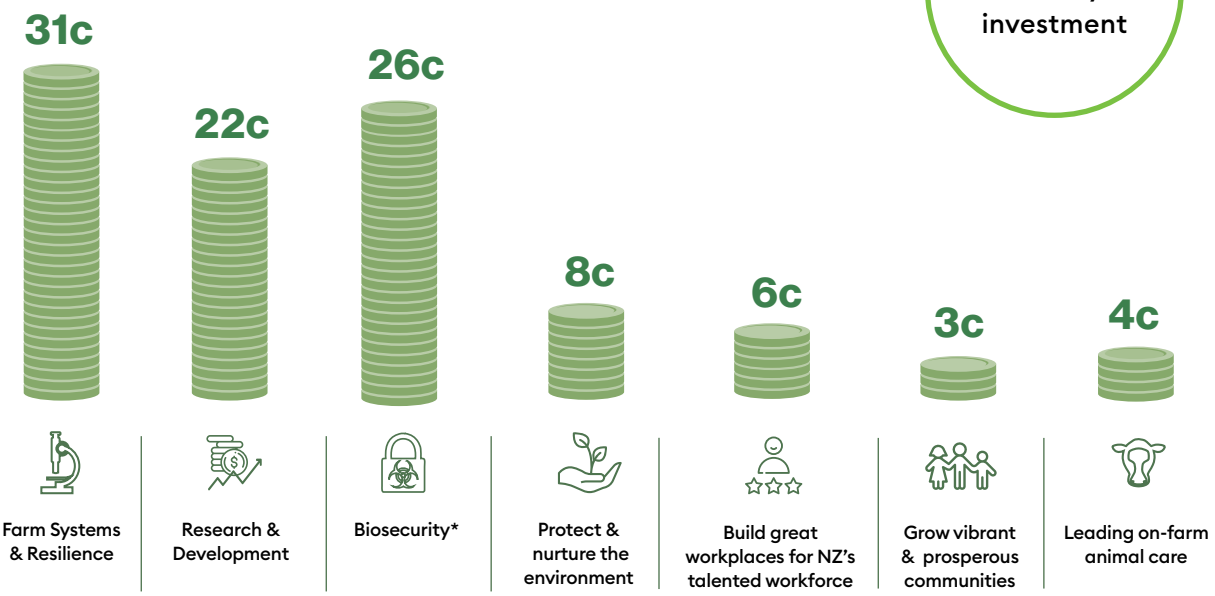
In 2020/21, a total of $70.1 million was collected through the milksolids levy, plus DairyNZ received Government co-funding.

Our work includes research and development to create practical on-farm solutions, supporting farmers in the on-farm adoption of good practice farming, promoting careers in dairying and advocating for farmers with central and regional government.

## Levy and co-funding investment by objective

**2021/22 funding under the sector strategy, Dairy Tomorrow.**

For every $1 of DairyNZ investment




*largely TB control investment supporting OSPRI

## 2021/22 DairyNZ investment under focus areas

2021/22 funding under DairyNZ's strategy.

| | Forecast spend |
|---|---|
| Increase profit and reduce footprint | $12.8M |
| Competitiveness, responsible & resilient | $38.4M |
| Build capability of people | $2.8M |
| Engage better with levy payers | $13.7M |
| Build trust and pride | $2.0M |

# Our work for farmers across New Zealand

## Northland

A three-year research trial in Northland has revealed how different farming systems perform under varying climate conditions and milk prices. The research will help Northland farmers, and farmers nationwide, build resilience and better plan their approach to droughts and changing milk prices.

## Waikato

We hosted 17 online discussion groups on wide range of topics driven by local farmer needs including employment, milking intervals, environmental regulations and more. This allows national specialists to share their knowledge, and is popular with farmers. Events are also livestreamed to DairyNZ's regional Facebook page and page membership has grown to 1,500.

## Top of South/West Coast

DairyNZ has worked with affected farms to support them with flood and drought recovery. More farmers are joining DairyBase which allows farms to develop and compare key performance indicators against similar farms. They are working with DairyNZ's team to benchmark their performance, set goals, and track their achievements against other local farms, with the aim of lifting their performance over time.

## Canterbury/North Otago

DairyNZ and Selwyn Hinds farmers are partnering to demonstrate how farmers can reduce nitrogen losses while maintaining profitability (see page 8). Supporting farmers through the Ashburton flooding, and those affected by a surge in *M. bovis* cases as a result of seasonal bulk milk tests, have also been priorities.

## Bay Of Plenty

DairyNZ maintained and built relationships with1,000 levy payers while delivering group events and contacting farmers. Events upskilled farmers on a range of topics driven by farmer needs and are highly rated by farmers. Eight Step Change events were held on improving profitability and reducing environmental footprint. Two national Ahuwhenua Trophy finalists were part of a local DairyNZ- Māori business initiative.

## Lower North Island

In response to farmer needs, DairyNZ has been delivering practical training to upskill staff from '2IC' to farm manager roles. We have also been working with Dairy Trust Taranaki to compare current and future farm systems on their farm, and with partner farms to test changes to improve profit and reduce their farm environmental footprint.

## Southland/South Otago

As part of our wintering campaign, we hosted a wide range of wintering events and developed wintering resources. We have seen farmers commended by Environment Southland for their wintering preparations. DairyNZ also continues to invest in research at the Southern Dairy Hub to provide farmers with options to meet changing environmental requirements and maintain profitability.

# Dairy rises to the challenges of 2020/21

Jim van der Poel

**The past year has been a challenging one, with many changes and demands coming at farmers. Under pressure, farmers are doing an amazing job, while many are short staffed.**

Dairy has once again been a driving force behind New Zealand's better than expected economic performance. Our sector employs 50,000 Kiwis. With a higher milk price forecast, the total economic contribution from dairy was estimated at over $40 billion over the past season. With Covid continuing to affect our economy, every Kiwi is benefitting from dairy's contribution to New Zealand.

As a result of hard work by farmers and partner organisations, we are also winning the *M. bovis* battle. By September 2021 only two farms in New Zealand had active *M. bovis* – down from 34 two years ago.

We know that *M. bovis* has created a significant amount of stress for farmers, and we have been focused on working with programme partners to improve biosecurity and farmer support. A second recently completed programme review will help us keep strengthening our biosecurity systems through additional improvements.

We have also seen a shift in how dairy farmers are perceived by the public. Over the past three years, our Vision is Clear campaign profiled the great work 60 dairy farmers have done to care for the environment. 1.7 million Kiwis have seen the campaign and an estimated 63 percent of Kiwis who have seen the campaign feel positively towards dairy farmers. When the campaign started in 2018, only 43 percent of New Zealanders felt that way.

## Advocacy for farmers

Following joint advocacy by DairyNZ and other Southland Advisory Group members, the Government deferred wintering rules around pugging, resowing and slopes. However, winter grazing standards needed to be lifted.

Farmers, with support from DairyNZ and our primary sector partners, achieved real improvements in winter grazing practices this year – and they have been commended for that.

Our advocacy has been focused on ensuring politicians understand the pressure farmers are facing, and working with farmers on solutions.

In August 2020 farmers completed our View from the Cowshed survey, which highlighted that mental health is a major issue and regulations are the leading cause of farmer stress. Your survey responses enabled us to get the public and politicians talking about this issue. We have repeated the survey again this year.

A staff shortages survey also contributed to successful advocacy for border exceptions and visa extensions for migrant dairy workers. Resolving staff shortages continues to be a key priority.

We continue to strongly represent your views to the Government that regulatory overload is creating stress and burnout among farmers, particularly when many are understaffed. We want the Government to slow down the speed of changes, and take a step back to coordinate and plan their activities.

## Helping deliver for farmers

Our new DairyNZ strategy is about delivering a better future for farmers.

We have identified a number of focus areas to support farmers with future-fit solutions to help increase profit and reduce farm environmental footprint, and build capability on farm. We also want to engage and partner better with farmers, and build trust and pride in dairy farming.

Our new focus areas will guide our work over the coming year as we continue to work with farmers, and for farmers, to meet the challenges and opportunities ahead.

Warm regards,

**Jim van der Poel**
**DairyNZ chair**

# Sector at a glance


**total number of herds**

(down 145 herds from 2019/20)

## Cows

**4.904**

**million milking cows**

(0.4% decrease from 2019/20)

**1.948**

**billion kg of milksolids**

(up 2.7% from 2019/20)

**397**

**average kg milksolids per cow**

(up 12kg from last season)

## Farmers

**6,206**

**owner-operators**

(56% of herds)

**3,145**

**sharemilkers**

**1,594**

**contract milkers**

## Farms

**155ha**

**average farm size**

(effective ha)

**444**

**average herd size**

(up 4 from 2019/20)

*Statistics for the 2020/21 dairy season.*

# How we're helping NZ dairy remain the world's most sustainable

Tim Mackle

## This year, we were pleased to confirm that Kiwi dairy farmers are the world's most carbon efficient milk producers.

A DairyNZ-commissioned AgResearch report, released in January, found New Zealand dairy farmers have the world's lowest carbon footprint – at half the emissions of other international producers. We shared this story widely with media and politicians, ultimately reaching an estimated 3.4 million people.

This position is a great starting point but also a challenge for us going forward, as we navigate how to reduce our emissions even further to achieve our Zero Carbon Act commitments.

At DairyNZ, we are focused on supporting farmers to retain our world-leading position by investing in science to help maximise profitability, while reducing environmental footprint.

We are also working to ensure solutions are practical on-farm, and we are committed to supporting you through change.

This Annual Report outlines some major projects underway to achieve our goal improved profit, healthier waterways and reduced emissions. These will provide farmers with a range of options to meet changing regulations. I'm excited by the progress we are already making.

### R&D

The genomic selection research programme underway is developing higher yielding pastures with a lower environmental footprint and has the potential to improve yields by between $0.4 to $1.3 billion annually by 2040.

Our researchers are making good progress in using genetics to predict cow fertility through puberty timing. This could enable farmers to breed more fertile herds and deliver environmental benefits, through fewer stock on farms.

We're also seeing more farmers adopt flexible milking to create a better lifestyle or to manage staff shortages. This shift is also proving to have animal health benefits.

### Sustainable practices

Along with science, there's great work underway on the ground by farmers across the country. We're proud to be doing our bit supporting farmers with research in several regions including Canterbury and Southland.

In Canterbury, farmers have partnered with DairyNZ to reduce their nitrogen losses. In Selwyn and Hinds, 100 percent of farms surveyed reported having changed farm practices to reduce their environmental footprint.

Change isn't easy, so we have been working together with partner farms to test and share options that farmers across these catchments can adopt. Over 500 farmers in Selwyn Hinds have attended a field day or event to learn from other farmers how to adapt their practices to reduce nitrogen losses and maintain profitability.

In Southland, over 90 percent of farmers who are part of the Aparima Community Environment Project now have a Farm Environment Plan. Farmers who have plans are more likely to have adopted a range of good farming practices.

Across all our regions, DairyNZ's team are working for you to provide support and assistance. This Annual Report highlights just a small portion of our work for the 2020/21 year. If you'd like to know more about how we can help you, please read on and get in touch with us too.

Warm regards,

**Tim Mackle**
**Chief Executive**

# DairyNZ Board of Directors

## Jim van der Poel
### Chair

Jim is a dairy farmer and with his wife Sue has farming interests in Waikato, Canterbury and the United States.

He has a long association with DairyNZ that includes being on the foundation board of the organisation's predecessor Dexel, and then becoming chair before taking on a farmer elected director position on DairyNZ's first board in 2007. He stepped down in 2009, was re-elected in 2013, and is the current chair of the Board.

Jim was previously on the Fonterra board, a position he held for 12 years, and was an inaugural director on the Fonterra Shareholders Fund, as well as serving on the board of New Zealand Cooperative Dairies.

Amongst the industry awards he has received are the A. C. Cameron Memorial Award, Nuffield Scholarship, Sharemilker of the Year and Dairy Exporter Primary Performer Award.

## Colin Glass

With his wife Paula and their two daughters, Colin owns and operates a 670 cow dairy farm, and two properties that rear and finish bull beef at Methven in Mid-Canterbury.

He is a chartered accountant fellow and has a commerce degree in farm management and a post-graduate diploma in accountancy and finance from Lincoln University.

Colin is the chief executive of Dairy Holdings Limited which has extensive operations throughout the South Island. He is a director of a number of agri-business companies and is currently chairman of Ashburton Lyndhurst Irrigation Limited.

## Elaine Cook

Elaine has interests in a 300 hectare family dairy farm in Otautau, Southland, and lives in the Bay of Plenty. She and her late husband took the traditional progression through the industry to farm ownership, farming both in Waikato and Southland.

Her governance roles have been with organisations that create value for others in agri-business, research and innovation, industry good, pastoral dairy farming and education. Amongst her current roles is chairing the Southland Dairy Leaders Group, which has a strong environmental focus.

Elaine's corporate career has involved agri-business, local government, information management, health and safety, and human resources.

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## Tracy Brown

Tracy is a director of Te Rarawa Farming Ltd, in the far north and a trustee for Te Mahere Whakauka (The Hope Project). She is a past chair of DairyNZ's Dairy Environment Leaders Forum and the Ballance Farm Environment Awards Alumni. She was a trustee of Dairy Women's Network, St Paul's Collegiate and Matamata Intermediate. She was a 2020 Nuffield Scholar.

Her first role was as an economist for the NZ Meat and Wool Board. She has a Bachelor of Agricultural Science (Hons) from Massey Universityand a Kellogg Rural Scholar. Tracy and her husband won the 2010 Waikato Ballance Farm Environment Supreme Award and the 2019 Fonterra Farm Source Responsible Dairying Award. She received a Sustainable Business Network's 'Sustainability Superstar' award, and was part of the Essential Freshwater Independent Advisory Panel.

## Dr Jacqueline Rowarth

Jacqueline has a background in research, education, management and governance with organisations including AgResearch, Lincoln University, Unitec, the University of Melbourne, Massey University, the University of Waikato, the Environmental Protection Authority, Crop and Food Research and AGMARDT. She is currently a farmer-elected director of DairyNZ and Ravensdown.

A past president and a fellow of the New Zealand Institute of Agricultural and Horticultural Science, Jacqueline is also a past president of the New Zealand Grassland Association and a current trustee of the NZ Grassland Trust.

She is a Companion of the Royal Society of New Zealand, and a Companion of the New Zealand Order of Merit for services to agricultural science.

## Peter Schuyt

Peter has been, and is, an independent director for a broad range of New Zealand businesses.

He is the chair of Tax Management NZ Ltd. He is also the chair of the Audit and Risk Committees of Tatua Co-operative Dairy Company and Foodstuffs North Island Ltd.

Prior to taking on chair and director roles, Peter held senior executive roles, primarily in finance and strategy, for the New Zealand Dairy Board, Fonterra and the New Zealand Post Group.

Peter is a chartered fellow of the New Zealand Institute of Directors.

## Jo Coughlan

Originally from a sheep and cropping farm in Mid-Canterbury, Jo married a Southland farmer. Having lived for 25 years in Wellington, she brings diverse thinking and experience to DairyNZ.

Jo's career spans manufacturing; banking and financial services; consulting; politics; communications and marketing; not-for-profit and governance. She has held senior corporate roles for organisations such as NZ Aluminium Smelters Ltd, AMP, Ergo, National Bank and was press secretary for then Deputy Prime Minister and Foreign Affairs Minister Right Hon Don McKinnon. She has since built a successful consulting business representing national and international clients and held several leadership and governance roles.

## Mary-Anne Macleod

Mary-Anne is a director of the Environmental Protection Authority and National Institute of Water and Atmospheric Research (NIWA). She also provides advice to central and local government agencies.

Mary-Anne spent seven years as the chief executive of the Bay of Plenty Regional Council and before that as general manager responsible for strategy and iwi relations. Prior to that she held senior roles in central government and in international consultancies. Her academic qualifications are in earth science.

Her previous governance roles include serving on the boards of Quayside Holdings Limited, Bay Venues Limited, Bay of Plenty Lass, Priority 1 and House of Science. She is a member of the New Zealand Institute of Directors.

# DairyNZ senior leadership team

## Dr Tim Mackle

**Chief executive**

Tim has been DairyNZ's chief executive since its inception in 2007 and was chief executive of its predecessor Dexcel. He leads DairyNZ in its vision to deliver a better future for New Zealand dairy farmers. Previously, Tim was general manager of Fonterra subsidiary, Anchor Ethanol.

Tim began his career as a nutrition and milk characteristics scientist, worked in the New Zealand Dairy Board's strategy team and also held a corporate role at Fonterra. Tim has a PhD in Animal, Food and Nutritional Sciences from Cornell University, New York.

## Dr Bruce Thorrold

**Strategy and investment leader – new systems and competitiveness**

Bruce oversees research into farm profitability and footprint, the national evaluation systems for animals (Breeding Worth), the Forage Value Index, and the dairy sector's core economic database (DairyBase).

Before his current role Bruce led the Dexcel farm systems research team and was involved with the Holstein Friesian Strain Trial and the Lake Taupo policy process. He previously worked for AgResearch and the Ministry of Agriculture and Fisheries researching soil science and catchment management. Bruce has a Bachelor of Agricultural Science (with first class honours) and a PhD in Soil Science from Lincoln.

## Nick Robinson

**Strategy and investment leader – farm performance**

Nick's work focuses on workforce strategy and strategic engagement.

Prior to joining DairyNZ Nick held roles in both the public and private sectors working across corporate affairs and sustainability both here in New Zealand and internationally.

Nick holds a Master of Philosophy in Business from Massey University.

## Dr David Burger

**Strategy and investment leader – responsible dairy**

David oversees strategy and programme investments related to environmental sustainability, and biosecurity.

David is a water quality scientist with more than 20 years national and international experience in applied water resources management. He joined DairyNZ as a water quality specialist and became manager of the environment team in 2015 before joining the executive team in 2018. He previously worked as a scientist and advisor for Deltares, an independent international water research institute based in the Netherlands and then Singapore. David holds a PhD in Limnology and a MSc in Freshwater Ecology from the University of Waikato.

## Julia Murphy

**General manager - people and culture**

DairyNZ believes that the better our people are supported, the better they can support farmers. The People and Culture team strive to develop the DairyNZ team's talent to enable the organisation to meet the needs of an everchanging sector, keeping farmers ahead of the curve.

Since joining DairyNZ in 2010, Julia has held a number of roles including Senior HR Business Partner and Transformation and Culture Manager. She joined the executive team in 2019. Prior to this she worked for the Royal Bank of Scotland. Julia holds a Bachelor of Arts from Waikato University and a Certificate of Personnel Practice (CIPD) from the University of Strathclyde, Glasgow.

## Sharon Morrell

### General manager – farm performance

Sharon's team proactively engages with farmers both one-on-one and through events designed to connect farmers, promote farm business efficiency and sustainability, thus supporting farm resilience and sector competitiveness.

With an honour's degree in Agricultural Science from Massey University and certificates in nutrient management and adult learning, Sharon has farmed, tutored and consulted prior to joining DairyNZ eleven years ago as a consulting officer. Sharon is also a Nuffield scholar, studying how producers cope with change.

## Dr David McCall

### General manager – new systems and competitiveness

David's team of scientists and economists provide farmers with new solutions to remain internationally competitive and locally responsible in 2030.

David has previously held general manager roles for development and extension, and research and development at DairyNZ. Before this, he supported technology company start-ups and investments at Celentis. He also worked as a farm systems scientist at AgResearch. He has a PhD in Agricultural Economics and Farm Management from Massey.

## Jenny Cameron

### General manager – responsible dairy

Jenny oversees the biosecurity, environment, solutions and development teams, and projects that cover workforce and policy issues. Designing work that supports farmers with solutions for change is a key focus of the portfolio.

She has previously held roles as Chief Executive of the Electricity Retailers' Association of New Zealand, Director of external relations for the Brewers' Association of Australia and New Zealand, served for a decade as a diplomat with the Ministry of Foreign Affairs and Trade, and practised as a lawyer in Palmerston North. She holds a Bachelor of Psychology and Law from Victoria University of Wellington.

## David Evans

### General manager – corporate services

David was formerly DairyNZ's financial controller and then chief financial officer.

He currently oversees finance, project management, digital information and communications technology, facilities and procurement. David is also company secretary for the DairyNZ Group and secretary of the New Zealand Core Database Access Panel.

He has a Bachelor of Commerce from the University of Auckland and is a member of Chartered Accountants Australia and New Zealand.

## Amanda Woodbridge

### General manager - marketing, communications and engagement

Amanda describes her job as helping to share DairyNZ's science and research to help farmers farm even better, and telling the rest of New Zealand (public, stakeholders, media) about the great work dairy farmers are doing.

Before joining DairyNZ, Amanda was a director of her own communications marketing agency. She has an Honours degree in Marketing from Victoria University and has won international awards for her marketing programmes.

# Highlights 2020/21

# Developing better solutions through science

## Creating better forages for tomorrow's challenges

A joint research programme is improving the efficiency of plant breeding to develop higher yielding pastures, and identifying how to create climate resilient forages with a lower environmental footprint.

The aim is to develop future fit forages with stronger yields.

The research uses genomic selection which involves analysing plant DNA to predict desirable traits in seedlings.

The five-year research programme has focused on improving perennial ryegrass and white clover. It found that genomic selection could be useful in identifying and selecting for 20 positive traits. Traits researchers looked for included good yield, pasture persistence, high nutritive value, and high nitrogen fixation.

The aim now is to scale the programme up and have commercial seed companies start using genomic selection as part of their breeding operations. This research will also focus on using genomic selection to reduce the environmental footprint of forages and increase their drought and heat tolerance.

**Modelling suggests if genomic selection for pasture yield could be introduced by 2026, Kiwi farmers could see improvements in yields of $0.4 - $1.3 billion per year by 2040.**

Researchers harvest ryegrass to measure yield.

The research has been funded by DairyNZ, Dairy Australia, Beef+Lamb New Zealand, Barenbrug, Grasslands Innovation, AgResearch and the Ministry of Business, Innovation and Employment.

# NZ dairy farmers world's most carbon efficient

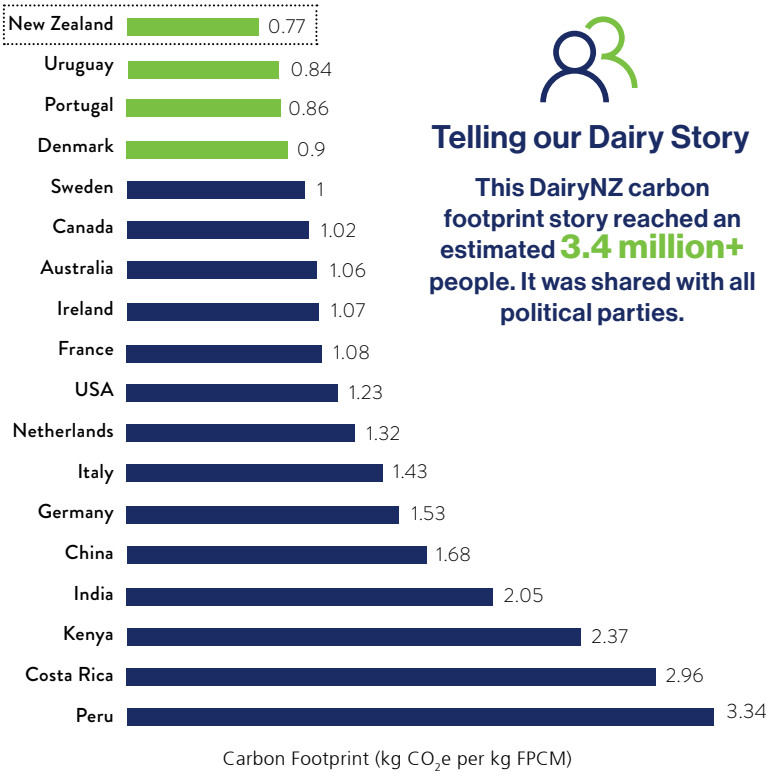
A DairyNZ commissioned report has been sharing the message that Kiwi farmers can proudly claim to produce the world's most carbon efficient milk.

The 2020 study by AgResearch showed that New Zealand milk was produced with an on-farm carbon footprint 48 percent less than the average of 18 countries studied.

New Zealand's pasture-based system, and relatively low use of supplementary feeds, were important contributors to the ranking.

DairyNZ Step Change programme is supporting farmers to continue reducing emissions.

## Carbon footprint of milk production




### Telling our Dairy Story

**This DairyNZ carbon footprint story reached an estimated 3.4 million+ people. It was shared with all political parties.**

# Unlocking the secrets to improving cow fertility

A large-scale trial following 5,000 cows across 54 herds has found that puberty timing is an early predictor of cow fertility – a discovery that could help farmers select and breed more fertile herds.

The research confirmed a genetic link between a heifer's age at puberty and her ability to conceive early during first lactation.

Researchers found that puberty timing is significantly more likely to be inherited (20 to 30 percent) from one generation to the next than existing fertility traits, which are less than 5 percent heritable. This means puberty timing will respond quickly to selective breeding.

"The findings are exciting, as they could allow farmers to develop more fertile herds, which would improve profitability and also have environmental benefits," says Dr Chris Burke, DairyNZ Senior Scientist.

Researchers will now track the trial herds to monitor their reproductive results during second lactation.

The project is funded by DairyNZ and the Ministry of Business, Innovation and Employment. Additional funding and resources are provided by AgResearch, Fonterra, LIC and CRV. The project received a Kudos Primary Industries Award.

**"There's a lot less pressure and the early finish every second day is nice. There's more time to spend with family and friends."**

*Rick Phillips - Farm Manager.*

# Flexible Milking brings plenty of benefits in the Bay

A shift to a flexible milking schedule is paying off in the Bay of Plenty for farmer Nick Dowson and farm manager Rick Phillips.

The pair have been part of a DairyNZ research programme trialling how flexible milking can be applied successfully on-farm.

Following the change, milk production has - perhaps surprisingly - lifted this season. The cows are calmer and the team spend less time and money on reproduction with similar results.

Flexible milking has freed up some of Nick's time so he can tend to the farm's avocado orchard, and both of them enjoy more time with family.

After using 3-in-2 milking over summer for a number of years, Nick spoke with milking expert Josh Wheeler who suggested it might suit them year round.

"We tried 16-hour intervals, which wasn't much fun," says Nick. "Research by DairyNZ made us realise the hours aren't that critical, so we've adjusted our intervals."

They now milk at 5.30am, 3.30pm and 10.30am the next day.

One of the biggest surprises following the change to 3-in-2 was a major improvement in somatic cell count, partly because they now have time to strip the herd once a week. A lower cell count indicates mastitis isn't an issue and the cows are healthy and producing milk well.

### Promising results from research

In the past year, five other farms have been trialling flexible milking as part of the project, and have seen similar benefits.

The farms reported their teams enjoyed flexible milking, and having more time for other tasks. There was also a trend for improved reproductive results across the farms.

The on-farm trials follow two years of research on Lincoln University farms. This found that a herd on 3-in-2 milking produced 5 percent less milksolids than twice a day milking, but saw a 6 percent improvement in body condition scores and a decrease in lameness.

"Every farm is different, but our research and on-farm results are encouraging and show that 3-in-2 milking does offer a number of benefits. It's worthwhile considering whether 3-in-2 could help improve your milking strategy," says DairyNZ Senior Scientist Dr Paul Edwards.

Damian and Jane Roper.

# Shaping a better future for the sector

## Sharing your stories changes perceptions

Damian and Jane Roper's work with their local community to care for their land and waterways is one of 60 farmer stories profiled in DairyNZ's The Vision is Clear campaign which has changed the way Kiwis see dairy farmers.

The Pātea farmers have planted over 10 hectares of trees on their farm, and have restored a native bush block. Their children have created a boardwalk through the bush block, and it will be protected in its natural state as they plan to covenant it. They've also developed a swampy area into a beautiful lake. Water quality testing has shown that invertebrates are now flourishing.

"We've seen kōura and eels in our lake and we've got a lot of teal and native species nesting on our farm now," Damian says.

Together with local iwi Ngāti Ruanui, they've created a pā on their farm. It is used to grow native trees to plant by their waterways and gift to the community. The couple say Māori values for the land align with theirs, and they are now learning Te Reo Māori.

Children from schools and kohanga reo and their local community have visited the farm to see their lake, native bush and pā.

"It's a beautiful part of the world," Damian says, "that New Zealanders should see."

In addition to The Vision is Clear sharing the Ropers' story with Kiwis, DairyNZ's media team put the story forward to Seven Sharp. They interviewed the couple at their farm and this story reached over 1 million people.

## The impact of the Vision is Clear campaign

The Vision is Clear campaign focused on raising awareness of the positive work farmers, like the Ropers, and the community are doing to improve water quality. It involved newspaper and radio ads, online videos and stories on the New Zealand Herald website, and social media posts and ads.

**Today, 63%**
**of those exposed to the campaign feel positively towards dairy farmers.**

**In 2018 when the campaign started**
**43%**
**of Kiwis felt positively towards dairy farmers.**

**Today, 51%**
**of people say seeing the campaign has changed how they feel about the dairy sector.**

**An estimated**
**1.7 million**
**Kiwis have seen the campaign**

# Our key advocacy work for farmers

**July 2020**

The Government extends temporary work visas for around 3,000 dairy workers by 6 months. DairyNZ and Federated Farmers advocated for this change.

**August 2020**

DairyNZ releases the 'The View from the Cow Shed' which includes ten policy priorities for the 2020 election and farmer survey insights. This highlights changing regulations as a major cause of farmer stress, and fuels media coverage of this issue. Farmer stress due to regulations was also discussed at the TVNZ leaders debate.

**October 2020**

DairyNZ contributes to Our Land and Water research showing from 1995 to 2015 45% more nitrogen (N) and 98% more phosphorus (P) would have entered rivers from dairy land if farming practices hadn't improved. In 2015, P losses from dairy land were an estimated 20-25% lower than 1995. Total N losses grew 25%, as dairy land increased by 40%. This is shared with the Government and media.

**December 2020**

Analysis by DCANZ and DairyNZ is released on dairy's value. It shows dairy employs 50,000 Kiwis and adds $10.2 billion to our economy.

**January 2021**

DairyNZ commissions and releases an AgResearch report showing NZ milk is the world's most carbon efficient which receives widespread media coverage.

**February 2021**

The Climate Change Commission consults on carbon budgets. DairyNZ advocates that the Commission doesn't increase methane reduction targets (as proposed) and supports more Government funding into reducing farm emissions. The Commission later agrees with our position in their recommendation to Government.

**March 2021**

Our survey of over 1,100 farmers shows 49% of farms are short staffed. Together with Federated Farmers, we apply to allow migrants across the border. In June an exception is granted for 200 dairy workers.

Following joint advocacy by DairyNZ and other Southland Advisory Group members, the Government announces wintering rules around pugging, resowing, and slopes have been deferred, and instead focuses on using farm plans to deliver water quality improvements.

**April 2021**

Work by DairyNZ and Federated Farmers provides Horizons farmers with an additional resource consent option with less economic impact on farmers and the region, but similar water quality outcomes. A final decision will be released after appeals are resolved.

# Stronger biosecurity systems contributing to *M. bovis* eradication progress

Significant progress has been made towards eradicating *Mycoplasma bovis* over the past year.

The latest independent Technical Advisory Group report for the *Mycoplasma bovis* (*M. bovis*) programme confirms New Zealand is on track to eradicate the disease and shows commitment by farmers is delivering results.

Only two farms had active confirmed *M. bovis* in September 2021 – down from 34 two years ago. The report confirmed that significant improvements have been made to tracing systems and the management of infected herds since 2019, while farmers have improved animal movement recording.

DairyNZ continues to partner with the farming community and sector on a number of initiatives to support the uptake of good on-farm biosecurity practices.

We commissioned an independent review of the programme in 2019 and programme partners commissioned the latest expert review in 2021 in order to keep improving our *M. bovis* management.

**DairyNZ has provided 1800 farmers with recovery/ welfare support and over 48,000 hours of staff expertise.**

**Over 1500 farmers used the DairyNZ, Beef + Lamb NZ Compensation Assistance Team.**

**TB infected dairy herds dropped from 230 in 1996 to 11 herds in 2020.**

# Southland farmers plan to improve water quality

600 Southland farmers are working together as part of the Aparima community environment (ACE) to lift their farming practices and improve the region's waterways.

The project began in 2018 and aims to support farmers to develop and implement Farm Environment Plans. The plans include actions to reduce sediment and nutrient loss, and guide fencing and riparian planting. A particular focus over the past year has been improving wintering practices, and a range of events have been held to share knowledge between farmers.

214 dairy farmers are part of the project. By June 2021, 93% of dairy farmers in the project had a Farm Environment Plan.

Nationally, over 3,400 dairy farmers have a plan, and by 2025 all dairy farmers will have one.

A 2020 survey of ACE farmers found that those with a plan were more likely to have adopted a range of good farming practices than farmers without a plan.

This project is supported by Thriving Southland, DairyNZ, Beef + Lamb New Zealand, Environment Southland, Fonterra and Open Country Dairy. For more detail see **thrivingsouthland.co.nz/ace.**

## Project survey highlights:

**95%**

**of farmers use buffer strips by waterways and gullies to reduce sediment and nutrient losses**

**84%**

**of farmers use nutrient budgets to guide fertiliser decision making**

**79%**

**of farmers use back fencing, portable troughs and portable bale feeders to reduce mud over winter**

# Supporting better farming locally

## Kiwi farmers get future fit as part of Step Change

Over a thousand farmers and rural professionals have started on a journey to future proof New Zealand dairy farming and are now looking at options to improve farm profitability while continuing to reduce their environmental impacts.

"New Zealand farmers can be proud to be amongst the most sustainable farmers in the world, but we know there is more to be done," says Dr David Burger, Strategic Investment Leader for Responsible Dairy.

"Global customers continue to demand higher environmental standards. It's a complex and stressful challenge for farmers. Our Step Change programme is focused on building farmer knowledge and providing farmers with a range of practical solutions they can choose from which will allow them to be both profitable and reduce their environmental impact."

Dairy Environment Leader (DEL) farmers joined the first series of Step Change 'Know your Numbers' workshops to share their knowledge with other farmers. At these 30 workshops for farmers and rural professionals, DEL farmers and DairyNZ staff shared how to calculate and understand measures related to farm operating costs and profitability, and key environmental indicators.

"A good understanding of key measures helps farmers understand where they are today, the likely impacts of policy on their farm system, and where they should focus for the future," says David.

As a result of the workshops, and supporting communication, over 1,000 farmers reported they knew their numbers in 2020/21.

Dairy Environment Leaders, over 300 farmers, and rural professionals also discussed a range of options farmers could action to meet changing environmental expectations and remain profitable at twelve 'Exploring your Options' workshops. The workshops built on the knowledge gained from the Know your Numbers events.

Farmers have been part of over 11,000 conversations at group or one-on-one discussions with DairyNZ staff and other farmers to explore options for how to improve profitability, and reduce environmental impacts in different farm systems and regions. A range of farmer resources are available at **dairynz.co.nz/stepchange.**

During year two of a five-year programme, Step Change also focused on building farmer pride as part of a 'Rise and Shine' campaign. The aim was to highlight that New Zealand dairy farmers are world leading – and inspire farmers to continue keeping ahead of challenges in a fast changing environment.

Southland farmer Suzanne Hanning is championing good wintering practices.

# Farmers and DairyNZ partner to make a difference over winter

**86 wintering events hosted for farmers in 2020/21**

**wintering checklist distributed to nearly 100,000 rural households**

2021 saw DairyNZ partner with farmer champions to deliver a campaign promoting good wintering practice called 'Let's make a difference this winter.'

Three Southland-based farmers - Suzanne Hanning, Jon Pemberton, and Tangaroa Walker - shared good management practice advice with other farmers through videos, images, print ads and social media.

This effort was backed by unprecedented collaboration across the farming sector to host joint events, coordinate media, and develop communication for both farmers and the public.

Between June 2020 and June 2021, DairyNZ, often in collaboration with Beef+ Lamb New Zealand, hosted 86 wintering events countrywide. 50 of these events were held from April to June 2021 in response to the Government's deferral of new wintering regulations. The events focused on understanding good management practice and creating a plan for adverse weather.

Farmers said the workshops helped them understand good management practice requirements, and how wintering plans support Farm Environment Plans.

An 0800 hotline was set up to report wintering issues to primary sector partners so they could support farmers to address issues. Farming sector organisations together developed winter grazing plans, and a wintering checklist which was shared online, at events, and distributed in print to nearly 100,000 rural households nationwide.

Environment Southland reported significant improvements in wintering practices and excellent compliance in their observation flights.

Jon Pemberton says farmers that have chosen to make a real effort to implement best management practices have got through winter well.

"The grazed paddocks show that there are real benefits to limiting soil damage by using back fences to protect critical source areas. Having a winter management plan has proven to be very valuable."

"It's so great to see the massive improvement in wintering practices," says Suzanne Hanning.

"You hardly see any crop paddocks that don't have a back fence or a trough in them now. Most farmers are always striving for improvement, not because they have to, but because it's the right thing to do."

"We have challenged farmers to be better than before and they are delivering," says DairyNZ's Head of South Island Tony Finch. "Farmers are now better prepared for adverse weather and are talking with their teams about their plans and practices. We've come a long way and we can still keep improving."

# DairyNZ and farmers partner in Canterbury to meet challenges

Canterbury dairy farmers are making widespread changes to their farming practices to reduce their environmental impact - with support from both local farmers and DairyNZ.

As part of the Meeting a Sustainable future project, 45 partner farms are working with DairyNZ to trial options to reduce nitrogen losses to meet Environment Canterbury regulations.

DairyNZ and partner farms are sharing the changes they are making on farm with over 400 farms in Selwyn and Hinds by hosting field days.

In a recent DairyNZ assessment of 235 farms in the two catchments, 100 percent reported adapting their practices to reduce nitrogen loss, says DairyNZ project leader Virginia Serra.

Eighty-one percent reported improving their irrigation systems or irrigation management. More than 50 percent said they had changed how they use fertiliser and improved their effluent management or effluent systems.

"These changes help reduce nitrogen losses which will in time help improve water and groundwater quality," says Virginia. "It's great to see farmers playing their part to look after the environment for future generations."

"We're seeing most farmers making multiple changes on farm to achieve the new targets. Change isn't easy and the project aims to help farmers find the mix of options that work best on their farm so they remain profitable."

The Everest family own one of the partner farms. They recently hosted a field day for 45 farmers to share the changes they are making.

They have installed an efficient variable rate irrigation system to reduce drainage losses and nutrient losses, and have added plantain and chicory into their pasture mix. They've also significantly reduced their fertiliser use.

"We developed an annual nitrogen application plan so we knew what our target application rates were each month. We also used a urease coated urea product which reduces greenhouse gas and nitrogen losses," Phill Everest explains.

"We've always been focused on learning how to do things better. We've got to learn fast to make changes, so we can continue to play a key role in contributing to local communities."

The changes mean they have already met their 2030 target to reduce nitrogen losses by 25 percent.

Phill says that continuing to reduce their nitrogen losses further to meet environmental requirements will be a significant challenge.

"We are taking small steps each year. This approach will allow us to make the best improvements we can."

## Progress in Selwyn and Hinds

**452 dairy farms** in Selwyn and Hinds

Together with DairyNZ, **45 partner farms** are leading change by trialling options to **reduce N and greenhouse gas losses**

**23 farmer events** held to share knowledge. Over 500 farmers attended events over the past year.

**100% of 235 farms assessed in Selwyn and Hinds report** making changes to reduce nitrogen losses. Most are taking multiple steps

# Māori dairy farms build firm foundations for future growth

Blending farming best practice with whanau aspirations and values is opening up opportunities for Māori in dairying.

A targeted extension project co-funded by DairyNZ and the Ministry for Primary Industries (MPI) in the Eastern Bay of Plenty is supporting Māori-owned dairy farms to explore sustainable system changes and build and develop their skill base.

The farms are all owned by trusts, and the project aims to help build stronger relationships between trustees and farm teams, and foster the adoption of best practice farming methods which support whanau aspirations and values.

"Each trust is exploring how to improve their business at an operational and governance level. Importantly they are making changes and checking progress using DairyBase benchmarking measures," says Hemi Dawson, DairyNZ's Kaiārahi Ahuwhenua (Māori Agribusiness Specialist).

"The feedback from participants has been positive, there is more collaboration between farms, and it's creating exciting possibilities for Māori dairy farmers," says Hemi.

One of the trusts involved in the project - Tunapahore B2A Incorporation – was a finalist in the Ahuwhenua Trophy, a national award recognising and celebrating success in Māori farming. DairyNZ is a proud gold sponsor of the awards. Another similar cluster of Māori businesses, funded by Te Puni Kokiri and supported by DairyNZ, is located in the Rūātoki valley. The winner of the Ahuwhenua Trophy this year, Tataiwhetu Trust, is part of this group.

"It's great to see there is a strong interest from everyone involved in continuing to improve the way they farm, and also in passing their knowledge on to other Māori now and into the future," says Hemi.

## Workplace 360 helps farmers build better workplaces

Over 2,600 farmers have used a new DairyNZ tool that helps them build stable, high performing teams since its launch in April 2021.

Workplace 360 is an online assessment that farmers can use to identify strengths and weakness in their work environment, decide what they want to do to improve and monitor their progress.

"We developed Workplace 360 in response to farmer requests. Attracting and retaining staff is a focus for many farms, and farmers were keen to find out how to make their farms better workplaces for their teams," explains Nick Robinson, DairyNZ's Strategy and Investment Leader - Farm Performance.

The assessment can be completed in under 30 minutes, and has three levels: Foundation, Good and Great Practice. It helps farmers assess performance across a wide range of areas including compliance, team culture and risk management.

The reports are confidential but Fonterra suppliers may choose to share their results with the Co-operative, as completing Workplace 360 is a key step to meet the People and Community achievement as part of Fonterra's Co-operative Difference Payment. To use Workplace 360 visit **dairynz.co.nz/workplace360**

# Looking ahead

# dairy tomorrow

The future of New Zealand dairying.

**The Dairy Tomorrow Strategy is focussed on the key challenges and opportunities facing the dairy sector. By working together, partners will ensure dairy has a strong future.**

The strategy was launched in 2017 by DairyNZ, Dairy Women's Network, Federated Farmers and Dairy Companies Association of New Zealand.

DairyNZ leads four of the commitments and coordinates strategy implementation. The strategy shapes our investment priorities.

The Dairy Tomorrow commitments are:

- protecting and nurturing the environment
- building resilient and competitive farm businesses
- producing the highest quality and most valued dairy nutrition
- practicing world leading animal care
- building great workplaces for New Zealand's most talented workforce
- growing vibrant and prosperous communities.

### New Zealand Dairy story launched

Over the past year, the Dairy Company Association of New Zealand (DCANZ), led the development of a story about how we bring Dairy Goodness to the World. The story is available at nzstory.govt.nz and as a sector resource. It focuses on what's special about New Zealand dairy including our natural production, our innovation, our kaitiakitanga and integrity.

### Integrated Farm Planning

The Government recently launched an Integrated Farm Plan approach to simplify and coordinate farm planning requirements.

Dairy Tomorrow Partners have been working together to create a useful farm plan for dairy farmers, and cover key requirements. We also want to be able to show sector-wide progress towards important goals, such as improving water quality. Partners are currently looking at key measures, and how data can be captured from farms and analysed, while protecting farmer confidentiality.

### Collective Challenges

Dairy Tomorrow Partners are working together to meet challenges with a planned, sector wide approach. These challenges include environmental leadership, and reducing dairy sector emissions. They also include developing options for surplus dairy calves and improving our communication and connection with the public.

DairyNZ · DCANZ · OpenCountry · Westland Milk Products Hokitika · New Zealand · Dairy Women's Network

Synlait · TATUA · Fonterra Dairy for life · Oceania Dairy · Federated Farmers of New Zealand · Miraka nurturing our world

# DELIVERING A BETTER FUTURE FOR FARMERS

## DairyNZ has established a new organisational strategy.

Our purpose is to deliver a better future for dairy farmers. It underpins everything we do.

The new strategy has been informed by discussions with farmers through our 2019 roadshows and last year's levy meetings. They have told us to focus our effort on the big issues, to ensure our services are relevant and accessible, and engage and listen well. It also enables us to deliver on our Dairy Tomorrow commitments.

**Our purpose**

## Delivering a better future for farmers

**How we deliver our purpose**

**Developing Better Solutions** · **Shaping a Better Future** · **Supporting Better Farming**

**We've identified five focus areas to guide our work over the coming years.**

The strategy is designed to be flexible and agile.

We'll be measuring our impacts to track our success and may adjust the strategy to better meet farmer needs.

**Our focus areas**

- **Increase profit and reduce environmental footprint while caring for animals**
- **Develop future farm systems and sector scale solutions for farmers**
- **Building capability of people on farm**
- **Engage and partner better with levy payers and farmers**
- **Build trust and pride in dairy farming**

# OUR FOCUS AREAS FOR 2021/2022

## FOCUS AREA ONE:

## Increase profit and reduce environmental footprint by 2025 while caring for animals on-farm.

DairyNZ will help dairy farmers with the complex, and often stressful, challenge of reducing their footprint and getting ready for upcoming changes including freshwater and climate change regulations.

During this year through our Step Change project, DairyNZ will support farmers to understand key on-farm measures on profitability, nutrient losses and greenhouse gas emissions. The project will encourage farmers to benchmark their performance in these areas against other farms and consider options to improve priority measures. DairyBase reporting will be improved to assist farmers to find and compare key reporting measures.

We will also provide resources and support for farmers on animal care.

We will continue to advocate strongly for farmers on climate change and freshwater policy at a national and regional level.

Another focus is on lifting wintering outcomes. We are working with farmer champions and across the farming sector to share best practice advice and support farmers in implementing good management practices.

## FOCUS AREA TWO:

# Develop future farm systems and sector scale solutions.

DairyNZ will help prepare the dairy sector for the future by developing new solutions to support the long-term competitiveness and sustainability of individual farms and the sector.

Research into methane reduction options is a focus as we want to equip farmers with tools to reduce their environmental footprint and remain the world's most emission efficient producers.

The frontier farms project will also support our dairy farmers to remain world leading. The project will analyse and compare the performance of international and New Zealand dairy systems to understand what changes we need to make to remain competitive. 'Frontier farm systems' will be designed to demonstrate how New Zealand farms can adapt to respond to competitor dairy farming models. We want to design resilient, innovative and world leading dairy systems.

Another key goal is for our national breeding system to produce the world's best rates of herd genetic gain (for traits relevant to the future of New Zealand dairy). Genomic selection will be an important technology to help achieve this goal as it allows genetically superior animals to be identified at a young age. This workstream includes delivering increased profit through greater rates of genetic gain with a focus on improving fertility, and the future traits most important to farmers. The project aims to share all relevant data and develop an Infoherds platform to support genomic evaluations.

## FOCUS AREA THREE:

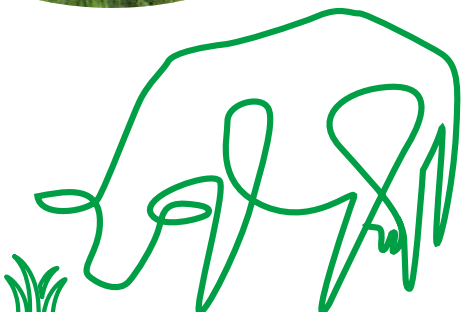
# Build the capability of people on-farm.

We know from our farmer survey that attracting and retaining staff is a significant challenge for many farms.

DairyNZ will support farmers to attract, develop and retain a world-class workforce.

A focus for this year will be developing a workforce transition plan. This will set out the dairy sectors current workforce, review existing research on how to attract and retain dairy workers, outline farmer needs, and identify how best to deliver on these.

The GoDairy campaign has been refreshed and will continue to promote dairy careers as part of working toward resolving long-term workforce challenges. DairyNZ also continues to work together with Federated Farmers to strongly advocate for farmers on immigration issues.



## FOCUS AREA FOUR:

# Engage and partner better with levy payers and farmers.

Farming is becoming more complex and with that, you've told us we need to change how we work with, and support, farmers, to ensure you're getting value for your levy dollar.

Specifically, farmers have told us that we need to proactively engage with you, listen to truly understand your needs, ensure our services are relevant and accessible for farming today, and focus our effort regionally on the big issues affecting your farm.

We're making changes to how we operate including appointing relationship managers in the regions to proactively engage with farmers; redeveloping the tools we offer you; and launching a series of new digital tools including developing a new website (now underway). We have also launched an informative podcast series called Talking Dairy; and are expanding our 0800 phone service.

We're also shifting how we create and share solutions, to spend more time working alongside farmers to design interventions together that work on farm. We are sharing these by listening first to understand your needs and what options fit you best.

## FOCUS AREA FIVE:

# Build trust and pride in dairy farming.

DairyNZ's trust and pride programme tells the great story of how New Zealand dairy farmers are the world's most sustainable, and their progress to become even better.

We have undertaken research to understand what's driving public perceptions of the dairy sector and farmers. We found that around 40% of Kiwis are interested in dairy and have relatively positive perceptions. Another 45% of our population are busy people and know little about us. We want to better reach this group to tell the dairy story, as they're the parents of the next generation, and are today's decision makers. Our research tells us that we haven't reached this group with our activities to date. We're now redeveloping our trust and pride campaign in a fresh format to build on the momentum created by The Vision is Clear. We are confident this will reach more Kiwis and help build trust and pride in dairy.

DairyNZ is also partnering with House of Science to deliver new educational resource kits to educate school children on the dairy sector. The fun and engaging kits cover dairy, climate change, water quality and land use. They will be used by over 60,000 children a year. Schools will also have the chance to visit a local dairy farm.

New Zealand farmers are world leading, but farmer pride is declining. We will work with farmers to explore why this is occurring, and how we can support you to rebuild it.

# Independent report on value of DairyNZ Investments for 2020/21

DairyNZ audits its investment portfolios annually to provide confidence to levy payers that the levy is being invested in their best interests.

The Board of DairyNZ Incorporated appoints a panel of New Zealand dairy farmers to review DairyNZ's progress against annual performance targets. The Farmer Auditor Panel consists of two independent farmers and one independent consultant as the facilitator. The current members are Ian Brown, Anne-Marie Wells and independent consultant James Morrison.

The panel's purpose is to review the annual Key Indicators of Success (KIS) outcomes and determine if the targets have been achieved to a level of satisfaction to provide levy payers with confidence that DairyNZ is delivering value to them.

For the 2020/21 year there were 16 KIS across all investment areas of DairyNZ. The Farmer Auditor Panel met in June 2021 to review the KIS achievements and have completed an independent report on their findings.

The auditors reviewed summary evidence and interviewed DairyNZ strategy and investment leaders and were satisfied with the KIS achievements.

The auditors concluded that DairyNZ has clearly fully achieved eleven of the sixteen KIS targets in 2021, three were partially achieved and two KIS were not achieved. This equated to a 78% achievement of KIS for the 2020/21 year and was an improvement on the previous year. The auditors acknowledged the large effort that went into the delivery of the KIS outcomes over the last 12 months. They were also very impressed with the high standard of reporting and evidence produced for the auditors to use when reviewing and assessing the KIS outcomes.

The auditors adjusted the self-assessment by DairyNZ management on KIS achievement in only one instance (from achieved to partially achieved for KIS 16). The importance of clearly understanding and defining KIS achievements at the outset was noted and discussed.

The suggestion to use a partially achieved assessment was adopted where the KIS had multiple components, and some were achieved. In the cases where a KIS was not achieved there has still been progress worthy of recognition.

| Dairy Tomorrow commitment | Key Indicators of Success related to commitment | Result |
|---|---|---|
| Commitment 1 – protect and nurture the environment for future generations. | KIS 1, 2, 5 and 7. | All KIS were achieved. |
| Commitment 2 – build the world's most competitive and resilient dairy farming businesses. | KIS 3, 4, 6, 8, 9,10,11 and 12. | Five KIS were achieved, two were partially achieved and one not achieved. |
| Commitment 4 – leading on-farm animal care. | KIS 13. | This KIS was achieved. |
| Commitment 5 – building great workplaces for New Zealand's most talented workforce. | KIS 14 and 15. | KIS 14 was not achieved, KIS 15 was achieved. |

**Note DairyNZ is not responsible for delivering on Dairy Tomorrow commitment 3 (nutrition).*

# Projects 2020/21

The following section summarises DairyNZ investment into projects according to the Dairy Tomorrow Strategy.

Additionally, there are other investments made into this strategy by our partners which are not included in this report.

## Commitment 1

# We will protect and nurture the environment for future generations

New Zealand dairy farmers are committed to farming within environmental limits and a collaborative approach between communities, government and other land users will help lead efforts to improve the health of our rivers and streams, protect and enhance biodiversity, and develop a vision of sustainable land use in New Zealand.

Farmers will also lead efforts on agriculture's contribution to meeting New Zealand's climate change goals through identifying and implementing strategies to reduce or offset greenhouse gas emissions from dairy farming.

## Dairy Environment Leaders

The wider community continues to have an expectation that farmers will lead initiatives to improve environmental outcomes for New Zealand.

The Dairy Environment Leaders (DEL) project will drive farmer-led initiatives that build awareness of the need for change and generate on farm behaviour change to improve our environment. DEL farmers will:

- be influential within their communities and in public
- empower on-farm change
- have a positive voice in policy development and implementation at the local and central government level
- build farmer leadership for community change.

By building strong regional projects within the wider national framework and supporting individual and collective action, the DEL project contributes significantly to environmental change that all New Zealanders can be proud of.

**Provider:** DairyNZ

**Funding:** $215,500 (excluding GST)


## Healthy Waterways

Healthy Waterways, through strong links to the Farming Within Limits Project, is providing science to quantify the dairy sector's contaminant footprint, the impacts of this footprint, and options to reduce this. Importantly, this programme provides catchment-based examples of how farmers can successfully implement changes to improve water quality outcomes. The catchment accounting framework is continuing to be refined to estimate contaminant loads, enabling the source and amount of nitrogen and phosphorus entering waterways to be estimated across all catchments across New Zealand. With this information, we can calculate the dairy contaminant load relative to other land uses, and better direct efforts to improve water quality to where they will make the most difference.

The Healthy Waterways Project is also responsible for developing a more robust understanding of the relationship between land use pressure and mitigations that reduce this pressure, and water quality outcomes. This framework supports future national and regional limit setting processes and integrates and builds on the knowledge developed through four related projects – Systems for the Environment, Systems that Work, Designing the Future and Productive Pastures.

**Provider:** DairyNZ

**Funding:** $980,581 (excluding GST)

## Farming Within Limits

Farming Within Limits supports farmers to understand regional and national environmental policy, the implications of policy on their farm and solutions to fulfil their environmental obligations and achieve ongoing improvements.

Through this project, national and regional policy work ensures that dairy farmers are represented, and their interests are advocated for in policy processes. A significant area of work currently is policy and advocacy on freshwater policy and associated regulations. This includes advocacy in ongoing Environment Court processes and the implementation of National Environmental Standards.

Our regional environmental activity encompasses science, policy, economic and engagement work related to current and future regional limit setting processes across ten regions. This ensures a targeted and coordinated response is adopted to environmental policy for farmers and stakeholders in each region. Once regional policies become operative and on-farm change is required, support with implementation is provided through the Step Change Project and through regional Dairy Environment Leaders.

**Provider:** DairyNZ

**Funding:** $1,812,343 (excluding GST)

## Blueprint for Sustainable Land Use

The Blueprint for Sustainable Land Use project at DairyNZ seeks to assist dairy farmers to explore their short, medium and long-term future in a structured way. The project aims to develop and apply a credible process to explore alternate pathways for action, with a focus on actions today and in the future that allow farmers to remain responsive to opportunities and challenges. The project has initially focused on the Tararua catchment where dairy farmers need to consider options in response to regulatory changes.

**Provider:** DairyNZ

**Funding:** $55,470 (excluding GST)

## Climate Change

The Climate Change Project supports the dairy sector to address greenhouse gas emissions and prepare farmers for the future where they will be priced on their biological emissions. The project takes a comprehensive research and development, science, policy and advocacy, extension, and communications approach through five workstreams. This includes policy, mitigation, adaptation, extension and He Waka Eke Noa workstreams. It aims to ensure that farmers are supported to prepare for the future, and have the right tools, support and infrastructure to respond, while ensuring their businesses remain viable.

Collectively, this work supports He Waka Eke Noa, our primary sector climate change commitment and joint Government industry agreement to report, manage and reduce on-farm biological emissions through a policy pricing mechanism. This will also provide the New Zealand public with confidence that we are committed to a low emission economy.

**Provider:** DairyNZ

**Funding:** $1,045,402 (excluding GST)

## Aparima Good Farming Practice

This project will achieve the rapid adoption of good farming practice at pace and scale by 2022. It will do this by supporting dairy farmers and dairy graziers to develop farm environment plans, and by providing extension activities to support the adoption of good farming practice on farm.

**Provider:** DairyNZ

**Funding:** $360,805 (excluding GST)

## Commitment 2

# We will build the world's most competitive and resilient dairy farming businesses

International competitiveness and resilience are essential for long-term success of the dairy sector. To support this, benchmarks and targets will be developed for international competitiveness, resilience, sustainability and community expectations for future farm systems.

Technology solutions will be researched, aiming to provide solutions for future farm systems, and whole farm system assessments will capture on-farm improvements. New initiatives will also reduce the risk and impact of biosecurity incursions on farm profitability and productivity.

## St Peters School/Lincoln University Demonstration Dairy Farm – Owl Farm

The goal of Owl Farm, the St Peter's/Lincoln University Demonstration Dairy Farm is to apply proven research, utilising good on-farm practice and scientific monitoring for the farm to become an exemplar in dairy production, and economic performance with a low environmental footprint.

**Provider:** St Peter's School Trust

**Funding:** $45,000 (excluding GST)

## Farmer Networks

DairyNZ supports Dairy Women's Network (DWN). The network supports farmers by developing the capability of members to run competitive and resilient businesses through the operation of their regional network and the delivery of leadership and technical training events. Dairy women implement change and the network's work benefits both farm businesses and the wider community.

**Provider:** Dairy Women's Network

**Funding:** $442,000 (excluding GST)

## South Island Dairying Development Centre (SIDDC)

SIDDC's main activity is the demonstration and extension of new farm systems and technologies at a farm scale on the Lincoln University Demonstration Farm (LUDF).

SIDDC comprises a number of contributing organisations - Lincoln University, SIDE (South Island Dairying Event), AgResearch, Ravensdown, LIC and DairyNZ.

SIDDC's strategy involves taking risks so farmers don't have to by implementing future systems taking account of economic, environmental, people and community factors.

This year SIDDC is transitioning to a new farm system demonstration at LUDF. This involves ten milkings in seven days (to support better staff welfare) and using plantain as a dominant forage (to support better environmental outcomes) while striving to remain in the top two percent of farms for profitability.

**Provider:** SIDDC and Lincoln University

**Funding:** $50,000 (excluding GST)

## On-Farm Biosecurity

This project is aimed at supporting good on-farm biosecurity practices, both in response to recent incursions (especially *Mycoplasma bovis*), and to help meet the aims of Dairy Tomorrow commitment 2.

DairyNZ and Beef + Lamb NZ have developed practical good practice biosecurity resources to support the sector with on-farm biosecurity implementation. Over the last 12 months this project has evolved into a wider national partnership programme, co-led with Beef + Lamb NZ and MPI, through the *M. bovis* programme and with engagement with Dairy Tomorrow partners. This project takes a partnership approach to supporting on farm biosecurity and provides a framework for everyone to play their part.

**Provider:** DairyNZ

**Funding:** $116,400 (excluding GST)

## OSPRI – NAIT & TB

Effective animal traceability and disease management are the cornerstones of good on-farm biosecurity practice. As part of our support for the Dairy Tomorrow strategy, DairyNZ wants to enable ongoing improvements across OSPRI's NAIT and TB programmes on behalf of our farmers, to make our biosecurity system stronger.

This project is strongly integrated with our On-Farm Biosecurity Programme, working with farmers and the wider community to support awareness and uptake of good on-farm biosecurity practices.

Over the last 12 months, our On-Farm work programme has evolved into a wider national partnership programme co-led with Beef + Lamb NZ and MPI, which includes a focus on traceability improvements aligning with the OSPRI Strategic Plan. This partnership supports a collaborative approach to strengthening biosecurity systems following the Mycoplasma bovis incursion.

**Provider:** DairyNZ

**Funding:** $155,500 (excluding GST)

## DBRiEF

Biosecurity incursions have significant time, financial, and other impacts on the dairy sector. The ability to understand, prepare for and mitigate the biggest risks (which are currently unknown) is essential to protect our sector in the future.

DairyNZ has taken action to address some of that uncertainty by developing DBRiEF. DBRiEF's primary purpose is to help us assess the highest biosecurity risks and impacts for our sector.

DBRiEF outputs will be used strategically by DairyNZ to work with the government and others to make more informed decisions around preventing, preparing for, and responding to incursions.

DBRiEF will also benefit the wider dairy sector (processors, transporters and others), by highlighting key risks to the dairy sector to inform risk management plans.

The project also provides opportunities for collaboration with others (such as the arable sector, and Beef + Lamb NZ) to reduce biosecurity risks by supporting passive surveillance, early reporting of incursions and on-farm biosecurity efforts.

**Provider:** DairyNZ

**Funding:** $528,668 (excluding GST)

## Resilient Dairy

The Resilient Dairy project is part of the 'Innovative breeding for a sustainable dairy future' programme led by Livestock Improvements Corporation (LIC), the Ministry for Primary Industries (Sustainable Food and Fibre Futures) and DairyNZ, with funding from DairyNZ and LIC.

DairyNZ aims to increase the rate of genetic gain in the national herd. DairyNZ leads work to deliver a national genomic evaluation system that incorporates all relevant genotypes and phenotypes.

The industry good Infoherds platform is a pivotal part of the project, as this platform will provide data to support the world's best rates of genetic gain in traits relevant to the future of the New Zealand dairy sector.

**Provider:** DairyNZ

**Funding:** $673,189 (excluding GST)

## Wintering Infrastructure

Invercargill's Southern Dairy Hub research farm is hosting a new project that will take an innovative, cost-effective wintering system to a full on-farm trial in 2023.

The project is researching different concepts for off-paddock structures where cows are kept during winter. Southern dairy farmers will have an important role in designing, approving and testing concepts.

**Provider:** DairyNZ

**Funding:** $98,496 (excluding GST)

## Sustainable use of Fodder Beet

This project forms part of a strategy to address animal welfare risks associated with new systems and technologies for environmental management. It is supported by the Sustainable Farming Fund and PGG Wrightson Seeds.

Fodder beet is important for profit outcomes, especially in the South Island, and can also play an important role in managing nitrate leaching. Animal health issues are a risk and need to be understood and resolved to provide farmer confidence in using fodder beet.

The objective of the project is to identify the health and lifetime productivity risks of feeding fodder beet to dairy cows, and provide recommendations and decision support for appropriate feeding strategies to mitigate these risks.

**Provider:** DairyNZ

**Funding:** $62,035 (excluding GST)

## Farmer Engagement

The purpose of print and digital farmer engagement activities is to inform and inspire farmer change through the DairyNZ website and the Inside Dairy publication. Dairynz.co.nz is the largest website of its kind in the world with over 3,300 pages of content and is the highest rated of all DairyNZ's channels by farmers.

Inside Dairy continues to have a very high readership. The publication aims to enable better farmer decisions by creating and presenting information that is easy to understand, actionable, timely, and relevant.

**Provider:** DairyNZ

**Funding:** $848,393 (excluding GST)

## Dairy Sector Competitiveness

Increasing our global market share requires an understanding of how to profitably flex production across time in the New Zealand dairy sector, in response to variable milk prices. The primary objective of this project is to identify the critical management decisions that govern the financial performance of New Zealand dairy farms across time. An economic analysis of the growth in milk production in the US dairy sector will also be undertaken, and economic data will be provided to stakeholders and decision makers.

**Provider:** DairyNZ

**Funding:** $418,324 (excluding GST)

## Step Change

Step Change is a five-year programme that aims to help farmers increase profit and reduce their environmental footprint. Step Change is about getting ahead of the game. It's DairyNZ's response to customer needs, not to regulation. This ensures that dairy farmers are both financially and environmentally sustainable, to preserve New Zealand dairy farmers' position as the most sustainable dairy farmers in the world.

Step Change takes an integrated approach which considers profit, water quality and greenhouse gas emissions as a package. The project has confirmed metrics and processes to help farmers know their numbers and understand the principles, drivers and levers for change. This will make it easier for farmers to take action to build resilient and adaptable farm systems. The project also has new integrated focus topics which will be incorporated into field work and online resources.

**Provider:** DairyNZ

**Funding:** $1,236,308 (excluding GST)

## TB National Pest Management Strategy - TB Free

This investment aims to control the spread of tuberculosis (TB) through disease management by detecting TB within herds through an extensive testing programme. It also completes wild animal (vector) control to eliminate TB from wildlife, particularly possums as they are the main carriers and transmitters of TB to cattle and deer. This work also covers movement control to minimise the risk of infection between herds.

**Provider:** OSPRI

**Funding:** $14,500,000 (excluding GST)

## NZAEL Operations

Genetic gain in dairy cattle has helped deliver higher productivity and profitability to farmers. The NZAEL owned Breeding Worth (BW) system provides a measure for genetic gain. This genetic gain is delivered to farmers by bull breeders and animal breeding companies. Maintaining and improving the BW system and the underpinning phenotypic data, genetic research and delivery systems is vital to achieve sector targets, especially in profitability, and is the focus for this project. The project ensures NZAEL applies robust and world-leading science to animal evaluation, to ensure optimal rates of genetic gain are achievable.

**Provider:** New Zealand Animal Evaluation Limited (NZAEL)

**Funding:** $3,132,000 (excluding GST)

## Forage Value - Supporting Research

This project aims to lay the basis for a Forage Value Index (FVI) that is scientifically based, objective, appropriately weighted for all critical traits and accurately calibrated for on-farm conditions.

Key work undertaken towards this objective includes completion of the third lactation of a farm systems experiment at Scott Farm, Newstead (called Forage Value Index Validation), comparing systems based on high FVI cultivars (5 star) and low FVI cultivars (1 or 2 star) for pasture production, milk production, and profit.

Detailed monitoring of high and low FVI pastures established at the Southern Dairy Hub Farm, Makarewa, in 2017 was undertaken for pasture growth, composition and nutritive value. Long-term studies of pasture persistence at Scott Farm and Lincoln University Research Dairy Farm continued through their fifth full year post-sowing to assess the persistence of cultivar yield differences. Final year trials in Canterbury and Waikato comparing detailed nutritive value traits of 25 perennial ryegrass cultivars were also completed.

This project also supported the continuation of a study comparing perennial ryegrass recovery treatments to determine the longevity of ryegrass and the yield benefits from grazing deferral and under sowing.

**Provider:** DairyNZ

**Funding:** $1,793,780 (excluding GST)

## Southern Dairy Hub Farm Systems Research

The objective of this project is to test if crop choice and nitrogen fertiliser management can reduce the nitrogen footprint on a Southland farm by 30% and improve profit compared to existing practice. Another aim is for farmers engaged in the project to better understand the key drivers of nutrient loss on their farms, and the opportunities associated with the mitigation options investigated. Four farm systems, two based on kale wintering and two based on fodder beet wintering, are part of the project. It is examining issues related to wintering, fodder beet feeding and nutrient loss reduction. The project started in June 2018 and will be completed in May 2022.

**Provider:** DairyNZ

**Funding:** $900,000 (excluding GST)

## MPI Southern Dairy Hub Participatory Research

This project takes an integrated approach, and focuses on achieving water quality outcomes while improving farmer understanding of the impact of farm systems and options to reduce greenhouse gas emissions. The project involves a network of four satellite farms, with associated communities of practice. It aims to increase farmer confidence, capacity and capability to adopt new farm practices with a lower environmental footprint. More farmers across the region will be skilled to be able to influence farmers around them, and within their networks, on how to make changes on their farms to achieve improved environmental outcomes, particularly to achieve nitrogen loss reductions.

**Provider:** DairyNZ

**Funding:** $96,633 (excluding GST)

## South Island Hub, North Island Hub

The objective of these two Hub projects is to engage with farmers regionally to achieve on-farm change, resilience and competitiveness. There is ongoing focus on improving how DairyNZ's farmer facing team engages with farmers to provide them value, and with key stakeholders who also support farmers.

**Provider:** DairyNZ

**Funding:** $8,310,990 (excluding GST)

## Biosecurity Policy

The biosecurity programme aims to ensure current and future biosecurity risks to the dairy sector are properly understood and communicated to relevant stakeholders. It also focuses on ensuring appropriate readiness and response systems are in place at farm, industry and national level.

**Provider:** DairyNZ

**Funding:** $223,474 (excluding GST)

## MBIE (Ministry of Business, Innovation and Employment) Low N Livestock

The objective of this project is to harness animal genetics to reduce nitrogen leaching and greenhouse gas emissions, and provide improved tools for evaluating and regulating environmental impacts.

The goal is that by 2026, nitrogen excretion breeding values to reduce nitrogen leaching will be available for all dairy cows. They will also be accessible to, and used by, dairy and beef farmers through commercial breeding companies. The effects of reducing herd level nitrogen excretion by combining genetic and management mitigations will also be successfully integrated into Overseer. This will allow farmers and regional councils to understand nitrogen leaching impacts and develop strategies to meet environmental targets. Farmers will be able to use these tools to transform their herds and reduce their environmental impacts.

**Provider:** DairyNZ

**Funding:** $1,133,959 (excluding GST), funding matched by MBIE

## MBIE Partnership – Pillars of a Competitive and Responsible Dairy System: Improved Longevity and Reproductive Performance

DairyNZ and the MBIE have an eight-year partnership programme (Pillars of a New Dairy System) that aims to deliver innovative management and genetic solutions to improve the fertility, health and longevity of New Zealand dairy cows. There are two main research areas: reducing premature mortality and increasing lifetime productivity in dairy herds; and achieving sector targets for reproductive performance.

**Provider:** DairyNZ

**Funding:** $885,115 (excluding GST), funding matched by MBIE

## External Hybrid Grasses

A work programme has been developed that will see the first commercial hybrid cultivars available in 2023. This project aims to develop a 'turn-key' technology package that includes parent lines and heterosis maps required for other commercial players to pick up the technology. Research work includes testing the proof of concept in New Zealand, and understanding the science behind superior grass performance.

**Provider:** Dairy Australia

**Funding:** $561,681 (excluding GST)

## DairyBase

DairyBase is the New Zealand dairy sector's platform for the analysis, storage and comparison of standardised dairy farm data. This project provides individual farm financial, physical and benchmark reporting to farmers. It also provides industry good data for research, policy and advocacy purposes to the dairy sector.

Farmers can compare their business to New Zealand benchmarks or models and make informed farm management decisions. They can do this on their own, or with the assistance of rural professionals or DairyNZ Consulting Officers.

DairyBase is working with external industry partners to automate the collection of physical and financial data with farmer permission. This will reduce the amount of time farmers spend entering data into DairyBase.

**Provider:** DairyNZ

**Funding:** $1,168,397 (excluding GST)

## Selwyn-Hinds

Under Environment Canterbury's Plan Change 1 and Plan Change 2, a total of 460 dairy farmers in the Selwyn and Hinds catchments need to comply with several environmental obligations, including significant reductions in nitrogen loss from the baseline period (2009-2013) for their properties by set dates. This five-year project began in 2018. It aims to support farmers in both catchments to meet plan change requirements while maintaining profitable and resilient businesses.

The success of this project will be demonstrated by farmers in Selwyn and Hinds making the necessary changes to meet their environmental regulations while running resilient and profitable businesses; and by their on-farm changes being properly reported and contributing to the positive reputation of farmers in the area. Project success also includes a reduced environmental footprint at a farm level contributing to a lower environmental footprint at a catchment level.

**Provider:** DairyNZ

**Funding:** $499,560 (excluding GST)

## GM Forages

AgResearch has developed a genetically modified (GM) ryegrass that in glasshouses has produced both higher levels of energy (through increased lipids) and higher growth rates (of 40 percent) through more efficient photosynthesis. To progress the development of these plants and potentially release them in New Zealand requires further research including off-shore field trials. Without compelling field data, there won't be a basis for a fact-based discussion on the merits and costs of GM ryegrass release in New Zealand.

**Provider:** AgResearch

**Funding:** $750,000 (excluding GST)

## Plantain

The aim of this project is to support the widespread adoption of plantain in targeted catchments by providing evidence of a farm scale reduction in nitrogen leaching and systems impacts.

The project is a multi-disciplinary, multi-institution research and development programme which aims to build farmer, general industry, and regional council confidence in the effectiveness of plantain to reduce nitrate leaching on dairy farms. Farmers and the dairy sector require robust evidence that dairy systems based on plantain forages can match or exceed traditional ryegrass-based systems in production and profit.

If this cannot be achieved, the project will demonstrate how plantain can reduce nitrogen leaching to provide farmers with an alternative low-cost option to capital-intensive options such as housing animals. This project is funded by DairyNZ and the Sustainable Farming Fund.

**Provider:** DairyNZ

**Funding:** $823,825 (excluding GST)

## Tararua Plantain Rollout

Research shows use of plantain within farm systems can reduce nitrogen leaching. Recognising the benefits of plantain, DairyNZ is coordinating a seven-year project to encourage farmers in the Tararua region to incorporate the plant into their farm system, and implementing an extension programme to ensure local farmers are well supported and get access to the very latest research.

The aim is for 118 farms in the region to utilise plantain to help increase farm business resilience and improve water quality. The project will also demonstrate to the wider community that farmers are committed to reducing their environmental footprint. DairyNZ is working with local dairy farmers and their farm consultants, Horizons Regional Council, Massey University, AgResearch, Agricom, agronomists and a six-strong project team to achieve success.

**Provider:** DairyNZ

**Funding:** $270,437 (excluding GST)

## Farm Business Capability

The Farm Business Capability project provides farmers with the support needed to become capable and confident farm business managers. Working with farmers, DairyNZ Consulting Officers and other sector organisations, this project provides a suite of farm business management tools, resources, training and support services to both farmers and the rural professionals supporting them. The key areas needed for success in business, planning, budgeting and business analysis are covered. DairyNZ is also working closely with training providers to influence the range of business management training available, and to build a culture where actively working on your business is valued as much as working in it.

**Provider:** DairyNZ

**Funding:** $380,473 (excluding GST)

## Farmer Insight

DairyNZ cares about what farmers and the public think. The purpose of this project is to deliver robust insights, so that DairyNZ can act on the things that matter to farmers.

**Provider:** DairyNZ

**Funding:** $389,990 (excluding GST)

## Baseline

This project aims to alert stakeholders to any developing financial impacts on the performance and viability of dairy farming from increases in environmental regulation.

We collect data to enable a full analysis to be undertaken in DairyBase, and develop Overseer files. We use this data to advocate on farmers' behalf on water quality policies set by regional councils and greenhouse gas legislation. Information from the Baseline project is also used for dairy industry statistics, and for other DairyNZ projects and research.

**Provider:** DairyNZ

**Funding:** $272,121 (excluding GST)

## Taranaki Research

This project on the Taranaki Research farm is investigating the profitability of using palm kernel extract (PKE) at a high stocking rate and comparing this to a pasture only system, within the limitations of Fonterra's fat evaluation index. This will be compared with locally grown maize grain.

The experiment will also investigate the benefits and costs of autumn calving. There has been increased interest in autumn calving, particularly in coastal Taranaki, and also in other regions that experience dry summer conditions and mild winters with reasonable pasture growth.

**Provider:** Dairy Trust Taranaki

**Funding:** $250,000 (excluding GST)

## Forage Value Index Operations

This project aims to establish a comprehensive system to evaluate and communicate the economic value of perennial and short-term ryegrass cultivars to dairy farmers. This will allow farmers to confidently select cultivars to maximise on-farm profitability. The evaluation system also sends clear signals to plant breeders about which traits are important to dairy farmers and the economic value of changes in trait values. It also provides a framework to measure and track the rate of genetic gain in pasture. DairyNZ is collaborating with the New Zealand pasture plant breeding industry on this project.

**Provider:** DairyNZ

**Funding:** $1,793,780(excluding GST)

## Māori Agribusiness

A significant proportion of dairy land in New Zealand, particularly in the Bay of Plenty, is Māori owned or operated. The Māori Agribusiness project was established to better connect Māori dairy farmers with resources available through DairyNZ. The first goal was to equip DairyNZ to effectively engage with Māori farmers, with a Māori agribusiness specialist, or Kaiārahi Ahuwhenua, being appointed.

The project also builds on existing relationships, such as with the Ahuwhenua Excellence in Māori Farming Awards

team, alumni and prospective entrants. This is a logical link as the Ahuwhenua Awards provide an established, beneficial network and framework for both inspiring and assessing Māori farming aspirations and performance.

**Provider:** DairyNZ

**Funding:** $271,843 (excluding GST)

## International Dairy Federation

The New Zealand National Committee of the International Dairy Federation (IDF) is the national body responsible for coordinating and managing New Zealand dairy sector input and influence on issues relating to the IDF. IDF NZ also manages the dairy committee for International Organisation for Standardisation (ISO) within New Zealand. It is important that the New Zealand dairy sector voice is heard by the IDF because of its role in coordinating global dairy sector input into food standards, and policies, guidelines and practices in a wide range of areas.

**Provider:** IDF New Zealand

**Funding:** $150,000 (excluding GST)

## Farm Systems Modelling

This project will develop and apply computer models to explore farm systems, components of farm systems and environmental questions that are expensive and difficult to answer with traditional research methods. Modelling is applied in a wide range of projects.

**Provider:** DairyNZ

**Funding:** $280,000 (excluding GST)

## Dairying in a Variable Climate

Palm kernel expeller has assisted farmers to manage variability in pasture supply. However, its use affects the processability of milk and it can increase the cost of processing. The introduction of milk fat evaluation index (FEI) penalties will impact on the ability of farmers to manage pasture supply gaps.

This project will measure the economic and environmental impacts of three different management strategies to produce milk within a variable climate and milk FEI constraints. Data from the project will allow the effects of these systems on milk production, profitability, environmental sustainability, cow welfare, labour and capital requirements to be assessed.

**Provider:** Northland Dairy Development Trust

**Funding:** $160,000 (excluding GST)

## Dairy Statistics

Dairy Statistics provides a range of statistical analyses on current, historic and emerging trends in the New Zealand dairy sector. It also reports on initiatives being undertaken to eradicate disease. Dairy Statistics is an essential reference for a variety of organisations, including universities, local government, dairy companies, industry support organisations, rural professionals and farmers.

**Provider:** LIC

**Funding:** $72,000 (excluding GST)

## Bay of Plenty Focus on Dairying

This farmer-led project works with farmers in the Eastern Bay of Plenty to make their operations more profitable and sustainable. Many activities and events have been undertaken to support this aim, including sharing progress updates, yellow bristle grass prevention and management advice, the use of DairyBase and Lucerne data collection.

**Provider:** Bay of Plenty Focus on Dairying Charitable Trust

**Funding:** $66,000 (excluding GST)

## Homegrown Feed

This project encourages and supports farmers to build capability to maximise their use of homegrown feed.

It supports the efficient use of imported feed to ensure economic resilience in an environment where farmers need to reduce their environmental footprint. The project also maintains feed resources and seasonal information on the value of homegrown feed.

**Provider:** DairyNZ

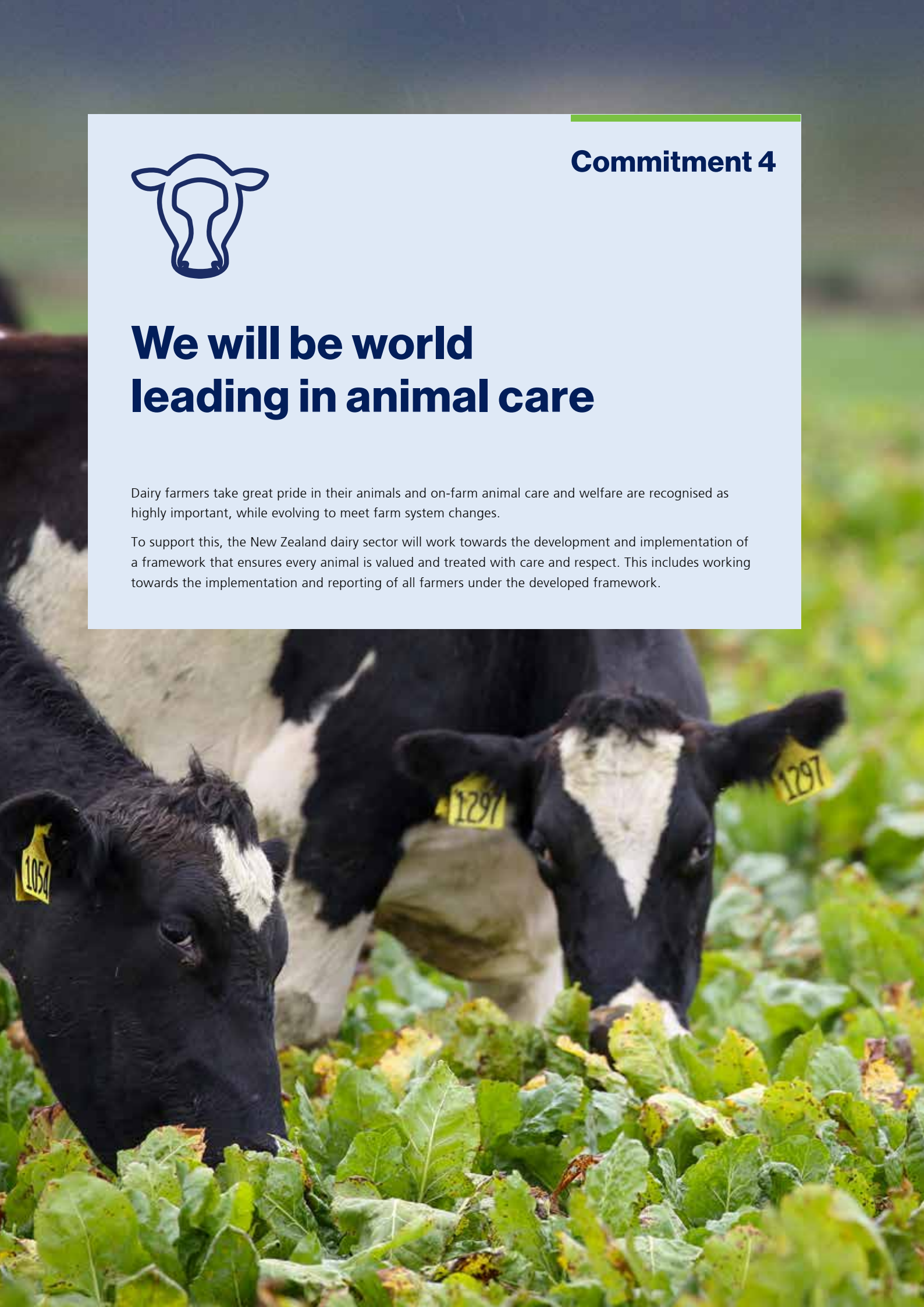
**Funding:** $316,130 (excluding GST)

## Commitment 4

# We will be world leading in animal care

Dairy farmers take great pride in their animals and on-farm animal care and welfare are recognised as highly important, while evolving to meet farm system changes.

To support this, the New Zealand dairy sector will work towards the development and implementation of a framework that ensures every animal is valued and treated with care and respect. This includes working towards the implementation and reporting of all farmers under the developed framework.



## Southern Wintering

Wintering on crops is a common method of providing all grazing stock with ample feed in southern New Zealand. However, in the last few years wintering practices have faced scrutiny and farmers are being asked to improve farming practices to protect the land and their cows.

New research by the Government shows that New Zealanders are optimistic about the future of our environment, with 75 percent of Kiwis agreeing that together New Zealanders can make a difference. This project takes a collaborative approach to help achieve a difference. It supports all those involved in wintering, including seed sellers, tractor drivers, veterinarians and farmers, to work together to protect our soils, waterways, farming businesses and animals.

**Provider:** DairyNZ

**Funding:** $217,642 (excluding GST)

## Animal Care Programme

**Practice Change**

This project supports practice change and provides solutions which are easy to implement to achieve change. It looks at how we can be ahead of emerging issues, preparing farmers for regulation changes and updating on-farm practices based on the latest research findings. Key focus areas include the care of neonatal calves and how to handle stock to reduce stress.

**Early Response Service**

This service links farmers on at-risk farms with the support required to farm their way out of this risk. We partner with other businesses and organisations in the dairy sector to achieve this goal.

**Monitor and Measure**

To help target resources to areas of greatest need, the monitor and measure team carries out 500 on-farm animal care consultations to better understand existing and emerging animal care practices, and provide farmers with support as required.

**Plan for the Future**

This work helps guide government policy and looks at future national requirements. Cross sector work ensures balance across all species of livestock, as well as ensuring good welfare for dairy cattle after they leave the farm. This is achieved through multi-agency working groups. Recent examples of this work includes casualty stock collection and reviewing the Dairy Cattle Code of Welfare.

**Provider:** DairyNZ

**Funding:** $1,171,869 (excluding GST)

## World Leading Animal Care

This project is working towards Dairy Tomorrow's commitment to be world leading in animal care. The project has been working with farmers to develop a commitment framework. It includes work across 90 pastoral dairy farms to collect various welfare indicators in order to understand the relationships between key on-farm indicators, and also consider which indicators work in a practical setting within seasonal production systems.

**Provider:** DairyNZ

**Funding:** $501,849 (excluding GST)

## New Zealand Bioeconomy in the Digital Age (NZBIDA)

This project will identify, develop and test metrics, frameworks, digital technologies and farm systems to improve animal care. It will assess which animal care indicators and technology work best on-farm to support world leading animal care. The focal areas for animal care improvement are: limiting thermal stress in animals, designing and implementing systems that treat animals as sentient beings, and precision grazing management. The goal after three years is for one or more exemplar 'connected' farms to show digital technologies (such as data integration, sensors, models, analytics and artificial intelligence) are feasible and improve animal care.

**Provider:** AgResearch Limited

**Funding:** $101,000 (excluding GST)

## Dairy Calf Opportunities

Increasingly dairy farmers are looking for alternative options for bobby calves, in line with changing expectations of animal care. Modelling various scenarios for the sector has shown that a combination of two approaches would achieve the best results from a production, revenue, greenhouse gas emission and nitrogen excretion point of view. The first approach is to use calf-free lactations and other changes on farms to reduce the number of calves born, and the second is to direct surplus calves to rose veal and young beef production.

In this project, the dairy and beef sectors will collaborate to develop a multi-year programme of work to further explore opportunities, address barriers, and implement some promising options together with commercial enterprises.

Current barriers for dairy farmers to producing or rearing more dairy-beef calves were identified with a nationwide survey. The programme intends to address consumer expectations and public perception of dairy and meat production systems, identify opportunities to extend lactations (to reduce the number of calves born) and produce high-performing dairy-beef calves (through mating programmes, calf rearing management). It will also consider data management systems to track calves from birth onwards and use data to evaluate genetics. Ultimately the project aims to co-develop sustainable business propositions for supply and value chains, and co-develop a cross-sector strategy to reduce bobby calf numbers.

**Provider:** DairyNZ

**Funding:** $139,379 (excluding GST)

Commitment 5

# We will build great workplaces for New Zealand's most talented workforce

Talented people provide the skills and motivation to support the dairy sector. To support this, farm businesses will have best employment practices and quality work environments, and ensure everyone gets home safe and well each day.

Sector initiatives will inspire, attract, grow and retain dairy talent, and implement new programmes to support and integrate new entrants into the sector and our rural communities. New programmes to build and sustain our governance and management base through diversity and leadership will also be developed.

## New Zealand Dairy Industry Awards

DairyNZ is pleased to support the NZ Dairy Industry Awards. The programme provides the opportunity for programme participants to accelerate their learning, connect with others and grow their capability, both personally and professionally. For many, the Dairy Industry Awards is a catalyst to progress their careers, both inside the farm gate and in industry and community leadership. By showcasing excellence, the awards build pride amongst the farming community and help share dairy stories with the New Zealand public to help the dairy sector meet its goals.

**Provider:** New Zealand Dairy Industry Awards Trust

**Funding:** $327,707 (excluding GST)

## GoDairy Career Changes

This project is about promoting the career opportunities available in dairy and increasing awareness and knowledge of people to build interest in entering the dairy sector. The dairy sector is an outstanding career opportunity with long-term prospects to get ahead. By showcasing the opportunities and realities of on-farm jobs we can attract more people and ensure people are better equipped and suitable for a career in dairy. This work can also help to improve public perception.

**Provider:** DairyNZ

**Funding:** $777,945 (excluding GST)

## Getting into Dairy

This project promotes dairy careers to young people to attract them into the sector, either on-farm or in the service and support sector. It aims to assist the sector to attract, develop and retain highly skilled, motivated people, including farm managers, scientists, research technicians and rural professionals.

**Provider:** DairyNZ

**Funding:** $675,132 (excluding GST)

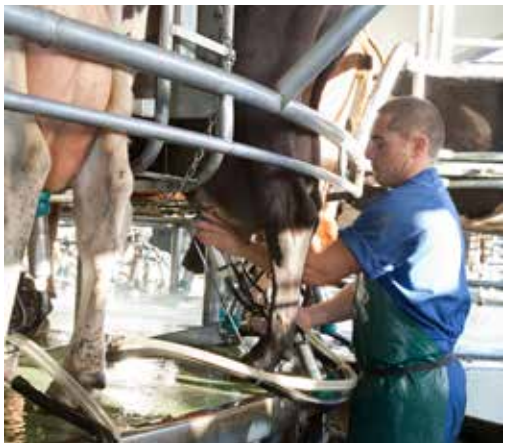
## Milksmart

Improvements in milking performance are possible across most farms in New Zealand and contribute to reduced work hours. Barriers to achieving better milking performance include farmer understanding of the opportunities available, confidence to make changes and access to suitably qualified people to guide them through change. Currently between 55-57% of work time on a dairy farm is spent milking, so efficiencies made through Milksmart help create better working environments for employers and employees.

The Milksmart project aims to address these barriers by making it easier for farmers to assess their milking performance and understand how to improve. It also helps farmers gain confidence to make changes from seeing examples of other farmers successfully taking steps to improve their performance, and by upskilling rural professionals to support farmers.

**Provider:** DairyNZ

**Funding:** $171,775 (excluding GST)



## Commitment 5

This project focuses on providing leadership to support DairyNZ and its partners to deliver on Dairy Tomorrow Commitment 5 of 'We will build great workplaces for New Zealand's most talented workforce.'

Commitment 5 is co-led by DairyNZ with Federated Farmers, Dairy Women's Network and New Zealand Young Farmers being supporting partners.

**Provider:** DairyNZ

**Funding:** $101,260 (excluding GST)

## Flexible and Fixed Milking

This project is part of a bold initiative to optimise and increase the use of an innovative farm management strategy (three milkings in two days; '3-in-2') to ensure our future dairy farm systems meet people, animal health and profitability expectations. The number, timing and duration of milkings within a farm system (typically two per day) significantly contributes to people's health concerns (burnout, exhaustion, sleep-problems) and cow health issues such as lameness and low body condition.

Reducing milking events to once-a-day (OAD) can mitigate these issues, however, there is often substantial loss in milk production and profitability in high producing herds. '3-in-2' milking is an innovative approach currently used by seven percent of New Zealand farmers to achieve some of the benefits of OAD milking without the associated production loss. A key barrier to greater industry adoption is a lack of knowledge on the impact of '3-in-2' on system performance, which results in a lack of confidence to adopt this change.

With the growing interest in extended milking intervals, farmers are asking questions about whether existing strategies to improve milking efficiency (such as MaxT) could still be used. In the 2020/21 season an additional experiment was added to the project to test the use of a simplified version of MaxT called a fixed milking time under a range of milking intervals.

This project will use a multidisciplinary approach involving farmers and their teams, scientists and industry experts to optimise and increase the use of '3-in-2' to improve the wellbeing of people, cow health and system profitability.

**Provider:** DairyNZ

**Funding:** $259,826 (excluding GST)

## Quality Work Environments

This project leads the implementation of the Workplace Action Plan, which supports employers and employees to build quality work environments on dairy farms. A key focus is working with farmers to build knowledge and support the implementation of improved workplace practices.

The project also involves other stakeholders in developing and maintaining tools and resources, and monitoring and evaluating the impact of good people management. It includes advocating for our workforce needs and working with government agencies around immigration policy and farm safety regulations.

**Provider:** DairyNZ

**Funding:** $445,624 (excluding GST)

## Workplace Design

Future dairy workplaces will need to be attractive places to work so the best and brightest want to choose a dairy career. However, what makes a workplace attractive is constantly changing and is influenced by a variety of factors, both on and off farm.

DairyNZ's Workplace Design project takes a future-looking perspective in creating great dairy workplaces for 2030. Farmers are involved in co-developing solutions that work for them, as well as actively researching the impact and performance of people management and workplace solutions. This will give farmers certainty about the value of investing in different approaches to people management. They will also have more confidence about which approaches fit their farm, and how to implement changes in practice.

**Provider:** DairyNZ

**Funding:** $461,733 (excluding GST)

### Implemented Programmed Learning

This project seeks to determine how programmed learning, leveraging Tertiary Education Commission (TEC) funding, can be effectively integrated into farmer facing delivery extension and development programmes, to broaden its reach and impact.

**Provider:** DairyNZ

**Funding:** $123,100 (excluding GST)

### Secondary School Education Centre of Excellence for Agricultural Science and Business Programme

This project aims to deliver an education programme to secondary school students that will stimulate careers in agricultural science and business, helping to meet the sector's long-term needs for highly skilled and motivated young people.

**Provider:** Massey University

**Funding:** $100,000 (excluding GST)

### Improving Dairy Production Capability

This project is a co-investment by DairyNZ with Massey University to provide joint funding for a Professor of Dairy Production Systems based at Massey University. The ongoing funding of this position will boost the research, teaching and training capability in dairy production and dairy systems, and provide stronger alignment between Massey University academics and the dairy sector.

**Provider:** Massey University

**Funding:** $90,000 (excluding GST)

### Primary Industry Capability Alliance (PICA)

Continued improvements in dairy business performance are essential if New Zealand is to capitalise on changing market trends and associated emerging opportunities. Developing people within the dairy sector, by increasing their numbers and improving skill levels, is central to capturing this opportunity. PICA provides a collaborative forum for like-minded organisations to plan and implement capability and attraction initiatives across sectors.

**Provider:** Primary Industry Capability Alliance Inc

**Funding:** $150,000 (excluding GST)

### Kellogg Rural Leadership Programme and Nuffield Scholarships

The Kellogg Rural Leadership Programme and Nuffield Scholarships develop leaders for the rural and primary industry sectors, particularly to support government and industry strategies around export targets and human resources. The four-phase Kellogg programme includes leadership tools and skills development, understanding of the New Zealand primary sector, national and international industry issues, and network development across industry sectors. Nuffield Scholars join a global programme that involves travel to four continents to study agricultural, political and social strengths and this culminates in a research project.

**Provider:** Lincoln University

**Funding:** $150,000 (excluding GST)

### Develop Rural Youth

Growing leadership in dairy is key to ensuring a positive and secure future for the sector. This project expands the leadership talent pool, attracting and retaining young people from the wider agricultural industry, by expanding leadership training and opportunities available to them.

**Provider:** New Zealand Young Farmers

**Funding:** $80,000 (excluding GST)

### Improving Herd Performance

Farmer learning is the cornerstone of farm business performance and is key to a resilient and competitive dairy sector. Continued professional learning is also at the heart of a motivated and engaged rural professional workforce, that supports farmers to manage herd and animal performance profitably and sustainably.

Farmers need trusted advisers to help improve the management of cows for reproduction, mastitis, lameness, nutrition, rearing and body condition. Advisers need to be able to provide impartial advice within a profitable, whole system context. Advice also needs to minimise impacts on a farm's environmental footprint.

This project provides farmers and their off-farm professional advisers and contacts with access to technical information that is evidence-based, supported by science and appropriate for profitable, pasture-based dairying systems.

**Provider:** DairyNZ

**Funding:** $457,454 (excluding GST)

## Commitment 6

# We will help grow vibrant and prosperous communities

Vibrant and prosperous communities is about the dairy sector's involvement and contribution to local communities. This includes helping strengthen communities through growing community leadership and building stronger connections, including urban-rural relationships.

This includes influencing the delivery of infrastructure and services in rural areas that support regional economic and social wellbeing, and work towards becoming a highly trusted business sector in New Zealand.

## The Vision is Clear

Powered by DairyNZ, The Vision is Clear is a public campaign that showcases the work dairy farmers and other Kiwis are doing while inspiring everyone to take an active role in looking after New Zealand's waterways. The project aims to improve public perception by raising awareness of progress made by dairy farmers to improve water quality.

The Vision is Clear is about the dairy sector openly acknowledging the role we play in the country's water quality challenge, showcasing what we are doing about it and celebrating the great work that is being done by people all over the country, including farmers. It highlights that we all have a part to play.

**Provider:** DairyNZ

**Funding:** $1,016,000 (excluding GST)

## Vibrant Communities

This stream of DairyNZ's Vibrant Communities programme is about increasing trust and pride in the New Zealand dairy sector by highlighting the valuable contribution dairy makes and highlighting the great work farmers are doing to improve the environment through education and sponsorship.

Our education programme provides positive and engaging learning experiences for children, parents and teachers that help build knowledge and understanding of dairying, what farmers do to care for the environment and their animals, and the critical role that sustainable dairy farming plays in New Zealand. This includes an online platform - Rosie's World - in-school education kits, and supporting schools to visit a dairy farm.

We also strategically sponsor initiatives, conferences and organisations that build trust and pride in dairy.

**Provider:** DairyNZ

**Funding:** $722,747 (excluding GST)

## Events

By delivering and being involved in dairy sector events and conferences, DairyNZ helps facilitate education and knowledge sharing to New Zealand dairy farmers, stakeholders and public. Events help increase participants' access to new knowledge. They also support networking, and provide opportunities for discussion, debate and information sharing.

**Provider:** DairyNZ

**Funding:** $439,460 (excluding GST)

# Financials 2020/21

# Independent auditor's report

To the members of DairyNZ Incorporated

**Report on the audit of the consolidated financial statements**

## Opinion

In our opinion, the accompanying consolidated financial statements of DairyNZ Incorporated (the 'Incorporated Society') and its subsidiaries (the 'Group') on pages 59 to 82:

i. Present fairly in all material respects the Group's financial position as at 31 May 2021 and its financial performance and cash flows for the year ended on that date; and

ii. Comply with New Zealand Equivalents to International Financial Reporting Standards for Public Benefit Entities.

We have audited the accompanying consolidated financial statements which comprise:

- The consolidated statement of financial position as at 31 May 2021;
- The consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended; and
- Notes, including a summary of significant accounting policies and other explanatory information.

## Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand) ('ISAs (NZ)'). We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of the Group in accordance with Professional and Ethical Standard 1 International Code of Ethics for Assurance Practitioners (Including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards) ('IESBA Code'), and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

Our responsibilities under ISAs (NZ) are further described in the auditor's responsibilities for the audit of the consolidated financial statements section of our report.

Our firm has also provided other services to the Group in relation to tax and other advisory services. Subject to certain restrictions, partners and employees of our firm may also deal with the Group on normal terms within the ordinary course of trading activities of the business of the Group. The firm has no other relationship with, or interest in, the Group.

## Other information

The Directors, on behalf of the Group, are responsible for the other information included in the entity's Annual Report. Our opinion on the consolidated financial statements does not cover any other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## Use of this independent auditor's report

This independent auditor's report is made solely to the members as a body. Our audit work has been undertaken so that we might state to the members those matters we are required to state to them in the independent auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the members as a body for our audit work, this independent auditor's report, or any of the opinions we have formed.

## Responsibilities of the Directors for the incorporated society and group financial statements

The Directors, on behalf of the Incorporated Society, are responsible for:

- The preparation and fair presentation of the consolidated financial statements in accordance with generally accepted accounting practice in New Zealand (being New Zealand Equivalents to International Financial Reporting Standards for Public Benefit Entities);
- Implementing necessary internal control to enable the preparation of a consolidated set of financial statements that is fairly presented and free from material misstatement, whether due to fraud or error; and
- Assessing the ability to continue as a going concern. This includes disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they either intend to liquidate or to cease operations, or have no realistic alternative but to do so.

## Auditor's responsibilities for the audit of the incorporated society and group financial statements

Our objective is:

- To obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error; and
- To issue an independent auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs NZ will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error. They are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of these consolidated financial statements is located at the External Reporting Board (XRB) website at:

http://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-7/

This description forms part of our independent auditor's report.

**Hamilton**
**29 July 2021**

# Statutory information

**For the year ended 31 May 2021**

The Directors present the Annual Report along with the audited accounts for DairyNZ Incorporated and Subsidiary Companies for the year ended 31 May 2021.

## 1. Activities

DairyNZ's main income is provided by the Commodity Levies (Milksolids) Order 2020, as well as the undertaking of dairy research, development and extension activities.

## 2. Results

DairyNZ Group's total comprehensive surplus for the year was $9,761,736.

## 3. Disclosures

Pursuant to Clause 24.1(c) and 24.1(d) of the Rules of DairyNZ Incorporated and/or Section 211(1) of the Companies Act 1993, we disclose the following information:

| DIRECTORS | DAIRY NZ INCORPORATED | SUBSIDIARY AND OTHER DIRECTORSHIPS |
|---|---|---|
| J. van der Poel | Director Elected (Chairman) | DairyNZ Ltd |
| T. Brown | Director Elected | DairyNZ Ltd |
| E. Cook | Director Elected | DairyNZ Ltd |
| J. Coughlan | Director Appointed | DairyNZ Ltd |
| C. Glass | Director Elected | DairyNZ Ltd |
| J. Rowarth | Director Elected | DairyNZ Ltd |
| P. Schuyt | Director Appointed | DairyNZ Ltd |
| M. Macleod | Director Appointed | DairyNZ Ltd |
| R. Anderson | | New Zealand Animal Evaluation Ltd |
| H. Blair | | New Zealand Animal Evaluation Ltd |
| E. Coats | | New Zealand Animal Evaluation Ltd |
| A. Kempthorne | | New Zealand Animal Evaluation Ltd |
| M. Townsend | | New Zealand Animal Evaluation Ltd |
| S. Montgomerie | | New Zealand Animal Evaluation Ltd |
| A. Body | | Insight Genomics Ltd and Pastoral Genomics Ltd |
| T. Mackle | | DairyNZ Accreditation Ltd |
| D. Evans | | DairyNZ Accreditation Ltd, Dairy Insight (PGGR Consortia) Ltd, New Zealand Animal Evaluation Ltd |
| D. McCall | | Dairy Training Ltd |
| B. Thorrold | | Insight Genomics Ltd, Data Linker Ltd and Farm Data Accreditation Ltd |
| M. Julian | | Dairy Training Ltd |
| G. Taylor | | SDH GP Ltd |

| POSITIONS HELD IN OTHER DAIRY INDUSTRY GOOD ENTITIES | | |
|---|---|---|
| J. Jago | Officer | Primary Industry Capability Alliance Incorporated |
| T. Mackle | Officer | South Island Dairying Development Centre (SIDDC) |
| J. Cameron | Officer | IDF National Committee |
| T. Brown | Trustee | New Zealand Dairy Industry Awards |
| A. Wilcock | Trustee | AgRecovery Foundation |

## Changes during the year

H. Anderson resigned as Director of DairyNZ Limited on 21 October 2020.

M. Macleod appointed as Director of DairyNZ Limited on 21 October 2020.

D. Evans resigned as Director of SDH GP Limited on 15 April 2021.

G. Taylor appointed as Director of SDH GP Limited on 15 April 2021.

## Directors' interest

A Directors interest register is maintained throughout the year.

## Use of company information

The Board received no notices during the year from Directors required to use Company information received in their capacity as Directors, which would not have been otherwise available to them.

## Share Dealings

No Directors hold any shares in any DairyNZ entity within the Group.

## Donations

There were no donations made in the current year.

## Board and committee attendance

| | BOARD | ARC | P&C |
|---|---|---|---|
| H. Anderson | 4 | - | 2 |
| E. Cook | 8 | - | 4 |
| J. Coughlan | 8 | - | 4 |
| P. Schuyt | 8 | 3 | - |
| J. van der Poel | 8 | 3 | 4 |
| J. Rowarth | 8 | 3 | - |
| C. Glass | 8 | 2 | 2 |
| T. Brown | 8 | 2 | 2 |
| M. Macleod | 5 | 0 | 4 |
| **Total meetings** | **8** | **3** | **4** |

DairyNZ has two permanent Board Committees; the Audit Risk Committee (ARC) and the People & Culture (P&C) Committee. The ARC assists the Board in fulfilling its governance responsibilities in relation to the Group's management of key strategic and operational risks, policies and procedures for managing and mitigating risks, financial reporting, audit activities, treasury matters, financial risk management and internal control frameworks. The People & Culture assists the Board in fulfilling governance responsibilities in relation to recruitment, retention, remuneration and development of directors, executives and other employees and to promote a safe and healthy working environment.

## Directors Remuneration

Remuneration paid during the period was as follows:

| | 2021 |
|---|---|
| H. Anderson | 18,958 |
| T. Brown | 49,500 |
| E. Cook | 53,675 |
| J. Coughlan | 49,675 |
| C. Glass | 49,675 |
| J. Rowarth | 49,675 |
| P. Schuyt | 52,625 |
| J. van der Poel | 93,357 |
| M. Macleod | 41,917 |
| R. McIntyre | 4,800 |
| M. Herbert | 1,600 |
| A. Wells | 1,200 |
| **Directors of DairyNZ subsidiaries** | |
| R. Anderson | 20,000 |
| H. Blair | 23,500 |
| E. Coats | 20,000 |
| A. Kempthorne | 20,000 |
| W. Larsen | 13,334 |
| S. Montgomerie | 20,000 |
| M. Townsend | 23,333 |
| | **606,825** |

## Employees Remuneration

The following number of employees received remuneration and other benefits (including redundancies) totalling more than $100,000 during the year:

| | NUMBER OF EMPLOYEES | |
|---|---|---|
| SALARY BAND | 2021 | 2020 |
| 100,000 - 110,000 | 32 | 29 |
| 110,000 - 120,000 | 17 | 18 |
| 120,000 - 130,000 | 11 | 9 |
| 130,000 - 140,000 | 13 | 11 |
| 140,000 - 150,000 | 7 | 4 |
| 150,000 - 160,000 | 8 | 8 |
| 160,000 - 170,000 | 6 | 7 |
| 170,000 - 180,000 | 3 | 2 |
| 180,000 - 190,000 | 2 | 3 |
| 190,000 - 200,000 | 4 | 2 |
| 200,000 - 210,000 | 2 | 3 |
| 210,000 - 220,000 | 2 | - |
| 220,000 - 230,000 | 3 | 1 |
| 230,000 - 240,000 | 1 | 2 |
| 240,000 - 250,000 | 1 | 1 |
| 250,000 - 260,000 | 1 | - |
| 260,000 - 270,000 | - | 1 |
| 270,000 - 280,000 | 2 | 2 |
| 280,000 - 290,000 | - | 1 |
| 590,000 - 600,000 | 1 | - |
| 600,000 - 610,000 | - | 1 |

## Auditors Remuneration

The following amounts were payable to the auditors of DairyNZ Incorporated and its subsidiaries:

| | FOR AUDIT WORK | FOR OTHER SERVICES |
|---|---|---|
| KPMG | 75,000 | 10,671 |

**J VAN DER POEL, CHAIRMAN**
29 July 2021

**P SCHUYT, DIRECTOR**
29 July 2021

# Statement of Comprehensive Income

**For the year ended 31 May 2021**

| *In thousands of New Zealand dollars* | | Consolidated | |
|---|---|---|---|
| | **NOTE** | **2021** | **2020** |
| **Continuing operations** | | | |
| Revenue and other income | 3 | 86,002 | 83,827 |
| Operational expenses | 4 | (76,250) | (84,179) |
| **Profit/(loss) before finance activities** | | **9,752** | **(352)** |
| | | | |
| Finance income | | 79 | 209 |
| Finance expenses | | - | - |
| **Net finance income** | **5** | **79** | **209** |
| | | | |
| **Profit/(loss) before income tax** | | **9,831** | **(143)** |
| | | | |
| **Tax expense** | **6** | **-** | **-** |
| **Profit/(loss) for the period** | | **9,831** | **(143)** |
| | | | |
| **Other comprehensive income** | | | |
| Net change in fair value of available for sale financial assets | | (69) | (124) |
| | | | |
| Income tax on other comprehensive income | | - | - |
| **Other comprehensive income for the period, net of income tax** | | **(69)** | **(124)** |
| | | | |
| **Total comprehensive income/(loss) for the period** | | **9,762** | **(267)** |

# Statement of Changes in Equity

**For the year ended 31 May 2021**

*In thousands of New Zealand dollars* — Consolidated

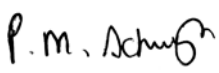
| | CONTRIBUTION BY OWNERS | INVESTMENT FAIR VALUE RESERVE | RETAINED EARNINGS | TOTAL EQUITY |
|---|---|---|---|---|
| Balance as at 1 June 2019 | 33,783 | (94) | 10,690 | 44,379 |
| **Total comprehensive income for the period** | | | | |
| Profit/(loss) for the period | - | - | (143) | (143) |
| **Other comprehensive income** | | | | |
| Net change in fair value of available for sale financial assets | - | (124) | - | (124) |
| **Total other comprehensive income** | **-** | **(124)** | **-** | **(124)** |
| **Total comprehensive income for the period** | **-** | **(124)** | **(143)** | **(267)** |
| **Balance as at 31 May 2020** | **33,783** | **(218)** | **10,547** | **44,112** |
| Balance as at 1 June 2020 | 33,783 | (218) | 10,547 | 44,112 |
| **Total comprehensive income for the period** | | | | |
| Profit/(loss) for the period | - | - | 9,831 | 9,831 |
| **Other comprehensive income** | | | | |
| Net change in fair value of available for sale financial assets | - | (69) | - | (69) |
| **Total other comprehensive income** | **-** | **(69)** | **-** | **(69)** |
| **Total comprehensive income for the period** | **-** | **(69)** | **9,831** | **9,762** |
| **Balance as at 31 May 2021** | **33,783** | **(287)** | **20,378** | **53,874** |

# Statement of Financial Position

**As at 31 May 2021**

| *In thousands of New Zealand dollars* | | Consolidated | |
|---|---|---|---|
| | **NOTE** | **2021** | **2020** |
| **Assets** | | | |
| Property, plant & equipment | 7 | 20,552 | 21,248 |
| Intangible assets | 8 | 5,329 | 4,995 |
| Biological assets - livestock | 9 | 1,420 | 1,427 |
| Investment in associates | 18 | 4,584 | 4,699 |
| Other investments | 10 | 1,253 | 1,322 |
| **Total non-current assets** | | **33,138** | **33,691** |
| Cash and cash equivalents | 12 | 22,636 | 18,545 |
| Inventories | | 135 | 106 |
| Trade and other exchange receivables | 11 | 2,713 | 2,891 |
| Trade and other non-exchange receivables | 11 | 10,255 | 7,618 |
| **Total current assets** | | **35,739** | **29,160** |
| **Total assets** | | **68,877** | **62,851** |
| **Members' funds** | | | |
| Contributions received | | 33,783 | 33,783 |
| Investment fair value reserve | | (287) | (218) |
| Retained earnings | | 20,378 | 10,547 |
| **Total members' funds** | **16** | **53,874** | **44,112** |
| **Liabilities** | | | |
| Employee entitlements | 14 | 255 | 310 |
| **Total non-current liabilities** | | **255** | **310** |
| Trade and other payables | 15 | 10,952 | 14,358 |
| Deferred income | | 1,620 | 1,521 |
| Employee entitlements | 14 | 2,176 | 2,550 |
| **Total current liabilities** | | **14,748** | **18,429** |
| **Total liabilities** | | **15,003** | **18,739** |
| **Total members' funds and liabilities** | | **68,877** | **62,851** |

**J VAN DER POEL, CHAIRMAN**
29 July 2021



**P SCHUYT, DIRECTOR**
29 July 2021

# Statement of Cash Flows

**For the year ended 31 May 2021**

| *In thousands of New Zealand dollars* | | Consolidated | |
|---|---|---|---|
| | **NOTE** | **2021** | **2020** |
| **Net cash from/(used in) operating activities** | | | |
| **Cash provided from:** | | | |
| Dairy industry good levies | | 69,785 | 67,856 |
| Biosecurity response levies collected | | 46,799 | 47,005 |
| Other funding | | 12,963 | 19,697 |
| Interest income received | | 79 | 209 |
| | | **129,626** | **134,767** |
| **Cash applied to:** | | | |
| Payments to suppliers and employees | | 76,744 | 82,810 |
| Biosecurity response levies paid | | 46,799 | 47,005 |
| Interest expense paid | | - | - |
| | | **123,543** | **129,815** |
| **Net cash from/(used in) operating activities** | **23** | **6,083** | **4,952** |
| **Net cash from/(used in) investing activities** | | | |
| **Cash provided from:** | | | |
| Proceeds from sale of biological assets | | 183 | 186 |
| Proceeds from sale of property, plant & equipment | | 135 | - |
| | | **318** | **186** |
| **Cash applied to:** | | | |
| Purchase of biological assets | | - | 117 |
| Acquisition of property, plant & equipment and intangibles | | 2,310 | 2,220 |
| | | **2,310** | **2,337** |
| **Net cash from/(used in) investing activities** | | **(1,992)** | **(2,151)** |
| **Net cash from/(used in) financing activities** | | **-** | **-** |
| **Net increase/(decrease) in cash balances** | | **4,091** | **2,801** |
| Cash balances at beginning of period | | 18,545 | 15,744 |
| **Closing cash balances** | **12** | **22,636** | **18,545** |

# Notes to the Financial Statements

**For the year ended 31 May 2021**

## A) Accounting Policies

### 1. Accounting entity

DairyNZ Incorporated ("DairyNZ") is an Incorporated Society incorporated under the Incorporated Societies Act 1908 and domiciled in New Zealand. DairyNZ's registered office is at the corner of Ruakura Road and Morrinsville Road, Hamilton. These financial statements have been prepared in accordance with the Financial Reporting Act 2013.

DairyNZ is primarily involved in the promotion and funding of dairy industry good activities. Accordingly, DairyNZ has designated itself as a public benefit entity for the purpose of financial reporting.

The consolidated financial statements of DairyNZ as at, and for the year ended 31 May 2021 comprise DairyNZ and subsidiaries (together referred to as the "Group") and the Group's interests in associates and jointly controlled entities.

### 2. Basis of preparation

**i) Statement of compliance**

These financial statements have been prepared in accordance with New Zealand Generally Accepted Accounting Practice ("NZ GAAP"). They comply with Public Benefit Entity International Public Sector Accounting Standards ("PBE IPSAS") and other applicable Financial Reporting Standards, as appropriate for Tier 1 not-for-profit public benefit entities. The Group qualifies as a Tier 1 reporting entity as total expenses for the Group exceeds $30 million.

The financial statements were approved by the Directors on 29 July 2021.

The accounting policies set out below have been applied consistently to all periods presented in these financial statements. The accounting polices have been applied consistently to Group entities.

**ii) Basis of measurement**

The financial statements have been prepared on the historical cost basis except for the following:

- Biological assets are measured at fair value less point-of-sale costs.
- Available for sale assets are measured at fair value.

**iii) Functional and presentation currency**

These financial statements are presented in thousands of New Zealand dollars, which is DairyNZ's functional currency.

**iv) Use of estimates and judgements**

Estimates and judgements are made by management in applying the Group's accounting policies.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised and in any future periods affected.

Significant areas involving high levels of estimation or judgement are:

- Note 7 - useful lives and impairment of property, plant and equipment.
- Note 8 - useful lives and impairment of intangible assets
- Note 14 - employee entitlements and long term benefits
- Note 18 - measurement of associates
- Note 22 - recognition of contingent liabilities

**V) NEW OR AMENDED STANDARDS ADOPTED IN CURRENT YEAR AND STANDARDS ISSUED BUT NOT YET EFFECTIVE**

i) PBE IFRS 9 'Financial instruments' which is effective for annual periods beginning on or after 1 January 2021. The standard will simplify the mixed measurement model as well as establish three primary measurement categories for financial assets: amortised cost, fair value through other comprehensive income and fair value through financial performance. The Group has assessed the impact of these standards and considers there to be minimal impact on the financial statements.

ii) PBE IPSAS 48 'Service Performance Reporting' which is effective for annual periods beginning on or after 1 January 2022, introduces requirements for preparation of a Statement of Service Performance. The Group is currently considering the disclosures that will be made.

# B) Performance

## 3. Revenue

Revenue is recognised and measured at the fair value of consideration received or receivable to the extent it is probable that the economic benefits will flow to the Group and the amount of revenue can be reliably measured.

The following specific recognition criteria in relation to the Group's revenue streams must also be met before revenue is recognised.

**i) Revenue from exchange transactions**

**Services**

Revenue from services rendered is recognised in proportion to the stage of completion of the transaction at the reporting date. The stage of completion is measured with reference to project milestones.

**Other income**

Other income comprises of the following;

- **Dividend income** - recognised as income on the date that the Group's right to receive payment is established.
- **Gain/(loss) on disposal of assets** - difference between the carrying value and proceeds from disposal of assets.
- **Movement in fair value of livestock** - movement in the fair value of the asset.
- **Surplus/(deficit) in associates** - recognised as share of surplus/(deficit) in associates.

*In thousands of New Zealand dollars* — Consolidated

| REVENUE FROM EXCHANGE TRANSACTIONS | 2021 | 2020 |
|---|---|---|
| Farm income | 2,099 | 2,243 |
| Research commercial income | 3,270 | 1,882 |
| Dairy Training course fees | 1,024 | 1,198 |
| Other revenue | 4,504 | 3,256 |
| **Total exchange revenue** | **10,897** | **8,579** |

### ii) Revenue from non-exchange transactions

Non-exchange transactions are those where the Group receives an inflow of resources (i.e. cash and other tangible or intangible items) but provides no (or nominal) direct consideration in return.

#### Industry good levy

DairyNZ has the power to raise a levy from dairy industry participants under the Commodities Levies Act 1990. Revenue from the industry good levy is recognised when the levy becomes receivable.

#### Government grants and funding

Inflow of resources from government grants and funding are recognised as revenue in the period for which the funding received is utilised. Funds that are not utilised as stipulated are either returned, resulting in the recognition of a non-exchange liability or recognised as income in advance to be utilised over future periods.

*In thousands of New Zealand dollars* — Consolidated

| REVENUE FROM NON-EXCHANGE TRANSACTIONS | 2021 | 2020 |
|---|---|---|
| **Levy income**<br>*Levy revenue is collected from farmers via the following companies* | | |
| Fonterra | 55,415 | 54,612 |
| Open Country Dairy | 6,251 | 5,617 |
| Synlait | 3,125 | 2,756 |
| Westland | 2,303 | 2,313 |
| Miraka | 988 | 947 |
| Oceania Dairy | 835 | 816 |
| Tatua | 566 | 547 |
| Other Dairy Companies | 636 | 645 |
| **Total levy income** | **70,119** | **68,253** |
| **Other funding** | | |
| MBIE research funding | 2,760 | 6,037 |
| Sustainable Farming fund | 2,097 | 852 |
| Other | 129 | 106 |
| **Total other funding** | **4,986** | **6,995** |
| **Total non-exchange revenue** | **75,105** | **75,248** |
| **Total revenue** | **86,002** | **83,827** |

## 4. Expenses

**Operational expenses by nature**

Operational expenses include costs incurred by DairyNZ and it's subsidiaries for undertaking research, development and extension activities. These activities are funded through levy investment and government funding.

Operating costs this year were lower than last year due to COVID-19 having an impact on costs overall and specifically, travel costs. Further expenditure reductions are due to the investment in the Joint Venture Pastoral Genomics reducing with the entity being wound down as well as a reduction in DairyNZ Incorporated investment expenditure with some external providers.

The following items of expenditure are included in operational expenses:

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Amortisation | 1,244 | 1,143 |
| KPMG - audit fees | 75 | 73 |
| KPMG - other services | 11 | 19 |
| Bad debts | 10 | - |
| Commodity levy collection fee | 351 | 360 |
| Depreciation | 1,568 | 1,874 |
| Directors' fees (includes directors of subsidiaries) | 607 | 596 |
| Directors' and governance expenses | 123 | 149 |
| Impairment of investments | 115 | 106 |
| Operating leases | 460 | 525 |
| Personnel expenses | 28,641 | 29,006 |
| Professional fees - legal | 132 | 141 |
| Provision for employee entitlements | (429) | 61 |

**Research and development**

Research and development costs are included in operational expenses. Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised when incurred.

The Group's research and development costs for the period were $43.34 million (2020; $53.33 million).

**Audit**

Other services include advice on accounting for the Biosecurity response levies and training courses attended by Board and Executive team. (2020; R&D tax credits and biosecurity response levies).

## 5. Net finance income

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Interest income on loans and receivables | 79 | 209 |
| **Finance income** | **79** | **209** |
| Interest payable on loans and payables | - | - |
| **Finance expense** | **-** | **-** |
| **Net finance income** | **79** | **209** |

**Finance income**

Finance income comprises interest income on funds invested. Interest income is recognised as it accrues, using the effective interest rate.

## 6. Income tax

Income derived from DairyNZ Incorporated and certain subsidiaries is exempt income under Section CW51 of the Income Tax Act 2007. Income derived from DairyNZ Limited has been granted exemption in accordance with Section CW49 (1) of the Income Tax Act 2007.

# C) Net Assets

## 7. Property, plant and equipment

**Consolidated**

*In thousands of New Zealand dollars*

| | LAND | BUILDINGS | LEASEHOLD IMPROVEMENTS | FARM DEVELOPMENT | PLANT AND EQUIPMENT | VEHICLES | TOTAL |
|---|---|---|---|---|---|---|---|
| **For the year ended 31 May 2020** | | | | | | | |
| **Cost or deemed cost** | | | | | | | |
| Balance at 1 June 2019 | 13,196 | 12,492 | 895 | 1,302 | 7,135 | 3,682 | 38,702 |
| Additions | - | 296 | - | 19 | 556 | 22 | 893 |
| Disposals | - | - | - | - | - | - | - |
| **Balance at 31 May 2020** | **13,196** | **12,788** | **895** | **1,321** | **7,691** | **3,704** | **39,595** |
| **Depreciation and impairment losses** | | | | | | | |
| Balance at 1 June 2019 | 146 | 6,992 | 855 | 843 | 5,347 | 2,290 | 16,473 |
| Depreciation for the year | - | 622 | 14 | 78 | 687 | 473 | 1,874 |
| Disposals | - | - | - | - | - | - | - |
| **Balance at 31 May 2020** | **146** | **7,614** | **869** | **921** | **6,034** | **2,763** | **18,347** |
| **Carrying Amount as at 31 May 2020** | **13,050** | **5,174** | **26** | **400** | **1,657** | **941** | **21,248** |
| | | | | | | | |
| **For the year ended 31 May 2021** | | | | | | | |
| **Cost or deemed cost** | | | | | | | |
| Balance at 1 June 2020 | 13,196 | 12,788 | 895 | 1,321 | 7,691 | 3,704 | 39,595 |
| Additions | - | 235 | - | 130 | 358 | 9 | 732 |
| Disposals | - | - | - | - | (14) | (764) | (778) |
| **Balance at 31 May 2021** | **13,196** | **13,023** | **895** | **1,451** | **8,035** | **2,949** | **39,549** |
| **Depreciation and impairment losses** | | | | | | | |
| Balance at 1 June 2020 | 146 | 7,614 | 869 | 921 | 6,034 | 2,763 | 18,347 |
| Depreciation for the year | - | 529 | 15 | 73 | 573 | 378 | 1,568 |
| Reversal of impairment loss | (146) | - | - | - | - | - | (146) |
| Disposals | - | - | - | - | (9) | (763) | (772) |
| **Balance at 31 May 2021** | **-** | **8,143** | **884** | **994** | **6,598** | **2,378** | **18,997** |
| **Carrying Amount as at 31 May 2021** | **13,196** | **4,880** | **11** | **457** | **1,437** | **571** | **20,552** |

**i) Recognition and measurement**

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses.

**ii) Depreciation**

Depreciation is recognised in the statement of comprehensive income on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. Land is not depreciated.

Where assets are purchased for a specific project use, they are depreciated over the life of the project where it is determined that there is no further benefit for the Group.

The estimated useful lives for the current and comparative periods are as follows:

- **Buildings** - 4-50 years
- **Leasehold improvements** - Lease period being 1 to 34 years
- **Farm development** - 5-20 years
- **Plant and equipment** - 2-12.5 years
- **Vehicles** - 2-10 years

Depreciation methods, useful lives and residual values are reassessed at each financial year-end.

**iii) Land**

Land is valued at cost. An independent valuation was obtained from Telfer Young at the end of the year. The land value has increased by $1.85M to $14.9M. Per the DairyNZ Land Valuation Policy, $0.15M of this increase was applied to offset previous losses that had been booked to the revaluation reserve.

**iv) Leased assets**

Leases in terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset. As at 31 May 2021, there are no finance leases.

**v) Impairment**

The carrying amount of all tangible and intangible assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). The Group recognises any impairment loss in the statement of comprehensive income and the carrying amount of assets are adjusted to the recoverable amount which is the higher of fair value less costs to sell or value in use.

## 8. Intangible assets

**Consolidated**

*In thousands of New Zealand dollars*

| | SOFTWARE |
|---|---|
| **For the year ended 31 May 2020** | |
| **Cost or deemed cost** | |
| Balance at 1 June 2019 | 9,517 |
| Additions | 1,328 |
| **Balance at 31 May 2020** | **10,845** |
| **Depreciation and impairment losses** | |
| Balance at 1 June 2019 | 4,637 |
| Amortisation for the year | 1,143 |
| Impairment loss | 70 |
| **Balance at 31 May 2020** | **5,850** |
| **Carrying Amount as at 31 May 2020** | **4,995** |
| | |
| **For the year ended 31 May 2021** | |
| **Cost or deemed cost** | |
| Balance at 1 June 2020 | 10,845 |
| Additions | 1,578 |
| **Balance at 31 May 2021** | **12,423** |
| **Depreciation and impairment losses** | |
| Balance at 1 June 2020 | 5,850 |
| Amortisation for the year | 1,244 |
| Impairment loss | - |
| **Balance at 31 May 2021** | **7,094** |
| **Carrying Amount as at 31 May 2021** | **5,329** |

**i) Acquired software**

Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. Computer software assets acquired in a non-exchange transaction are measured at fair value. These costs are amortised over their estimated useful lives, being up to five years. The amortisation period and amortisation method is reviewed at each financial year-end.

**ii) Developed software**

Costs associated with developing or maintaining computer software programmes are recognised as an expense as incurred. Costs that are directly associated with the development of identifiable and unique software products controlled by the Group and that will probably generate economic benefits exceeding costs beyond one year, are recognised as intangible assets. Costs include the employee costs incurred as a result of developing software and an appropriate portion of relevant overheads. Computer software development costs recognised as assets are amortised over their estimated useful lives, between 2 to 7 years. The amortisation period and amortisation method is reviewed at each financial year-end.

## 9. Biological assets

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Balance at 1 June | 1,427 | 1,398 |
| Increase due to acquisitions | - | 117 |
| Changes due to sales and natural increases | (18) | (403) |
| Change in fair value less estimated point-of-sale costs | 11 | 315 |
| **Balance at 31 May** | **1,420** | **1,427** |
| | | |
| Non-current | 1,420 | 1,427 |
| Current | - | - |
| **Number of Livestock held at 31 May** | **880** | **897** |

Biological assets comprise of livestock held by the Group and are measured at fair value less point-of-sale costs.

Point-of-sale costs include all costs that would be necessary to sell the assets. The fair value of livestock is based on the market price of livestock of similar age, breed and genetic make-up.

**Risks**

The Group is exposed to a number of risks related to its livestock.

**i) Regulatory and environmental risks**

The Group is subject to laws and regulations in New Zealand. The Group has established environmental policies and procedures aimed at compliance with local environmental and other laws.

**ii) Climate and other risks**

The Group's livestock are exposed to the risk of damage from climate changes, diseases and other natural forces. The Group has extensive processes in place aimed at monitoring and mitigating those risks, including regular industry pest and disease surveys.

## 10. Investments

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Available-for-sale financial assets | 1,253 | 1,322 |
| **Balance at 31 May** | **1,253** | **1,322** |

The Group's investments in equity securities are classified as available-for-sale financial assets within level 1 of the fair value hierarchy as quoted prices in an active market are available. Subsequent to initial recognition, they are measured at fair value by reference to published price quotations and changes therein, other than impairment losses, are recognised directly in equity. Gains or losses arising from changes in the fair value are recognised in other comprehensive income.

**Impairment**

Equity investments are deemed to be impaired whenever there is a significant or prolonged decline in fair value below the original purchase price. Any subsequent recovery of an impairment loss in respect of an investment in an equity instrument classified as available-for-sale is not reversed through the statement of comprehensive income. (For this purpose prolonged is regarded as any period longer than nine months and significant as more than 20 percent of the original purchase price of the equity instrument.)

## 11. Trade receivables

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Trade receivables due from related parties | 61 | 32 |
| Other trade receivables | 12,840 | 10,427 |
| Prepayments | 67 | 50 |
| **Balance at 31 May** | **12,968** | **10,509** |

**i) Recognition and measurement**

Trade receivables are initially measured at fair value, then adjusted for any impairment. Trade receivables classified as 'loan and receivable' financial instruments are stated at amortised cost using the effective interest method, less any impairment losses.

**ii) Impairment**

For trade receivables which are not significant on an individual basis, collective impairment is assessed on a portfolio basis based on number of days overdue, and taking into account the historical loss experience in portfolios with a similar amount of days overdue.

The recoverable amount of the Group's loans and receivables carried at amortised cost is calculated as the present value of estimated future cash flows, discounted at the original effective interest rate.

**iii) Biosecurity response levy receivable**

Other trade receivables includes an amount of $2,737,215 receivable from dairy processors in relation to the May 2021 biosecurity response levy. This amount is also payable to the Ministry for Primary Industries.(2020; $3,024,005).

## 12. Cash and cash equivalent

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Bank balances | 10,386 | 13,545 |
| Call deposits | 12,250 | 5,000 |
| **Cash and cash equivalents** | **22,636** | **18,545** |

Cash and cash equivalents are measured at amortised cost using the effective interest method. The effective interest rate on call deposits in 2021 was 0.82 percent (2020: 2.06 percent). The deposits had an average maturity of 126 days (2020: 83 days).

## 13. Operating leases

### Leases as lessee

Non-cancellable operating lease rentals are payable as follows:

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Less than one year | 502 | 301 |
| Between one and five years | 1,404 | 856 |
| More than five years | 455 | 183 |
| | **2,361** | **1,340** |

The Group leases a number of facilities under operating leases. The leases typically run for a period of 3-5 years, with an option to renew the lease after that date. Lease payments are increased periodically to reflect market rentals.

**Lease Payments**

Payments made under operating leases are recognised in the statement of comprehensive income on a straight-line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

## 14. Employee entitlements

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Non-current | 255 | 310 |
| Current | 2,176 | 2,550 |
| **Balance at 31 May** | **2,431** | **2,860** |

The provision for employee entitlement relates to at-risk incentive provisions, long service leave, accrued annual leave and retirement allowances.

**i) Long-term benefits**

The Group's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any related assets is deducted. The discount rate is 1.85% which was the 10-year government bond rate bill rate as at 31 May 2021. The calculation is performed using the projected unit credit method. Any actuarial gains or losses are recognised in the statement of comprehensive income in the period in which they arise.

**ii) Short-term benefits**

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A provision is recognised for the amount expected to be paid under short-term cash bonus plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

**iii) Defined contribution plans**

Obligations for contributions to defined contribution pension plans are recognised as an expense in the statement of comprehensive income when they are due.

## 15. Trade and other payables

| | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Trade payables due to related parties | 33 | 59 |
| Other trade payables | 7,729 | 10,922 |
| Non-trade payables and accrued expenses | 3,190 | 3,377 |
| **Balance at 31 May** | **10,952** | **14,358** |

**i) Recognition and measurement**

Trade payables are recognised at cost when the company becomes obliged to make future payments resulting from the purchase of goods and services. Trade payables are classed as an "other amortised cost financial liability".

**ii) Provisions**

A provision is recognised if, as a result of a past event the Group has a present legal or constructive obligation that can be estimated reliably and it is probable that an outflow of economic benefits will be required to settle the obligation.

## 16. Members' funds and reserves

DairyNZ's capital is its equity (or members' funds) which comprise retained earnings, fair value reserves and contributions received. Equity is represented by net assets.

DairyNZ manages its revenues, expenses, assets, liabilities, and general financing dealings prudently. DairyNZ's equity is largely managed as a by-product of managing income, expenses, assets, liabilities, and compliance with the Directors instructions.

The objective of managing DairyNZ's equity is to ensure that DairyNZ effectively achieves its goals and objectives for which it has been established, while remaining a going concern.

**Fair value reserve**

The fair value reserve comprises the cumulative net change in the fair value of available-for-sale financial assets until the investment is derecognised or impaired.

The Group is not subject to any externally imposed capital requirements.

The Group's policies in respect of capital management and allocation are reviewed regularly by the Directors.

There have been no material changes in the Group's management of capital during the period.

## 17. Subsidiaries

Subsidiaries are entities controlled by the Group. Control exists when the Group has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. Benefits from activities may be both of a financial and non-financial nature. Benefits of a non–financial nature could be if those benefits are meeting the Group's social objectives. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

The Group has the following significant subsidiaries:

| NAME | COUNTRY | CLASS OF SHARE | VOTING INTEREST HELD % | | BALANCE DATE | PRINCIPAL ACTIVITY |
|---|---|---|---|---|---|---|
| | | | 2021 | 2020 | | |
| DairyNZ Limited | NZ | Ordinary | 100 | 100 | 31-May | Dairy industry research, development and extension |
| Dairy Training Limited | NZ | Ordinary | 100 | 100 | 31-May | Dairy industry training |
| New Zealand Animal Evaluation Limited | NZ | Ordinary | 100 | 100 | 31-May | Maintenance of a national breeding index |
| Dairy Insight (PGGR Consortia) Limited | NZ | Ordinary | 100 | 100 | 31-May | Greenhouse gas emission research |
| Insight Genomics Limited | NZ | Ordinary | 100 | 100 | 31-May | Pastoral genomics ryegrass research |
| DairyNZ Accreditation Limited | NZ | Ordinary | 100 | 100 | 31-May | Accreditation of dairy industry services |
| Data Linker Limited | NZ | Ordinary | 50 | 50 | 31-May | Industry database |

**i) Transactions eliminated on consolidation**

Intra-group balances, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

## 18. Joint ventures and associates

### a) Joint ventures

*In thousands of New Zealand dollars*

| | PASTORAL GREENHOUSE GAS RESEARCH CONSORTIUM | PASTORAL GENOMICS LTD | TOTAL (SHARE IN JOINT VENTURE) |
|---|---|---|---|
| **For the year ended 31 May 2020** | | | |
| Ownership | 28.59% | 49.66% | |
| Current assets | 1,309 | 1,292 | 2,601 |
| Non-current assets | - | - | - |
| **Total assets** | **1,309** | **1,292** | **2,601** |
| Current liabilities | 321 | 1,043 | 1,364 |
| Non-current liabilities | - | - | - |
| **Total liabilities** | **321** | **1,043** | **1,364** |
| Revenues | 665 | 762 | 1,427 |
| Expenses | (1,055) | (2,368) | (3,423) |
| **Profit/(loss)** | **(390)** | **(1,606)** | **(1,996)** |
| | | | |
| **For the year ended 31 May 2021** | | | |
| Ownership | 27.06% | 49.66% | |
| Current assets | 638 | 622 | 1,260 |
| Non-current assets | - | - | - |
| **Total assets** | **638** | **622** | **1,260** |
| Current liabilities | 144 | 414 | 558 |
| Non-current liabilities | - | - | - |
| **Total liabilities** | **144** | **414** | **558** |
| Revenues | 596 | 1 | 597 |
| Expenses | (1,891) | (42) | (1,933) |
| **Profit/(loss)** | **(1,295)** | **(41)** | **(1,336)** |

**Joint ventures**

Joint ventures are those entities over whose activities the Group has joint control, established by contractual agreement and requiring unanimous consent for strategic financial and operating decisions. Joint ventures are accounted for using the proportionate consolidation method whereby the Group's share of each of the assets, liabilities, income and expenses of a jointly controlled entity is combined line by line with similar items in the Group's financial statements. The liabilities recognised include the Group's share of those liabilities for which the Group is jointly liable.

**b) Associates**

*In thousands of New Zealand dollars*

| | SDH GP LTD |
|---|---|
| **For the year ended 31 May 2020** | |
| Ownership | 37.50% |
| Current assets | 790 |
| Non-current assets | 20,646 |
| **Total assets** | **21,436** |
| Current liabilities | 39 |
| Non-current liabilities | 8,866 |
| **Total liabilities** | **8,905** |
| Revenues | 426 |
| Expenses | (705) |
| **Profit/(loss)** | **(279)** |
| Share of profit/(loss) | (105) |
| **Value of investment** | **4,699** |

| | |
|---|---|
| **For the year ended 31 May 2021** | |
| Ownership | 37.50% |
| Current assets | 573 |
| Non-current assets | 20,453 |
| **Total assets** | **21,026** |
| Current liabilities | 28 |
| Non-current liabilities | 8,774 |
| **Total liabilities** | **8,801** |
| Revenues | 422 |
| Expenses | (728) |
| **Profit/(loss)** | **(306)** |
| Share of profit/(loss) | (115) |
| **Value of investment** | **4,584** |

**Equity accounted associates**

Associates are those entities in which the Group has significant influence, but not control, over the financial operating policies. Investments in associates are accounted for using the equity method and are recognised initially at cost. The cost of the investment includes transaction costs. The consolidated financial statements include the Group's share of the profit or loss and other comprehensive income of equity accounted investees.

**Ospri Limited (associate)**

DairyNZ has a 45.45% shareholding in OSPRI Limited which was established on 30 May 2013. This company operates the national animal identification and tracking scheme for cattle and deer.

OSPRI Limited is an associate however is not equity accounted as it is a charitable entity - registration number CC49247. DairyNZ will not receive any future tangible financial benefit from OSPRI Limited or be entitled to any distributions on winding up.

# D) Other disclosures

## 19. Financial instruments

**Risks**

Exposure to currency, interest rate and credit risk arises in the normal course of the Group's business. Derivative financial instruments are used as a means of reducing exposure to fluctuations in foreign exchange rates and interest rates. While these financial instruments are subject to the risk of market rates changing subsequent to acquisition, such changes would generally be offset by opposite effects on the items being hedged.

**i) Credit risk**

Credit risk is the risk that the counterparty to a transaction with the Group will fail to discharge its obligations, causing the Group to incur a financial loss. The Group is exposed to credit risk through the normal trade credit cycle and advances to third parties. No collateral is required in respect of financial assets. Management has a credit policy in place and the exposure to credit risk is monitored on an ongoing basis.

Reputable financial institutions are used for investing and cash handling purposes. The maximum exposure to credit risk is represented by the carrying value of each financial asset in the Statement of Financial Position.

The status of trade receivables at the reporting date is as follows:

*In thousands of New Zealand dollars* — Consolidated

| | GROSS RECEIVABLE 2021 | IMPAIRMENT 2021 | GROSS RECEIVABLE 2020 | IMPAIRMENT 2020 |
|---|---|---|---|---|
| **Trade receivables** | | | | |
| Not past due | 12,320 | - | 10,094 | - |
| Past due 0-30 days | 330 | - | 161 | - |
| Past due 31-120 days | 129 | - | 92 | - |
| Past due 121-360 days | 122 | - | 112 | - |
| Past due more than 1 year | - | - | - | - |
| **Balance at 31 May** | **12,901** | **-** | **10,459** | **-** |

*In thousands of New Zealand dollars*

**ii) Market risk**

**a) Foreign currency risk**

Foreign currency risk is the risk that the value of the Group's assets and liabilities will fluctuate due to changes in foreign exchange rates. The Group has no current exposure to foreign currency risk.

**b) Interest rate risk**

Interest rate risk is the risk that the value of the Group's assets and liabilities will fluctuate due to changes in market interest rates. The Group is exposed to interest rate risk primarily through its cash balances.

*In thousands of New Zealand dollars* Consolidated

| | 2021 | | | 2020 | | |
|---|---|---|---|---|---|---|
| | BALANCE | MATURITY DATE | EFFECTIVE INTEREST RATE | BALANCE | MATURITY DATE | EFFECTIVE INTEREST RATE |
| Short Term Deposit | 4,500 | 21/06/2021 | 0.65% | 5,000 | 27/07/2020 | 1.21% |
| Short Term Deposit | 3,000 | 25/06/2021 | 0.59% | | | |
| Short Term Deposit | 4,750 | 25/08/2021 | 0.50% | | | |
| | **12,250** | | | **5,000** | | |
| **Average effective interest rate** | | | **0.58%** | | | **1.21%** |

**Sensitivity analysis**

In managing cash flows the Group aims to reduce the impact of short-term fluctuations on the Group's earnings by investing in short term deposits. Over the longer-term, however, permanent changes in interest rates will have an impact on profit. A decrease in interest rates of one percent would reduce interest income by $159,545 (2020; $147,241). Cash deposits made on DairyNZ's behalf are made only with New Zealand registered banks with an appropriate credit rating.

## 20. Capital commitments

As at 31 May 2021, DairyNZ Group has capital commitments totalling $437,235. These include development of the NZAEL State-of-the-Art database ($62,639), Quality Data ($72,067), Dairy Industry Good Animal Database ($67,285), core systems upgrade ($35,600), other plant & equipment ($140,990) and farm developments ($58,654). (2020; $549,095).

## 21. Committed funds

The Group is contracted to provide funds to a number of projects on a multiyear basis, in exchange for services provided, however, certain conditions in the contract must be met annually before the funds are paid out. Funds committed for future projects which are subject to certain conditions being met are as follows:

*In thousands of New Zealand dollars* Consolidated

| | 2021 | 2020 |
|---|---|---|
| Less than one year | 16,721 | 17,437 |
| Between one and five years | 59,568 | 72,750 |
| More than five years | - | - |
| | **76,289** | **90,187** |

## 22. Contingent liabilities

The Group recognises a contingent liability when there is a possible obligation that arises from past events, and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group.

The Group has agreed to co-fund a number of industry good projects, but the providers of these projects are required to secure funding from other sources before DairyNZ will provide the agreed funding. As this ability to secure other funding is outside the control of DairyNZ, DairyNZ's committed funding is recognised as a contingent liability.

In the normal course of business DairyNZ, as an investor, agrees to co-fund industry good projects pending the providers ability to secure funding from other sources.

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Less than one year | - | 187 |
| Between one and five years | - | - |
| More than five years | - | - |
| | **-** | **187** |

## 23. Reconciliation of the profit for the period with the net cash from operating activities

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| **Profit/(loss) for the period** | **9,831** | **(143)** |
| **Adjustments for:** | | |
| Depreciation | 1,568 | 1,874 |
| Amortisation of intangible assets | 1,244 | 1,143 |
| Net change in fair value of biological assets | (176) | (98) |
| Gain on sale of fixed assets | (130) | - |
| Loss on sale of fixed assets | - | 71 |
| Impairment reversal of fixed assets | (146) | - |
| Impairment of investment in joint ventures and associates | 115 | 120 |
| | **2,475** | **3,110** |
| Change in inventories | (30) | 6 |
| Change in trade receivables | (2,459) | 1,111 |
| Change in trade and other payables | (3,305) | 806 |
| Change in provisions and employee benefits | (429) | 62 |
| | **(6,223)** | **1,985** |
| **Net cash from operating activities** | **6,083** | **4,952** |

## 24. Related parties

**Parent and ultimate controlling party**

The immediate parent and controlling party of the Group is DairyNZ Incorporated.

**Transactions with key management personnel**

Key management personnel compensation comprised:

| *In thousands of New Zealand dollars* | Consolidated | |
|---|---|---|
| | **2021** | **2020** |
| Employee benefits - short term | 2,879 | 2,969 |
| | **2,879** | **2,969** |

DairyNZ Directors also act as Directors and are Shareholders of the following various entities, with which the Group transacts with as part of ordinary business:

| | |
|---|---|
| **H. Anderson** | Director of the National Institute of Water and Atmospheric Research (NIWA) and New Zealand Forest Research Institute Limited. |
| **J. Coughlan** | None. |
| **J. Rowarth** | Director of Ravensdown Limited. Shareholder of Fonterra Co-operative Limited, Livestock Improvement Corporation Limited and Ravensdown Limited. |
| **E. Cook** | Shareholder of Farmlands and Ravensdown Limited. |
| **J. van der Poel** | Shareholder of Fonterra Co-operative Limited, Livestock Improvement Corporation Limited, Ravensdown Limited and Ballance Agri-Nutrients Limited. |
| **P. Schuyt** | Director of Tatua Co-operative Dairy Company Limited. |
| **C. Glass** | Director of Pasture Conferences Limited and CEO of Dairy Holdings Limited. Shareholder of Fonterra Co-operative Limited, Livestock Improvement Corporation Limited and Ravensdown Limited. |
| **T. Brown** | Shareholder of Fonterra Co-operative Limited, Livestock Improvement Corporation Limited and Ballance Agri-Nutrients Limited. |
| **M. Macleod** | Director of the National Institute of Water and Atmospheric Research (NIWA) |

**Other related party transactions**

DairyNZ enters into funding and investment transactions (programme expenses) with its subsidiaries, associates and joint ventures in the ordinary course of business.

*In thousands of New Zealand dollars*

| | TRANSACTION VALUE | | BALANCE OUTSTANDING | |
|---|---|---|---|---|
| | **2021** | **2020** | **2021** | **2020** |
| Pastoral Genomics Limited | - | 1,302 | - | 651 |
| Pastoral Greenhouse Gas Research Consortia | 800 | 800 | 400 | 400 |
| Tbfree NZ Ltd (Ospri) | 14,500 | 14,500 | 1,390 | 1,390 |
| | **15,300** | **16,602** | **1,790** | **2,441** |

**Other related party transactions**

All transactions and outstanding balances with these related parties are to be settled in cash within six months of the reporting date. None of the balances are secured.

*In thousands of New Zealand dollars* **Receivables**

| | TRANSACTION VALUE | | BALANCE OUTSTANDING | |
|---|---|---|---|---|
| | 2021 | 2020 | 2021 | 2020 |
| NIWA | 179 | 252 | 6 | - |
| Pastoral Greenhouse Gas Research Consortia (joint venture) | 72 | 421 | 6 | - |
| Ravensdown Limited | 1 | 1 | 1 | - |
| Southern Dairy Hub (associate) | 10 | 10 | 12 | - |
| Tatua Co-op Dairy Co. Ltd | 934 | 562 | 36 | 32 |
| | **1,196** | **1,246** | **61** | **32** |

*In thousands of New Zealand dollars* **Payables**

| | TRANSACTION VALUE | | BALANCE OUTSTANDING | |
|---|---|---|---|---|
| | 2021 | 2020 | 2021 | 2020 |
| NIWA | 321 | 107 | 4 | 52 |
| New Zealand Forest Research Institute* | 69 | 69 | 7 | - |
| Pasture Conferences Ltd | - | 210 | - | - |
| Ravensdown Limited | 10 | 3 | - | - |
| Southern Demonstration and Research Farm Limited | 250 | 254 | 22 | 7 |
| | **650** | **643** | **33** | **59** |

**New Zealand Forest Research Institute is no longer a related party at 31 May 2021.*

## 25. Subsequent events

There were no subsequent events that have occurred since balance date.

## 26. Other disclosures

**i) Biosecurity response levy**

DairyNZ acts as an agency that collects Biosecurity Response Levies from milk processors and passes them on to MPI in the month of collection. All Biosecurity Response Levy cash collected and paid is accounted for in the balance sheet and is clearly disclosed in the Statement of Cashflows. DairyNZ choose not to retain a commission for their services with regards to the collection and payment of the Biosecurity Response Levy, therefore there is no impact on the Statement of Comprehensive Income.

## Income & Expenditure Plan 2021/22

| | 2022 BUDGET | 2021 ACTUAL | MOVEMENT |
|---|---|---|---|
| **Revenue** | | | |
| Milksolids levy | 68,937 | 70,119 | (1,182) |
| MBIE partnership | 1,135 | 2,760 | (1,625) |
| Other income | 13,260 | 13,202 | 58 |
| | **83,332** | **86,081** | **(2,749)** |
| **Operational Expenses** | | | |
| Auditors remuneration | 70 | 75 | 5 |
| Building costs | 888 | 965 | 77 |
| Commodity levy collection fee | 346 | 351 | 5 |
| Computing costs | 2,314 | 2,026 | (288) |
| Depreciation and amortisation | 3,146 | 2,812 | (334) |
| Directors fees | 448 | 467 | 19 |
| Directors governance expenses | 129 | 260 | 131 |
| External services (legal) | 73 | 132 | 59 |
| Office costs | 177 | 474 | 297 |
| Other operating costs | 5,127 | 5,133 | 6 |
| Operating leases | 486 | 460 | (26) |
| Personnel expenses | 29,151 | 28,307 | (844) |
| Provider services and sub-contracts | 39,032 | 33,611 | (5,421) |
| Repairs and maintenance | 370 | 441 | 71 |
| Travel costs | 846 | 736 | (110) |
| **Total operational expenses** | **82,603** | **76,250** | **(6,353)** |
| **Profit/(Loss) before income tax** | **729** | **9,831** | **(9,102)** |

| LEVY FUNDS INVESTMENT BY COMMITMENT | 2022 BUDGET | 2021 ACTUAL | MOVEMENT |
|---|---|---|---|
| Protect and nurture the environment | 12,786 | 9,772 | (3,014) |
| Competitive and resilient dairy farming business | 38,458 | 30,944 | (7,515) |
| Leading in on-farm animal care | 2,757 | 4,677 | 1,921 |
| Build great workplaces for NZ's talented workforce | 13,725 | 11,750 | (1,975) |
| Grow vibrant and prosperous communities | 1,997 | 1,739 | (258) |
| **Total investment expenses** | **69,722** | **58,882** | **(10,840)** |

# How We Share Information With You

**DairyNZ works with farmers to tell the story of New Zealand dairy to media and the public through our media activities and The Vision is Clear. We also work to provide you with information and solutions to help you everyday on-farm.**

## DairyNZ website & apps

**569,311**
**website users**

During 2020/21, DairyNZ website users increased by 3%

**81,096**
**visitors**

to **thevisionisclear.co.nz** during 2020/21.

**5,833**
**downloads**

of DairyNZ apps which provide farming tools and resources.

## Social media followers

| 25,156 | 11,512 | 11,984 | 4,531 |
|---|---|---|---|
| FACEBOOK | LINKEDIN | TWITTER | INSTAGRAM |


**Increase in followers across DairyNZ's social media channels***

*This excludes The Vision is Clear

THE VISION IS CLEAR

On average, posts on The Vision is Clear Facebook page reached **279,000** people per month, and an average of 21,000 people engaged with the posts each month.

On average, posts on The Vision is Clear Instagram page reached **44,000** people each month, with an average of 3,000 engagements each month.

## Media

**95%**
**Positive/Neutral Media Reporting**

of dairy farming (across all forms of media) on average.

**11%**
**of all Dairy news coverage**

originates from DairyNZ, which makes DairyNZ one of the largest suppliers of daily stories to media.

**30K+**
**people reached**

through 'The Vision is Clear' media stories on NZ Herald online **per month.**

**DAIRYNZ**

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DairyNZ