



Strategic Plan

Subtropical Dairy
2023–2028



DELIVERING
for **DAIRY**

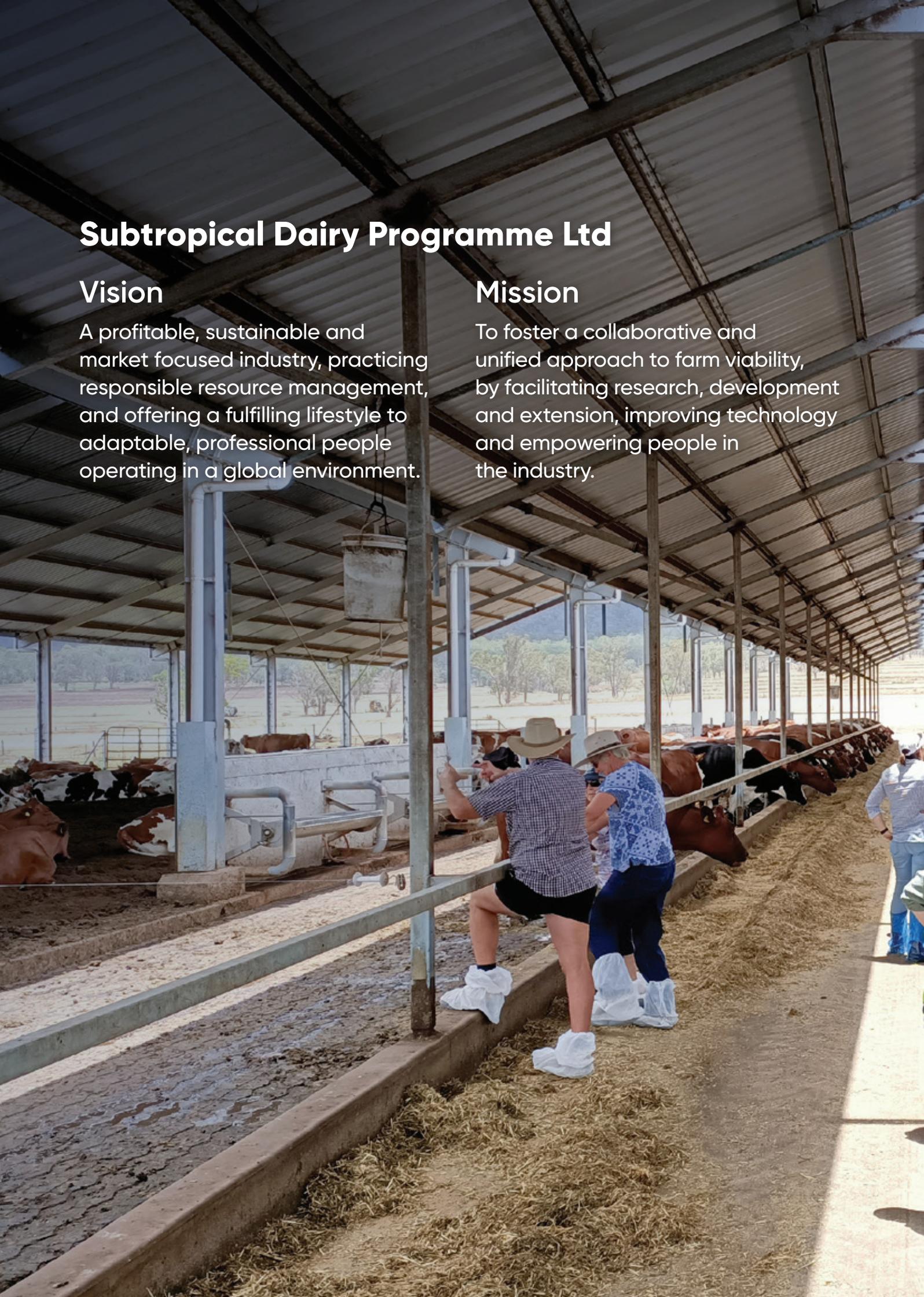
Subtropical Dairy Programme Ltd

Vision

A profitable, sustainable and market focused industry, practicing responsible resource management, and offering a fulfilling lifestyle to adaptable, professional people operating in a global environment.

Mission

To foster a collaborative and unified approach to farm viability, by facilitating research, development and extension, improving technology and empowering people in the industry.





Executive summary

Subtropical Dairy is the dairy industry development body for Australia's north-eastern dairying region encompassing Queensland and northern New South Wales (NNSW).

It is one of eight Dairy Australia regional development groups and aims to help advance the industry in the region through the delivery of research, development and extension (RD&E). Subtropical Dairy is funded primarily by Dairy Australia and the Dairy Service Levy. It has been in operation since 1996 to guide the strategic direction and implementation of dairy research, education and promotion programs in north-eastern Australia.

Since the publishing of its last strategic plan in 2017, collaboration between Subtropical Dairy and Dairy Australia has evolved considerably. Today, in addition to its own initiatives, Subtropical Dairy is the regional delivery arm of Dairy Australia for the provision of industry services to the north-eastern Australian dairy industry.

The Subtropical Dairy Programme Strategic Plan 2023–2028 describes Subtropical Dairy Programme's strategic priorities and investment intent over the next five years. This plan was developed following a consultation process involving surveys, workshops and facilitated discussions with farmer groups across Queensland and northern NSW. Service providers and collaborators were also key contributors. Key to its design was a two-day workshop in late September 2022 at Kooralbyn, Queensland, where over 30 farmers and stakeholders participated to identify opportunities and challenges facing the north-eastern Australian dairy industry over the next five years. The Subtropical Dairy Board also held several workshops to refine the plan.

The north-eastern Australian dairy industry has been in contraction since 2000, with regional milk supply over the last six years declining at approximately 3.5 per cent per year and farm numbers declining at 5.2 per cent per year. Current attrition rates predict the industry will cease in Queensland in 2035 unless there is significant change. There have been various factors at play causing this attrition, but critical issues are industry fatigue, market failure, a lack of substantial productivity gains, variable weather patterns, cost pressures and accessing labour.

Despite the challenges the north-eastern Australian dairy industry has faced over the last two decades, there are well-structured dairy businesses that have adopted and implemented practices to manage key profit drivers and risk. These are resilient enterprises and are generating significant returns on investment, even in a volatile operating environment. The region's dairy farm and processing sectors continue to be supported by stable returns from growing markets. Regional milk supply is currently not meeting local consumer demands, relying on imported milk from southern NSW and northern Victoria. This shortfall in the region's milk supply is an opportunity for existing dairy businesses to expand and for new entrants to enter the industry.

Our research and consultation has identified several specific opportunities and challenges over the next five years. Examples of key opportunities include the regions proximity to a large growing domestic market, increased farm gate prices, forage production capacity and the emergence of genetic technology to deliver stepwise productivity gains. Some key challenges include more volatile input markets and weather patterns, accessing labour, lack of investment pre-farm gate, and the inherent challenges to dairy farming in the subtropics and tropics.

In response to this future operating environment, Subtropical Dairy has developed three key responses comprising of various discipline strategies. These are: better outcomes for dairy farm businesses through improving the enabling environment; delivering more customised and responsive farm services; and supporting more competitive, contemporary and resilient farm businesses and systems.



Introduction

The Subtropical Dairy Strategic Plan 2023–2028 provides a framework for Subtropical Dairy’s investment and priorities over the next five years.

It has been developed in consultation with Dairy Australia, regional farmer groups, Queensland Department of Agriculture and Fisheries and key industry stakeholders including milk processors and agribusiness. Consequently, this strategic plan has close alignment with Dairy Australia’s Strategic Plan 2020–2025, the national pre-farm gate dairy RD&E strategy Dairy Moving Forward and the Australian Dairy Plan. Maximising returns on levy investment through leveraging co-investment has been, and will continue to be, integral to how Subtropical Dairy operates.

Subtropical Dairy’s remit is based on delivering national and regionally developed extension programmes and facilitating short-term applied farmer-led research and development. It operates predominantly pre-farm gate in partnership with Dairy Australia and other regional Research, Development and Extension (RD&E) investors and providers.

The Subtropical Dairy Strategic Plan 2023–2028 is focused on building resilient, sustainable farm profitability through three core strategic priorities.

Subtropical Dairy’s Strategic Priorities

- 1 Better outcomes for dairy farm businesses through improving the enabling environment
- 2 Delivering more customised and responsive farm services
- 3 Supporting more competitive, contemporary and resilient farm businesses and systems

The Board and Executive of Subtropical Dairy are confident that this strategic plan charts a path to equip Subtropical Dairy and its partners to deliver productive outcomes for levy payers through capitalising on world class, contemporary dairy RD&E to respond to opportunities and challenges from 2023 to 2028 and beyond.

Subtropical Dairy would like to thank everyone who contributed to the development of this plan. Special thanks goes to Barb Bishop and Associates for facilitating a two-day workshop that was key to the plan’s development.



A handwritten signature in black ink that reads "Luke Stock".

Luke Stock Chairperson



A handwritten signature in black ink that reads "BRAD GRANZIN".

Brad Granzin Executive Officer



Strategic priorities

Subtropical Dairy has three strategic priorities over the next five years. Each priority is underpinned by an objective and key outcomes.

	1	2	3
Objective	Better outcomes for dairy farm businesses through improving the enabling environment	Delivering more customised and responsive farm services	Supporting more competitive, contemporary and resilient farm businesses and systems
	THE ENABLING ENVIRONMENT	FARM SERVICES	FARM BUSINESS STRATEGIES AND FINANCIAL PERFORMANCE
Outcomes	a Work collaboratively with other stakeholders in north-eastern Australia to improve the return on investment of levy	a Farm services delivering new knowledge and technology	a Dairy farmers increase profitability by improved decision-making based on appropriate analysis and interpretation of key profit drivers
	b Informing farmers, aspiring farm owners, investors and financial institutions about various business and ownership models that can enable transition in or out of the industry	b Adapt delivery models to drive practice change	b In terms of seasonal milk production, dairy farm businesses understand their biophysical, financial and people strengths and weaknesses of their systems and adapt their milk production strategies accordingly
	c Developing new farmer leaders	c Supporting businesses during extreme operating conditions, such as weather events	c Increased long-term profitability and business resilience through enterprise strategic planning to manage volatility (inputs and weather events) and long term transformations (evolving value chains and climate change)
	d The development of regional service providers		

AGRONOMY AND HERD NUTRITION	HERD DEVELOPMENT, PERFORMANCE, HEALTH AND WELFARE	STAFF
a Improved soil management and utilisation of nutrients and water	a Investing and integrating infrastructure and feeding systems	a Support dairy farms to provide a safe work environment
b Milk income over feed costs is maximised	b Improved management of mastitis and lameness	b Reduce staff requirements through automation and business review
c Providing extension support to local research and development outcomes	c Farmers operating best practice in animal husbandry	c Farms invest in the skill development of their staff to improve productivity
		d Farmers are preferred employers and skilled managers

About us

Subtropical Dairy is the dairy industry development body for Australia's north-eastern dairying region encompassing Queensland and northern New South Wales.

It is one of eight Dairy Australia regional development groups nationally and aims to help advance the industry in the region through the delivery of RD&E. Subtropical Dairy is funded primarily by Dairy Australia and the Dairy Service Levy.

Subtropical Dairy has been operating since 1996 to guide the strategic direction and implementation of dairy research, education and promotion programs in north-eastern Australia. In response to a reduction in public dairy extension investment over the last seven years, Dairy Australia is now a deliverer of extension services nationally. As a key partner of Dairy Australia, the remit of Subtropical Dairy has also changed with the organisation now facilitating the regional delivery of extension services. Farmers are the key clientele of Subtropical Dairy. In addition, Subtropical Dairy has key collaborative relationships with advisers and organisations associated with north-eastern Australian dairy supply chains.

Between 2017 and 2022, Subtropical Dairy has delivered:

- 715 events to 9,879 participants across a range of technical disciplines, networking activities and projects.
- Over 500 1:1 consultancies mostly focused on emergency response and externally funded projects.
- Posted 5,500 copies of regional newsletters, such as Northern Horizons.

Additionally over these five years, Subtropical Dairy published its weekly e-news, managed multiple social media interfaces, and shared a website with the Queensland Department of Agriculture and Fisheries. It also funded and facilitated 36 regional R&D projects instigated by its seven farmer-led Regional Groups.

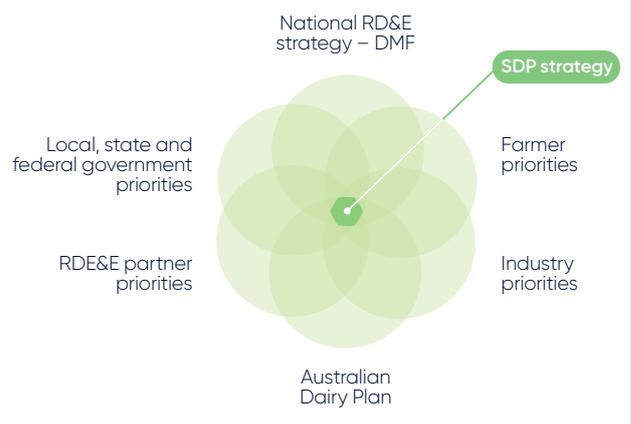


Our role

- Deliver extension services through information provision, facilitating groups, networks, workshops and events, and supporting mentoring and one-on-one technical advice.
- Capacity building in terms of farm practices, management, compliance, leadership and career development.
- Identify and facilitate projects and relationships providing benefit for the local dairy industry.
- Advocate best-practice in animal health and welfare, environmental and natural resource management, and business management.
- Build local community awareness of the dairy industry.
- Work with dairy farmers to identify and evaluate areas where RD&E may assist in the competitiveness and sustainability of our region.
- Develop partnerships with industry stakeholders to maximise the benefits gained from the investment of the Dairy Services Levy.
- Where possible, use the Dairy Services Levy to leverage funds from other sources that can add value to current and future projects.
- Participate in national priority setting and strategic planning of farm RD&E.
- Ensure responsible and timely use is made of the Dairy Services Levy paid by the region's dairy farmers.
- Apply appropriate corporate governance policies and principles in the operation of the business.
- Monitor and evaluate the effectiveness and efficiency of all the above.

Where we fit within the RD&E environment

Subtropical Dairy is in a unique position to lead, influence, co-ordinate, collaborate and deliver a range of strategies and projects relevant to the dairy industry. The following diagram shows Subtropical Dairy's central strategic role in aligning and working with national, government and local investment and priorities to deliver the best outcomes for farmers.



Dairying in north-eastern Australia

The Subtropical Dairy region (from the Atherton Tablelands in Queensland to Kempsey in northern NSW) has approximately 385 farms producing 4.7% of Australia’s milk supply. Farms are located across an area of 200,000km², with the region extending 1,700km north to south.

Annual milk production in the Subtropical Dairy region in 2021/22 was 409 million litres (ML) (299ML in Queensland and 110 ML in northern NSW). Milk is produced all year round. Despite a slight reduction in drinking milks sales over the last seven years, the Queensland marketplace is still substantial. The annual drinking milk market (October 2021 to September 2022) in Queensland was 573 million litres. The Subtropical Dairy region has seen the greatest attrition in the last six years in subcoastal and inland dairy businesses as opposed to coastal farms (Figure 1).

Bioclimatic challenges of dairying in tropical and subtropical environments

Despite considerable investment in RD&E globally, modern-day dairying in the tropics and subtropics is still problematic. Highly productive cows, typically of *Bos taurus* genetics, such as Holsteins, are susceptible to heat stress, disease and pests. Tropical forages have inherent characteristics that make them less productive than temperate species. Rainfall patterns can also be more extreme. While all these challenges can be addressed, they come with cost and risk. Globally, we are seeing some growth in milk supply in some tropical and subtropical dairy industries. Often this has been due to

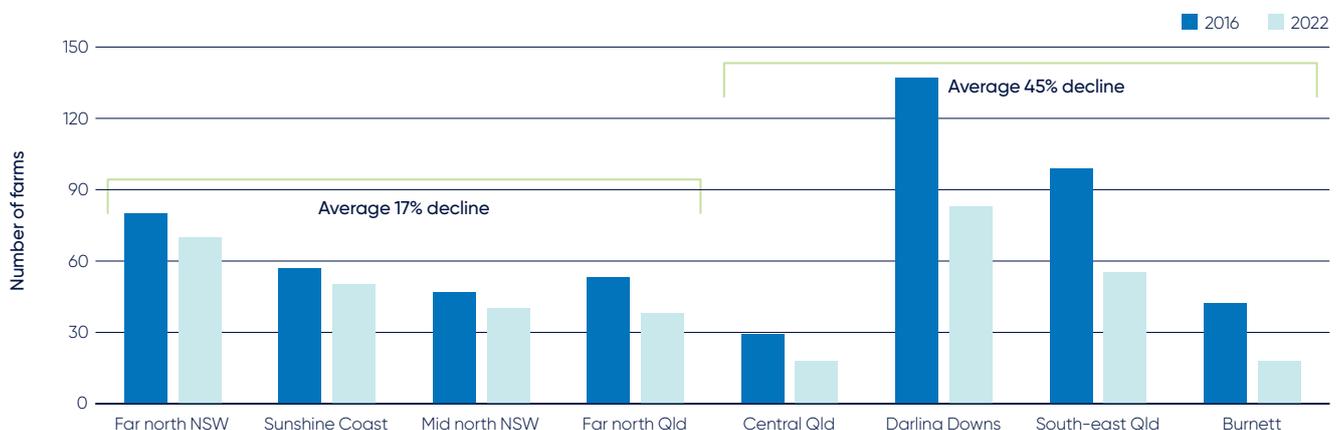
the industry evolving from a low farm productivity base or rapid growth in the scale of processing operations.

Queensland is the most disaster impacted state in Australia. Since 2017, 64 of the state’s 77 local government areas have been impacted by one or more declared disaster events. Between 1970 and 2019, Queensland and NSW have experienced 74 per cent of the national economic loss due to natural disasters (\$52.87 billion).

Throughout the Subtropical Dairy region, farms are spread across coastal river catchments, moderate rainfall cropping regions and upland high rainfall zones. The region has a diverse range of dairy business systems due to varying biophysical and climatic factors, and management strategies. The region continues to see severe drought and extreme rainfall events, with a gradual trend down in annual rainfall totals in the last 30 years.

	2016	2022
Total milk produced ML	550	409
Number of farms	578	396
ML per farm	0.95	1.03

Figure 1 Attrition in the last six years in subcoastal and inland dairy farms



Dairy farms in the region have increased production over the last six years. In 2016, the annual milk production of an average Queensland dairy farm was one million litres. In 2022, this had increased to 1.07 million litres. This has been driven by both an increase in herd size and milk production per cow. Queensland Dairy Accounting Scheme (QDAS) figures show that the value of farm assets under management has increased from \$4.6 million in 2017 to \$6.0 million in 2022. As has been the case in the past, there has been a trend to larger, more intensive, complex business models.

QDAS figures from 2016 to 2022 showed an average enterprise Earnings Before Interest and Tax (EBIT) of \$148,020 per farm (range of \$29,111 to \$237,784) and an average return on asset (RoA) of 3.0 per cent (range 0.6 per cent to 4.4 per cent, excluding capital gain). This is below the long-term average RoA for agricultural investments of approximately five per cent (excluding capital gain). Historic analysis has shown that the Queensland dairy industry has experienced growth when annual RoA has been greater than 4.5 per cent (2008–10 and 2016/17). These periods of higher profitability have been underpinned by high farm gate price and better seasons.

Equity and debt

Between 2016 and 2022, the Queensland and northern NSW dairy farm sectors have maintained relatively high equity. Benchmarking results over this period shows an average equity of 78 per cent (range of 76 to 80 per cent for QDAS and 71 to 81 per cent in NNSW). Of note is that NNSW farms had lower than average equity during 2021 (71%) and 2022 (75%). Debt servicing has averaged 2.3 cents per litre (cpl) in Queensland (2.0 to 2.9cpl), while debt servicing has been higher in NNSW at 4.0cpl (3.5 to 4.7cpl). An increase in medium business interest rate of 3.6 per cent since mid-2021 would likely increase this debt servicing by up to 3cpl subject to bank terms.

Opportunities to improve farm profitability

QDAS results between 2016 and 2022 have shown the top 25 per cent of dairy businesses delivering an average annual EBIT per cow of \$1,156 (range of \$624 to \$1,613). This compares to the average for a QDAS farm over the same period of \$562 (range of \$113 to \$861). Expressed as a multiple, the top 25 per cent of QDAS farms had 2.6 times the average (a range of 1.7 to 5.5). Dairy Industry Farm Monitor (DIFM) results for all of NSW show a similar trend over the same period. The top 25 per cent of farms had an average annual EBIT per cow between 2016 and 2022 of \$1,265 (range of \$746 to \$1,975) versus an average \$553 (range of \$161 to \$1,081). When this difference is expressed as a multiple, the top 25 per cent of DIFM farms benchmark 2.8 higher EBIT per cow than the average (a range of 1.8 to 4.6). These comparisons show that there is scope to understand the reasons for the substantial difference in farm business financial performance across Subtropical Dairy.

Forage management and nutrition

The Queensland Department of Agriculture and Fisheries (DAF) is the lead agency for feedbase R&D in north-eastern Australia under the C4Milk project, with Subtropical Dairy playing a supporting role, assisting in extension of outcomes from this project. In addition, Dairy Australia facilitates the delivery of national extension programmes in soil management (FertSmart) and herd nutrition.

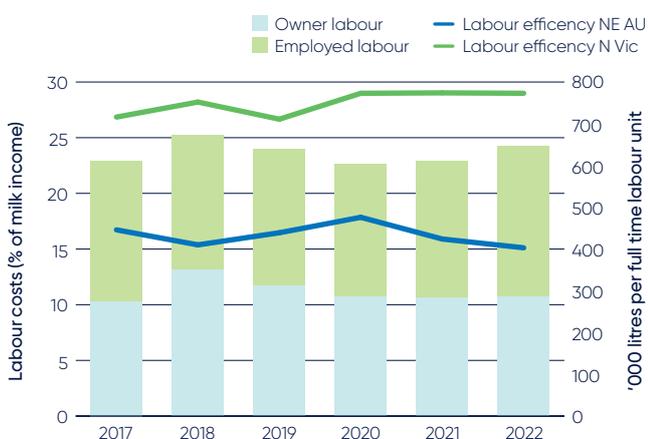
Dairy feeding systems in north-eastern Australia continue to change due to climate variability, increased feed related costs (FRC) and changes to the milk supply market. These changes have resulted in a fundamental shift from traditional pasture-based dairy feeding systems towards intensive feeding systems. DAF analysis has shown that the observed decline in EBIT from 2016 through to 2020 was driven by both an increase in non-FRC (e.g. labour) and a decline in margin over feed related costs (MOFC). MOFC was at its lowest in 2019 and 2020, due to drought and high commodity prices.



Labour efficiency and costs

QDAS reports over the last six years show that labour costs (employed and owner imputed) are the second highest cost to Queensland dairy farms. Labour expenses as a proportion of milk income has been stable over this period; however, there has been a gradual trend towards reduced labour efficiency. This compares to a slight improvement in labour efficiency in northern Victoria (Figure 2).

Figure 2 Labour efficiency across north-eastern Australia and northern Victoria



Recruiting and retaining staff

Unemployment in Australia is currently at historical lows. Dairy Australia survey data collected during 2022 indicates that one in four dairy farmers are unable to find labour or access the skills they need on farm. Staff retention in Australian dairy businesses is also a challenge. In a survey during 2021, 40 per cent of farms had one staff member leave and 47 per cent had recruited new staff over the previous 12 month period.

Markets and processing

Dairy supply chains in the Subtropical Dairy region almost exclusively service the domestic market with a strong focus on fresh milk lines or other niche locally manufactured products. It is estimated that five per cent of the region's milk supply is exported as milk fat products, ice cream and fresh milk.

As has been the case for the last 12 years since the introduction of discounted fresh milk by local retailers, the challenging domestic trading environment has led to margin erosion for local value chains. There has been limited capacity to pass on higher costs to consumers, particularly those due to unseasonal events or natural disasters. There have also been cost rises in a number of general business inputs such as energy and staff. This issue is further exacerbated by national pricing by large retailers. This makes it difficult for regional processors to recoup the inherent higher milk supply costs associated with tropical and subtropical dairy farm systems.

In 2016 – when the last Subtropical Dairy strategic plan was prepared – Queensland farm gate milk supply (377ML) was 71 per cent of demand (531ML). In 2022, there has been further attrition in supply (299ML) which contrasts with the drinking milk market growing to 573ML. Consequently, self-sufficiency in Queensland has declined to 52 per cent. Between October 2021 and September 2022, Queensland milk supply was lowest in April (713,000 litres per day) and highest in October (930,000 litres per day).

Consumer expectations regarding sustainability

There is emerging global compliance to reduce greenhouse gas (GHG) emissions in dairy systems with many multinational processors setting a zero-emission target by 2050. Dairy systems in subtropical and tropical countries produce a third of the world's milk supply, but emit over half of the global dairy GHG emissions. Much of this is due to the lower digestibility of tropical forages, lower cow productivity, both within a lactation and over her life. The Australian Government has a commitment to net zero GHG emissions by 2050. Through the Australian Dairy Industry Sustainability Framework, the Australian dairy industry has set a 2030 goal to reduce GHG emissions intensity by 30 per cent.

Opportunities and challenges

The Subtropical Dairy region has the following existing and emerging opportunities and challenges.

Strategic area	Driver	Environmental scan	Outlook
Value chains and the enabling environment			
Markets and consumers	Population growth	Growing domestic market driven by regional population growth.	●
	Domestic per capita consumption	Australians are consuming less dairy.	●
	Emerging plant-based dairy products	Sales are increasing by 14% p.a.	●
	Carbon emissions	There is growing market accountability regarding carbon emissions from business.	●
	Calf welfare	Increasing compliance on calf welfare and bobby calves.	●
	Social license	Through social media, there is greater public scrutiny on dairy farming.	●
Profitability	Farm gate milk price	Farm gate price in north-eastern Australia has increased significantly recently and is relatively stable.	●
	Loss of margin	The discounting of fresh milk by retailers has led to margin erosion across value chains.	●
	Inability to pass on costs	The annual cycle of milk supply contracting means farm businesses need to absorb volatile input costs.	●
Post-farmgate investment	Risk regarding re-investment in aging processing facilities	There has been little investment by large processors recently. Facilities in urban locations face increase commercial competition for land and infrastructure.	●
Policy	Policy to grow the region's dairy industry	Lack of government and private sector policy to stimulate pre-farm gate investment in the north-eastern Australian dairy industry.	●
	Water	Environmental policies and growing populations are placing pressure on agricultural water availability and infrastructure development.	●

Key ● Opportunity ● Challenge



Strategic area	Driver	Environmental scan	Outlook
Farm operating environment			
Volatility and risk	Global volatility	International markets for commodities are volatile due to government policy, unregulated markets and climatic events.	●
	Climate and weather patterns	North-eastern Australia is seeing a gradual decline in average rainfall and more extreme weather events.	●
Profitability	Equity	Equity in existing businesses is strong at 78%.	●
	Return on assets (RoA)	The current average RoA (3.0%) is below comparable returns in other agribusiness (5.0%) and the level to stimulate farm growth (4.5%).	●
	Competition for resources	There is increasing competition and cost for land, water and staff.	●
	Transition to other agricultural businesses	High beef prices are driving the transition of farms from dairy to beef.	●
	Labour	The automation of routine tasks offers scope to reduce labour costs.	●
Productivity	Productivity gains	RD&E gains have not been large enough to overcome surges in costs and unsustainable margins.	●
	Scale of operation	Compared to other Australian regions, the north-eastern Australian dairy industry has smaller farms leading to greater fixed costs per litre.	●
	Housed systems	Climate change, weather patterns and limited access to land is driving investment in housing and greater productivity.	●
	Systems complexity	Volatility and partial mixed ration systems are increasing business complexity.	●
	Data	There is a growing availability of data linked to productivity drivers.	●
Investment	Location of alternative dairying regions	There are locations within north-eastern Australia with lower land costs, access to more reliable water and within close proximity to markets, e.g. Goondiwindi and Fraser Coast Local Government Areas.	●
	Capital for new entrants	The increasing capital cost of dairy farms with sustainable scale is a barrier to farm ownership.	●
	Investment	Due to a lack of confidence and business succession, there is under-investment by existing farms or new entrants in operating infrastructure that could drive productivity efficiencies.	●
	Culture	The north-eastern Australian dairy industry has a negative culture and portrays an industry in continual crisis.	●
	Lack of career pathway to farm ownership	There is not a well-established pathway for new entrants to either share-farm or lease farms.	●
Agronomy and herd nutrition	Forage yield	The capacity for forage production per hectare in north-eastern Australia exceeds temperate regions.	●
	Forage diversity	A wide range of annual and perennial forages are available for propagation.	●
	Genetic modification of forages	Gene modification such as editing offers stepwise productivity gains in forage and grain quality.	●
	Competition for feeds	Other ruminant industries compete with dairy for conserved forages and commodities.	●
	Soils	The management of soils is inconsistent and variable.	●
	Greenhouse gases	Enteric methane synthesis and nitrous oxide loss from fertilisers are contributors to greenhouse gas emissions.	●

Key ● Opportunity ● Challenge

Strategic area	Driver	Environmental scan	Outlook
Farm operating environment continued			
Animal performance	Animal health	Mastitis, lameness and other animal health issues due to environmental conditions.	●
	Environment	High heat loads leading to reduced cow performance.	●
	Genomics	The adoption of genomic breeding values offers significant productivity gains.	●
	Performance monitoring	The use of technology to individually monitor animal performance offers scope to maximise genetic potential and reduce waste.	●
	Dairy/beef	The rearing of dairy beef calves in conjunction with the use of sexed semen offers parallel income to milk production and addresses emerging regulations regarding euthanasia of bobby calves.	●
	Biosecurity	The recent entry of fall army worm has caused changes in base summer forage species and additional costs. The proximity to Australia of exotic high impact, contagious diseases (foot and mouth disease and lumpy skin disease) has raised the risk of an incursion.	●
Farmers and their families	Mental health	Fatigue and burnout due to extreme weather events and volatile operating conditions.	●
	Succession planning	Inadequate investment in generational farm ownership transition. There is a lack of suitable service providers in this discipline.	●
Staff and training	Farm managers	Finding and developing staff as managers is problematic.	●
	Attracting and retaining staff	Recruiting staff to the dairy industry is a national problem.	●
	Overseas labour	Improve access to, and training of, overseas workers.	●
	Wages and salaries	Wage growth and regulation are becoming key challenges.	●
	Vocational training – Queensland	There are currently no dairy traineeships available in Queensland.	●
Service delivery			
Farm services	Identification and servicing of farms aspiring to change	Working more 1:1 with farms that aspire to change or are dealing with issues.	●
	Emergency response	Support businesses to access funding and technical resources.	●
	Online services	Further enhancing the online delivery of extension and advisory services.	●
	Diverse region	The north-eastern Australian dairy industry is spread over a large area, has diverse systems and is culturally complex. With limited resources, this makes face to face extension delivery challenging.	●
	Communication infrastructure	Poor internet service in some regions is stopping the delivery of online extension.	●
Service providers	Privatisation of RD&E	The proportion of propriety intellectual property is growing while the proportion of public intellectual property is shrinking.	●
	Service providers	Lack of current and future skilled service providers in regions across key farm disciplines.	●
	Fee for service consultancies	The provision of free advice and a culture of farm businesses not paying for advice is stopping the development of fee-for-service regional consultancies, particularly in whole farm management.	●
	Integration of R&D outcomes	Further upskill service providers in the latest R&D knowledge and technology.	●
Collaboration	Integrating technology developed in other industries	The sharing of innovative technology applicable to tropical and subtropical dairy systems, particularly in the disciplines of forage production and herd performance.	●

Key ● Opportunity ● Challenge

Industry outlook

There are several major trends that will potentially influence the north-eastern Australian dairy industry over the next five years.

Despite a slowing in migration to Queensland and a forecast reduction in drinking milk consumption per capita, the Queensland drinking milk market is still expected to grow by 25 million litres over the next five years.

There were significant increases in farm gate milk price in July 2022, with increases of 15 to 20cpl. Likely drivers for these increases were due to the attrition in farm milk supply in eastern Australia and increased competition amongst processors. This period also saw significant increases in retail pricing.

There continues to be a trend to greater intensification of dairy systems driven by weather patterns and nutritional limits to per cow productivity from perennial tropical grasses. There are no immediate visible plans to invest in the genomic development of perennial tropical forages by either public or private investors.

There will be changes in farm practices such as calf rearing and on-farm carbon mitigation driven by processor policies.

Globally, 2023 is forecast to be the hottest year on record. As Australia exits a record third La Niña period, it is possible that a period of El Niño drought conditions will return in the next five years.



Strategic response

Strategic outcome	Approach/action	Measure	Target 2028
1 Better outcomes for dairy farm businesses through improving the enabling environment			
a Work collaboratively with other stakeholders in north-eastern Australia to improve the return on investment of levy	Subtropical Dairy uses best intent to collaborate with other organisations operating in its remit Subtropical Dairy advises Dairy Australia regarding high priority RD&E investment for north-eastern Australia	<ul style="list-style-type: none"> Maintenance of service provider communication network Delivery of annual Service Provider forum The Board and Executive Officer of Subtropical Dairy actively seek engagement opportunities with Dairy Australia 	<ul style="list-style-type: none"> Regional service providers engage in ongoing communication with directors and staff Delivery of an annual Service Provider forum Four annual meetings by directors with Dairy Australia
b Informing farmers, aspiring farm owners, investors and financial institutions about various business and ownership models that can enable transition in or out of the industry	Provision of information and resources Engage with regional public and private financial organisations	<ul style="list-style-type: none"> Awareness of resources and options Annual engagement with public and private sectors 	<ul style="list-style-type: none"> 90% awareness within relevant demographics An annual forum with financial institutions
c Developing new farmer leaders	Cultivate leaders that can drive a positive industry agenda	Delivery of leadership courses	One per year
d The development of regional service providers	Subtropical Dairy supports the skill development of regional technical consultants and advisers	Attendance and feedback of service providers at training events	50% of regional service providers attend an event per year
2 Delivering more customised and responsive farm services			
a Farm services delivering new knowledge and technology	Identify new contemporary technologies that can be integrated into dairy farm businesses	Annual improvements in productivity to maintain and/or improve profit and return on investment on-farm	Four innovative technologies are identified per year
b Adapt delivery models to drive practice change	Deliver an extension model based on 1:1 support and confidential analysis to identify opportunities for business improvement Deliver group activities such as training and peer-to-peer learning on a needs basis	<ul style="list-style-type: none"> Contact with dairy farms Delivery of group-based activities 	<ul style="list-style-type: none"> All disengaged dairy farms receive a consultation every year A minimum of 60 group events are delivered per year with a minimum participation of 45% of dairy businesses
c Supporting businesses during extreme operating conditions, such as weather events	Provide support for dairy farms and service providers regarding on-farm technical and financial issues	Delivery of information, group events and 1:1 farm consultations	As required

Strategic outcome	Approach/action	Measure	Target 2028
3 Supporting more competitive, contemporary and resilient farm businesses and systems			
Farm business strategies and financial performance			
a Dairy farmers increase profitability by improved decision making based on appropriate analysis and interpretation of key profit drivers	Develop and deliver new tools and resources on a 1:1 basis, either directly or via other service providers	Dairy farm businesses utilising relevant key performance indicators with support from extension staff and service providers	50% of all dairy farms are utilising these resources
b In terms of seasonal milk production, dairy farm businesses understand their biophysical, financial and people strengths and weaknesses of their systems and adapt their milk production strategies accordingly	Develop and deliver within year analysis tools focusing on profit, biophysical drivers and inherent farm characteristics	Development of a within year analysis decision support system and delivery of associated extension activities	Development complete by December 2024. Extension delivery complete by December 2026
c Increased long-term profitability and business resilience through enterprise strategic planning to manage volatility (inputs and weather events) and long term transformations (evolving value chains and climate change)	Evaluate, modify and/or develop existing or new tools and resources and support training farmers in their use and interpretation	Dairy farms have strategic and risk management plans	90% of dairy farms are made aware of resources and the benefit/cost of having strategies in place

Strategic outcome	Approach/action	Measure	Target 2028
3 Supporting more competitive, contemporary and resilient farm businesses and systems			
Agronomy and herd nutrition			
a Improved soil management and utilisation of nutrients and water	<p>Best practice soil management for pastures and crops is communicated</p> <p>Subject to system specific key performance indicators, farms continually look to sustainably grow more nutrients on farm and converting these to milk</p> <p>Utilise practices from other commodities and leverage off non-dairy levy R&D</p>	<ul style="list-style-type: none"> • Proportion of dairy farms undertaking annual soil tests and adapting fertiliser management • Adoption of best practice 	<ul style="list-style-type: none"> • 90% of all dairy farms are aware of the benefit/cost of undertaking soil tests • 40% of all dairy farms are undertaking soil tests annually • Details of service providers related to soils analysis and their interpretation are communicated • Milk yield per hectare of homegrown forages has increased 10% between 2023 and 2028
b Milk income over feed costs (MOFC) is maximised	<p>Dairy farms calculate income over feed costs on a regular basis subject to farming system</p> <p>Dairy farms understand the cost of milk production of individual forages and commodities available</p> <p>Options to improve returns are pursued</p>	<ul style="list-style-type: none"> • Dairy farms are aware of the benefit cost of measuring MOFC • Dairy farms have the skills and resources or access to service providers to calculate MOFC • Dairy farm managers are signposted to resources and expertise to assist with herd nutrition improvements 	<ul style="list-style-type: none"> • 90% of all dairy farms are aware of the benefit/cost of routinely calculating MOFC • 40% of all dairy farms are calculating MOFC at least quarter • Between 2023 and 2028, MOFC has increased on average above the Consumer Price Index
c Providing extension support to local research and development outcomes	<p>Extension resources are deployed on a needs basis to support the C4Milk and other R&D projects</p>	<ul style="list-style-type: none"> • Publication of 18 articles annually from C4Milk • Annual co-delivery of six group activities incorporating contemporary agronomic and herd nutrition science 	<ul style="list-style-type: none"> • 90% of all dairy farms are aware of the outcomes of C4 Milk and other R&D projects • There are over 100 participants annually in co-delivered group activities, with a measured improvement in knowledge and skills

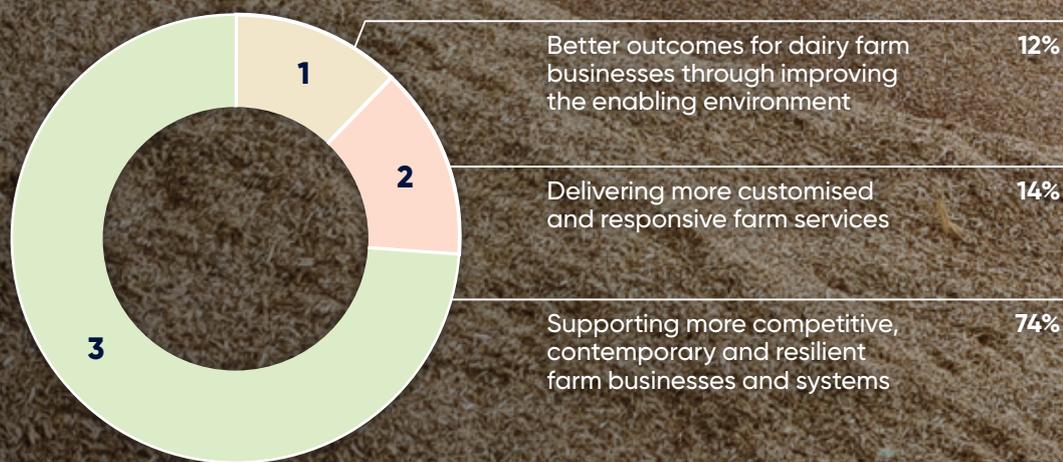
Strategic outcome	Approach/action	Measure	Target 2028
3 Supporting more competitive, contemporary and resilient farm businesses and systems			
Herd development, performance, health and welfare			
a Investing and integrating infrastructure and feeding systems	<p>Ensuring dairy farm managers are aware of the benefit/cost of management and infrastructure strategies to manage weather events, climate change and herd nutrient intakes</p> <hr/> <p>Dairy farms have access to resources to integrate these strategies into their businesses where warranted</p>	<ul style="list-style-type: none"> • Awareness of options • An evaluation regarding benefit/cost from the potential adoption within their business 	90% of dairy farms aware with 40% undertaking benefit/cost analyses
b Improved management of mastitis and lameness	Ongoing delivery of national mastitis and lameness management courses such as Milking and Mastitis Management and Healthy Hooves	<ul style="list-style-type: none"> • Communication of latest information and practices • The delivery of training is reviewed annually in operating plans 	<ul style="list-style-type: none"> • 90% of all dairy farms are aware of these programmes • Annual delivery of one course in each of Subtropical Dairy's seven regions
c Farmers operating best practice in animal husbandry	Deliver information and skill development courses with a focus on calf management	Adoption of best practice by dairy farms. Advisers are advocates for these practices	100% of all dairy farms are operating at national animal welfare standards
Staff			
a Support dairy farms to provide a safe work environment	Provision of up-to-date information and resources	Awareness of WH&S legal requirements and best practice	100% of all dairy farms
b Reduce staff requirements through automation and business review	<p>Undertake R&D to identify labour saving technology</p> <hr/> <p>The development and implementation of farm labour audits to identify staff efficiency strategies and their relationship to business profit drivers</p>	<ul style="list-style-type: none"> • Publishing of two technical articles per year focused on labour saving technology and approaches • A pilot farm labour audit is developed by December 2024 and delivered to a minimum of 40 dairy farms by December 2028 	Number of staff employed by farms does not increase from 2023 benchmarks (Queensland Dairy Accounting Scheme)
c Farms invest in the skill development of their staff to improve productivity	Staff are encouraged to participate in training programmes	Full-time labour equivalent (FTE) per million litres annual milk production	Milk production per FTE is improved by 25%
d Farmers are preferred employers and skilled managers	Provision of targeted information and resources such as Farming with my Team	Farmers have the same level of training and skills as other potential employers of businesses of similar scale	Staff turnover is less than 25% in farms accessing information

Future investment

The graph below shows the investment intent of Subtropical Dairy from 2023 to 2028 across its core strategies.

In summary, Subtropical Dairy intends to invest 74 per cent towards supporting more competitive, contemporary and resilient farm businesses and systems, and 14 per cent towards delivering more customised and responsive farm services. The remaining 12 per cent will be targeted towards improving the effectiveness and impact of the enabling environment of the north-eastern Australian dairy industry.

Investment in Strategic Priorities 2023–2028





Governance, monitoring and business improvement

Governance

Subtropical Dairy Programme is a not-for-profit RD&E company, limited by guarantee. It shares a close strategic and operational partnership with Dairy Australia.

Subtropical Dairy is managed by a skills-based, eight-member Board with support from a full-time Executive Officer. Subtropical Dairy also has part-time project managers (two) and extension officers (three positions).

The Board comprises of:

- A minimum of four and a maximum of five dairy farmers, one of whom must be the Chair and must be members of Dairy Australia.
- A minimum of three and a maximum of four service providers with complementary industry skills as determined by the operational and strategic needs of the Board at the time of appointment.

Board members are appointed for a three-year term and can renominate after their term. An industry-led selection panel is appointed each year to interview and select candidates for any Board vacancies. The selection panel is chaired by the Subtropical Dairy Chair or Vice Chair.

Other members of the panel include:

- A representative from EastAUSMilk.
- A representative from NSW Farmers Association.
- A representative from the Queensland Department of Agriculture and Fisheries.
- Two nominated representatives from Subtropical Dairy's regional teams.

Subtropical Dairy has a Memorandum of Understanding with NSW Farmers to ensure that communication and alignment between policy and research is optimised.

The Board also has committees including Finance, Audit and Risk; Extension and Adoption; Projects; and Strategy and Innovation.

Monitoring

Subtropical Dairy monitors its performance using various approaches.

Governance

The Subtropical Dairy Board undergoes annual performance reviews and undertakes quarterly reviews of financial performance and risk. Subtropical Dairy's annual financial reports are also audited externally.

Delivering strategic outcomes

Subtropical Dairy uses several sources of data to monitor the impact of the organisation:

- National Stakeholder Tracking (commissioned annually by Dairy Australia).
- An Annual Farmers and Service Provider survey collating short term priorities and feedback regarding delivery channels and impact.
- Event attendance and evaluation. Event evaluation has two major aspects:
 - Feedback regarding course or project design, content, presentation and other delivery aspects
 - What value have projects delivered to the target user and/or the investor? For example, when workshops are delivered, there are analyses undertaken regarding pre- and post- workshop changes in knowledge and the intent of the participant to adapt new skills in their farm practices. These are followed up later with further evaluation of the level of impact the project has had on business profitability e.g. farm benchmarking, testimonials, group discussions.
- Direct feedback to Subtropical Dairy directors and staff. Through our everyday business, we receive informal feedback regarding our services.







Disclaimer

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