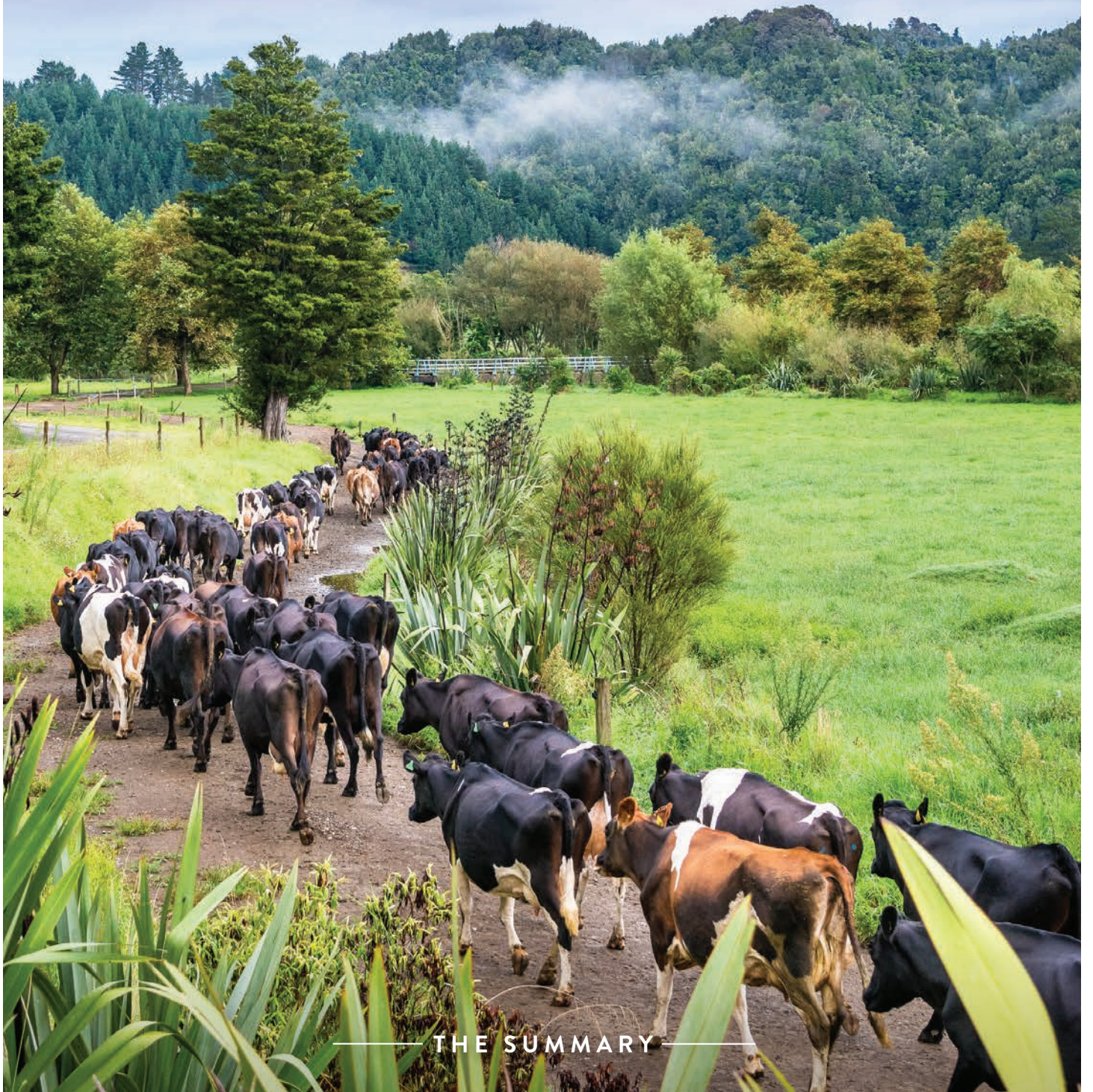


ANNUAL REPORT

2017/18

THE SUMMARY



In your region 2017/18

NORTHLAND

A three-year study at the Northland Agricultural Research Farm, supported by DairyNZ and other sponsors, has compared bought-in feed systems with self-contained feed systems. The first two years found that when the cost of supplementary feed and cropping are considered, a grass-only system may have similar, or better, profitability to a system using palm kernel expeller (PKE). However, 2017/18 showed a significant advantage to using PKE due to a challenging winter/spring.

WAIKATO

DairyNZ's Waikato team carried out more than 750 touching base visits in 2017/18, to provide support to farmers managing seasonal issues and adverse events, as well as connect with those often unable to attend discussion groups. DairyNZ is also a key partner with Owl Farm at St Peter's School and the P3 Trust Hauraki, which both provide critical data analysis of performance, which is available to farmers.

TARANAKI

In 2017/18, Taranaki was affected by a severe drought which saw farmers face a feed shortage. The situation was compounded when Cyclone Gita hit the region in February. DairyNZ's Taranaki team worked closely with a number of organisations to coordinate support and advice for farmers. DairyNZ, in conjunction with the Rural Support Trust, held nine workshops across the region to help farmers and answer their questions. The workshops were attended by 265 farmers.

WEST COAST

Top of the South Island farmers are now able to benchmark their performance against other farms in the region for the first time. In 2017/18, 20 additional farms signed-up and entered their data in DairyNZ's DairyBase system. dairynz.co.nz/dairybase

BAY OF PLENTY

DairyNZ's Bay of Plenty team were involved in field testing and initial user acceptance of Farm Gauge, a new online tool to help farmers assess their business. The team worked closely with the project's developers and hosted a series of workshops throughout the region to both road test and gather feedback to enhance the farmer experience when using the tool.

LOWER NORTH ISLAND

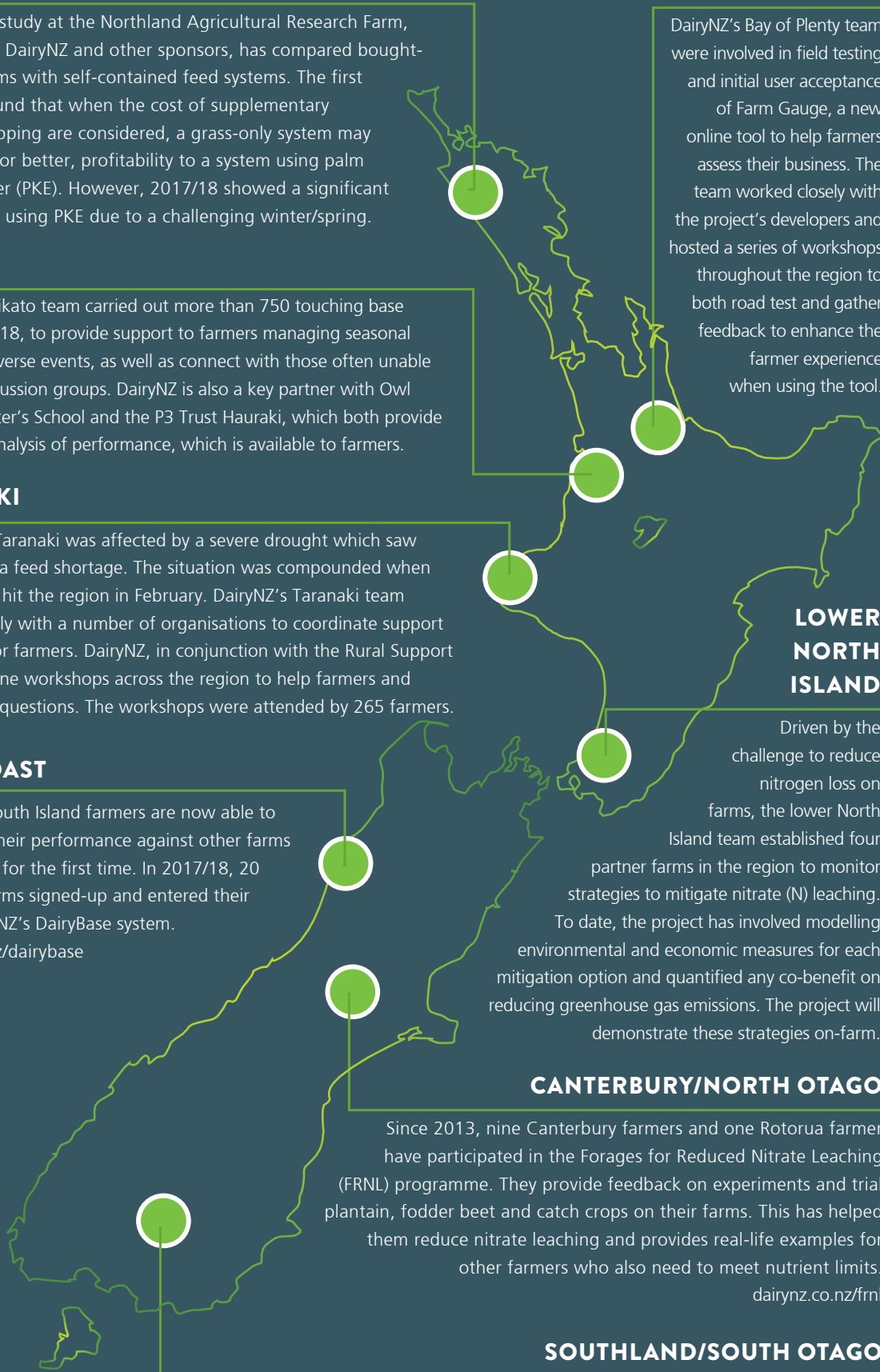
Driven by the challenge to reduce nitrogen loss on farms, the lower North Island team established four partner farms in the region to monitor strategies to mitigate nitrate (N) leaching. To date, the project has involved modelling environmental and economic measures for each mitigation option and quantified any co-benefit on reducing greenhouse gas emissions. The project will demonstrate these strategies on-farm.

CANTERBURY/NORTH OTAGO

Since 2013, nine Canterbury farmers and one Rotorua farmer have participated in the Forages for Reduced Nitrate Leaching (FRNL) programme. They provide feedback on experiments and trial plantain, fodder beet and catch crops on their farms. This has helped them reduce nitrate leaching and provides real-life examples for other farmers who also need to meet nutrient limits. dairynz.co.nz/frnl

SOUTHLAND/SOUTH OTAGO

In July 2017, the Southern Dairy Hub opened and research got underway. During the 2017/18 season DairyNZ researched the impact of fodder beet and kale on cow health, reproductive performance and milk production. Four farmlets were established to address key issues related to wintering, nutrient loss reduction and fodder beet. DairyNZ and AgResearch are the principal shareholders in Southern Dairy Hub, along with local farmers and businesses through the Southern Dairy Development Trust (SDDT). southerndairyhub.co.nz



DAIRY TOMORROW TO SET SECTOR UP FOR FUTURE

Another year in the dairy sector has been and gone and 2017/18 will be remembered by many of us for the rise of climate change and the discovery of mycoplasma bovis in New Zealand. While vastly different issues, both have had profound impacts on many of you and dominated the media cycle.

Every season throws a range of challenges at us – whether it's farming under a reduced milk price, managing difficult weather conditions, working toward environmental goals or, like this year, handling a significant biosecurity issue.

DairyNZ and your levy plays an important role in delivering research, innovation, advice and projects which will set the dairy sector up for the future and help manage current issues.

DAIRY STRATEGY LAUNCH

A highlight of 2017/18 was the release of the new dairy sector strategy, *Dairy Tomorrow*.

Launched in November 2017, the new strategy was driven by the need to keep pace with the changing nature of our sector. Our former chairman Michael Spaans was heavily involved in developing the new *Dairy Tomorrow* strategy and we will continue his great work as we roll it out this year.

Dairy Tomorrow is the plan which will take New Zealand dairy into the future, as a high-performing, sustainable and responsible sector. DairyNZ investments are driven by the strategy. *Dairy Tomorrow* has six commitments to achieve in the coming decade. These are:

- to protect and nurture the environment for future generations
- to build the world's most competitive and resilient dairy farm businesses
- to produce the highest quality and most valued dairy nutrition
- to be world leading in on-farm animal care
- to build great workplaces for New Zealand's most talented workforce
- to help grow vibrant, prosperous communities.

These commitments are crucial for dairy's future. Achieving them will take collaboration by everyone in the sector – from dairy farmers through to the wider primary sector, dairy leaders and government.



Jim van der Poel

The *Dairy Tomorrow* strategy continues the good work being done by dairy farmers who are busy building competitive businesses, producing quality product and leading in sustainability, animal care, employment and in the community.

LOOKING AHEAD

Finally, I want to thank you all for contributing to our fantastic industry. Dairy farming really is a great career, great lifestyle, great business and a great opportunity for farming families to make a huge contribution to New Zealand. Even though dairying can be tough at times, I hope you feel the same passion I do for this industry.

**JIM VAN DER POEL
CHAIRMAN, DAIRYNZ**

MYCOPLASMA BOVIS FUNDING

The *Mycoplasma bovis* (*M. bovis*) issue has been a big challenge for our sector this year, and we have responded with significant resourcing to support MPI and farmers. The funding of this work is complex. DairyNZ and Beef + Lamb are both contributing to support farmers impacted by *M. bovis* and the activity associated with eradication and research.

Details of this cost share are still being worked through, but the GIA (Government Industry Agreement for Biosecurity Readiness and Response Deed) is crucial to determining the funding mechanism, and a biosecurity incursion levy will likely be required to recover some of the costs incurred by *M. bovis*.

Read more about the *M. bovis* work on pg 4, 5 and 11.

WHAT A YEAR THAT WAS...

Dairy is a sector which is dynamic, challenging and always at the forefront of change. And each year we all balance the need to plan for the future, while acting in the here and now.

For me, 2017/18 was a big year for DairyNZ, as we represented our levy payers in everything from research, farm practice advice and environmental change, through to policy, public perception and industry events.

This year, DairyNZ has had a significant change in terms of how our investments are made. The introduction of the *Dairy Tomorrow* strategy means realigning our priorities to it, to support achieving its six commitments. This was reinforced by an internal restructure, so our teams are delivering results which align to the *Dairy Tomorrow* objectives.

This year's highlights are once again as varied as our scope of work.

I will begin with one of the year's biggest topics – *Mycoplasma bovis* (*M. Bovis*). Over the last year we've all learnt how important it is to value our biosecurity systems and to support one another through one of the biggest challenges our sector and farmers have faced in a long time.

DairyNZ has committed significant resources to the fight to eradicate *M. bovis* – including 40 DairyNZ staff who are dedicated to working on the issue, from liaison with Ministry for Primary Industries, significant farmer support and expert technical advice, through to communications with media and stakeholders. And the job isn't over – I expect *M. Bovis* to remain a significant focus for us in the next year too.

RESEARCH HIGHS

This year we have continued programmes of research which will deliver invaluable information for dairy farmers.

The Forages for Reduced Nitrate Leaching (FRNL) research is continuing to look into how feeding diverse pasture species and crops can reduce nitrate leaching. Plantain and fodder beet appear to be the best options, while catch crops following winter crops appear to use water and nitrogen (N) in the soil over winter, reducing the risk of N leaching.

Results from research like FRNL will help set our farm systems up for the future.

Another levy-funded DairyNZ project, Leap21, got underway last season and explores future dairy systems. This is cutting-edge thinking - the team involved are designing resilient dairy farm systems which make the best products in the world, while enhancing the environment and leading in



Tim Mackle

“OVER THE LAST YEAR WE’VE ALL LEARNT HOW IMPORTANT IT IS TO VALUE OUR BIOSECURITY SYSTEMS AND TO SUPPORT ONE ANOTHER THROUGH ONE OF THE BIGGEST CHALLENGES OUR SECTOR AND FARMERS HAVE FACED IN A LONG TIME.”

animal care, along with being sought-after as workplaces. It's worth checking out, visit dairynz.co.nz/leap21.

OUR PEOPLE

Of course, dairy farming is alive and well thanks to the tremendous talent working across the sector.

In 2017/18, we invested \$7.4m into supporting farm teams – this includes training and skills programmes, farmer wellness initiatives and resources to enable quality work environments.

Some of the investment also goes into getting people into dairy farming. This is vital, because it is estimated that by 2025, we will need 50,000 people in the dairy sector workforce, many of whom will need tertiary training of level 4 or above.

As we head through the 2018/19 season, it's important we remember that people are the core of our dairy businesses – and as we work through issues like *M. bovis*, variable milk prices and climate, we need to look after ourselves first and foremost.

I want to thank our staff and board for their dedication, as well as our partners, but most importantly our farmers for their engagement and support.

TIM MACKLE
CHIEF EXECUTIVE, DAIRYNZ

SUPPORTING FARMERS THROUGH MYCOPLASMA BOVIS

Since *Mycoplasma bovis* (*M. bovis*) was first detected in New Zealand in July 2017, DairyNZ has been actively involved in many areas of the response.

It has been – and continues to be – a significant large-scale response. Hundreds of thousands of tests took place during the first year, including the first of two rounds of national bulk milk testing from every dairy farm nationwide.

After much consideration, in May 2018 DairyNZ chairman Jim van der Poel stood beside the government and announced the decision to work towards eradicating *M. bovis* from New Zealand.

At the time, the disease was on less than 1 percent of dairy farms, and the government and dairy sector opted for its only chance at eradication.

Forty DairyNZ staff are working across the country to assist with the *M. bovis* response, alongside the lead agency,

Ministry for Primary Industries (MPI), and other organisations to support farmers both on the ground and at governance level.

Efforts have involved assisting at regional headquarters in Invercargill, Ashburton and Hamilton, helping affected farmers with feed budgets, coordinating feed and putting systems in place to farm under movement restrictions.

GOVERNANCE INVOLVEMENT

DairyNZ has been working at a governance and technical level across a range of workstreams, alongside MPI, at the national control centre for *M. bovis*. DairyNZ represents dairy farmers in discussions involving the processes for affected farmers, to help ensure solutions are practical.

Another focus for DairyNZ is ensuring all farmers have access to the right information to make informed decisions to protect their farms and animals.

DairyNZ has connected farmers nationwide with the latest information – using public meetings, discussion groups, e-newsletters, webinars, the DairyNZ website, social media and rural media.

WHERE TO FROM HERE?

DairyNZ continues to work closely with key stakeholders and farmers, as the government and the sector work towards eradicating *M. bovis*.

Along with being the dairy farmer voice at governance level and providing good practice information to farmers, DairyNZ staff are also helping affected farmers with the recovery phase as they restock their farms.

DairyNZ, in collaboration with the government and Beef + Lamb, is committed to contributing funds to support farmers impacted by *M. bovis*. At the time of publishing, the details were yet to be confirmed.

dairynz.co.nz/mbovis

dairynz.co.nz/biosecurity



DairyNZ has connected farmers with the latest information on *mycoplasma bovis*.

GIA FOR BIOSECURITY IN PROGRESS

With the support of dairy farmers, DairyNZ has applied to become a Signatory to the Government Industry Agreement for Biosecurity Readiness and Response Deed (the GIA).

This followed two rounds of farmer consultation in late 2017 and early 2018. The biosecurity response levy agreed to in the consultation will see no levy collected until the sector commits to a significant incursion response, when DairyNZ would contribute under a pre-agreed cap.

The over-arching GIA aim is to protect the future of farming in New Zealand by having the right biosecurity readiness and response arrangements in place to address exotic pests and diseases that impact on production and milk quality.

By being a GIA signatory DairyNZ, on behalf of dairy farmers, will have more of a say on biosecurity decision-making and have up-front conversations with Government and other industry signatories about respective cost shares.

DairyNZ is expected to become a GIA Signatory by the end of 2018.

dairynz.co.nz/gia

PROTECT
OUR FUTURE.

FARMERS OPEN THEIR BOOKS

Since 2016, around 20 dairy farmers with a low cost of production (per kg milksolids), made their farm budgets available online at dairynz.co.nz to help others benchmark and consider options during a period of low milk prices.

These budget case studies describe where the farmers are spending money and the reasons behind key management decisions. In 2017/18 five more farmers joined the project, adding diversity to the case studies and allowing more farmers access to numbers they can relate to.

New farmers from Waikato, Lower North Island and Canterbury have joined existing top performers to share their forecast budgets.

Most regions are now represented and the farms include a range of operating structures, from businesses with an owner-operator, to those with a sharemilker or contract milker. They also include varying amounts of feed inputs, with organic farms and those milking once-a-day represented.

These farms were all selected because they are top-performing farms with a focus on keeping their costs low. The farms share many common factors and all are focused on



Alan Davie-Martin, one of the budget case study farmers who got involved in 2017/18.
Photo credit: Elise Rutherford Photography.

farming for the long-term and, as part of that, they prioritise taking care of the land, people and cows.

In 2017/18 there was more than 21,000 views of the budget case study pages.

dairynz.co.nz/budgetcasestudies



DAIRYBASE-ASB PARTNERSHIP

In 2017/18 DairyNZ and ASB partnered to provide dairy farmers with much better access to benchmarking data and sector insights.

Using DairyNZ's DairyBase, ASB rural managers can now add value by analysing benchmarking data and trends for their dairy farming customers. If dairy farmers want to join DairyBase, data can also be automatically transferred from ASB into DairyBase.

DairyNZ strategy and investment leader Bruce Thorrold says the ASB partnership provides a fantastic opportunity for farmers.

"I would encourage dairy farmers with ASB to contact their bank manager – there is so much to gain from this, including better access to regionalised data, robust benchmarks and targeted analysis," says Bruce.

DairyBase is a benchmarking tool which helps farmers track their productivity and profitability, compare costs to other similar farms, and track progress towards long and short-term goals.

Other highlights for 2017/18 include:

- DairyBase registered an additional 150 farms and provided reports to 2165 farm businesses. These reports help farms understand their performance in relation to similar farms, from both a financial and physical aspect.
- DairyBase is working with several corporate farms to develop reporting and benchmarks specific to larger farm groups.
- More dairy farmers are making use of DairyBase by submitting their data. In 2017/18, 1770 businesses submitted their full financial data – up 222 on the year before.

dairynz.co.nz/dairybase

FARMERS SUPPORT SCIENTISTS' FORAGES RESEARCH

The Forages for Reduced Nitrate Leaching (FRNL) research programme is looking at how diverse pasture species and crops can reduce nitrate leaching by reducing nitrogen (N) in cows' diets and improving plant N uptake.

Plantain and fodder beet have emerged as the best options to reduce N loss from urine N, while catch crops following winter crops have been shown to use water and N in the soil over winter, reducing the risk of N leaching.

SHARING INFORMATION

A network of dairy, arable and mixed livestock farmers have influenced the direction of the research by acting as monitor farms and supplying feedback on the proposed mitigation options, and results of experiments and trialling the FRNL options on their own farm.

DairyNZ senior scientist Ina Pinxterhuis, who is leading the FRNL programme, says the input from farmers has been worth its weight in gold. "We've had some great workshops with robust discussions – for example around practicality or consequences researchers hadn't thought about. This changed the research direction in several cases," says Ina.

"The farmers also demonstrate what they are doing to reduce environmental impact and how they go about implementing the new options. The detailed data they collect is invaluable to evaluate the impact at the scale of working farms. I think we have achieved a unique collaboration between farmers and researchers."

dairynz.co.nz/frnl

ABOUT FRNL

Forages for Reduced Nitrate Leaching is a DairyNZ-led collaborative research programme. The main funder is the Ministry of Business, Innovation and Employment, with co-funding from research partners DairyNZ, AgResearch, Plant & Food Research, Lincoln University, Foundation for Arable Research and Landcare Research. DairyNZ invests \$450,000 of levy funds each year.



CULTIVAR PERFORMANCE UNDER THE FVI SPOTLIGHT

DairyNZ's Forage Value Index (FVI) helps farmers choose the best-performing ryegrasses for their region using its simple five-star rating system. Trials have now started to test the FVI system under realistic dairy farm management conditions.

The DairyNZ FVI is an independent, region-specific, profit-based index for short-term and perennial ryegrass cultivars. It categorises cultivars into five 'star rating' groups in each dairy region.

Launched in 2012, the FVI is now entering a validation phase, testing the FVI system under realistic farm management conditions.

Currently, the FVI includes seasonal dry matter yield only, but plans are in place to soon include metabolisable energy and persistence traits.

TESTING FVI SYSTEMS

Trials are taking place in Hamilton, managed by DairyNZ. Forty hectares of pasture was regrassed over the past three autumns, with equal areas sown in high- and low-ranked FVI cultivars.

All cultivars were sown with white clover (standard farm practice) and will be compared in a three-year experiment.

The aim is to determine whether dry matter yield differences of the cultivars emerge as expected and translate into profit rankings matching their relative FVI positions. Milk production and pasture production will be measured; and the operating profit calculated.

The Scott Farm trials are being supported by work at the Southern Dairy Hub, where 32ha was regrassed using high or low-ranked FVI cultivars in February 2017.

dairynz.co.nz/FVI
southerndairyhub.co.nz

DAIRY ACTION FOR CLIMATE CHANGE

In June 2017, DairyNZ launched the Dairy Action for Climate Change (DACC), an 18-month long commitment to address the sector's biological emissions.

Nine workshops were held around the country for rural professionals in 2017 and eight more for dairy farmers in 2018.

The workshops aimed to raise awareness of climate change and the need to address biological emissions in the long-term, as well as on-farm mitigation options available to farmers right now. Attendees also heard from some of New Zealand's leading climate change experts about emerging technological solutions to methane reduction.

The partnership farm project is another commitment

under the DACC. It will help dairy farmers understand what mitigations may work best on different farm systems to reduce emissions, and the impact those mitigations have on productivity and profitability.

Of the 14 farms from around New Zealand used as case studies to model what changes could be possible, most will go on to become partnership farms later this year.

Fifteen Dairy Environment Leaders were chosen to be climate change ambassadors for the sector in May 2018 and, following a meeting with Climate Change Minister James Shaw, have been working with their local communities to help engage farmers on climate change awareness.

dairynz.co.nz/climatechange

POLICY TEAM WORKS CLOSELY WITH GOVT

DairyNZ's policy team works on behalf of farmers to ensure investment and regulatory outcomes protect and enhance New Zealand dairy farming. During 2017/18, a range of work was undertaken.

REGIONAL COUNCIL POLICY

DairyNZ has continued to work closely with councils, farmers and other regulatory authorities to ensure sound policy, based on robust science.

In 2017/18, DairyNZ actively engaged with councils in Waikato, Canterbury, Bay of Plenty, Otago, Southland, Wellington, Northland and Manawatu/Whanganui to inform and influence the water quality limit-setting process.

Science addressed gaps, models evaluated policy options and effects on water quality, evidence was developed and presented to address concerns, and caucus processes ensured best outcomes for farmers and environment.

CENTRAL GOVERNMENT PRIORITIES

Since the new Government came into power in 2017, DairyNZ has engaged extensively with ministers on environmental priorities.

DairyNZ chief executive Dr Tim Mackle says the dairy sector realises the importance of working closely with the government to ensure the right policies are implemented to address issues such as reducing

agricultural emissions and improving waterways.

"Our focus is to ensure dairy continues to have a balance between being competitive and profitable, while also meeting the expectations of our consumers and communities," says Dr Mackle.

In 2017/18, DairyNZ engaged with the government on the following environmental policies:

LAND AND WATER FORUM

DairyNZ has participated in the Land and Water Forum and the processes prior to the Government's proposed reforms for freshwater management. This ensures dairy farmers have a strong voice and the impact of any changes are fair, effect-based and recognise environmental initiatives and infrastructure already undertaken by farmers in good faith.

The Land and Water Forum brings together a range of industry groups, environmental and recreational NGOs (non-government organisations), iwi, scientists and other organisations with a stake in freshwater and land management.

STOCK EXCLUSION REGULATIONS

DairyNZ has advocated on behalf of farmers regarding proposed stock exclusion regulations.

Dairy sector input has ensured advice sought by Government is as fair as possible for dairy farmers and recognises the significant infrastructure invested by the dairy sector.



Creating relevance between dairy farming and urban New Zealanders, and integrating dairy into the school curriculum, is helping get children, teachers and parents more engaged in the dairy sector.

Outside the classroom, DairyNZ's education programme also gives children the chance to visit a dairy farm through the school farm visit service, and to have a fun and educational experience through the Rosie's World programme and website.

Thanks to farmer volunteers, 7553 children visited a dairy farm in the past year, along with their teachers and parents.

DAIRY FARMING IN SCHOOLS

DairyNZ's in-school education programme delivered three new learning modules this year, with 625 classrooms and 17,500 children actively engaging with the resources. In addition, over 16,000 lesson plans were downloaded from the Rosie's Education website.

All of DairyNZ's learning modules fit within the New Zealand school curriculum and are designed to cater to teachers' needs and engage children and teachers with dairy in a positive way.



One of the most popular modules this year was a science lesson investigating an element's change in state by making ice cream. As part of the module, which also included a lesson plan, fact sheet and video, 350 teachers were given the opportunity to register for an ice cream making kit.

The kits were fully subscribed within 19 minutes of the registration opening. Seven Sharp did a story on the ice cream kit learning module, filming at Auckland's Hillpark School.

CREATING URBAN-RURAL RELATIONSHIPS

DairyNZ's CLASS-ified Game of Moostery connected 150 urban schools with 150 rural schools to create a better understanding of each other's lifestyles and perspectives. The 8400 children who participated completed a series of challenges, concluding with a skype session where each class raced to identify their mystery match.

Auckland's Papakura Normal School and Canterbury's Ohoka School were filmed by Newshub as they completed their skype challenge.

FUN WITH ROSIE

DairyNZ's Rosie the cow is a character loved by children for her quirky and entertaining nature.

A competition was held this year to find a real-life co-star for Rosie. Nate Cunis from Whangarei won the competition, which received over 100 video entries.

A new campaign called Dairy Doing Good was launched featuring Rosie and Nate exploring the dairy journey from plate back to paddock. The Rosie's World website is the campaign hub and includes videos, online ads, a quiz, competitions and content, and appearances on TVNZ's kids' programme What Now.

107,002 people visited the Rosie's World website to learn and play in a safe online environment, and 16,466 children completed Rosie's quiz competitions.

To see photos, thank you letters to farmers and work from school children, visit ourfarmvisit.co.nz

dairynz.co.nz/education

2017/18 highlights

RESEARCH AND DEVELOPMENT



Home-grown feed focus in Northland research

Managing variable climates and palm kernel expeller (PKE) use has been the focus of a three-year project at Northland Agricultural Research Farm (NARF). Highlights included high performance from the pasture-only farmlet in two of three years; profit-focused decision rules gave responses of 100-130 g MS/kg DM to PKE; and on-farm cropping produced severe management issues on the wet Northland soils. Read more at nddt.nz/

Fertility genetics

The heifers in the high and low fertility breeding value herds, in the Pillars of a New Dairy System research, have been through their first lactation and mating. Much bigger differences have been seen in the submission rates, anoestrus and empty rates between the two herds than were expected from their fertility BVs. While the fertility BV is pointing in the right direction, it seems the range of performance in the national herd is being underestimated.

FRNL tightens N cycle

The Forages for Reduced Nitrogen Leaching (FRNL) Programme has shown the benefits of plantain, fodder beet and catch crops (after winter feed) for reducing nitrogen leaching. The research team is now working with farmers to test the implementation of these ideas and with Overseer Ltd to ensure the science results are reflected in the Overseer model and farmers will see it in their leaching predictions.

TALENTED PEOPLE



Scholarship programme

Fifty-six undergraduate students and 13 graduate students are involved in the DairyNZ scholarship programme which supports young people into dairying.

School agribusiness programme

Thirty-nine secondary schools around New Zealand are now teaching agribusiness (approximately 1000 students) thanks to the Centre of Excellence for Agricultural Science and Business Programme.

FARM PROFIT



Farm assessment tools

Over 950 farmers used DairyNZ farm assessment planning tools (e.g. Farm Gauge) to evaluate their farm business and provide links to tools and resources and support improvements.

Budget case studies

The 20 farmer budget case studies on the DairyNZ website received 21,000 views, providing farmers with a behind-the-scenes look into some of New Zealand's top-performing farm businesses.

Farmer events

Over 1350 farmer events were held to provide farmers access to the tools, skills and support to improve farm performance.

WORK ENVIRONMENT



MilkSmart

MilkSmart in Action worked closely with 10 farmers to improve milking efficiency and comfort, which then helped over 538 other farmers to do the same through a series of nationwide workshops.

Workplace Action Plan

The Sustainable Dairying: Workplace Action Plan continued to showcase to farmers what a good and great farming workplace looks like and provide the framework for practical ideas and solutions through regular Friends of the Workplace Action Plan communications.

ENVIRONMENTAL STEWARDSHIP



Sustainable Dairying: Water Accord

Provisional results suggest over 97.5% of all Accord waterways on dairy farms are now stock excluded and 99.7% of stock crossing points have bridges or culverts.

Managing water quality

DairyNZ has worked alongside primary sector partners, regional council and government to develop an agreed set of national good farming practice principles, to be implemented over the next five years.

Science behind policy

Research has been undertaken in partnership with NIWA and regional councils to understand drivers of water quality decline in rivers, to help underpin regional environmental policy processes.

BIOSECURITY



Mycoplasma bovis management

DairyNZ has worked alongside the Ministry for Primary Industries to support farmers impacted by *Mycoplasma bovis* and to provide guidance to manage and reduce the risks of further incursions.

Government agreements

Operating agreements with Government were developed to deal with high-risk animal diseases, plant pests and weeds.

ANIMAL WELFARE



Bobby calf management

There has been continued improvements in the management of bobby calves across the supply chain, leading to a further reduction in mortality rate from 0.12% to 0.06% in 2017.

Opportunities presented by approaches to reduce the numbers of bobby calves are being explored.

Practice change

Programmes were implemented to provide farmers with the support to make changes to management practices, such as the use of pain relief for disbudding, ahead of regulatory changes in 2018/19.

Practical workshops such as CalvingSmart, tools including the Facts and Figures app and services such as the Early Response Service were implemented to ensure farmers have the support necessary to provide high standards of animal care.

LOCAL COMMUNITIES



Find a Farmer

Thanks to the DairyNZ education programme's Find a Farmer service and the farmer volunteers involved, 7553 children visited a dairy farm in the past year, along with their teachers and parents.

School connections

TV3 News filmed two classrooms participating in DairyNZ's CLASS-ified Game of Moostery which connected 150 urban schools with 150 rural schools to learn more about each other.

NATIONAL PROSPERITY



Climate change

DairyNZ launched Dairy Action for Climate Change to build the foundation to support dairy farmers and the wider dairy industry to address on-farm methane and nitrous emissions over the longer term.

Research into mitigation options

New greenhouse gas mitigation technologies and their commercialisation have been researched through the Pastoral Greenhouse Gas Research Consortium.

Work with councils/government

DairyNZ has continued to work in partnership with regional councils and central government to ensure the National Policy Statement for Freshwater Management is implemented wisely and the concerns of dairy farmers are understood.

INDUSTRY INFORMATION SYSTEMS



DairyBase connects with ASB

Connecting data to help farmers make better decisions is part of the future. DairyBase is leading the way with its connectivity strategy and, in May 2018, launched a connection with the ASB Bank that will help DairyBase clients, who are ASB customers, get the most from their financial data. DairyNZ is working with others to expand this network.

Forage Value Index (FVI) extends scope

The FVI has now been running for six years, based on seasonal yield data. In the last year DairyNZ has been able to put a first estimate of forage quality differences alongside FVI. DairyNZ is looking to develop this further in 2018/19, with the simultaneous introduction of the first quality and persistency economic values.

dairy tomorrow

The future of New Zealand dairying.

WHERE WE'VE BEEN

In 2013, the Strategy for Sustainable Dairy Farming was adopted, creating a framework of 10 objectives outlining what it means for dairy farming to be competitive and responsible.

A further 16 ambitious targets for 2020 were set to track the progress being made (see summary of progress pg 13). Fast forward to 2017 and much had changed in that short time.

Strong progress has been made against the goals of the strategy launched in 2013, however much about our global and local operating environment is changing at a rapid pace.

Over the past 15 years the dairy sector has taken significant steps towards being more sustainable. But the job is not done. The next era of the dairy industry's strategic work aims to make progress where we know more is needed.

NEW STRATEGY: DAIRY TOMORROW

The new *Dairy Tomorrow* strategy recognises the importance of the dairy sector working transparently and openly with others to play its part in working toward a shared future vision for New Zealand and its role in the world, while continuing to provide the natural, high-quality products we are known and famous for the world over.

DAIRY TOMORROW COMMITMENTS

- 1 WE WILL PROTECT AND NURTURE THE ENVIRONMENT FOR FUTURE GENERATIONS**
- 2 WE WILL BUILD THE WORLD'S MOST COMPETITIVE AND RESILIENT DAIRY FARMING BUSINESSES**
- 3 WE WILL PRODUCE THE HIGHEST QUALITY AND MOST VALUED DAIRY NUTRITION**
- 4 WE WILL BE WORLD LEADING IN ON-FARM ANIMAL CARE**
- 5 WE WILL BUILD GREAT WORKPLACES FOR NEW ZEALAND'S MOST TALENTED WORKFORCE**
- 6 WE WILL HELP GROW VIBRANT AND PROSPEROUS COMMUNITIES**



To find out more
VISIT DAIRYTOMORROW.CO.NZ

Achievements under the Strategy for Sustainable Dairy Farming 2013-2017

In 2013, the Strategy for Sustainable Dairy Farming set out 16 targets for competitive and responsible dairy farming. As the new Dairy Tomorrow strategy begins, the achievements to date are highlighted below.



TARGETS



INDICATORS

COMPETITIVE – GLOBAL AND LOCAL

1. Profit from productivity increase from an average of \$50/ha/year to \$65/ha/year by 2020.	On average gains in PfP (profit from productivity) have remained at \$50/ha/yr over the last decade. This equates to \$73,500 gain per average New Zealand dairy farm or \$882m across the sector over that period. High milk price volatility has masked any further gains since 2013.
2. Research delivers farm systems that increase production and profit by \$110/ha per year, while reducing the environmental footprint by 30%.	New options such as fodder plantain, fodder beet and catch crops are reducing nitrate leaching. Technologies to reduce methane production are advancing. Increased profitability has not been achieved. Improved ryegrass plants are being evaluated for their potential profitability gains.
3. By 2020, 90% of dairy farm businesses have fully competent farm teams.	74%* of farms have fully competent teams, up from 65%. Gains in experience and secondary school achievement by people entering the industry were partially offset by a decrease in the amount of training undertaken.
4. By 2020, all dairy regions have sufficient certified rural professionals.	There are now over 760 certified rural professionals trained in effluent system design and assessment, reproduction, nutrient management and body condition scoring.
5. The dairy industry and government authorities have robust biosecurity systems.	Recent incursions have highlighted the importance of biosecurity and shortcomings in the sector's detection and response capability. As a result, the sector and government are ramping up efforts to achieve this target.
6. Farm practices ensure the milk supply is free of contaminants.	Average somatic cell count has reduced by 14% (30,000 somatic cells) since 2013, reflecting positive gains in udder health management.
7. By 2018 farmers have access to an information system that supports single entry and comprehensive data storage and links this data to key farm applications.	Significant progress made with the launch of commercial services including Agrigate. Business-to-business connections have expanded through DataLinker. These connections have been supported by the data standards and codes of practice.
8. Robust industry information systems facilitate 1.5% annual gains in breeding worth (BW) of the national herd.	Estimated gains in BW have increased steadily from 1.25% in 2013 to 1.56% in 2017. Genetic gain will deliver \$11 profit/cow/year.
9. Robust industry information systems facilitate rates of genetic gain of 1.0% per annum by 2020 in the forage value of pasture plants.	Annual gains achieved of 0.49% in forage value of pasture plants. These gains in seasonal dry matter production have increased the forage value of new cultivars by \$30-\$40/ha/year.

RESPONSIBLE – TODAY AND TOMORROW

10. The dairy industry fulfills all commitments listed in the Sustainable Dairy: Water Accord.	Provisional results suggest stock exclusion is now present along 97.5% of accord waterways. 10,614 nutrient budgets were processed and nitrogen management information provided to farmers.
11. 80% of New Zealanders agree dairy farmers are good stewards of the environment, by 2020.	In 2018, 53% of New Zealanders agreed that dairy farmers were committed to protecting the environment and water quality. This has increased from 33% in 2013.
12. 100% of farmers are compliant with the good practice animal welfare guidelines and standards for dairy farming.	Based on a survey of 500 farms, 88% of farms comply with all the animal welfare codes, including 68% who operate well above the minimum standards.
13. By 2020 90% of dairy farm businesses have quality work environments.	Good progress has been made in the use of timesheets, rosters and payroll to better manage teams.
14. 90% of New Zealanders agree dairy farmers make a positive contribution to rural and urban communities.	In 2018, 82% of New Zealanders agreed that dairy farmers made a positive contribution to rural and urban communities.
15. By 2020, export earnings are increased by 55% through adding value to milk and implementation of a sustainable milk growth strategy.	In 2018, the value of dairy exports was \$13.4b, a 9% increase on the 2013 baseline of \$12.3b.
16. 75% of New Zealanders agree that dairying makes a positive contribution to their standard of living.	In 2018, 56% of New Zealanders agreed that dairying made a positive contribution to their standard of living.

* provisional data

KEY PROJECTS FOR 2018/19



COMMITMENT 1

**WE WILL
PROTECT AND
NURTURE THE
ENVIRONMENT
FOR FUTURE
GENERATIONS**

WATER QUALITY SCIENCE

DairyNZ will continue to ensure that regional water quality issues related to dairy farming practices are well understood and that farmers have the right knowledge and tools required to help meet water quality limits.

UNDERSTANDING OUR FOOTPRINT

A national accounting framework is being developed to help understand dairying's environmental footprint and support policy solutions at the catchment and regional scales.

GREENHOUSE GASES

Ongoing research will help identify strategies to reduce or offset greenhouse gas (GHG) emissions from dairy land. Preferred policy options to meet the industry's contributions to New Zealand's 2030 GHG target will be developed and advocated for with central government.

LOW N COWS TESTED

Research to determine the potential to breed cows that produce lower urinary nitrogen (N) and less N leaching gets underway in 2018/19. Four hundred cows on North Island farms will have urinary and milk output measured, and genetic differences in N balance due to genetics will be looked for.

TARGETED SUPPORT FOR PRIORITY CATCHMENTS

Three case study projects will target the Tararua, Selwyn-Hines and Aparima areas to support farmers to implement farming systems and practices to meet the environmental management expectations for the catchment.



COMMITMENT 2

**WE WILL BUILD
THE WORLD'S
MOST COMPETITIVE
AND RESILIENT
DAIRY FARMING
BUSINESSES**

DIGAD LINKS DIRECT TO CRV

The third step in DairyNZ and NZAEL taking responsibility for Animal Evaluation, the National Breeding Objective (BW) and Core data will be completed in 2019, when CRV Ambreed starts directly feeding its herd records to DIGAD.

WILL NEW RYEGRASSES MEASURE UP?

DairyNZ is investing alongside many others in the sector and government to improve ryegrass breeding. In 2018/19 the field performance of ryegrass plants selected using genomic selection, bred by hybrid methods and created using GM technology will be evaluated.

FARM BUSINESS ASSESSMENT AND PLANNING

The extension teams will focus on farm business assessment and planning to support farmers during the 2018/19 season. Benchmarking will be used extensively to ensure an evidenced-based approach. Specific focus will be given to providing follow-up support to ensure action plans are implemented.

MYCOPLASMA BOVIS RESPONSE

DairyNZ will continue to provide support to farmers impacted by *M. bovis*. The development and extension team will work with others in the sector to ensure farmers have the right information when they need it to protect their farms from biosecurity incursion.



COMMITMENT 3

WE WILL PRODUCE THE HIGHEST QUALITY AND MOST VALUED DAIRY NUTRITION

This commitment is a responsibility of the dairy supply companies involved in the *Dairy Tomorrow* strategy.

Initiatives to support this commitment will be led by the dairy companies and supported by achievements in several of the other commitments.



COMMITMENT 4

WE WILL BE WORLD LEADING IN ON-FARM ANIMAL CARE

DEFINING WORLD LEADING ANIMAL CARE

Work will be undertaken to understand what it takes to be world leading. This will be used to develop the framework that will underpin the research, development and extension activities over the next three to five years.

STOCKMANSHIP

DairyNZ will continue developing practical workshops to help those caring for animals to improve their awareness of animal welfare expectations and skills to achieve these. The programme's reach will be extended through veterinarians, training networks and farmer organisations.

KEEPING COWS COMFORTABLE

Work will begin to develop a programme to support farmers to maintain cow comfort through the extremes of summer and winter.

KEY PROJECTS FOR 2018/19



COMMITMENT 5

WE WILL BUILD GREAT WORKPLACES FOR NEW ZEALAND'S MOST TALENTED WORKFORCE

FARM BUSINESS TRAINING

Work will continue with consulting officers and Primary ITO training advisors using a partnership approach to better serve the training needs of farm businesses. Fit for purpose learning plans will take better account of the business goals.

WORKING TOGETHER

A collaborative approach will be used to design a more coordinated capability and skills development pathway, aligned with dairy sector standardised roles, and taking into consideration formal and non-formal training for people throughout their career in dairy.

WORKPLACE ACTION PLAN

In partnership with Dairy Women's Network and Federated Farmers, the Workplace Action Plan will be refreshed to reflect the new goals in *Dairy Tomorrow*. A framework of compliance, good and great, will be used to set agreed sector expectations for the workplace. DairyNZ will work with dairy processors to support improved workplace conditions.

ATTRACTING TALENT

Programmes to increase awareness of the diverse range of careers available in dairy will continue through secondary schools and identify further opportunities to support career changers. A targeted approach will be taken to address labour supply issues in Canterbury and Southland regions.



COMMITMENT 6

WE WILL HELP GROW VIBRANT AND PROSPEROUS COMMUNITIES

TELLING OUR STORY

DairyNZ will continue work in community engagement through media activity and public events, and by supporting farmers to tell their stories.

Additional initiatives to support this commitment will be led by Federated Farmers and Dairy Women's Network.

FINANCIALS

Statement of Comprehensive Income

For the year ended 31 May 2018

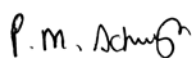
In thousands of New Zealand dollars

	Consolidated		Parent	
	2018	2017	2018	2017
Continuing operations				
Revenue and other income	83,196	89,559	71,533	77,282
Operational expenses	(86,669)	(91,802)	(72,493)	(82,059)
Profit/(loss) before finance activities	(3,473)	(2,243)	(960)	(4,777)
Finance income	369	420	7	10
Finance expenses	-	2	-	3
Net finance income	369	422	7	13
Profit/(loss) before income tax	(3,104)	(1,821)	(953)	(4,764)
Tax expense	-	-	-	-
Profit/(loss) for the period	(3,104)	(1,821)	(953)	(4,764)
Other comprehensive income				
Net change in fair value of available for sale financial assets	(262)	49	-	-
Income tax on other comprehensive income	-	-	-	-
Other comprehensive income for the period, net of income tax	(262)	49	-	-
Total comprehensive income/(loss) for the period	(3,366)	(1,772)	(953)	(4,764)



JIM VAN DER POEL, CHAIRMAN

9 August 2018



PETER SCHUYT, DIRECTOR

9 August 2018

Statement of Changes in Equity

For the year ended 31 May 2018

In thousands of New Zealand dollars

Consolidated

	CONTRIBUTION BY OWNERS	INVESTMENT FAIR VALUE RESERVE	RETAINED EARNINGS	TOTAL EQUITY
Balance as at 1 June 2016	33,783	481	14,711	48,975
Total comprehensive income for the period				
Profit/(loss) for the period	-	-	(1,821)	(1,821)
Other comprehensive income				
Net change in fair value of available for sale financial assets	-	49	-	49
Total other comprehensive income	-	49	-	49
Total comprehensive income for the period	-	49	(1,821)	(1,772)
Balance at 31 May 2017	33,783	530	12,890	47,203
Balance as at 1 June 2017	33,783	530	12,890	47,203
Total comprehensive income for the period				
Profit/(loss) for the period	-	-	(3,104)	(3,104)
Other comprehensive income				
Net change in fair value of available for sale financial assets	-	(262)	-	(262)
Total other comprehensive income	-	(262)	-	(262)
Total comprehensive income for the period	-	(262)	(3,104)	(3,366)
Balance at 31 May 2018	33,783	268	9,786	43,837

In thousands of New Zealand dollars

Parent

	CONTRIBUTION BY OWNERS	INVESTMENT FAIR VALUE RESERVE	RETAINED EARNINGS	TOTAL EQUITY
Balance as at 1 June 2016	33,783	-	(13,001)	20,782
Total comprehensive income for the period				
Profit/(loss) for the period	-	-	(4,764)	(4,764)
Other comprehensive income				
Total other comprehensive income	-	-	-	-
Total comprehensive income for the period	-	-	(4,764)	(4,764)
Transactions recorded directly in equity				
Subsidiary (Dexcel Holdings) wound up	-	-	(239)	(239)
Balance at 31 May 2017	33,783	-	(18,004)	15,779
Balance as at 1 June 2017	33,783	-	(18,004)	15,779
Total comprehensive income for the period				
Profit/(loss) for the period	-	-	(953)	(953)
Total comprehensive income for the period	-	-	(953)	(953)
Balance at 31 May 2018	33,783	-	(18,957)	14,826

Statement of Financial Position

As at 31 May 2018

In thousands of New Zealand dollars

	Consolidated		Parent	
	2018	2017	2018	2017
Assets				
Property, plant and equipment	22,752	22,721	-	-
Intangible assets	5,091	4,692	-	-
Biological assets - livestock	1,325	1,814	-	-
Investments in subsidiaries	-	-	35,272	34,940
Investments in associates	5,042	5,047	5,029	5,038
Other investments	1,808	2,065	-	-
Total non-current assets	36,018	36,339	40,301	39,978
Cash and cash equivalents	18,966	20,715	89	765
Inventories	101	113	-	-
Trade and other exchange receivables	334	3,618	-	1,969
Trade and other non-exchange receivables	6,902	6,790	6,902	6,690
Total current assets	26,303	31,236	6,991	9,424
Total assets	62,321	67,575	47,292	49,402
Members' funds				
Contribution by owners	33,783	33,783	33,783	33,783
Investment fair value reserve	268	530	-	-
Retained earnings	9,786	12,890	(18,957)	(18,004)
Total members' funds	43,837	47,203	14,826	15,779
Liabilities				
Employee entitlements	348	501	-	-
Total non-current liabilities	348	501	-	-
Trade and other payables	14,871	17,136	31,759	33,051
Deferred income	796	553	707	572
Employee entitlements	2,469	2,182	-	-
Total current liabilities	18,136	19,871	32,466	33,623
Total liabilities	18,484	20,372	32,466	33,623
Total members' funds and liabilities	62,321	67,575	47,292	49,402

Statement of Cash Flows

For the year ended 31 May 2018

In thousands of New Zealand dollars

	Consolidated		Parent	
	2018	2017	2018	2017
Net cash from/(used in) operating activities				
Cash provided from dairy industry good levies	66,479	66,798	66,479	66,798
Cash provided from other funding and interest	20,569	18,845	8,218	10,435
	87,048	85,643	74,697	77,233
Cash applied to suppliers and employees	86,511	88,883	73,076	70,099
Net cash from/(used in) operating activities	537	(3,240)	1,621	7,134
Net cash from/(used in) investing activities				
Cash provided from sales of assets, investments and livestock	1,093	348	-	-
Cash applied to purchase of assets, investments and livestock	3,379	6,325	2,297	7,398
Net cash from/(used in) investing activities	(2,286)	(5,977)	(2,297)	(7,398)
Net increase/(decrease) in cash balances	(1,749)	(9,217)	(676)	(264)
Cash balances at beginning of period	20,715	29,932	765	1,029
Closing cash balances	18,966	20,715	89	765

DAIRYNZ

YOUR LEVY IN ACTION

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

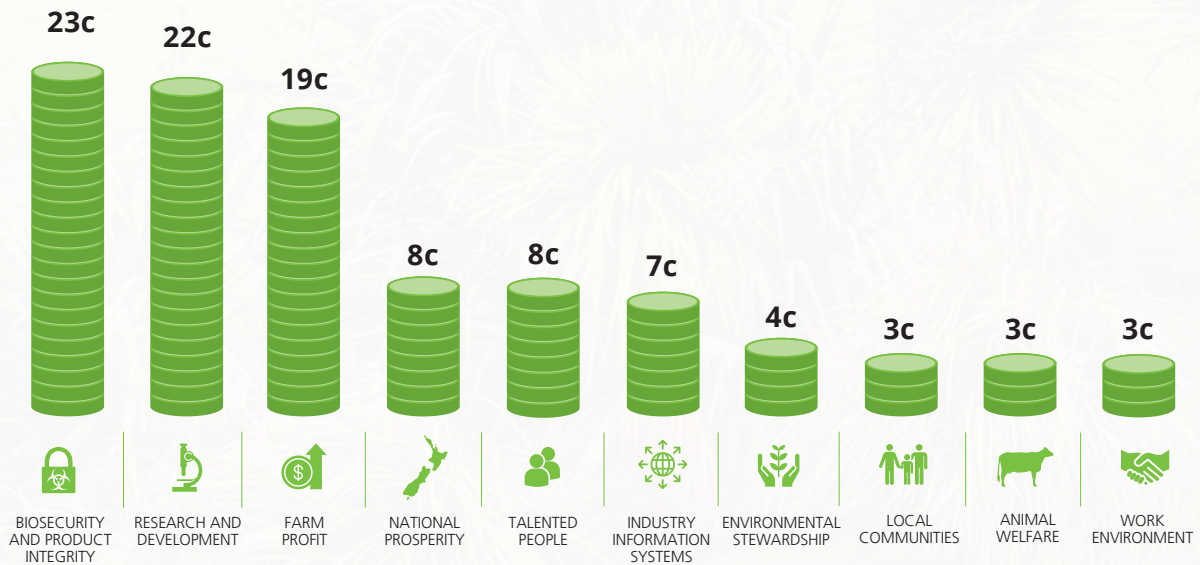
In 2017/18, \$66.2 million was collected through the milksolids levy, plus DairyNZ received government co-funding.

Our work includes research and development to create practical on-farm tools, leading 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 2017/18

2017/18 funding under the 10 objectives in the previous sector strategy, the Strategy for Sustainable Dairy Farming.

For every \$1 of DairyNZ investment:



2018/19 DAIRYNZ INVESTMENT COMMITMENTS

2018/19 funding under the six commitments in the new sector strategy, Dairy Tomorrow.



Competitive and resilient dairy farming businesses

(includes \$14.5m for TB management)

\$53.7m



Build great workplaces for NZ's talented workforce

\$7.5m



Protect and nurture the environment

\$6.1m



Leading in on-farm animal care

\$2.9m



Grow vibrant and prosperous communities

\$2.4m



Download the full Annual Report at dairynz.co.nz/annualreport or phone 0800 4 324 7969.

DairyNZ Incorporated, Private Bag 3221, Cnr Ruakura & Morrinsville Roads, Hamilton 3240, New Zealand
Ph +64 7 858 3750; Fax +64 7 858 3751 • Email info@dairynz.co.nz • dairynz.co.nz

DNZ01-017

DairyNZ