IT'S OUR NATURE

OUR INTEGRATED REPORT 2021

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WELCOME TO PĀMU'S INTEGRATED ANNUAL REPORT

Critical to successful integrated reporting are two key elements – engagement with stakeholders on material issues that impact our business and full accounting for how we look after the capitals (including natural resources) that come under our stewardship. We cover both aspects in this report.

This year, we asked a range of external stakeholders along with groups of Pāmu employees, our Board and Leadership Team to give us feedback on the issues and on Pāmu's role and performance in relation to those issues.

See 'Material issues and stakeholder views' on pages 17–28.

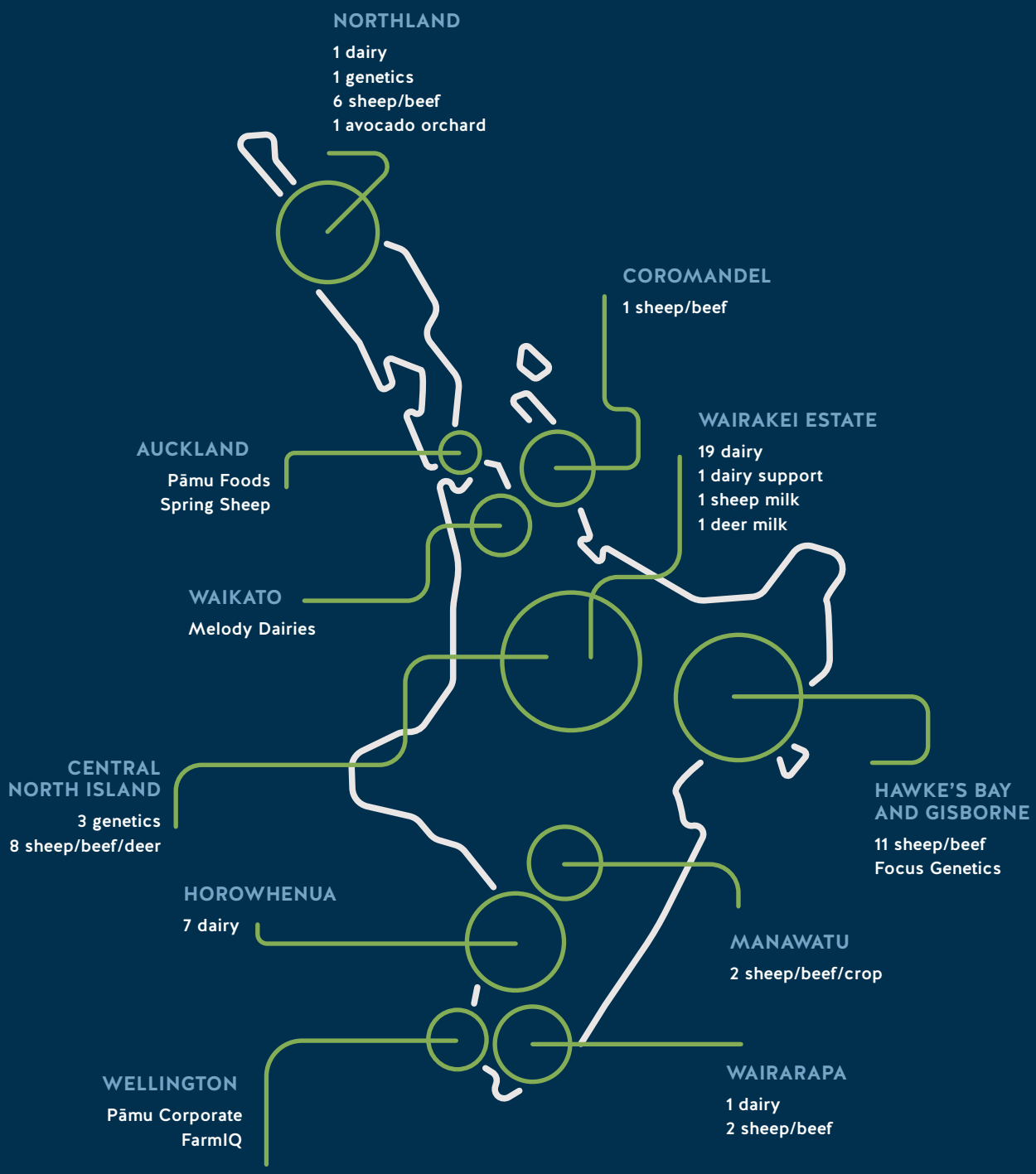
We are grateful to the stakeholders who have given generously of their time to share their perspectives.

Another key component in this report is our selection of performance measures, which we have refined this year as we continuously strive to provide meaningful data on how we are doing as a business across all our capitals.

See 'Performance scorecard' on pages 6–7.

We welcome your feedback on the contents on this report, and we are always open for discussion with you on innovations that will improve farming and the vitality of the wider sector and communities in which we work.

PĀMU TODAY



OUR CONSUMER AND FOOD SERVICE PRODUCTS

JOINT VENTURES AND SUBSIDIARIES

FARMIQ®

MELODY Dairies

FOCUS GENETICS

SPRING SHEEP MILK CO. New Zealand

114
Farms in total

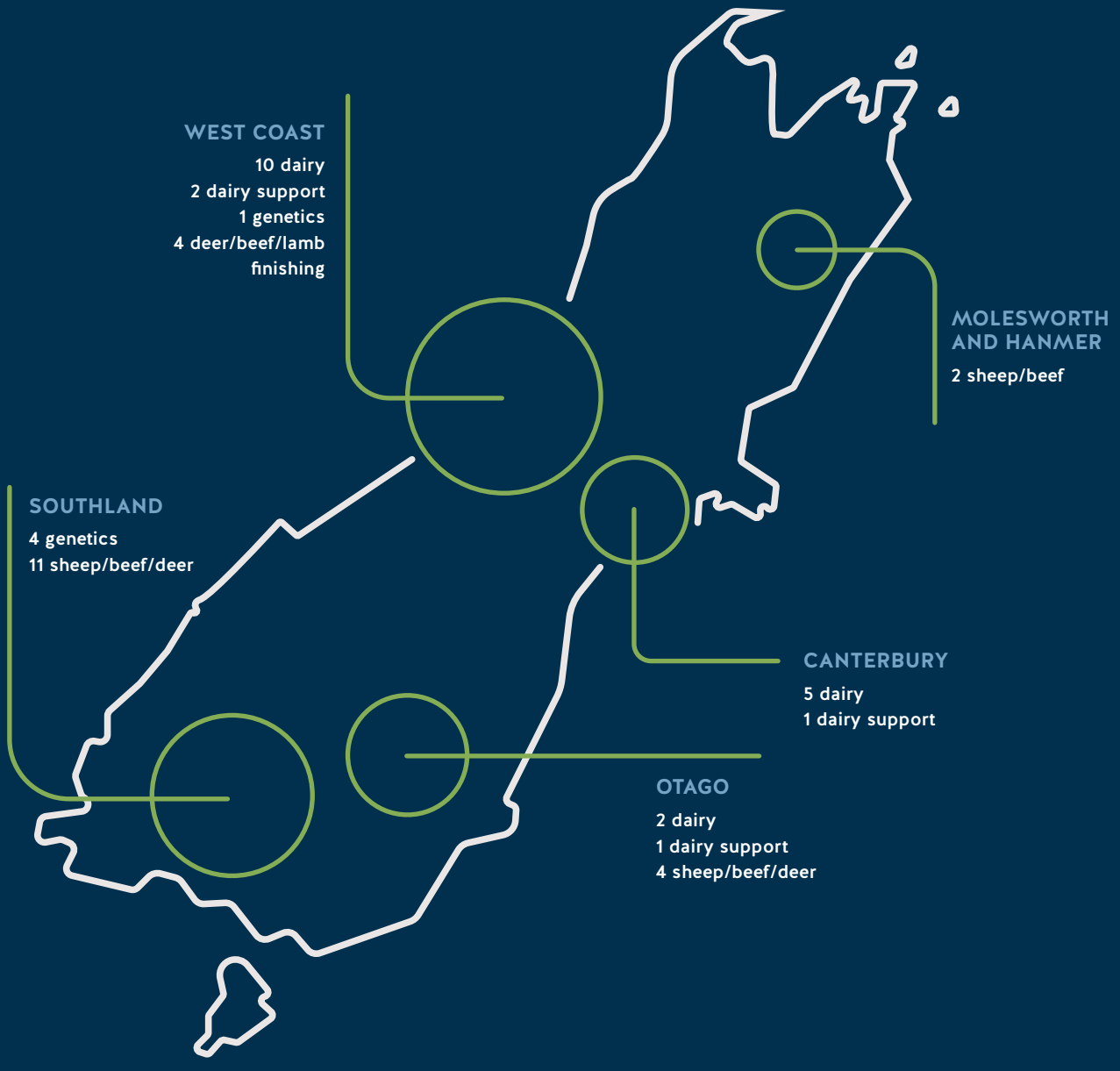
29
Farms managed by Pāmu, owned by others

85
Farms owned and managed by Pāmu

>364,538
Total hectares of farms

>210,486
Hectares of managed farms

>154,052
Hectares of owned farms



VALUE CREATION

OUR PURPOSE

ENRICHING OUR LAND, OUR PEOPLE AND THE FUTURE OF FARMING

OUR WORLD

GLOBAL AND LOCAL MARKETS FOR FOOD AND FIBRE

VALUE CHAINS FROM FARM, FOREST AND ORCHARD TO MARKETS

LAND AND NATURAL RESOURCES

AOTEAROA NEW ZEALAND – PEOPLE, GOVERNANCE, PROVENANCE

SOCIAL LICENCE – TE TAIAO

TECHNOLOGIES AND KNOWLEDGE

PĀMU CAPITALS

PEOPLE

Farmers, growers, marketers, supply chain managers, business experts

647 employees

NATURAL ASSETS

364,538 hectares

9,940 hectares QEII

FINANCE

Total assets $1,975 million

FARMS AND ANIMALS

114 farms

1,334,970 stock units

12,190 ha plantation forests

EXPERTISE

Leader in new cattle, deer and deer genetics, expertise in farm management and animal-based production systems

R&D investment $3.8 million

RELATIONSHIPS

Supply chain partnerships, research and development partnerships, stakeholder engagement programmes

27 community engagement events

OPERATIONS

Pastoral farming of dairy cows, beef cattle, sheep and deer – milk and red meat production in efficient, sustainable farming systems

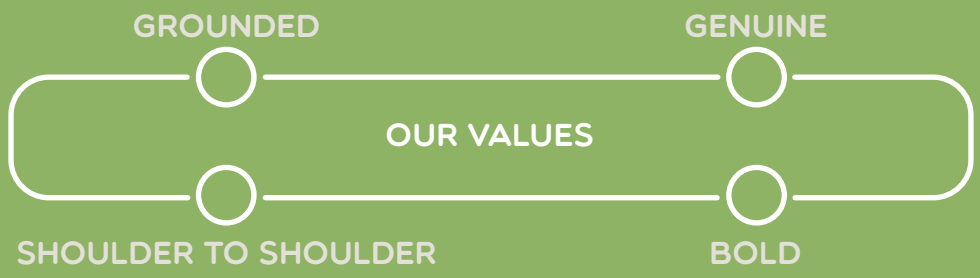
Ongoing pursuit of farming excellence – genetics, productivity knowledge practices, digital tools, land and water management, kaitiakitanga

Wood production and carbon sequestration – excellence in forestry

Horticulture – commercial crops and research and development of new crops

Speciality milk production and development (on-farm and in value chains) – organic bovine, sheep milk and deer milk

NOTE: Data is as at 30 June 2021 or for the year end at that date.



OUTPUTS

Dairy products
15.1 million kg milksolids

Red meat
Prime beef 6,241 tonnes
Sheepmeat 6,793 tonnes

Forestry harvest
Total wood harvest 47,993 tonnes

Horticultural produce
Avocados and other experimental crops

Carbon emissions
Credits and other ecosystem services
1.09 million NZUs
Net carbon emissions
414,900 tonnes CO_2e

OUR AMBITIONS

HIGHLY RESPECTED EMPLOYER – SKILLED, INNOVATIVE AND MOTIVATED PEOPLE FOR LAND-BASED INDUSTRIES OF AOTEAROA NEW ZEALAND

GLOBAL LEADER IN SUSTAINABLE LAND USE AND SYSTEMS – MODEL OF TE TAIAO CONCEPTS AND PRACTICES

PROFITABLE – EBITDAR OF $130-140M PER ANNUM BY 2030

UNIQUELY DIVERSIFIED FOOD AND FIBRE PRODUCER – PRODUCER OF HIGH-VALUE PRODUCTS FOR GLOBAL MARKETS

RECOGNISED INNOVATION PARTNER AND SOURCE OF KNOWLEDGE ON EXCELLENCE AND SUSTAINABILITY IN FARMING, FORESTRY AND HORTICULTURE

VALUED PARTNER IN VALUE CHAINS TO MARKET AND IN RESEARCH AND DEVELOPMENT

PERFORMANCE SCORECARD

	Financial year 2021	Financial year 2020	Financial year 2019
Environment			
Total area retired and protected in QEII covenants (hectares)[1]	9,940	9,497	8,861
GHG emissions on farms that we own (tonnes CO_2e) – gross[2]	566,557	566,062	615,950
GHG emissions on farms that we own (tonnes CO_2e) – net[2]	236,501	255,100	326,122
GHG emissions on all farming operations (tonnes CO_2e) – gross[2]	747,798	785,775	874,901
GHG emissions on all farming operations (tonnes CO_2e) – net[2]	414,900	470,893	581,323
Phosphate loss on all farming operations (tonnes)[3]	372	433	NR
Nitrogen loss below the root zone on all farming operations (tonnes)[3]	4,920	4,897	4,912
Intensive winter crop area shown as % of total effective hectares of farms with intensive winter crop (% hectares)[4]	4.41	5.31	NR
Synthetic nitrogen fertiliser applications, total (tonnes)[5]	5,594	5,939	6,161
Total area in forestry plantation (hectares)[6]	12,190	10,756	9,458
People			
Lost-time injury frequency rate[7]	9.8	7.2	9.4
Lost-time injury severity rate (average days lost per lost-time injury)[8]	24.1	17.2	24.6
On-farm safety observations (number)[9]	5,772	3,263	1,419
Positive incident report frequency rate[10]	1,121.7	722.5	419.0
Employee turnover (%)[11]	23.5	21.3	22.2
Training metric – proportion of employees in any form of mental health training (%)[12]	29.7	12	13
Employee diversity – gender and ethnicity (% of total)[13]			
Male	76.3	76.7	75.2
Female	23.7	23.3	24.8
New Zealand European	62.9	64.6	65.9
Māori	20.5	18.8	17.2
Not known	5.5	5.2	5.4
European	2.8	4.0	5.1
Asian	4.2	4.6	3.8
Pacific peoples	1.6	1.2	1.2
Middle Eastern/Latin American/African	1.7	0.8	0.9
Other ethnicity	0.8	0.9	0.5
Employee diversity – gender pay gap (NZ benchmark %)[13]	9.1	9.3	9.3
Employee diversity – gender pay gap (Pāmu benchmark %)[13]	0.16	3.9	4.0
Staff engagement score[14]	7.0/10	NR	NR
eNPS[15]	2	NR	NR

1. Pāmu land protected by covenants with the QEII Trust Board as at 30 June under biodiversity protection programmes initiated in 1991.
2. Greenhouse gas emissions from all farming operations on properties that are owned by Pāmu. Gross on-farm emissions are based on modelling of carbon dioxide, nitrous oxide and methane loss to the atmosphere using the best-available industry standard OverseerFM technology. Net emissions are gross on-farm emissions minus CO_2e sequestered in all planted forestry and riparian areas and also native forest and scrub growing on these properties. Pāmu continues to refine its modelling. Data reported in prior years is not directly comparable. FY2020 and FY2021 sequestration calculations have been adjusted to exclude Glenomaru, a leased farm. FY2020 and FY2021 results reflect a reduction in Pāmu's farming portfolio. Due to OverseerFM, this data is reported retrospectively, e.g. FY2021 is the most recent and relates to FY2020.
3. Nitrogen and phosphorus losses have been taken from OverseerFM's aggregated data function. Data for FY2021 and FY2020 has been modelled under version 6.4.0 (released in 2021), with FY2020 data (as previously reported) remodelled under this latest version and updated in this report. FY2019 data is based on modelling outputs from an earlier version of OverseerFM, available at the time of reporting in 2019. Accordingly, these figures are not directly comparable. FY2020 and FY2021 figures reflect a steady state (with N averaging 13.5 kg/ha, and P decreasing from 1.2 kg/ha to 1 kg/ha). Calculations do not include nitrogen removed by wetlands, although this will be reflected in future reporting, as wetland data and appropriate scientific information becomes available. All reported figures represent those occurring throughout the previous financial year. Data scope includes all Pāmu-owned and managed farms, with the exception of Sweetwater Dairies and Kapiro Orchard (Northland).
4. The percentage of intensive winter crop (IWG) proportionate to the total effective hectares for farms with intensive winter grazing. Note that standard industry measurement is total hectares.
5. This data represents our synthetic nitrogen fertiliser purchased from Ballance Agri-Nutrients during any given financial period. Units are in tonnes of nitrogen.
6. Total area of Pāmu-owned plantation forestry as at 31 December (during the financial year).
7. LTIFR is the number of employee working hours lost due to injury per 200,000 hours worked by all employees in the year.
8. The average time lost per singular event (LTI), allowing us to determine how serious the injuries are.
9. Safety observations are reports of safe or unsafe acts or conditions identified by employees in their workplaces. Reporting of observations helps to avoid near misses or harm and shows a positive safety culture.
10. Positive incident report frequency rate (PIRFR) is the number of first aid, near miss and safety observation reports for every 200,000 hours worked. These reports are seen as an indicator of a positive safety culture because they report incidents before individuals are seriously harmed.
11. Number of employees who left during the year as a percentage of the average total of Pāmu employees.
12. Based on analysis of Pāmu's database of employees as at 30 June each year.
13. Pāmu uses Statistics NZ as our trusted data source for New Zealand's gender pay gap. Statistics NZ reported the gender pay gap was 9.1% in 2021, 9.5% in 2020, 9.3% in 2019, 9.6% in 2018 and 9.7% in 2017. Statistics NZ has advised that previously supplied figures may differ to those provided in 2020.
14. Staff engagement score is the average score given by all the participants in response to questions of how they feel about their job experience and Pāmu.
15. Employer Net Promoter Score, or eNPS, is a scoring system designed to help employers measure employee satisfaction and loyalty within their organisations. It is an industry agnostic benchmark. It is based on the Net Promoter Score system from Bain & Company, Satmetrix Systems, Inc.

	Financial year 2021	Financial year 2020	Financial year 2019
Finance			
Return on invested capital (%)[16]	4.1	3.5	1.8
Operating margin (%)[17]	26.1	23.9	13.8
Solvency ratio (times, 30 June)[18]	4.8	5.0	6.2
Balance sheet gearing (%, 30 June)[19]	13.2	13.4	13.4
Farms and animals			
Animal health – dairy herd somatic cell count average (cell count per ml of milk)[20]	175,023	169,153	168,700
Milk solids per cow (kg)	375	355	327
Milk solids per hectare (kg)	864	843	802
Milk solids as a percentage of cow's live weight (%)[21]	82	77	71
Prime lamb carcass weight in season (kg)	17.9	17.8	17.9
Prime steer carcass weight (kg)	312	312	315
Net production per effective hectare (kg)[22]	176	157	159
Lambing percentage (%)[23]	134	135	128
Expertise			
Revenue generated per head of livestock ($)[24]			
Sheep	127	140	133
Beef	1,330	1,385	1,447
Beef (including dairy beef)	916	928	867
Deer	336	484	590
Confirmed R&D projects ($)[25]	3,800,000	NR	NR
Relationships			
Cattle, sheep and deer under contract (% of total budgeted sales)[26]	68	56	67
Spring Sheep – milking flock size (sheep)[27]	9,300	6,000	4,000
FarmIQ – NZ farms using management tools[28]	4,540	4,109	3,990
Sheep maternal (index NZMW) ($)[29]	38.42	32.08	33.55
Beef maternal[30]	-		
Deer maternal (index R-EK) ($)[29]	16.80	17.45	16.06
Sheep terminal (index NZTW) ($)[29]	20.75	19.98	17.92
Beef terminal (index TERM) ($)[29]	52.00	50.00	47.00
Deer terminal (index TERM) ($)[29]	15.84	15.91	8.96
Community engagement events[31]	27	NR	NR

16 Profitable use of financial capital: Earnings before interest, tax and revaluations less non-operating items/average shareholders' equity, debt and redeemable preference shares less revaluation reserves. Non-operating items includes imputation credits, share of profit/loss and dividends received from joint ventures and gains/losses on asset sales (FY2021 ($4m), FY2020 $5m, FY2019 $1m). Total revaluation reserves including revaluations in retained earnings (FY2021 $757m, FY2020 $721m, FY2019 $812m).

17 Profit per dollar of revenue: Earnings before interest, tax, depreciation, amortisation and revaluations less non-operating items/operating revenue. Refer note 16 for details of non-operating items.

18 Financial flexibility: Current assets/current liabilities (excluding current portion of long-term debt on the basis that all debt will be refinanced as it matures and excluding current portion of lease asset and lease liability).

19 Balance sheet leverage: Net debt/net debt plus equity.

20. Average somatic cell count across all Pāmu-managed herds for the production season. Lower cell count indicates lower concentration of cells in milk, with a correspondingly lower level of pre-clinical mastitis in cows.

21. Metric based on 460 kg liveweight.

22. This is a measure of production per hectare including wool and velvet.

23. Based on ewes mated, hoggets mated and in-lamb ewes purchased. FY2019 reduction attributable in part to spring storms in 2018.

24. Pāmu revenues for each livestock category divided by the number of production animals sold during the year.

25. Focus Genetics R&D projects that are under way in FY2022. This figure does not include ongoing or completed trial projects across Pāmu operations or those projected to be completed in FY2022. Accordingly, this represents a conservative value in FY2022. As we enhance our innovation tracking and reporting systems going forward, we anticipate that a more complete R&D figure will be reported in future years.

26. Pāmu has contracts with leading primary product processors for supply of finished livestock to market specifications. These underpin income levels across large volumes of production and also ensure supply to processors within time windows that meet their customers' requirements.

27. Spring Sheep produces premium sheep milk infant formula, full cream and fortified milk powders and chewable tablets for domestic sale and export to a growing number of Asian markets. Pāmu owns 50% of this joint venture entity. Figure represents total flock size owned by supplying farmers.

28. FarmIQ Systems' number of client farms using FarmIQ digital applications and cloud service as at 30 June. Pāmu is a 26.03% shareholder in FarmIQ.

29. (NZMW: New Zealand maternal worth. R-EK: replacement – early kill. NZTW: New Zealand terminal worth. TERM: terminal.) Industry standard measure (breeding index) of genetic worth expressed as expected return per dam joined (maternal index) or per progeny born (terminal index) compared to industry average in base year (1995).

30. Beef maternal indexes not available currently during transition to new breed society. AngusPro and New Zealand industry index still to be implemented, data will be available in next reporting period.

31. Comprises of hosting and active participation in open days, catchment area meetings, formal rural forums and iwi engagement initiatives.

OUTLOOK

CHAIR AND CHIEF EXECUTIVE

Pāmu is looking ahead with confidence after another pleasing year delivering on its purpose – enriching our land, our people and the future of farming. Our confidence in future food and fibre markets is tempered by the continuing challenges posed by Covid-19 and the need to make our business more climate and environmentally friendly.

In FY2021, Pāmu exceeded financial targets while farming to higher environmental standards, striving to improve the wellbeing and knowledge of people across the business and pursuing technology and farm system innovation. The latter are in areas of high importance to Pāmu's future success as well as the nation's farmers (such as bobby-free dairy).

Our financial performance was impacted by some Covid-19-related factors, but these were largely offset by buoyancy in product prices and production growth, most notably in Pāmu's dairy business. Group EBITDAR was $61 million (vs budget $35 million) – very pleasing given global market disruptions and cost pressures. On this basis, the company will pay a $5 million dividend for FY2021.

We grew milk and meat production on a reduced land area – all due to ongoing improvements in animal genetics and in farming practice and systems, including increased use of new digital technologies. While our productivity rose in both dairying and livestock farming, revenue fell in the latter, mainly because of lower prices for venison on global markets and weak prices for coarse fibre wool.

EBITDAR for FY2021 also reflects Pāmu's growth in forestry assets and their associated carbon credits. Group net profit after interest, depreciation and tax was $29 million – a reversal from the previous year's loss due to improved operating profitability and livestock revaluations.

CAPITALS PERFORMANCE

Pāmu's rates of return on financial capital are in line with averages for comparable New Zealand farms. We also measure group performance in relation to other Pāmu-specific forms of social and environmental capital. In this context, it is pleasing to see a further step up in employee engagement in FY2021. Our aspiration to achieve year-on-year improvement in our health and safety record was not met, and doing so will be a priority for improvement next year. This is consistent with the importance we place on people capital across the business.

Likewise, this Integrated Report's trend data for expansion of forestry, land retirement and carbon emissions indicates very good progress in enhancing the natural capital used by Pāmu. We enrich our land by farming with less negative impact on soil, water and atmosphere (such as the 12.5% reduction in winter cropping between 2018–2020 and improved winter grazing practice) and with regenerative benefit wherever achievable within our farming systems (such as protecting land through QEII covenants).

Pāmu farms and livestock are another form of capital to which we add value by building and maintaining infrastructure and asset quality and lifting productivity. Production ratios all showed improvement during FY2021.

Likewise, we continue adding to our expertise and relationships – forms of intellectual and social capital that are essential for delivery on Pāmu's purpose. We ran well-received Taste of Pāmu events at the Beehive in Wellington and in Christchurch and hosted field days and other visitor groups on our farms. We saw further pleasing developments with this capital, as evident in Pāmu's strategies for land-use diversification and speciality milk production and supply.

DR WARREN PARKER
CHAIR

STEVEN CARDEN
CHIEF EXECUTIVE

OUTLOOK CONTINUED

OPERATING ENVIRONMENT

As we go into FY2021, every New Zealand food and fibre producer is grappling with significant change and uncertainty. We all feel the impacts of Covid-19, market disruptions and fundamental shifts in demand, climate change-related imperatives and environmental and human wellbeing concerns. At Pāmu, our planning over the past decade has sought to account for competitive market trends, technology advances, climate threats, regulatory developments and human resources and societal issues. This focus has helped to position us relatively well to respond to the present challenges facing pastoral farmers, but we must remain adaptive to the critical risks, pressures and opportunities that can emerge quickly across our operating environment.

This year brings even greater need for vigilance on market and cost pressures and on how Pāmu's people are being impacted by farm system and regulatory changes. We place high value on understanding the views and interests of Pāmu stakeholders, outside and inside the business. This year, our stakeholder engagement process and materiality assessment focused on 18 issues for New Zealand farmers and growers.

See 'Material issues and stakeholder views' on pages 17–28.

We especially highlight the emphasis stakeholders placed on the need for greater urgency in change management and innovation and their sense that today's changing world holds many opportunities for Pāmu and others. Overall, we are pleased Pāmu retains substantial support for our purpose and strategies, and stakeholders are keen to see our delivery on these.

STRATEGY AREAS

Looking ahead, our strategy focuses on three key themes.

First, Pāmu will pursue excellence in its core farming business to be evidenced through higher profitability and greater sustainability in every sense. Our business is livestock and dairy farming but also forestry and plant biodiversity on land where these enterprises are more profitable and/or more sustainable than pastoral farming.

In livestock and dairying, Pāmu is moving to systems that combine with greater resource efficiency – land, water, infrastructure, animals and people – within clear environmental and biodiversity guidelines. System change puts more focus, farm by farm, on profitability gains than on maximising production. On some farms, this means stock numbers are being reduced and/or input costs managed down significantly, and the value of output increased such as we have successfully demonstrated with organic dairy systems.

We reported on an independent comparative analysis of our lower North Island dairy farm performance in last year's report.

We recognise that talented and committed farm managers and staff are critical to making these changes and to core business excellence. We are investing more to develop leadership competencies among farm managers and others from FY2021 onwards.

See 'Growing confident leaders' on pages 30–31.

We continue to promote appropriate training, recognising that we need to grow great farmers for New Zealand. We too are experiencing the present labour market shortages and are working to mitigate this through policies that drive retention and growth. We are training our staff for greater use of digital information technologies into the future. On-farm system changes are based on modelling of different land use, animal management and plant growing scenarios (see page 39). Farm managers and specialist support people base farm planning and ongoing management decisions on far greater understanding of all the critical variables involved than in the past.

See 'Digital modelling and information tools' on pages 32–33.

Across Pāmu, there is a drive to look for ways to reduce fertiliser application and agrichemical inputs without detriment to productivity, animal health or profitability. Ideally, we are increasing the latter at every step. In our dairy business, five farms will have attained full organic certification by October 2021, with others in the process of conversion to this higher-value model of milk production. We are being careful to manage supply relative to market demand through our milk processor relationships.

In livestock farming, genetic progress with sheep, cattle and deer remains as important as ever. Pāmu draws heavily on advances made by subsidiary company Focus Genetics, which has achieved industry-leading gains in the breeding values of sheep, beef cattle and red deer over the past 10 years. With this foundation, we are confident of making further advances in priority traits, especially for low-methane sheep, beef genetics for bobby-free dairy systems and hair and finer-wool sheep.

See 'Genetic advances are a major driver' on pages 34–35.

Our sustainability focus saw a step change with the creation of a Sustainability and Farming Systems group, led by General Manager Lisa Martin. This group drives our ambition to provide thought leadership around sustainability and best-practice farming systems. Their work will drive our efforts to improve water quality, reduce greenhouse gas emissions, and enhance biodiversity while embracing te taiao (a deep relationship of respect and reciprocity with the natural world).


PĀMU
MAKE YOUR HOME FIRE SAFE

OUTLOOK CONTINUED

All farm system decisions are made within the context of the land and environment plan that has been prepared for each farm. Managers have identified and assessed all on-farm natural resources, land-use capabilities and environmental risks catchment-wide. Soil retention and quality and freshwater and biodiversity protection are fundamental to all decision making. In this, Pāmu is committed to implementing New Zealand's updated National Policy Statement for Freshwater Management 2020 and the forthcoming National Policy Statement for Indigenous Biodiversity. We are well advanced in riparian planting of waterways and wetlands, and we foresee no issues in compliance with new mandatory livestock set-back rules and nitrogen fertiliser caps.

Our farms are also moving to help design and implement industry best practice for minimising the effects of intensive winter grazing. This includes phasing out winter crop on some farms and to 2% or less of the grazed areas on farms where biophysical and animal welfare considerations require feed supply security. Our livestock farms in Southland are working with researchers and rural supply firms to develop alternatives to intensive winter cropping with the same or higher level of profitability.

See 'Rolling back traditional winter grazing' on pages 36–37.

In Pāmu's view of sustainability, farms should aspire to be 'nature positive', fulfil animal welfare stewardship and provide safe, rewarding careers for the people who work the land. We are all on a journey towards achieving this – the hardest part will be systematic on-farm reduction in greenhouse gas emissions without significant sacrifices in profitability. This is an area of intensive work within Pāmu and across New Zealand's primary sector through the He Waka Heke Noa initiative.

For the next 3 years, our aspiration for the core Pāmu farming businesses is an average 2% per annum increase in profitability. Revenue lifts will come from our focus on lifting farmgate margins for food and fibre production through quality premiums and Pāmu Foods but also increasingly from forestry and associated carbon sequestration credits.

PLANT AND HORTICULTURE GROWTH

Expanding our plant-based business is our second major area of strategic focus for the next decade. Pāmu will continue to expand forest planting on land areas that are earning less than $250 EBIT/hectare and in a manner that is complementary to pastoral farming (for example, to reduce erosion, provide shelter and improve livestock movement). Our plan is to establish another 1,000–2,000 hectares of commercial forestry annually and design these plantings into the landscape to achieve 'highest and best' land use.

Farm land and environment plans, based partly on New Zealand's standard categorisation of land-use capability, are the starting point for assessing land with potential for production or permanent forestry. Trees will not be established on land that has higher productive potential, and carbon credit accrual under the Emissions Trading Scheme is a secondary consideration to the primary purpose of the forest. We want to establish a diverse forest portfolio. This will predominantly be radiata pine because of its proven commercial value and ease of establishment, but other exotic species (such as durable eucalypts) and native species (such as tōtara) are also being established on suitable sites.

In support of this strategy, Pāmu is partnering with forestry experts. We need more knowledge on optimising yields from radiata pine and other exotic and native plantation species. Our partnership with Scion, centred at the Puruki Experimental Forest on Mangamingi Farm, is an excellent example of how Pāmu can combine its land and capabilities with science to help lift forest performance and resilience over time and also help us enrich the future of farming – in this instance, through integration of commercial forestry onto farms.

See 'Huge potential for improved productivity' on pages 38–39.

In parallel with the expansion of its commercial forests, Pāmu will further expand native planting for freshwater protection and biodiversity, especially in riparian areas and wetlands. Our goal with forestry – and with all planting activity – is to secure the greatest value from our land in terms of all capitals without sacrificing returns from the core Pāmu livestock and dairy operations.

Pāmu's horticulture expansion continued in Northland with the avocado development close to Kerikeri – 17 hectares were planted during the year adding to the 1 hectare trial block planted in the previous financial year. Another 22 hectares are scheduled for planting this spring/summer to bring the orchard size to 40 hectares. The orchard is irrigated from the Kerikeri Irrigation Scheme, which has sufficient volume to cater for the expansion. There has been an impressive 100% tree survival rate, and tree growth is well ahead of expectations. Management continues to monitor the national and international avocado markets closely, although the orchard is still 2 years away from any meaningful commercial harvest.

SPECIALITY MILK

Excellence in speciality milk is a third theme in our strategy. We will grow the Pāmu supply of speciality milk – bovine organic and A2 beta casein milk along with innovative new deer and sheep milk products – to domestic and international markets. This strategy draws on all Pāmu capitals, not least our highly valued relationships with Fonterra, Miraka, Synlait and Westland Milk and our connections into export markets. Our aspiration is to achieve higher farmgate net returns through the synergies we can generate with our processor relationships.

OUTLOOK CONTINUED

The past year saw the Pāmu Foods business unit make significant progress with the launch of branded whole milk and semi-skimmed milk products in the retail markets of Vietnam and Singapore and the formation of new partnerships to supply Pāmu's wholesale milk products into China. Confronted with Covid-19 risks to human health, Asian consumers are definitely recognising the nutrition benefits of this country's pastorally produced dairy protein.

See 'Speciality milk products growing in Asia' on pages 40-41.

For Pāmu, the opportunity exists to secure more value from being a state-owned dairy producer dedicated to food quality and safety and high environmental standards. As noted, a growing portion of our milk is from organically certified farms, and we are a major source of A2 beta casein milk for our customers.

Deer milk is the newest of the speciality milks that Pāmu is evaluating, with potentially very high value as a cosmetics ingredient and, due to its distinctive properties, for nutritionally targeted foods. Establishing a new deer milking facility near Taupō, selecting higher milk yield hinds on the basis of their genetic records and securing research funding through the High-Value Nutrition Ko Ngā Kai Whai Painga National Science Challenge to confirm the health-conferring properties of deer milk were major achievements over the past 12 months. Pāmu will take further world-leading steps in deer milk production and marketing this year.

Spring Sheep, our 50% partnership with food marketer SLC Ventures, grows each year in supplier numbers and milk volumes, product sales and global recognition. We heartily congratulate the Spring Sheep team for their success at the 2021 World Dairy Innovation Awards, taking out the prestigious award for best infant nutrition. Pāmu will continue to support Spring Sheep's long-term growth as part of our group-wide speciality milk strategy. In the years ahead, we see speciality milk making an increasingly significant contribution to Group earnings.

ENABLERS OF GROWTH

Pāmu enters FY2022 with a clear purpose and strategy to achieve the transformative targets we have set for 2030 (see page 14). In support of this, the company is investing more in the development of its people at all levels. More than ever, Pāmu's success depends on people and their capabilities, motivation and wellbeing in every sense. The demands on managers, staff and contractors are rising, and we have to equip them with the leadership skills, technical abilities and digital technologies they need. Pāmu has progressed a long way already with new systems for on-farm and off-farm information capture and analysis and for smarter planning and decision support. More investment is planned over the next 3 years to accelerate Pāmu's digital journey, which will underpin future supply chain assurance, environmental integrity and climate response.

We are also investing in programmes to strengthen Pāmu land management and farming practices, thereby reducing environmental impacts and enabling adaptation to climate change region by region. We are committed to te taiao concepts – respect for nature and healthy ecosystems is fundamental to our business. So too is engagement with people and organisations who have a stake in Pāmu and its performance. We value stakeholders' interests and seek their support to deliver on our goals. Financial capital is an important enabler of strategy and future performance. In FY2022 and beyond, Pāmu will explore opportunities to sell assets that are of higher value to other parties and to recycle this capital into higher earning areas of our strategy.

FUTURE

We sincerely thank all Pāmu people for their huge commitment to our business and to our purpose on behalf of New Zealand farming and land managers. The past year had additional challenges due to Covid-19 and the general pace of both market and regulatory change. Our FY2021 financial performance and in relation to all other capitals is a tribute to the knowledge, skill and dedication of our people.

While the future will bring more uncertainty and change, Pāmu has the resources and capabilities to grasp the opportunities this will present. We have great people throughout New Zealand, clarity of purpose, a sound strategy, growing stakeholder support and effective programmes for enabling change and growth. Our 130-year history highlights our adaptability and resilience. Our ambition is to almost double EBITDAR by June 2030 and, over the same period, enhance all of the capitals Pāmu stewards on behalf of all New Zealanders, and especially the farming community.

Dr Warren Parker
Chair

Steve Carden
Chief Executive

PĀMU STRATEGY

OUR AMBITION FOR 2030

- A global leader in sustainable land use and systems, delivering on our Pāmu promise consistent with te taiao principles
- One of New Zealand's top employers supporting what New Zealanders love and need
- A uniquely diversified food and fibre producer
- A sought-after partner in New Zealand and abroad
- $130–140m per annum of EBITDAR
- Recognised as an innovation partner and knowledge transfer lead for agtech in New Zealand

2025 MILESTONES

GROW OUR PEOPLE
To deliver an eNPS ≥20

GROW PLANT BUSINESS
Plant business (incl. ecosystem services) delivering $15m EBITDAR

IMPROVE EFFICIENCY
>2% per annum net average profitability improvement in pastoral business

DIGITISATION
Digital ecosystem built to deliver leading farm management

GHG REDUCING FARMING TECHNOLOGIES & PRACTICES
Reduce our carbon emissions on farm in line with our commitments to meet the 2021 Paris climate change targets

GROW SPECIALITY DAIRY AS A CATEGORY
Speciality dairy business delivering 5% of EBITDAR

ENABLERS OF GROWTH

Utilise our resources and capital responsibility to increase returns

AREAS OF GROWTH

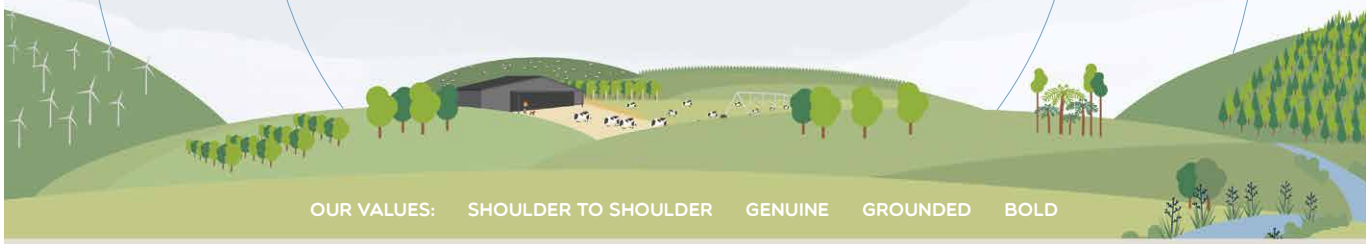
Drive excellence and innovation in all aspects of our pastoral farming forestry and horticulture business

- Increase performance through leading people development
- Invest in digitisation and innovation to drive productivity gains and a lower footprint
- Make speciality dairy a significant source of revenue
- Build a plant business (forestry, horticulture and ecosystem services) of scale through complementary land use
- Integrate te taiao concept, helping to regenerate the environment and adapt to climate change
- Engage stakeholders and partners to support Pāmu's purpose

PURPOSE

PĀMU™

ENRICHING OUR LAND, OUR PEOPLE AND THE FUTURE OF FARMING



OUR VALUES: SHOULDER TO SHOULDER GENUINE GROUNDED BOLD

OUR STRATEGY

MATERIAL ISSUES AND STAKEHOLDER VIEWS

Pāmu's strategy is based on a well-informed understanding of issues that are highly material to New Zealand food and fibre producers and to our business. Each year, we gather views from a cross-section of Pāmu stakeholders and assess with them the nature and importance of these material issues. The process and its outputs are a core element of this company's commitment to integrated reporting.

In 2021, stakeholder engagement and research and review of current Pāmu strategy identified 18 material issues. These updated and expanded on a similar set of issues and themes explored with stakeholders in 2020. Material issues present Pāmu with threats and risks to be managed and with opportunities and advantages for value creation in future. This year, the 18 issues were assessed for their importance to stakeholders and for their impact on the business of Pāmu.

We report on each of the issues here and present a materiality matrix in which all 18 are weighted for their importance and for their business impact. In 2021, issues related to the environmental performance of food and fibre producers were most heavily weighted, along with concerns about the availability and wellbeing of people who work on the land in New Zealand. Carbon emissions reduction is the most dominant of material issues.

The assessment also revealed a significant rise in the importance that both stakeholders and Pāmu's senior decision makers assign to climate change adaptation and to properly informed decision making on the use of New Zealand's land and water resources. The Covid-19 pandemic raises multiple uncertainties for this country's producers and exporters, and it also has significant influence on stakeholder views of many other issues.

Overall, the Pāmu materiality assessment for 2021 confirms a broad expectation of and desire for transformative change in New Zealand's production of food and fibre for local and global supply. There is a heightened sense of urgency related to the pandemic, to perceived shifts in global markets and to the need for producers to improve environmental performance in response to consumer demands, regulatory requirements and social licence concerns.

See 'Materiality matrix 2021' on page 28.

This report also relates material issues to discussion of Pāmu's strategy and of particular business initiatives. The company recognises multiple risks, threats, opportunities and advantages in its strategy formation and operations – this process is ongoing.

The Pāmu Board and Leadership Team thank all stakeholders who participated in this year's engagement and material issues assessment process. Interviewing, data collection and analysis was carried out by Martin Freeth of the Materiality Matters consultancy based in Wellington.

OUR APPROACH

The Pāmu stakeholder engagement and material issues assessment process (May–August 2021) built on similar processes in previous years.

The 18 material issues were identified and framed after engagement with 21 external stakeholder representatives, two Pāmu employee groups and the Ministry for Primary Industries. External stakeholders included corporate customers (four), supplier companies (four), professional advisers (three), scientific research organisations (two), other farming and producer bodies (three), regional councils (two) and environmental interest groups (three). In 2021, we improved on previous years' processes by ensuring stakeholder views included a distinct youth perspective and engaging a broader range of Pāmu employees in the process.

The Pāmu Board and Leadership Team reviewed the issues and summary of stakeholder views and gave an importance weighting to each issue. External stakeholders were invited to weight issues on the same scale. Weightings were aggregated and averaged to provide one Pāmu materiality assessment on each issue, as presented in the materiality matrix on page 28.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

EMISSIONS REDUCTION

New Zealand farmers and growers are expected to begin implementing new measures for greenhouse gas emissions reduction within 4 years, although big practical questions remain to be answered on how and at what costs. Primary industry organisations and government are immersed in design of policies to facilitate and require transition to lower-carbon forms of land use and production. Inclusion in the New Zealand Emissions Trading Scheme remains a possible outcome. How ready are farmers and growers for routine emissions measurement and reduction, and how available are the tools they require? Some are moving forward on measurement now. Among stakeholders, there is an increasing sense of urgency around the reduction imperative and approaches to and technologies for the coming transition. They fear many farmers are far from ready and policies will prove ineffective. They also say emissions reduction, once achieved, will be very positive for 'brand New Zealand' on global food and fibre markets.

FRESHWATER COMPLIANCE

Farmers and growers must increasingly comply with tighter regulations to stop and reverse deterioration in the quality and volume of freshwater bodies. The 2020 National Policy Statement (NPS) and regulations on freshwater are a major shift in the regulatory framework within which landowners, producers and regional councils operate. Stakeholders say there are multiple implications for change in catchment management plans and in producers' use of land, fertiliser, crops and irrigation water. They see this issue in terms of both social licence for farming in New Zealand and the demands of customers in global markets. Work is under way in many areas to identify rules and farm system changes that will be required for the NPS goals to be met at least cost to producers and communities.

> "We are looking towards carbon-zero branded meat products where all the emissions from production, processing and distribution are recognised, reduced (where possible) and offset … this is imperative as New Zealand moves towards a low-carbon economy. It's not enough for companies to measure their emissions and to set targets … they need to show consumers, especially younger consumers, the progress being made to achieve the reductions."
>
> **Kate Beddoe** Silver Fern Farms.

> "We don't have another 4 years for more voluntary processes and delay in emissions reduction. We know the science, and we know what needs to be done … we need to regulate and to then support farmers so they can take the hard actions, and so there's a just transition for everyone."
>
> **Adam Currie** Generation Zero.

> "Do we have a blunt [pricing] tool that drives farm production down or a tool that facilitates efficiency so that the top emitters can be encouraged to move down to where the majority of farmers already are? My worry is that we're going to handicap ourselves by not getting the pricing mechanism right."
>
> **Andrew Hoggard** Federated Farmers NZ.

> "For us, the NPS isn't perfect, and we would have preferred a strong N limit [on fertiliser applications] … the big question is whether the regional councils are really going to make it work because implementation and enforcement are down to them. I suspect the government is going to have to wield a big stick."
>
> **Kevin Hague** Royal Forest and Bird Protection Society.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

CLIMATE CHANGE ADAPTATION

Farmers and growers are confronted with huge potential threats from climate change. Weather events in the past year and global research and forecasts continue to raise awareness. But are producers and those who supply, advise and regulate them planning ahead sufficiently? Are they acting in the short term with sufficient urgency? Stakeholders say adaptation can include developing profitable new market opportunities as well as investing to protect and sustain current production. They say New Zealanders generally are recognising multiple linkages between the need for climate adaptation and other environmental and social issues. They add that this country has been slower than others to recognise adaptation as a critical need, but there is a new urgency around the issue in 2021.

PEOPLE CAPITAL

Primary sector employers are generally struggling to find and retain sufficient numbers of people with the knowledge, skill and willingness required. Border restrictions and immigration policies since early 2020 have exacerbated shortages. Stakeholders say this is an issue also rooted in societal changes, notably long-term decline in the rural population and disengagement from the primary sector – and its career opportunities – by urban young people. A range of stakeholders believe New Zealanders generally underappreciate the sector's value to their economy, as this is reflected in the government's persistent underinvestment in relevant job training and over-reliance on migrant labour. Some fear the outlook for land-based food and fibre production is seriously hampered by deficits in the people capital that is needed and will increasingly be so in future.

> "No-one wants the pollution risks that can come with some intensive livestock grazing practices, and in isolation, the N cap regime is not necessarily a bad thing … the bigger issue is to suddenly move to inputs regulation in the policy environment and away from focus on outcomes actually being achieved in freshwater quality."
>
> **Aaron Stafford** Ballance AgriNutrients.

> "We tried for 10–15 years to have some industry regulation that would constrain dairying growth, but industry bodies fought tooth and nail on all environmental issues … it must be very galling for them to be now receiving the same messages from their international markets."
>
> **Russel Norman** Greenpeace New Zealand.

> "It is clear that we will see fewer animals on farms, both dairy and drystock, and more land going into horticulture from now on."
>
> **Stephen Guerin** PGG Wrightson.

> "It's hard to know what the scenarios are going to be when you are having to make decisions now for the next 30 years. Farmers are certainly looking at a wider set of options to optimise land use, and we are seeing farmers build more flexibility into their farming systems to cope with climate uncertainties."
>
> **Sam McIvor** Beef + Lamb New Zealand.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

HEALTH, SAFETY AND WELLBEING

The sector has more work to do on reducing workplace accidents and raising levels of wellbeing among its current workforce. National indicators show improvement in recent years, but agriculture's health and safety record is still poor relative to other industries. Stakeholders say significant improvement in attitudes and practices is still needed. Pāmu is often seen to be something of an exception – its on-farm culture around health and safety held to be an exemplar for others. The broader concept of wellbeing, especially mental health, remains an important concern linked to the remote and often solitary nature of farm work, the loss of amenities in rural communities and a general weakening of ties between urban and rural New Zealand. Within Pāmu, stakeholders rate all matters of health, safety and wellbeing highly.

LAND-USE DECISIONS

Landowners and producers are increasingly challenged to make complex, more-informed decisions on land and water use for better outcomes in every regard. Stakeholders all indicate high acceptance that change must occur in the use, management and kaitiakitanga of natural assets and resources, along with more care for people capital. They say pressure is mounting for decisions that truly promote sustainability as well as productivity and profitability. Sustainability includes recognition that use of resources today must not harm their availability for farming and growing tomorrow. Into the future, decisions will encompass a broad range of land uses including alternative forms of plant and tree crop for mixed commercial and environmental purposes. New decision-making tools and more land-use information are being created and made available. How effective will these be, given the scale of challenges and the range of opportunities?

> "We've had a real lack of understanding between town and country develop over the past 30 years, and as part of that, there has been very little encouragement for young people to see agriculture as an attractive and varied career."
>
> **Alan McDermott** AgriFood Strategy consultant and adviser to Pāmu.

> "Getting enough sleep and eating at least one decent hot meal a day … these things make a huge difference to how staff are feeling when they're at work and that, in turn, affects their risk of having an accident or getting hurt somehow."
>
> **Pāmu Livestock Farm Manager** South Island.

> "When you plan to do a job on the farm, the fact that it will take an extra 5 minutes to do it the safest way is not really a big deal … it's a lot better than having someone hurt or worse."
>
> **Pāmu Dairy Farm Manager** South Island.

> "In the digital supply chain, customers will ultimately have a complete view of meat products by accessing digital data that's been collected and shared along the physical supply chain, perhaps with some data finally available to consumers through them scanning a QR code at the supermarket … that information will probably include such things as DNA confirmation on the particular breed of cattle or sheep."
>
> **Will Noble** FarmIQ.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

DIGITAL INFORMATION

The primary sector faces digital technology imperatives no less than any other sector: How effectively and how quickly farmers and growers take up technologies and make smarter use of information will affect their future success in all areas. There are multiple and fast-growing opportunities for digital information on farm, along farm product supply chains and between land managers and regulators. Stakeholders say the individuals have widely varying levels of ability to make use of technologies. A multiplicity of systems and lack of interoperability between them are highlighted as impediments to farmers and growers who seek advantage from their efficient use.

KNOWLEDGE GAPS

Farmers and growers, along with their suppliers, advisers and regulators, need more knowledge and better technologies in specific areas if they are to achieve better outcomes (economic, environmental and social). Stakeholders say there is increasing awareness of gaps in scientific knowledge and in practical understanding of how different land uses and inputs impact soil and water and of how new practices and systems might improve the production of food and fibre. Stakeholders say New Zealand needs renewed urgency in key areas of research and development in agriculture, forestry and horticulture. Soil science is frequently cited as an area of particular importance.

COVID-19 UNCERTAINTIES

The primary sector faces major uncertainties over returns, costs and supply chain functioning as Covid-19 disrupts markets and trade links worldwide. New Zealand's export and import shipping are disrupted, and no-one knows if and when pre-pandemic services will resume. Stakeholders say there will be longer-

> "Generally, forests offer big opportunity to store carbon and increase sequestration and also to embrace a wider view on how wood can contribute to a lower-carbon economy through its greater use in building and in the production of biofuels and biomaterials that replace oil-derived equivalents."
>
> **Florian Graichen** Scion Research.

> "It's no longer the idea that bigger is better ... we are getting almost the same production from fewer cows partly because the better performers in the herd have the chance to eat more grass. Input costs are down, and there's less burden on the staff."
>
> **Pāmu Dairy Farm Manager** North Island.

> "There's a real need for research to look more closely at the multiple implications of different land uses ... their effects on soil health and erosion, on greenhouse gas emissions, on the quality and availability of water and ultimately on human health and people's aspirations. These matters are interconnected. From a Māori perspective, research should address the effect of land uses on the mauri of the land. The two knowledge systems together can provide better understanding of the path we should take on our land."
>
> **Richard Gordon** Manaaki Whenua – Landcare Research.

> "We are on the cusp of significant change in agriculture. There will be less agricultural chemical usage, and we will move far more into the biological world ... our business is 2–3 years away from commercialisation of new products that work by enhancing nature."
>
> **Stephen Guerin** PGG Wrightson.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

term changes in product-sourcing patterns, supply chain systems and market access, none of these yet clear. There are also likely to be heightened global market advantages for this country's food producers. Stakeholders highlight current stresses on farmers and growers including people shortages due to border management and apparent gaps in national planning.

CHANGE CAPACITY

As noted above, there is broad recognition that change is needed and/or advisable in multiple areas. But do on-farm decision makers, processors and marketers and also industry bodies have sufficient capacity for substantial change in the right directions? The question becomes more pressing as the need for change accelerates in markets, in available knowledge and technology and in regulatory policies and public opinion. Stakeholders say change capacity encompasses mindset and knowledge, as well as availability of financial capital and tangible resources. They say it also requires leadership and forward vision in many areas, where these have been lacking in the recent past. In 2021, government agency stakeholders indicate high awareness of change capacity as an issue. There are new and planned programmes designed to facilitate individual farmers and landowners in their adoption of new systems and new resource uses, which also serve to promote New Zealand's broader environmental, economic and social interests.

ANIMAL FARMING FUTURES

Farmers must drop or modify certain traditional practices and systems in pastoral farming if New Zealand is to address intensifying animal welfare-related concerns among global customers and among domestic consumers and lobby groups. Changes are widely expected to be required in future or are already required to meet both international market demands and social licence expectations at home.

> "Our efforts as a country to effectively manage the risk of Covid-19 have had a hugely positive impact on New Zealand exports. It has reinforced our image internationally as a place that produces safe and high-quality food products at a time when consumers are looking for this surety."
>
> **Grant Watson** Miraka.

> "There's a group of farmers who are reactionary, who will do nothing until a carbon emissions bill arrives in the mail and who are hoping the freshwater policy issues will just go away."
>
> **Gavin McEwen** Farmax.

> "There's a large middle group of farmers who are not opposed to change but who aren't going to make it without financial support and incentives … that's just the reality if we're going to reach a new world of sustainable farming."
>
> **Kevin Hague** Royal Forest and Bird Protection Society.

> "The bulk of our members are probably feeling overwhelmed not so much with what they have to do, because most are doing it already, but with having to prove they have done everything right."
>
> **Andrew Hoggard** Federated Farmers NZ.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

Early disposal of bobby calves in dairying and intensive and winter grazing that involves animals standing in mud for periods of time are two practices now obviously under scrutiny. Stakeholders say new challenges on animal rights and welfare are inevitable. Some say the future is very uncertain, and animal farming itself might be called into question.

FOOD QUALITY AND SAFETY

Farmers and growers face mounting expectations from customers, globally and at home, on the quality and safety of New Zealand food and fibre products. Expectations of quality now include production and supply with least impact on the natural environment, on animal welfare and on human wellbeing. All these dimensions of quality and safety are now subject to social media scrutiny and/or to processor requirements. Stakeholders say producers will increasingly face information demands to support their products on the way to market and to satisfy consumer demands.

HUMAN DIETARY SHIFTS

New threats and new opportunities are rising for New Zealand producers as human dietary habits and preferences shift in fundamental ways. How are farmers and growers recognising and responding to global market changes around animal-derived proteins, existing and new plant-based foods and new synthetically produced alternatives to farmed meat. Stakeholders say various trends reflect new thinking about nutrition and healthy diets and also concerns about the environmental effects of farming. Technological advances in the production of alternative milks and the fermentation of synthetic meats are other drivers of these dietary trends.

> “Over the next 5 years, we will see a strong challenge to the very proposition that we can farm animals for food. It’s an extreme view but one we need to deal with in terms of how we honour the animal in life and death … and of how we honour it after death by utilising every part of the animal. This will be crucial if we are to retain and promote our social licence for the farming of animals.”
>
> **Sam McIvor** Beef + Lamb NZ.

> “Quality and safety are very hot topics in our markets, especially in Asia … we do a huge amount in our processing plants, but quality really starts with what farmers are doing on farms every day. They supply us with quality milk, and we add our quality on top of that.”
>
> **Gary Philip** Fonterra.

> “What is the new social licence going to look like as Generation Z comes of age because this is a generation who think very differently from previous generations. They are climate-focused and purpose-led with a very active voice … they want products from companies they trust and which stand for something, and that something might relate to ‘a low-carbon economy’ or ‘regenerative agriculture’ or ‘a circular economy’.”
>
> **Kate Beddoe** Silver Fern Farms.

> “There’s no doubt that people will be eating less meat, but they won’t cut it out entirely … people are thinking in new ways about how to put balance into their diets, and meat can and will still provide an important role.”
>
> **Sam McIvor** Beef + Lamb New Zealand.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

BIOSECURITY PROACTIVITY

Farmers and growers are broadly expected to become more proactive in identifying and stopping disease and pest incursions within New Zealand's bioeconomy. Threats are on the increase due to climate change and trade globalisation. The *Mycoplasma bovis* outbreak since 2017 exposed complacency in on-farm attitudes and practices towards animal tracing and hence towards disease control. With this eradication effort almost complete, stakeholders see a rising tide of expectation that farmers take more individual responsibility for all matters of biosecurity. They say digital traceability systems are fundamental to both biosecurity and market information needs.

TE AO MĀORI INTEGRATION

Producers and landowners are critical actors if New Zealand is to successfully integrate te ao Māori perspectives into management of its economy and environment. Farmers and growers are inevitably connected with the natural world and its resources, ecosystems and mauri. To what extent can and should te ao Māori perspectives inform land-use decisions, freshwater regulations compliance, emissions reduction and management of people capital? No stakeholders reject the challenges of te ao Māori integration at a conceptual level. Many question what this will look like in practice. Some say it requires more support for and engagement with iwi-owned farming enterprises already operating within te ao Māori.

FARMING SUPPORTS

Many farmers and growers need support from government, industry bodies and service providers if they are to make changes that are broadly seen as necessary and/or advisable. Stakeholders see support taking multiple forms – extension advisory services, planning and reporting tools and financial incentives. All are seen to have some justification in context of

"Restoring biodiversity should be one of our primary responses to climate change. This requires more land being set aside for regeneration on farms and a stronger focus on ecosystem health and on production within healthy landscapes. Healthy ecosystems are more resilient and can better cope with environmental shocks over the medium and long term. Restoring ecosystem health will not only reduce emissions but support adaptation and resilience of communities and the agricultural sector in the face of climate change."

Marnie Prickett Choose Clean Water and adviser to Pāmu.

"We just don't know how rapidly biodiversity loss could affect our ecology and our economy in the future."

Florian Graichen Scion Research.

"There's a paradigm shift happening in terms of the community's focus on the environment .. and part of that is iwi gaining a stronger voice on things they have known about for a long time. It will be confronting for some farmers in areas where they hold their own legacy of strong feeling about property rights and 'my right to do what I like on my land' … We're all learning with rights come responsibilities."

Fiona Young Environment Southland.

"Fertiliser, irrigation, carbon, biodiversity … we think about all these things in terms of what is good for the land and for mahinga kai, the natural sources that sustain life. If we are going to influence ecosystems through pastoral farming, what are we also going to do to maintain fundamental balance in nature that is essential for all life over time?"

Dean Fraser Ngāi Tahu Holdings.

MATERIAL ISSUES AND STAKEHOLDER VIEWS CONTINUED

the broader interest in emissions reduction, freshwater quality improvement and global market success. But what tools and policies are best for securing changes among which groups of farmers and growers? One proposed approach involves providing farmers and growers with alternative land-use scenarios, each with a toolbox of knowledge and inputs already developed by pooling the expertise of diverse parties.

REGENERATIVE AGRICULTURE DEBATE

Can and should farmers and growers increasingly embrace regenerative agriculture as a concept and set of practices? Is much of New Zealand farming already, in effect, regenerative? 'Regen', with diverse meanings, has permeated much discussion on agriculture's future and this country's place in global markets for food and fibre. Stakeholders have diverse perspectives. Regen becomes an issue in 2021 because it is so much debated – favoured as an approach farmers can adopt to reverse environmental damage and to strengthen the New Zealand brand but also strongly challenged for claimed lack of definitional precision and of substantiation by agricultural research and development.

BIODIVERSITY PROTECTION

Producers and landowners are increasingly expected to factor indigenous biodiversity into their plans and actions. Government directions will be formalised in a new National Policy Statement for Indigenous Biodiversity, with this intended to protect existing land uses, while preventing further biodiversity loss from changes in land use and management. Stakeholders say the significance for farming cannot yet be gauged. They say New Zealand is entering a new era of debate on how to protect biodiversity, including protection from some productive activities, and on the implications of biodiversity loss for ecosystem health and the future availability of natural resources.

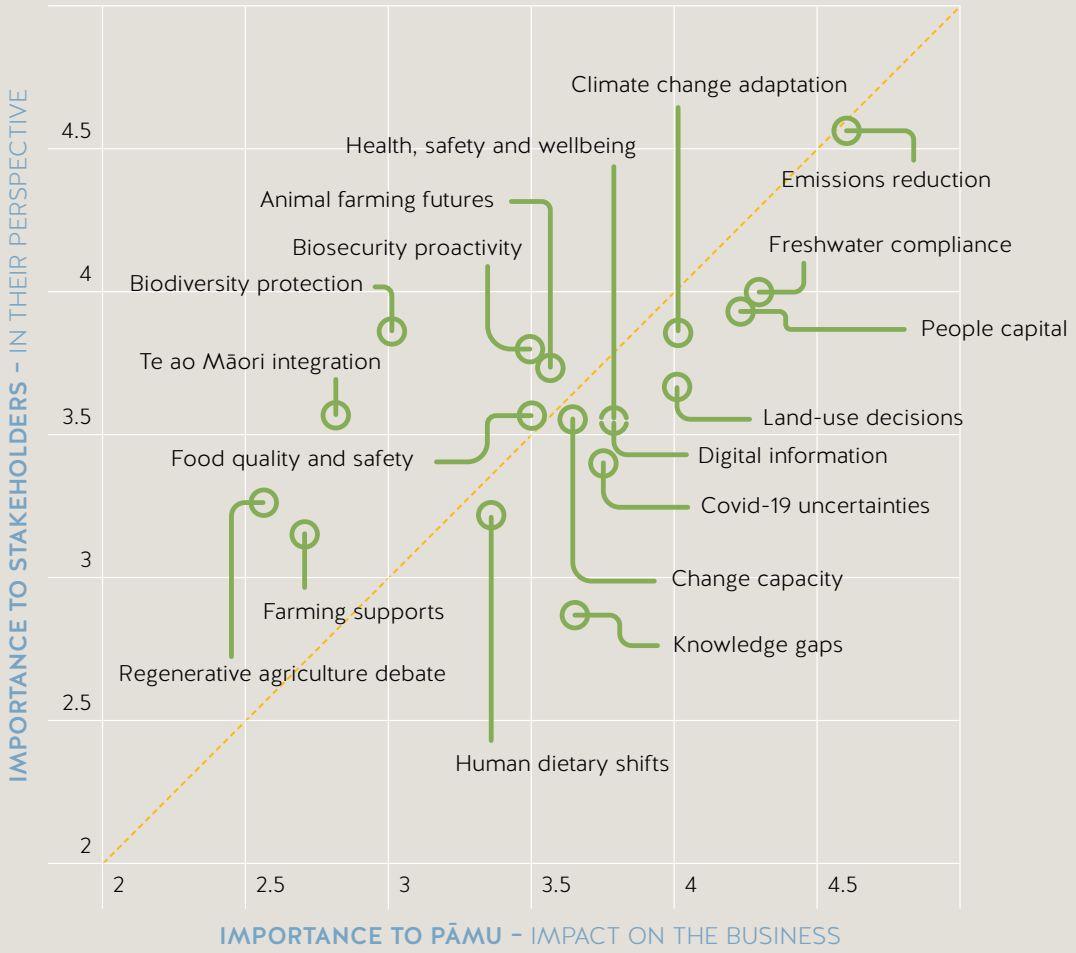
> "With the toolbox approach, you might for instance decide to convert part of the farm to sheep milking or to growing walnuts, knowing what the average earnings per hectare are likely to be, what nutrient requirements and losses might be and so on … it's all about farmers being able to take control rather than just being in a position of responding to increasing regulation."
>
> **Andrew Parrish** Environment Canterbury.

> "I think there's an immense obligation on Pāmu to help lead the changes because it has the scale and clout to be one of New Zealand's best farmers and other members of the farming community will listen to you."
>
> **Adam Currie** Generation Zero.

> "Regenerative is the concept for 'beyond sustainability' … it is out there in people's minds in the market whether scientists like it or not, so let's define it and make it a New Zealand proposition before anyone else can and then help our growers and farmers to live up to the concept."
>
> **John Brakenridge** New Zealand Merino.

> "We're very interested in regenerative agriculture from the perspective of soil management and soil health … New Zealand has lost focus on the importance of soil science in recent decades, and the sooner we get back to managing soils, the better."
>
> **Fiona Young** Environment Southland.

MATERIALITY MATRIX 2021



METHODOLOGY

The 18 issues were identified and framed after interviews with representatives of 21 external stakeholder organisations, discussions with two Pāmu employee groups and briefings provided by policy advisers and programme managers at the Ministry for Primary Industries. Issue identification and framing also drew on Pāmu strategy documents and review of current government policy statements and public commentaries. Subsequently, the external stakeholders were presented with a questionnaire asking for their importance weighting of each issue on a 1–5 scale of "importance in your view". Pāmu Board and Leadership Team members responded to a similar questionnaire, weighting each issue on importance in terms of business impact. Individual responses were averaged within each group of respondents to arrive at one importance value per issue for external stakeholders and one for Pāmu decision makers. Each individual response was given the same weighting in this process. The averaged external stakeholder and internal Pāmu assessments of importance can be compared in the materiality matrix. The proximity of each issue to the 45˚ line indicates the relative alignment of the two groups in their respective assessment of importance.

FINDINGS

External stakeholders and Pāmu decision makers both place highest importance on issues of environmental performance by food and fibre producers, with emissions reduction clearly at the top for both groups. Freshwater (policy and regulatory) compliance is weighted next in importance by both, while stakeholder respondents also give particular importance to biodiversity protection. Consistent with these concerns, stakeholders and Pāmu now place high importance on climate change adaptation and land-use decisions.

People capital – the availability of skilled and motivated people in the primary sector – and health, safety and wellbeing are issues of high importance to both external stakeholders and Pāmu. Clearly evident is a connection between these and issues of change capacity and digital information. Effectiveness in making necessary changes, and the take-up and use of digital tools are important for management of all people-related issues.

Animal farming futures – all matters related to the welfare and rights of livestock – have increased in importance for both external stakeholders and Pāmu. Both are significantly aligned on the continued importance of food quality and safety, increasingly based around customers' concerns for the natural environment, people and animals. Human dietary shifts remain an important issue, although without further heightening of the associated threat seen to animal-based protein producers.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GROWING CONFIDENT LEADERS FOR DELIVERY ON PĀMU'S PURPOSE AND STRATEGY

CAPITALS: PEOPLE, FARMS AND ANIMALS, EXPERTISE

Material issues addressed:

- People capital
- Health, safety and wellbeing
- Farming supports
- Land-use decisions
- Climate change adaptation
- Freshwater compliance

Pāmu's purpose and strategy require confident and competent leadership on farms and in business support roles. Such leaders will improve employees' experience and safety, help deliver higher productivity and stronger performance and enable us to face today's environmental challenges and the long-term impacts of climate change. Indeed, leadership has never been more important.

In FY2022 and beyond, Pāmu will take around 130 leaders – mostly farm managers and business managers – through a leadership development programme designed to raise their capability in personal communication skills and other core competencies. Managers will be given ongoing educational opportunities and digital tools to learn, practise and demonstrate our leadership competencies in ways most relevant to the role and team environment of each. The new programme is far more than a training course or seminar!

"As key learnings become embedded and reinforced through follow-on events and activities, we foresee significant improvement in the workplace experience and performance of everyone, with this leading to higher employee retention, satisfaction and productivity," says Leza Papps, Pāmu's Head of People. "As we continue to face challenges in environmental practice and regulation and in the pressures that arise from market and societal changes, managers will be better equipped to understand what's expected of them and to lead in their areas of the Pāmu whānau."

The programme starts with clarity on the minimal expectations that now exist for leaders and on the standard Nature of Leadership competence framework. Use of consistent language and approaches is important as is the need for behaviours to reflect Pāmu's four core values.

GROUNDED

GENUINE

BOLD

SHOULDER TO SHOULDER

"We have some very talented leaders today, and our programme is about enabling them and all others in management roles to become increasingly effective as leaders and as supporters of their people through the years ahead," says Leza.

MEET TWO YOUNG PĀMU LEADERS IN 2021

For Louise Egan, Pāmu is definitely the place to be. "The company has set me up really well as a first-time manager," says Louise. "I'm learning everything I need to know. I have clear targets and great support from a business analyst plus invaluable mentoring from our farm business manager and operations manager."

She manages Ruru farm, one of five milking units on the West Coast's Weka Dairy Complex. Louise was appointed to the role in October 2020, having joined Pāmu as a calf rearer on the complex only a year before. Her first season as manager was a "massive learning curve", and in winter/spring 2021, she and her team of four are calving 840 cows.

Louise relishes the challenges on Ruru – a high-rainfall farm on Weka's rolling terrain and glacial soils. "I love working with the people and animals here, although we all get sick of the rain at times and this is a relatively remote place to live."

Farming is clearly in her blood. Louise grew up on the land at Haupiri on the West Coast and spent 5 years working on dairy farms in Victoria, Australia, as part of her world travels prior to returning home in 2017. Louise is a Lincoln University graduate with a Bachelor of Environmental Management and also a qualified veterinary nurse – and she has recently completed the New Zealand Certificate in Agriculture – Dairy Farming (Level 4).

"My goal is to move up with Pāmu and gain experience in livestock farming as well – doing different things, gaining more knowledge and maybe becoming an operations manager," she says. "One step at a time, and my current role is enabling me to prove myself as a manager and to really lift the performance of my Pāmu farm."

GROWING CONFIDENT LEADERS

Louise Egan

James Van Bohemen is a very forward-looking livestock farm manager. City-born James discovered a love of farming early and has never looked back. This year, Pāmu has appointed the 28-year-old to be a farm manager on Rangitaiki Station, and he is looking even further forward.

"I'm hoping to be on Rangitaiki for the next 5–10 years or so because I enjoy engaging with the people and animals and this amazing landscape so much," says James. "Longer term, I'd like to become a business manager somewhere within the company, although my partner Rose and I have to decide where we want to live with a family as time goes on."

James has been on Rangitaiki for 7 years, initially as a senior shepherd and more recently as Farm Operations Manager. Now as Farm Business Manager, he has responsibility for the whole 9,500 hectare central North Island property, its huge deer farm (New Zealand's biggest), extensive sheep and beef operations, and large areas of forestry and wetland restoration. Rangitaiki has a full-time staff of 23.

"It's an amazing farm for the scale and diversity of its operations and for the opportunity to be forward thinking and versatile," he says. Over recent years, James has benefited from being mentored by Farm Business Manager Sam Bunny, who is now in a similar role on Wairakei Pastoral Estate.

In effect, Sam was continuing the support first given to James by the people on farms he frequently visited when growing up. It was then that James discovered a love for working with animals and land (and motorbikes). James studied agriculture for 5 years at Napier Boys' High School. As well as being a Kellogg Rural Leadership Programme graduate, he has recently completed a Bachelor of Applied Management.

James started on Stuart Farm, Te Anau, in 2013 and moved north a year later. "With its values, strategy and systems, Pāmu's a great company to work for, especially with all the things that are coming at agriculture these days," he says.

James Van Bohemen (left) with Rabobank CEO Todd Charteris

DIGITAL MODELLING AND INFORMATION TOOLS

DIGITAL TOOLS STRENGTHEN FARM DECISION MAKING, PRODUCTIVE DIVERSIFICATION

CAPITALS: EXPERTISE, FARMS AND ANIMALS, PEOPLE

Material issues addressed:

- Digital information
- Change capacity
- People capital
- Land-use decisions
- Freshwater compliance
- Emissions reduction
- Climate change adaptation
- Animal farming futures

Rangitaiki Station is a large and unique combination of land, animals and people. Making the most of all three requires the knowledge and skill of Pāmu farmers – and their smart use of digital modelling and information tools.

In 2015, Rangitaiki's then Farm Business Manager Sam Bunny and his team began using Farmax software for assessment of various diversification options on the 9,500 hectares of rolling or flat pumice country on the North Island's Central Plateau.

The station, with well-established sheep, beef and deer finishing systems, has an extraordinary pasture growth curve. Grass growth explodes in spring and early summer but is modest, at best, through the rest of the year.

Total feed production is high (including 9,500 tonnes of dry matter per hectare annually in the beef finishing system), but 70–75% is grown in just 4 months. This poses big challenges in farm policy setting on Rangitaiki – how to make optimum use of that spring grass and which types of sufficient stock to winter over to achieve this most profitably within the station's well-defined environmental limits.

"We used farm policy modelling tools to create scenarios that would fit the feed curve and meet our other objectives including financial return," says Sam. The decision was made to shift 2,500 hectares across from sheep finishing to a new bull beef operation supplied with calves from Pāmu dairy farms.

SYSTEM CHANGE

Now 5 years on, Sam says, the system is performing very well. Rangitaiki takes around 5,000 calves each early spring and finishes these 2 years later in January when pasture growth sharply declines. The figure represents more than a third of all bull beef finished by Pāmu, and the operation supports ongoing reduction in bobby calf numbers in dairying.

The policy for Rangitaiki sees all feed requirements met from on-farm production, including silage and winter crops although the latter has been reduced to 300 hectares across the whole station.

The intensive bull beef diversification has delivered financial results well ahead of forecast. Earnings before interest and tax on this operation in the past year were double the figure indicated in the Farmax modelling back in FY2016.

Such performance reflects, in part, separation from the station's other large sheep, deer and prime beef activities. Being separate helps the bull beef operation's detailed and digital tool-enabled feed budgeting and management system. In fact, the operation is divided into five farmlets, each a 500 hectare block under the day-to-day management of an individual Rangitaiki team member.

Each of these farmers maintains Farmax files on their block, with its feed budget, stocking profile and accumulated data on pasture and animal performance. Files are typically updated daily and then reviewed monthly with a manager.

Sam says management with this level of detail, which was completely new to Rangitaiki, has had huge benefits for the people concerned, for care of the land and for animal health and weight gain. "Having individual Farmax files and the responsibility that goes with that has created a huge amount of ownership by team members," he says. "They're making decisions every day, and it has definitely helped with staff engagement and personal development – and I think that's having positive impact on earnings."

Sam goes on to say that FarmIQ is also very much part of the Rangitaiki success story. FarmIQ enables the team to routinely upload and access data on every aspect of farm management, including stock movements, land mapping and fertiliser applications and animal treatments. This massive cloud-based information repository also makes for smarter decision making by farmers, along with the scenario-planning and performance-tracking capabilities of Farmax.

LIVESTOCK BREEDING DRIVES GENETIC ADVANCES AND FARMING PRODUCTIVITY

CAPITALS: FARMS AND ANIMALS, EXPERTISE, RELATIONSHIPS

Material issues addressed:

- Food quality and safety
- Human dietary shifts
- Animal farming futures
- Climate change adaptation
- Farming supports
- Knowledge gaps

Genetic advances are a major driver of productivity gain in Pāmu flocks and herds. Such advances are very evident in the latest maternal breeding[1] values achieved by Focus Genetics in its sheep, beef cattle and deer breeding programmes.

Focus Genetics – New Zealand's largest supplier of genetics to the red meat industry – has breeding flocks and herds on six Pāmu farms located around New Zealand.

The sires are bred to advance survivability, reproductive capability, weight gain potential and other desired traits in their progeny and are supplied to farmers throughout the country. These include, of course, the commercial flocks and herds of Pāmu.

A selection index is a measure of a sire's total economic value. The index aggregates the traits most desired for each breeding programme's objective and expresses them in a single monetary value. This is used to help inform the decisions that lead to the next generation of animals.

The Focus Genetics maternal indices for sheep, beef cattle and deer have increased again in FY2021, continuing a trend evident for the past five decades since Pāmu started its various purpose-breeding programmes.

Moreover, the genetic advances being achieved by Focus Genetics have once again outpaced the New Zealand livestock genetics industry generally, as evidenced on several industry indices.

See 'Performance scorecard' on pages 6–7.

The latest Focus Genetics maternal sheep index is $42.63, well above the industry index at $16.39. Within the Focus Genetics sheep programme itself, the annual breeding value (BV) has grown $1.52 per annum over 10 years.

The Focus Genetics maternal beef cattle BV of $113 has grown $4.80 per annum over 10 years. For deer, the equivalent values are $16.79 and $1.24 per annum growth.

Senior Animal Breeding Scientist Natalie Pickering says continued growth in Focus Genetics BVs reflects the longevity of its programmes and the care taken in selecting each year's stud animals.

The advance in genetics is testament to the collaboration, dedication, passion and time put in by the Pāmu genetic farm managers and Focus Genetics.

FOCUS GENETICS

Focus Genetics is a subsidiary company of Pāmu with a mission to advance animal breeding and genetic improvement throughout New Zealand livestock and dairy farming by applying science to the production of sires for use in sheep, cattle and deer flocks and herds. Focus Genetics seeks to contribute value to Pāmu farms by providing them with the elite genetics they need. The company also provides sires to many other farmers throughout New Zealand. Focus Genetics has various breeding partners in New Zealand as well as Australia, the United Kingdom and Uruguay.

1 Maternal breeding refers to selection of animals for their reproductive potential as well as their growth and meat qualities, whereas terminal breeding is for growth, meat and eating quality.

GENETIC ADVANCES ARE A MAJOR DRIVER

ROLLING BACK TRADITIONAL WINTER GRAZING

FARM SYSTEM CHANGES ROLL BACK TRADITIONAL WINTER GRAZING PRACTICES

Intensive winter grazing is being reduced steadily across Pāmu livestock farms to benefit environmental outcomes and animal welfare. On each property, the challenge is to find a farming system that will meet animal nutrition needs and maintain profitability with little or no cropping and at the same time avoid any new stress on animals, farmers or the environment.

"It's a journey we've been on for several years, with big reductions made already on some farms," says Tim Lissaman, Senior Business Manager for the Southland Livestock operations. "Taking out crop may require significant farm system changes that must be thought through carefully. We haven't got all the answers yet."

Three of Pāmu's 19 Southland livestock farms have stopped intensive winter grazing completely, while overall, the farms have reduced their crop areas by 37% over the past 4 years.

Company-wide, the aspiration is for winter crop grazing to be phased down to 0–2% over a number of years on all farms where it's traditionally been used. This will further reduce risks of soil and nutrient run-off from any Pāmu farm and reduce the prospect of any animal being left to stand on bare, muddy ground after grazing. In fact, Pāmu's reliance on winter cropping is very low by industry standards, with hectares put to this use in winter 2021 estimated to be only 4.4% of the total effective area on all the farms in question.

In Southland, Tim Lissaman says crops are the traditional way of shifting between seasons the land's capacity to keep livestock fed. Kale and swede crops have long been grazed through the region's cold 90-plus day winter when grass growth is minimal.

Tim says the transition to grass year round can only be successful if animal nutrition is well maintained for both welfare and production purposes while protecting or enhancing farm profitability. That can require adopting changes in livestock policies and in farm purpose and production role within Pāmu. Pasture fertiliser regime, grazing rotations and pasture management practices may also need to change.

FARM SYSTEM CHANGE

"Our objective is to develop the best farm system collectively across all measures including the most efficient possible use of the grass that can be grown within the boundaries of each farm and of course within environmental limits," says Tim. It's a perspective in which the aim is to optimise profitability rather than maximise production volume.

Winter cropping has stopped completely on Mount Hamilton and Waipuna farms. A sizeable proportion of their wintering stock units are now dairy beef animals sourced from Pāmu dairying operations. The system has created flexibility to accommodate variable grass growth, and staff have fewer pregnant and heavier stock to manage through winter on pastures that are especially wet in this area of Southland.

On nearby Mararoa Station, Pāmu has partnered with AgResearch for a deer grazing trial designed to provide other alternatives to traditional cropping. Two paddocks were put into a mix of turnips and Italian ryegrass last summer to be grazed through winter by weaner deer. Their performance on this feed is being compared with that on swede crops, with initial results looking promising.

"Turnips are a great bulk feed to carry the animals forward, and with the Italian, we'll keep a root system in the ground to reduce soil erosion and to continue taking up nitrogen into the spring," says Tim. "We'll see what the grass is looking like next summer and winter."

For farmers like Tim, maintaining animal nutrition and welfare are non-negotiables for winter feeding transitions to be successful. People are important too, and system change needs to be manageable and ideally reduce stress for farm teams.

CAPITALS: NATURAL ASSETS, FARMS AND ANIMALS, EXPERTISE

Material issues addressed:

- Animal farming futures
- Land-use decisions
- Climate change adaptation
- Digital information
- Freshwater compliance
- People capital

FOREST RESEARCH WITH HUGE POTENTIAL FOR IMPROVED PRODUCTIVITY AND ECOSYSTEM OUTCOMES

CAPITALS: RELATIONSHIPS, EXPERTISE, NATURAL ASSETS

Material issues addressed:

- Land-use decisions
- Biodiversity protection
- Freshwater compliance
- Knowledge gaps
- Emissions reduction
- Climate change adaptation

Radiata pine trees planted as a forest produce wood fibre, sequester carbon emissions, enhance biodiversity and protect soil and groundwater. Pāmu is in partnership with Crown research institute Scion to find the radiata pine genotypes, planting patterns and tree management policies that best suit particular landscapes and so lead to much-improved wood, carbon and water outcomes.

It's a partnership based around the 35 hectare Puruki Experimental Forest on Pāmu's Mangamingi Farm in the central North Island. Scion's research findings have huge potential for improving the productivity and ecosystem benefits achievable from radiata pine forestry both on farm as tree blocks and in larger plantations on suitable land throughout New Zealand.

Indeed, Scion has so far seen much higher productivity in Puruki's second forest rotation compared to a first rotation because of higher stocking rates and the initial selection of healthier, genetically improved stock. After 20 years, tree productivity of this second rotation has been higher by as much as 54% compared with equivalent measurement of trees in Puruki's first rotation forest (planted in 1973).

The land was formerly pasture that had been improved for livestock grazing through superphosphate fertiliser and planting with clover. Both rotations at Puruki have shown that planting pine trees on former pasture leads to higher forestry productivity.

Water quality from streams flowing out of the Puruki catchment is measured to assess the trees' take-up of these residual nutrients and to help determine the potential benefits to freshwater quality of pine plantations. The water quality is monitored at a stream water weir, and findings have been very positive when compared with those on water flowing off pasture land.

Pāmu and Scion have a lease agreement on Puruki that will cover a third rotation of the experimental forest in the decades ahead. Pāmu intends to apply research findings to its on-farm forestry planting programme.

Scion soil scientist Loretta Garrett says the Puruki Experimental Forest was established over half a century ago in response to an international call to monitor the impacts of land-use change on freshwater. "The installation of the site was visionary in ambition and scope, and it has produced longitudinal datasets with value that has compounded over time," says Loretta.

"Puruki is now one of very few experimental forests in New Zealand. It's a forest that can support our understanding of forest ecosystem response to change, including management change and climate change impacts," says Loretta. "Such forests are living laboratories within the landscape that provide opportunities to demonstrate, at scale, new and sustainable forestry practices that may shape and transform future forest management operations. This is critical in New Zealand's changing climate where the need to adapt and to design resilient forest systems within the landscape has never been greater."

SCION
FORESTS PRODUCTS INNOVATION

Scion specialises in research, science and technology development for the forestry, wood product, wood-derived materials and other biomaterials sectors. It is New Zealand's Crown research institute for sustainable forest management and tree improvement; forestry biosecurity, risk management and mitigation; wood processing, wood-related bioenergy, waste streams and other biomaterials; and forestry-based ecosystem services to inform land-use decision making.

Scion – referring to the tree cutting used to form a new graft – is the trading name for New Zealand Forest Research Institute, based in Rotorua, with a provenance that dates from 1898 when the state first established a forest nursery on the same site.

HUGE POTENTIAL FOR IMPROVED PRODUCTIVITY

SPECIALITY MILK PRODUCTS GROWING IN ASIA

DEMAND FOR PĀMU SPECIALITY MILK PRODUCTS GROWING IN ASIA

Pāmu's investment in speciality milk is paying off as our products meet growing demand among Asian customers. The past year has seen these branded whole milk and semi-skimmed milk products launched with key partners in retail markets in Vietnam and Singapore, while new partnerships have also been formed for Pāmu's wholesale supply in China.

The Pāmu Foods business unit leads this area of our speciality milk strategy, and in partnership with New Zealand dairy processors, it supplies products in powdered and liquid (UHT) forms, developing supply chain relationships and managing sales channels into the targeted Asian markets.

"We've taken progressive steps in the past year towards proving our business case and establishing a credible Pāmu value proposition in key markets for our milk," says Sarah Risell, General Manager, Pāmu Foods. "We've built a series of relationships with reputable customers across a range of market segments and channels. All of these serve to link Pāmu's dairy farmers more closely with customers and consumers who put a premium value on our Pāmu milk."

Pāmu Foods has based the growing business on solid relationships with Fonterra and Miraka, both customers to whom Pāmu is a major milk supplier, and also with Waikato Innovation Park and its Melody Dairies speciality milk drying facility. Pāmu is a 35% shareholder in that facility, which will have an important role as Pāmu Foods looks to expand with new deer milk products, subject to our ongoing research and development work on this speciality milk.

Deer milk has high-value prospects for use in unique foods, in skincare products and in nutritional supplements. Pāmu has been trialling the milk with chefs to use as an ingredient in luxurious desserts and savoury dishes. In 2018, this included winning a Novel Food or Beverage Award at the Massey University New Zealand Food Awards. More recently, Pāmu has supplied deer milk powder to a major Korean pharmaceutical company for use in its skincare products.

This year and beyond, Pāmu continues innovation with deer milk, having established a deer milking herd on Pāmu's Aratiatia Farm, near Taupō, to pilot new animal handling and milking systems. Pāmu will continue to work alongside Peter and Sharon McIntyre's deer dairy operation in Southland together with the company's own deer milk supply at Aratiatia through the FY2022 season.

DEER MILK'S NUTRITIONAL VALUE STUDIED

Pāmu is the world leader in deer milk products, and the future for these looks even brighter as scientists explore their nutritional value for the ageing population.

Deer milk is well recognised as a natural source of concentrated nutrition, with a much higher protein content than bovine milk and a different protein to fat ratio. It also has vitamins and minerals that support skeletal and immune health and other components with anti-inflammatory benefits.

In 2021, a Massey University study is looking more closely at how deer milk can support a healthy lifestyle and improve general nutrition. In research led by Nutritional Physiology Professor Marlena Kruger, 120 women over the age of 65, each with a low to normal body mass index, are being engaged in a randomised comparison trial. They will consume either 200 ml of deer milk or a commercial oral nutrition supplement daily for 10 weeks.

The study is funded by the High-Value Nutrition (HVN) Ko Ngā Kai Whai Painga National Science Challenge, with Pāmu as an industry partner. Marlena says people over 65 who have reduced muscle mass and higher risks of arthritis could secure considerable benefit from the increased protein and anti-inflammatory properties of deer milk. The HVN Challenge directors say, "The research findings from this project will add to the existing dossier of scientific evidence for Pāmu deer milk and will be fundamental to commercialisation of a finished product that could underpin a new industry in New Zealand."

CAPITALS: FINANCE, RELATIONSHIPS, EXPERTISE

Material issues addressed:

- **Food quality and safety**
- **Human dietary shifts**
- **Land-use decisions**
- **Knowledge gaps**
- **Digital information**
- **Covid-19 uncertainties**

AWARD-WINNING SPRING SHEEP

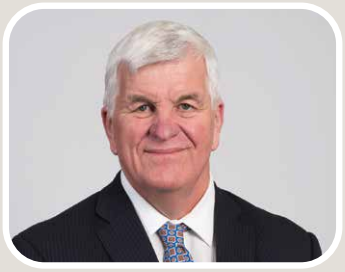
Spring Sheep continues to grow and secure greater recognition for the quality of its speciality milk products. In July 2021, Spring Sheep won the best infant nutrition product award at the World Dairy Innovation Awards, edging out several global food brands in this prestigious competition. Spring Sheep, an equal joint venture of Pāmu and food marketer SLC Ventures, has grown into the largest sheep milking group in the southern hemisphere with 16 farmer suppliers and 15,024 specially bred Zealandia milking sheep.

The World Dairy Innovation Award was secured for the company's Gentle Sheep Toddler Milk Drink, which is a fortified nutritional supplement for children aged 1–3 years. The 20 award categories attracted 222 entries from 25 countries.

Spring Sheep Chief Executive Scottie Chapman says business growth continues, with supply expected to come from more than 40,000 sheep by 2025. He says the Spring Sheep Board is focused on reinvesting to support that growth, to gain market share and to create a sheep milk industry for New Zealand that is sustainable over the longer term.

PĀMU BOARD AND MANAGEMENT

BOARD OF DIRECTORS



DR WARREN PARKER

NIGEL ATHERFOLD

DOUG WOOLERTON

JO DAVIDSON

CHRIS DAY

BELINDA STOREY

DR TANIRA KINGI

HAYLEY GOURLEY

DR WARREN PARKER

CHAIR
MEMBER OF PERFORMANCE AND SAFETY COMMITTEE
MEMBER OF AUDIT AND RISK COMMITTEE

Warren was appointed Chair of the Pāmu Board on 1 January 2019. Warren is a former Chief Executive of Scion (the New Zealand Forest Research Institute) and Landcare Research and was previously Chief Operating Officer of AgResearch. He currently holds several board roles, including as Chair of FarmIQ and a director of Farmlands Co-operative Society, Quayside Holdings and Genomics Aotearoa, and he chairs both the Forestry Ministerial Advisory Board and Griffith Enterprise at Griffith University. Earlier, he chaired the New Zealand Conservation Authority. Warren was raised on a dairy, sheep and beef cattle livestock farm in Northland, has a PhD in animal science and was previously a Professor of Agribusiness and Resource Management at Massey University, where he spent 18 years in various roles, including supervising the 9,000 stock unit Riverside Farm in Wairarapa.

NIGEL ATHERFOLD

DEPUTY CHAIR
CHAIR OF PERFORMANCE AND SAFETY COMMITTEE
MEMBER OF AUDIT AND RISK COMMITTEE

Nigel was appointed to the Pāmu Board in April 2018 and is Deputy Chair. He has over 25 years' experience in finance covering corporate finance, treasury risk management and banking. He is currently a director and shareholder of TDB Advisory Limited – a corporate finance and economics advisory company. Prior to this, he was ANZ corporate banking's regional executive in the southern region for 4 years, and prior to that, he spent 5 years in the New Zealand Dairy Board's treasury. Nigel is currently a director of three farming companies that have dairy, arable and sheep and beef assets and represents Pāmu on the boards of both Spring Sheep and Melody Dairy.

DOUG WOOLERTON

BOARD DIRECTOR
MEMBER OF PERFORMANCE AND SAFETY COMMITTEE

Doug was appointed to the Pāmu Board in May 2019. At a reasonably young age, he was elected to the board of a cooperative dairy company and served for 10 years, the last 2 years as Deputy Chair. His interest in politics eventually saw him move away from farming to pursue a political career serving 12 years as a Member of Parliament. Agriculture has remained a lifelong passion but from a political viewpoint rather than direct involvement. Since 2008, Doug has worked as an independent political consultant advocating for various businesses and assisting them to have their concerns heard by the government of the day. Doug grew up on the family farm in Waikato a few kilometres south of Hamilton along with three brothers, all of whom became dairy farmers. One is never far from the farm in Waikato.

JO DAVIDSON

BOARD DIRECTOR
MEMBER OF PERFORMANCE AND SAFETY COMMITTEE

Jo was appointed to the Pāmu Board in September 2019. She was an independent director for AUT Ventures for 5 years and is an advisory board member and business adviser supporting significant and SME-sized businesses on company purpose, brand and marketing-led transformational change projects, working with them to achieve sustainable profit and growth in New Zealand and international markets.

With a BHortSci from Massey University, Jo has had an extensive executive career in the highly competitive and dynamic FMCG, food and beverage manufacturing and agribusiness sectors in New Zealand and based in market in Australia, South Africa, UK and Europe, with project experience in Asia.

A member of Global Women, Jo also provides mentoring support for individuals and start-ups across a range of product and service categories developing culture and capability.

CHRIS DAY

BOARD DIRECTOR
CHAIR OF AUDIT AND RISK COMMITTEE

Chris was appointed to the Pāmu Board in May 2012. Chris is the Chief Transformation Officer for Silver Fern Farms and a director of Datacom. An experienced business leader, he has a background in finance, technology and leadership at executive and governance levels for local and international businesses. Chris lives in Wellington and grew up on a livestock farm in Wairarapa where his family has farmed since the 1850s.

BELINDA STOREY

BOARD DIRECTOR
MEMBER OF AUDIT AND RISK COMMITTEE

Belinda was appointed to the Pāmu Board in May 2018. She is Managing Director of Whakahura: Extreme Events and the Emergence of Climate Change – a 5-year research programme funded by MBIE. Belinda is a member of XRB's External Advisory Panel on Climate-related Financial Disclosures and co-founder of Kanute Limited (formerly Climate Acuity), a start-up developing tools to quantitatively price climate risk. She has an MBA in finance from Columbia University of New York and a master's in disaster risk from the University of Canterbury. A climate economist, Belinda's research focuses on the impact of escalating hazards on infrastructure, real estate, banking and insurance. She was raised on a dairy farm in north Waikato where her Irish family settled in the 1870s with the support of Ngāti Mahuta at Taniwha.

DR TANIRA KINGI

BOARD DIRECTOR
MEMBER OF PERFORMANCE AND SAFETY COMMITTEE

Tanira was appointed to the Pāmu Board in July 2020. Tanira has an extensive background in agricultural systems, land economics and forestry and is the science lead on a number of research programmes in environmental mitigation and land-use change modelling. He has a PhD in agricultural economics and development from the Australian National University and an MAppSci (Hons) in agricultural systems management from Massey University. Tanira is currently a ministerial appointment to advisory groups for freshwater and climate change and was previously a member of Pāmu's Environment Reference Group. Tanira has held governance positions on agricultural entities for almost 30 years and holds a number directorships on the boards of several Māori economic authorities. Tanira is affiliated to Ngāti Whakaue, Ngāti Rangitihi, Te Arawa waka.

HAYLEY GOURLEY

BOARD DIRECTOR
MEMBER OF AUDIT AND RISK COMMITTEE

Hayley was appointed to the Pāmu Board in May 2018. An agricultural economist, she has more than 20 years' experience in New Zealand and offshore financing, advising and working with agribusinesses throughout the value chain. Hayley is currently Agri Divisional Manager at Skellerup – leading manufacturing businesses based in New Zealand and internationally that provide dairy rubberware products and specialist footwear products globally. She previously headed Rabobank's New Zealand agribusiness banking division. Hayley grew up on a dairy farm in Karamea on the West Coast and has an MSc (Agricultural Economics) from Imperial College (University of London).

PĀMU BOARD AND MANAGEMENT CONTINUED

LEADERSHIP TEAM

STEVEN CARDEN
CHIEF EXECUTIVE

MARK JULIAN
GENERAL MANAGER
DAIRY OPERATIONS

BERNADETTE KELLY
GENERAL MANAGER
PEOPLE, SAFETY AND ENGAGEMENT

LISA MARTIN
GENERAL MANAGER
SUSTAINABILITY AND FARMING SYSTEMS

ALISTAIR MCMECHAN
GENERAL COUNSEL AND COMPANY SECRETARY

STEVEN MCJORROW
CHIEF FINANCIAL OFFICER

SARAH RISELL
GENERAL MANAGER
PĀMU FOODS

ANDREW SLIPER
GENERAL MANAGER
FORESTRY AND HORTICULTURE

STEPHEN TICKNER
GENERAL MANAGER
LIVESTOCK OPERATIONS

To read more about our Leadership Team,
please visit our website: pamunewzealand.com

GOVERNANCE AND STATUTORY DISCLOSURES

INTRODUCTION TO OUR GOVERNANCE FRAMEWORK

The Directors and management of Pāmu are committed to effective and robust governance. This section sets out the systems and processes underlying Pāmu's governance framework.

As a state-owned enterprise, Pāmu's principal objective is to operate as a successful business that is:

- as profitable and efficient as a comparable business not owned by the Crown
- a good employer
- an organisation that exhibits a sense of social responsibility by having regard to the interests of the communities in which it operates and by endeavouring to accommodate or encourage those interests when able to do so.

Pāmu is ultimately accountable to its shareholding Ministers (the Minister of Finance and the Minister for State-Owned Enterprises), who are supported by the Commercial Performance team at Treasury. Accountability is primarily achieved by issuing and reporting against Pāmu's annual Statement of Corporate Intent, which sets out Pāmu's objectives, nature and scope of activities and financial and non-financial performance measures. In addition, the shareholding Ministers issue an annual letter of expectations, and the company maintains regular engagement with Treasury.

THE BOARD

The Board is appointed by the shareholding Ministers and is currently comprised of eight non-executive independent Directors (including the Chair). Shareholding Ministers appointed Dr Tanira Kingi to the Board with effect from 1 July 2020 (replacing Tony Reilly whose term expired on 30 June 2020).

The Board is responsible to the shareholding Ministers for guiding and overseeing Pāmu's operations. Pāmu's Board Charter sets out how the Board discharges its responsibilities and powers. The Charter requires Directors to:

- observe high standards of ethical and moral behaviour
- act in the best interests of the shareholders
- ensure that Pāmu acts as a good corporate citizen taking into account environmental, social and economic issues
- recognise the legitimate interests of all stakeholders including staff
- ensure that staff are remunerated and promoted fairly and responsibly.

Under the Charter, the Board may establish committees from time to time to assist it by focusing on specific governance responsibilities in more detail, reporting and making recommendations to the Board as appropriate. The Board currently has two permanent committees:

- The Audit and Risk Committee deals with financial accounting and reporting issues and oversees Pāmu's risk management framework.
- The Performance and Safety Committee deals with remuneration, health and safety and staff training and development.

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

BOARD AND COMMITTEE MEETINGS

The Board and Board committees met regularly throughout the year in person and by audio visual means and conducted some business by circular resolution in lieu of meeting. Meetings for the year ending 30 June 2021 are set out in the following table.

Director	Board meetings (11 meetings)	Audit and Risk Committee (4 meetings)	Performance and Safety Committee (4 meetings)
Dr Warren Parker	11	4	4
Nigel Atherfold	11	4	4
Chris Day	10	4	
Jo Davidson	11	3	4
Hayley Gourley	11	4	
Belinda Storey	9	4	
Doug Woolerton	11	4	
Dr Tanira Kingi	10		4

During the year, Pāmu had Board observers attend meetings as part of the Agri-Women's Development Trust Escalator programme: Jan Early (one meeting) and Charlotte Westwood (eight meetings).

PĀMU'S ADVISORY GROUPS

Pāmu has two advisory groups that assist the company by providing insight, challenge and different perspectives on areas critical to our operations and strategy. The Environment Reference Group (ERG) guides and challenges Pāmu's environmental practice, and the Visionary Vets Group (VVG) focuses on ways to lift our animal welfare practice and standards. Membership of the two groups is shown below.

ERG	VVG
Marnie Prickett, Chair	Alan McDermott, Chair
Naomi Aporo	Dr Mark Bryan
Dr Bruce Campbell	Dr Ginny Dodunski
Sally Lee	Dr Arnja Dale
Helen Marr	Dr Helen Beattie
Tom Kay*	Dr Karl Weaver

*Tom Kay is a maternity leave replacement for ERG member Annabeth Cohen.

RISK MANAGEMENT

The Board has adopted a risk appetite statement that acts as a link between Pāmu's strategic objectives and its risk management framework. The Board is ultimately accountable for risk and has delegated the oversight of the risk framework (including the risk register and monitoring the internal audit programme) to the Audit and Risk Committee.

The Chief Executive is charged with the day-to-day management of Pāmu. The company operates under a detailed delegated authority structure, and the Board approves key operational and financial policies.

KPMG is Pāmu's current external auditor appointed by the Office of the Auditor-General, and PricewaterhouseCoopers performs the independent internal audit function for Pāmu.

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

SUBSIDIARIES

Pāmu's subsidiaries and their respective purposes are shown below.

Subsidiary	Purpose
Landcorp Holdings Ltd	Ownership vehicle for properties that are subject to the Protected Land Agreement between the Crown and Landcorp Farming (land to be used in Treaty of Waitangi settlements).
Landcorp Estates Ltd	Develops and sells land of higher value for uses other than farming.
Landcorp Pastoral Ltd	Holding company for Pāmu's interests in Focus Genetics Ltd Partnership (100% since September 2014), a limited partnership to enhance and market genetics in sheep, cattle and deer, and Spring Sheep Dairy NZ Ltd Partnership (50% interest, established June 2015), a sheep milking joint venture.

INTERESTS REGISTER

Entries made in the interests register during the year covered particulars of Directors' interests, Directors' remuneration and directors' and officers' liability insurance. The following are particulars of general notices of disclosure of interest as at 30 June 2021.

Director	Organisation	Position
Dr Warren Parker	Quayside Holdings Ltd	Director, Chair Remuneration Committee
	Quayside Properties Ltd	Director
	Quayside Securities Ltd	Director
	Farmlands Cooperative Society Ltd	Director, Chair People and Performance Committee
	Griffith Enterprise Advisory Board	Chair
	Forestry Ministerial Advisory Group	Chair
	Genomics Aotearoa Advisory Board	Director
	Warren's Insights Ltd	Director and shareholder
	Landcorp Holdings Ltd	Director
	Landcorp Estates Ltd	Director, Chair of Holdings, Estates and Pastoral
	Landcorp Pastoral Ltd	Director
	Focus Genetics Management Ltd	Director
Nigel Atherfold	TDB Advisory Ltd	Director and shareholder
	Ngāi Tahu Farming Ltd	Director
	Rural Equities Ltd (and subsidiaries)	Director
	Terracostosa Ltd (and subsidiaries)	Director
	GT & Company Ltd	Director and shareholder
	NZ Milk Trading Company Ltd	Director and shareholder
	Melody Dairies GP Ltd	Director
	Spring Sheep Dairy NZ Management Ltd	Director

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

Chris Day	Silver Fern Farms Ltd	Chief Transformation Officer
	Datacom Group Ltd	Director and Chair of Audit Committee
	CW & CR Day Trust	Trustee
	Fairholm Farming Ltd	Director and shareholder
	Landcorp Holdings Ltd	Director
	Landcorp Estates Ltd	Director
	Landcorp Pastoral Ltd	Director
Jo Davidson	LiquidStrip Ltd	Advisory Board member
Hayley Gourley	The Lake Road Partnership	Partner
	Skellerup Industries Ltd	Agri Divisional Manager
	Skellerup Rubber Products Jiangsu Ltd	Director
	Karalla Investments Ltd	Director and shareholder
Dr Tanira Kingi	Scion	Senior Scientist and Research Leader (resigned effective August 2021)
	Pukeroa Oruawhata Holdings Ltd (and subsidiaries)	Director
	Ngāti Whakaue Holdings Ltd (and subsidiaries)	Director
	Te Arawa Management Ltd	Director
	Te Arawa Primary Sector Group	Chair
	Kāhui Wai Māori (MfE)	Ministerial appointment
	Freshwater Science & Technology Advisory Group	Ministerial appointment
	Primary Sector Climate Change Commitment (He Waka Eke Noa)	Ministerial appointment
	Xerra Earth Observation Institute Science Advisory Group	Member
	Independent Climate Change Commission, Land Technical Advisory Group	Member
Belinda Storey	Climate Sigma Ltd	Director
	Endeavour Research Programme	Programme Managing Director
	Climate Acuity Ltd	Director and shareholder
	XRB External Advisory Panel for Climate Related Disclosures	Member
Doug Woolerton	The Lobbyist Ltd	Director and shareholder
	RMA Consulting Ltd	Director and shareholder

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

USE OF COMPANY INFORMATION

No requests were received from Directors to use company information that they obtained in their capacity as Directors and that would not otherwise have been available to them.

COMPANY DONATIONS

During the year, Pāmu made donations of $73,000.

DIRECTORS' REMUNERATION AND OTHER BENEFITS

Directors' fees (including fees for chairs of Board committees) for the year to 30 June 2021 were as follows:

Dr Warren Parker*	$90,700
Nigel Atherfold**	$89,167
Chris Day	$41,375
Jo Davidson	$37,085
Hayley Gourley	$37,085
Dr Tanira Kingi***	$18,542
Belinda Storey	$37,085
Doug Woolerton	$37,085
Total fees	**$388,124**

* Includes fees ($16,000) for additional responsibilities on the board of Focus Genetics Management Ltd.

** Includes fees ($32,000) for additional responsibilities on the boards of joint venture companies Melody Dairies GP Ltd and Spring Sheep Dairy NZ Management Ltd. The FY2021 payments also include $10,667 fees for FY2020.

*** Does not include $18,543 fees accrued but not paid during FY2021.

No remuneration or other benefits were paid to the Directors of Landcorp Estates Ltd, Landcorp Pastoral Ltd or Landcorp Holdings Ltd.

In addition to fees, the company provided a budget of $24,000 (total) towards Director continuing professional development.

INDEMNITY AND INSURANCE

Pāmu has arranged directors' and officers' insurance, which covers risks normally covered by such policies and includes separate cover to meet defence costs. In addition, as permitted by Pāmu's constitution, Directors and officers are indemnified by the company to the extent permitted by law for potential liabilities that they might incur for actions or omissions in their capacity as Directors or officers.

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

EMPLOYEES' REMUNERATION AND OTHER BENEFITS

Set out below are the numbers of current and former employees whose total remuneration was within the specified bands. Remuneration is inclusive of base salary, performance incentives and other benefits such as employer superannuation contributions, health and life insurance and accommodation.

Dollars in thousands	Number of employees
100-109*	34
110-119*	31
120-129*	30
130-139*	17
140-149	7
150-159*	8
160-169*	3
170-179	8
180-189	4
190-199	4
200-209	5
210-219	2
220-229	2
230-239	2
260-269	1
320-329	1
330-339	1
350-359	1
370-379	1
400-409	2
800-809	1

* Remuneration bands that include at least one former employee who received a severance payment, without which they would not have been in that band.

EXECUTIVE REMUNERATION

Pāmu's remuneration policy is to provide a sustainable remuneration system that recognises individual contribution, incentivises performance, provides a mix of rewards and is compelling relative to the market(s) in which we compete for talent.

Total remuneration at Pāmu constitutes two components: fixed remuneration and short-term performance incentives.

The Performance and Safety Committee reviews the annual performance appraisal outcomes for all members of the Leadership Team and approves the outcomes for all members other than the Chief Executive. The Chief Executive's remuneration is approved by the Board on the recommendations of the Chair and Deputy Chair. The review takes into account external benchmarking to ensure competitiveness with comparable market peers, along with consideration of an individual's performance, skills, expertise and experience.

External benchmarking is commissioned from an expert party, KornFerryHay Group (KFHG). KFHG is required to declare independence of any management influence in the collation of the information provided. Additionally PricewaterhouseCoopers provides comparator market information. External benchmarking for non-executive remuneration is requested by Pāmu's management and provided by KFHG.

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

FIXED REMUNERATION

Pāmu offers an employee remuneration package that comprises a competitive base salary supplemented by a range of benefits appropriate to employee needs and job requirements. Pāmu's policy is to pay fixed remuneration to the fixed pay market median.

SHORT-TERM PERFORMANCE INCENTIVES

Short-term incentives (STIs) are designed to recognise performance where Pāmu's Board approves the activation of the scheme. There is no assurance of incentives being paid.

Incentive target values are currently set at the commencement of employment as a percentage. The Chief Executive's STI was renegotiated in 2017 from a dollar value incentive to a percentage total fixed remuneration.

The Chief Executive's STI is 30% of total fixed remuneration. The STI for other executives is 20% of base salary.

Pāmu key performance indicators (KPIs) are aligned to individual and company achievement, and a proportion of the STI percentage is focused on either company or individual objectives. The ratio can change year to year on Board direction. For FY2021, KPIs were 50% company and 50% individual for the Chief Executive and all other executives.

Pāmu utilises KPIs to measure success at the end of the financial year. KPIs for FY2021 were aligned to the achievement of the strategy and business plan across the six capitals. They were either shared across functions or individually focused. Shared KPI objectives created focus on the company priorities.

KPIs are percentage rated at the end of the financial year, aligned to performance levels of threshold, target and stretch. Stretch performance levels allow employees to be rewarded for exceptional performance. Stretch targets allow recognition up to 120%.

LONG-TERM PERFORMANCE INCENTIVES

Pāmu no longer has a long-term incentive scheme.

TOTAL REMUNERATION FOR FY2021

CHIEF EXECUTIVE'S REMUNERATION (FY2021 AND FY2020)

	Salary $	Benefits[1] $	Subtotal $	STI $	LTI $	Pay for performance $	Total remuneration $
						Subtotal	
FY2021	614,901	3,120	618,021	185,943	0	185,943	803,963
FY2020	613,384	3,120	616,504	82,483	0	82,483	698,987

[1] Pāmu's Chief Executive has one benefit, a car park. There is no KiwiSaver, insurance or medical within the current package. Actual salary paid includes holiday pay paid as per New Zealand legislation.

5-YEAR SUMMARY – CHIEF EXECUTIVE'S REMUNERATION

	Financial year	Total remuneration paid	Percentage STI individual	Percentage STI company performance
Chief Executive Steven Carden	FY2021	$803,963	81%	83%
	FY2020	$698,987	93%	108%
	FY2019	$795,950	75%	25%
	FY2018	$769,652	104%	105%
	FY2017	$574,492	90%	112%

GOVERNANCE AND STATUTORY DISCLOSURES CONTINUED

BREAKDOWN OF CHIEF EXECUTIVE'S PAY FOR PERFORMANCE (FY2021)

	Description	Performance measures	Percentage achieved
STI	Set at 30% of total fixed remuneration	50% company performance	83%
	Based on financial and non-financial measures	50% individual performance	81%

FY2022 CHIEF EXECUTIVE'S REMUNERATION STRUCTURE

	Salary $	Benefits $	Subtotal $	STI $[2]	LTI $[3]	Pay for performance at target $	Total potential remuneration at target $
						Subtotal STI and LTI	
FY2022	625,877	3,120	628,997	188,699	0	188,699	817,696

[2] STI performance incentive constitutes 50% company performance and 50% individual performance.
[3] There is no LTI scheme in the CE's current employment agreement.

EXECUTIVE REMUNERATION

The two highest-earning executives at Pāmu in FY2021 were the Chief Financial Officer and the General Manager Pāmu Foods.

In FY2021, the Chief Financial Officer received remuneration totalling $406,500. This amount included a $64,536 STI payment for FY2020, and the remaining $341,964 includes base salary and benefits. There is no LTI scheme in the Chief Financial Officer's employment agreement.

In FY2021, the General Manager Pāmu Foods received remuneration totalling $405,841. The STI payment for FY2020 of $61,134 was paid with the remaining $344,707 constituting base salary and benefits. There is no LTI scheme in the General Manager Pāmu Foods' employment agreement.

TARGETS

FOR FY2021/22

As a state-owned enterprise, Landcorp Farming Limited prepares an annual Statement of Corporate Intent (SCI) including targets and budget forecasts for financial performance during the year ahead.

The FY2021 financial targets and forecasts for FY2022, including those in the SCI, are shown in the table below.

Shareholder returns	Actual FY2021	Target FY2021	Target FY2022
Total shareholder return (%)[1]	2.8	(0.1)	2.5
Return on equity (%)[2]	2.1	0.0	2.5
Dividend yield (%)[3]	0.4	0.0	0.4
Profitability and efficiency			
EBITDAR ($m)[4]	61	35	73
Net (loss)/profit after tax ($m)	29	(1)	34
Operating cash flow after capex ($m)[5]	(6)	(38)	(12)
Operating margin (%)[6]	26.1	16.5	23.8
Return on Invested capital (%)[7]	4.1	0.8	3.5
Dividends declared – Group ($m)	5	0	5
Leverage and solvency			
Gearing (%)[8]	13.2	16.3	11.9
Debt and lease liability to EBITDAR times[9]	7.4	14.5	5.8
Interest cover times[10]	4.59	2.04	7.44
Solvency times[11]	4.8	4.4	4.1
Solvency (including current debt) times	1.3	0.9	0.6
Debt to EBITDAR times[12]	3.4	7.6	3.1
Growth			
Revenue growth times[13]	1.0	0.9	1.0
Capital replacement times[14]	-	-	2.8
EBITDAR growth times[15]	-	-	1.0

1 The total of equity movement during the year and dividend paid/equity opening balance.
2 Net profit after tax/average equity.
3 Dividends declared/average shareholders' equity.
4 Earnings before interest, tax, depreciation, amortisation and revaluations.
5 Operating cash flow less cash lease expense less capital expenditure.
6 EBITDAR less non-operating items/operating revenue. Non-operating items includes imputation credits, share of profit/loss and dividends received from joint ventures and gains/losses on asset sales; FY2021 actual ($4m), FY2021 target ($3m), FY2022 target $13m.
7 Earnings before interest, tax and revaluations less non-operating items/average shareholders' equity, debt and redeemable preference shares less revaluation reserves. Refer note 6 for details of non-operating items. Total revaluation reserves including revaluations in retained earnings; FY2021 actual $757m, FY2021 target $736m, FY2022 target $745m.
8 Net debt/net debt plus equity.
9 Net debt and lease liability/EBITDAR less non-operating items. Refer note 6 for details of non-operating items.
10 Covenant interest cover calculation as agreed with banks.
11 Current assets/current liabilities (excluding current portion of long-term debt on the basis that all debt will be refinanced as it matures and excluding current portion of lease asset and lease liability).
12 Bank loans less cash/EBITDAR less non-operating items. Refer note 6 for details of non-operating items.
13 Operating revenue current year/operating revenue prior year.
14 New for FY2022: Asset purchases plus land development/depreciation and amortisation less lease amortisation.
15 New for FY2022: Current year EBITDAR less non-operating items/prior year EBITDAR less non-operating items. Non-operating items includes imputation credits, share of profit/loss and dividends received from joint ventures and gains/losses on asset sales; FY2020 actual $5m, FY2021 actual ($4m), FY2021 target ($3m), FY2022 target $13m.

KEY FINANCIAL DATA

OVER 5 YEARS

Shareholder returns	FY2021	FY2020	FY2019	FY2018	FY2017
Total revenue	250	251	241	247	231
EBITDAR[1]	61	65	34	49	36
Net profit after tax	29	(24)	(11)	34	52
Total comprehensive income	37	(79)	(65)	29	57
Total shareholder return (%)[2]	2.8	(5.3)	(4.7)	2.2	3.9
Return on equity, adjusted for IFRS fair value (%)[3]	1.3	3.6	1.5	1.6	1.2
Dividend declared	5	5	5	5	-
Total assets	1,975	1,938	1,782	1,858	1,814
Total equity	1,380	1,347	1,427	1,497	1,466
Bank debt	217	214	223	209	207
Shareholders' funds[4]/total assets (%)	74.3	74.0	85.0	86.0	86.3

[1] EBITDAR is earnings before interest, tax, depreciation, amortisation and revaluations.

[2] The total of equity movement during the year and dividend paid/equity opening balance.

[3] Net profit after tax less fair value revaluations/average shareholders' equity less revaluation reserves. Total revaluation reserves including revaluations in retained earnings; FY2021 $757m, FY2020 $721m, FY2019 $812m, FY2018 $924m, FY2017 $908m.

[4] Shareholders' funds includes redeemable preference shares.

FINANCIAL REVIEW

Pāmu achieved EBITDAR (earnings before interest, tax, depreciation, amortisation and revaluations) of $61 million for the year ended 30 June 2021, based on the strength of core farming operations and a further firming in New Zealand milk prices.

The result was down from EBITDAR of $65 million in FY2020, primarily due to that year including a $6 million one-off gain on the sale of shares in Westland Milk Products. In the latest year, lower demand in some New Zealand export markets and Covid-19-related trade disruptions saw a fall in venison prices and a softening in returns on other red meat, but these factors were more than offset for Pāmu by higher milk revenue, by allocations of carbon emission credits attributable to the company's forestry activities and by a reduction in operating expenses.

NET PROFIT AFTER TAX

Pāmu recorded net profit after tax of $29 million for the year ended 30 June 2021, which was a reversal from the $24 million loss in FY2020. This reversal was largely due to a $25 million gain in the fair value of Pāmu's biological assets, including livestock and forestry plantations, as at 30 June 2021. This gain contrasted with a $32 million loss at the previous balance date (June 2020). The latest year's net profit after tax included depreciation and finance expenses, which declined slightly from FY2020. The $29 million result for FY2021 came after a $5 million tax expense, which contrasted with an $8 million tax benefit in the previous year.

REVENUES

Total revenue was $250 million in FY2021, marginally down from the previous year ($251 million). This included a 3% decline in farm operating revenues to $232 million (from $239 million) reflecting the impact of lower returns from livestock due to market conditions. Pāmu increased production from its livestock farms throughout FY2021, assisted by favourable growing conditions in most regions, although eastern parts of New Zealand experienced another unseasonably dry summer. This increase was achieved despite an 8% reduction in farmed area due to past land sales or land retirement, expiry of leases and the conversion of lower-use capacity land to forestry. Pāmu continued to improve its livestock productivity on the most suitable land, with the key indicator of this (net kilograms of finished livestock per hectare) rising by 12% in the latest year.

Overall livestock revenue slipped to $112 million (from $127 million) because of lower meat prices in global markets disrupted by Covid-19. Venison was hardest hit by a contraction in demand from food service sectors in Europe and North America, with returns to New Zealand deer farmers in the latest year down around 40% compared with FY2019 when international demand and prices were at their highest. In contrast, lamb and beef prices gained momentum in the latter half of the latest year. Pāmu continued to sell much of its finished livestock to processors on contracts, thus limiting revenue uncertainty through the year.

Global milk prices increased during FY2021 with farmgate returns to New Zealand producers up around 5% from the previous year. Pāmu lifted total production to 15.1 million kilograms of milk solids (kgMS) from 14.8 million kgMS in the previous year. Productivity improved in the dairy business to reach 835 kgMS produced per hectare (from 813 kgMS/hectare last year). Milk revenue rose to $115 million in FY2021 (from $107 million last year), with this increase almost offsetting the decline in livestock revenue. Milk revenue grew to account for 50% of all Pāmu farm operating revenues in the latest year.

Wool revenue was unchanged at $3 million, as was revenue from forestry harvesting at $2 million. Pāmu continued to earn carbon credit allocations based on long-term growth in its plantation forests. The company had 12,190 hectares in plantation at 30 June 2021 (10,868 hectares at June 2020). New credits worth $8 million were allocated during FY2021 (compared with $3 million in the previous year), forming an increasingly valuable source of other operating revenues ($18 million this year compared with $12 million in FY2020).

FINANCIAL REVIEW CONTINUED

EXPENSES

Pāmu reduced operating expenses by 3% to $185 million ($191 million in the previous year) mainly due to lower personnel and other costs. Staff remuneration expenses were $5 million lower (at $58 million), primarily because the previous year's expenses had been increased by the creation of a provision for additional employee holiday pay. In FY2021, remuneration expenses included a reduced amount for at-risk incentive pay. The figure of $58 million also reflected a reduction in the use of casual employees in FY2021.

At 30 June 2021, Pāmu had 647 employees, compared with 658 and 636 at balance dates in 2020 and 2019 respectively. In FY2021, the company increased spending on staff development by $0.5 million.

Farm working and maintenance costs were flat year on year at $102 million. This reflected a moderate reduction in livestock numbers in all categories on Pāmu farms over the course of FY2021.

TOTAL COMPREHENSIVE INCOME

Pāmu recorded total comprehensive income of $37 million for the year ended 30 June 2021 with the overall result including fair value gains on the company's stock of carbon credits of $11 million ($9 million last year). For FY2020, Pāmu recorded a $79 million loss in total comprehensive income, which reflected a significant reduction in the fair value of land and improvements (no change in these values at 30 June 2021).

BALANCE SHEET

Total assets increased to $1,975 million at 30 June 2021 ($1,938 million at June 2020) due mainly to increases in the value of Pāmu's forestry and carbon assets. These increased in value by 32% from $71 million to $94 million. The rise in the forestry element of this total reflects the company's new planting programme, while carbon credit allocations and fair value gains have driven the overall increase in the value of carbon assets. Livestock assets rose in value by 5% to $286 million (from $273 million), reflecting fair value gains in sheep and dairy cows, although there were reductions in beef cattle and deer.

Total liabilities rose to $595 million ($591 million at June 2020), with modest increases in accounts payable and bank borrowings. Bank borrowing was $217 million, up from $214 million at June 2020, although significantly lower than at past balance dates. At 30 June 2021, Pāmu had on hand $8 million of cash and cash equivalents (up from $5 million at June 2020).

At 30 June 2021, the ratio of shareholders' funds (including redeemable preference shares) to total assets was 74%, which was unchanged from the previous balance date.

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STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE 2021

	Note	Group 2021 $m	Group 2020 $m
Revenue			
Farm operating	2	232	239
Other business activities	3	18	12
		250	251
Operating expenses			
Farm working and maintenance	4	102	102
Personnel and other	5	83	89
		185	191
(Loss) from equity accounted investments	15	(4)	(1)
Realised gain on sale of shares		-	6
Earnings before interest, tax, depreciation, and revaluations		**61**	**65**
Depreciation	6	(27)	(29)
Finance expenses	7	(21)	(22)
Fair value (loss) on financial instruments	8	(4)	(5)
Fair value gain/(loss) on biological assets	9	25	(32)
Impairment (loss) on property, plant and equipment	17	-	(9)
Net profit/(loss) before tax		**34**	**(32)**
Tax (expense)/benefit	10	(5)	8
Net profit/(loss) after tax		**29**	**(24)**
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Fair value (loss) on land and improvements	17	-	(61)
Fair value (loss) on share investments		-	(1)
Fair value gain on carbon credits	14	11	9
Tax (expense) recognised in equity	10	(3)	(2)
Total comprehensive income		**37**	**(79)**

The accompanying notes form part of these financial statements.

STATEMENT OF MOVEMENTS IN EQUITY

FOR THE YEAR ENDED 30 JUNE 2021

	Note	Share capital $m	Retained earnings $m	Share revaluation reserve $m	Asset revaluation reserve $m	Total equity 2021 $m
Balance at 1 July 2020		**125**	**613**	**1**	**608**	**1,347**
Net profit after tax		-	29	-	-	29
Dividend paid		-	(5)	-	-	(5)
Fair value movement		-	-	-	11	11
Tax expense recognised in equity	10	-	-	-	(3)	(3)
Realised loss on share sales		-	(1)	1	-	-
Realised gain on carbon credits sales		-	5	-	(5)	-
Net transfers under Protected Land Agreement		-	1	-	-	1
Balance at 30 June 2021	**22**	**125**	**642**	**2**	**611**	**1,380**

	Note	Share capital $m	Retained earnings $m	Share revaluation reserve $m	Asset revaluation reserve $m	Total equity 2020 $m
Balance at 1 July 2019		**125**	**640**	**1**	**662**	**1,428**
Net (loss) after tax		-	(24)	-	-	(24)
Dividend paid		-	(5)	-	-	(5)
Fair value movement		-	-	(1)	(52)	(53)
Tax expense recognised in equity	10	-	-	-	(2)	(2)
Realised loss on share sales		-	(1)	1	-	-
Net transfers under Protected Land Agreement		-	3	-	-	3
Balance at 30 June 2020	**22**	**125**	**613**	**1**	**608**	**1,347**

The accompanying notes form part of these financial statements.

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2021

	Group 2021 $m	Group 2020 $m
Cash flows from operating activities		
Receipts from customers:		
Livestock	136	146
Milk	102	100
Other receipts from customers	17	22
Payments to suppliers	(136)	(139)
Payments to employees	(63)	(62)
Interest paid	(10)	(12)
Net cash inflows from operating activities	**46**	**55**
Cash flows from investing activities		
Proceeds from sale of land and improvements and other property, plant and equipment	4	5
Proceeds from sale of carbon credits	6	-
Proceeds from sale of share investments	1	13
Purchase and development of land and forestry	(21)	(18)
Purchase of other property, plant and equipment and intangibles	(13)	(14)
Purchase of shares and net interests in joint venture investments	(3)	(9)
Net cash (outflows) from investing activities	**(26)**	**(23)**
Cash flows from financing activities		
Net borrowing receipts/(repayments)	3	(9)
Payment of lease liabilities	(15)	(15)
Dividends paid	(5)	(5)
Net cash (outflows) from financing activities	**(17)**	**(29)**
Net change in cash and cash equivalents	**3**	**3**
Cash and cash equivalents at beginning of year	5	2
Cash and cash equivalents at end of year	**8**	**5**

The accompanying notes form part of these financial statements.

RECONCILIATION OF PROFIT AND OPERATING CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2021

	Note	Group 2021 $m	Group 2020 $m
Net profit/(loss) after tax		**29**	**(24)**
Non-cash items			
Non-cash livestock growth and aging		11	3
Milk futures realised loss	2,8	2	-
Carbon credit allocation	3,14	(8)	(3)
Depreciation	6	27	29
Fair value movements	8,9	(21)	37
Milk futures unrealised loss	8	(13)	(5)
Interest expense on lease liability	7	11	12
Impairment loss on property, plant and equipment	17	-	9
Tax expense/(benefit)	10	5	(8)
Movements in working capital		1	10
Items classified as investing activities		2	(5)
Net cash flows from operating activities		**46**	**55**

The accompanying notes form part of these financial statements.

STATEMENT OF FINANCIAL POSITION

AT 30 JUNE 2021

	Note	Group 2021 $m	Group 2020 $m
Assets			
Cash and cash equivalents		8	5
Accounts receivable	11	42	38
Inventories		12	12
Property held for sale	12	27	27
Livestock	13	286	273
Forestry and carbon assets	14	94	71
Equity accounted investments	15	22	24
Share investments	16	37	38
Other assets		3	3
Property, plant and equipment	17	1,216	1,207
Leased assets	18	228	240
Total assets		**1,975**	**1,938**
Liabilities			
Bank loans	19	217	214
Accounts payable and accruals		19	14
Employee entitlements		13	13
Interest rate derivatives	20	5	12
Deferred tax liability	10	11	3
Lease liabilities	18	243	248
Redeemable preference shares	21	87	87
Total liabilities		**595**	**591**
Shareholders' funds			
Share capital		125	125
Retained earnings		642	613
Share revaluation reserve		2	1
Asset revaluation reserve		611	608
Total shareholders' funds	22	**1,380**	**1,347**
Total equity		**1,380**	**1,347**
Total equity and liabilities		**1,975**	**1,938**

Landcorp's Board of Directors authorised the financial statements for issue on 24 August 2021.

Signed on behalf of the Board

Dr. Warren Parker
Chair
24 August 2021

Chris Day
Chair of Audit and Risk Committee
24 August 2021

The accompanying notes form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 1: BASIS OF ACCOUNTING

REPORTING ENTITY

The financial statements presented are those of Landcorp Farming Limited ("Landcorp") and its subsidiaries, joint ventures and associates (the "Group"). Established under the State-Owned Enterprises Act 1986 and registered under the Companies Act 1993, Landcorp is a profit-oriented company, incorporated and domiciled in New Zealand. The ultimate shareholder of the Group is the Crown.

Landcorp is primarily a pastoral farming company, with a growing focus on exploring alternative uses for land in its portfolio, including additional forestry and horticulture. Landcorp also has a developing foods business marketing premium dairy products. Subsidiary companies are involved in land development, land management, farm technology and developing genetically superior sheep, cattle and deer breeds.

BASIS OF PREPARATION

These financial statements are prepared in accordance with generally accepted accounting practice in New Zealand ("NZ GAAP") under the Companies Act 1993 and the Financial Reporting Act 2013. NZ GAAP consists of New Zealand equivalents to International Financial Reporting Standards ("NZ IFRS") and other applicable Financial Reporting Standards, as appropriate for profit-oriented entities.

The financial statements are prepared on the basis of historical cost, modified by the revaluation of certain assets, investments and financial instruments as identified in the accompanying notes. The functional and reporting currency used to prepare the financial statements is New Zealand dollars, rounded to the nearest million dollars ($m). The financial statements have been prepared on a GST-exclusive basis except billed receivables and payables, which include GST.

BASIS OF CONSOLIDATION

The consolidated financial statements use the acquisition method of consolidation for Landcorp and its subsidiaries. Associates and joint ventures are accounted for using the equity method. All material intercompany balances and transactions are eliminated on consolidation. Transactions with jointly controlled entities are eliminated to the extent of Landcorp's interest in the entity. A list of subsidiaries and equity accounted investees is shown in Note 28.

SIGNIFICANT ACCOUNTING POLICIES

There have been no changes in accounting policies during the financial year. The principal accounting policies applied in the preparation of these financial statements have been consistently applied to all the periods presented. Where necessary, comparative information has been reclassified to achieve consistency with the current period's presentation.

ADOPTION STATUS OF RELEVANT NEW FINANCIAL REPORTING STANDARDS AND INTERPRETATIONS

There are currently no accounting standards or interpretations issued (but not yet effective) that are relevant to Landcorp.

USE OF ACCOUNTING ESTIMATES AND ASSUMPTIONS

The preparation of these financial statements requires management to make judgements, estimates and assumptions concerning the future that affect the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are:

- Note 13 – Livestock
- Note 14 – Forestry assets
- Note 17 – Property, plant and equipment

FAIR VALUE HIERARCHY

A number of Landcorp's accounting policies and disclosures require the measurement of fair values. The fair value hierarchy provides an indication about the reliability of inputs used to determine fair value. When measuring the fair value of an asset or liability, Landcorp uses observable market data as far as possible. An explanation of each level is as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: unobservable inputs for the asset or liability that are not based on observable market data.

COVID-19 PANDEMIC

Landcorp has experienced both positive and negative impacts as a result of the Covid-19 pandemic. While the impact on milk prices has been positive, there have been supply chain disruptions as well as an adverse impact on food service outlets which has depressed venison prices.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 2: FARM OPERATING REVENUE

Farm operating revenue is derived from the sale of livestock, milk and other agricultural produce such as wool and forestry logs. Revenue is measured at the transaction price specified in the customer contract.

Livestock revenue is recognised following delivery. Sales contracts either fix prices in advance or allow livestock to be sold at the prevailing spot rate. Each year, the Board approves a standard value for each livestock class. Changes in the value and volume of livestock arising from purchases, sales, births, deaths and aging are determined using standard values.

Milk revenue is recognised following collection by the milk processor using the processor's most recent forecast price and dividend information.

Landcorp holds New Zealand Stock Exchange ("NZX") milk price futures in order to manage commodity price risk. Fair value gains or losses are reported as a component of fair value movements on financial instruments within the Statement of Profit or Loss. Any realised gains or losses are accounted for within milk revenue in the year that settlement occurs.

Wool revenue is recognised following delivery to the wool broker. Contracts are held which either fix prices in advance or allow wool to be sold at the prevailing spot rate.

Forestry revenue is recognised from the sale of logs (at the market rate net of harvesting costs) together with revenue attributable to the growth of forest stands.

	Group 2021 $m	Group 2020 $m
Livestock	112	127
Milk	115	107
Wool	3	3
Forestry	2	2
Total farm operating revenue	**232**	**239**

Livestock revenue

	Note	Sheep $m	Beef $m	Dairy $m	Deer $m	Group 2021 $m
Livestock sales		53	47	24	14	138
Livestock purchases		(6)	(3)	(6)	-	(15)
Birth of animals	13	12	7	9	5	33
Growth of animals	13	21	28	20	6	75
Livestock losses	13	(5)	(2)	(3)	(1)	(11)
Book value of livestock purchased	13	3	2	4	-	9
Book value of livestock sold	13	(35)	(39)	(31)	(12)	(117)
Total livestock revenue		**43**	**40**	**17**	**12**	**112**

	Note	Sheep $m	Beef $m	Dairy $m	Deer $m	Group 2020 $m
Livestock sales		61	41	24	18	144
Livestock purchases		(9)	(2)	(3)	-	(14)
Birth of animals	13	14	9	8	8	39
Growth of animals	13	22	28	20	9	79
Livestock losses	13	(5)	(2)	(3)	(2)	(12)
Book value of livestock purchased	13	4	2	2	-	8
Book value of livestock sold	13	(36)	(35)	(30)	(16)	(117)
Total livestock revenue		**51**	**41**	**18**	**17**	**127**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 2: FARM OPERATING REVENUE continued

Milk revenue

	Note	Group 2021 $m	Group 2020 $m
Milk revenue		117	107
Realised milk futures losses transferred from Fair value loss on financial instruments	8	(2)	-
Total milk revenue		**115**	**107**

During the year ended 30 June 2021, Fair value movements on financial instruments within the Statement of Profit or Loss included $13m (2020: $5m) of unrealised fair value losses from milk price futures relating to current and future seasons. Further details are disclosed in Note 8.

NOTE 3: OTHER BUSINESS ACTIVITIES

	Note	Group 2021 $m	Group 2020 $m
Grazing and feed income		6	5
Carbon credit allocation	14	8	3
Other business activities		4	4
Total other business activities		**18**	**12**

NOTE 4: FARM WORKING AND MAINTENANCE

	Note	Group 2021 $m	Group 2020 $m
Cropping and feed costs		36	34
Pasture maintenance		23	24
Animal health and breeding		22	22
Other farm working expenses	8	6	8
Repairs and maintenance		15	14
Total farm working and maintenance		**102**	**102**

NOTE 5: PERSONNEL AND OTHER

	Group 2021 $m	Group 2020 $m
Staff remuneration	58	63
Superannuation and other personnel costs	5	5
Property-related expenses	8	7
Professional services	4	5
Other operating expenses	8	9
Total personnel and other	**83**	**89**

Included in professional services are statutory audit fees of $0.3m (2020: $0.3m).

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 6: DEPRECIATION

	Note	Group 2021 $m	Group 2020 $m
Property, plant and equipment and other assets	17	(16)	(18)
Leased assets	18	(11)	(11)
Total depreciation		**(27)**	**(29)**

NOTE 7: FINANCE EXPENSES

	Group 2021 $m	Group 2020 $m
Interest expense on borrowings	(6)	(6)
Interest expense on interest rate derivatives	(4)	(4)
Interest expense on lease liability	(11)	(12)
Total finance expenses	**(21)**	**(22)**

NOTE 8: FAIR VALUE (LOSS) ON FINANCIAL INSTRUMENTS

	Note	Group 2021 $m	Group 2020 $m
Interest rate derivatives		7	-
Realised milk futures loss transferred to Milk revenue	2	2	-
Unrealised milk futures loss		(13)	(5)
Total fair value (loss) on financial instruments		**(4)**	**(5)**

Gains and losses on milk futures are settled in cash each business day. These gains and losses are classified as unrealised until the underlying futures contracts are closed out.

NOTE 9: FAIR VALUE GAIN/(LOSS) ON BIOLOGICAL ASSETS

	Note	Group 2021 $m	Group 2020 $m
Effect of price changes on livestock	13	24	(29)
Effect of price changes on forestry	14	1	(3)
Total fair value gain/(loss) on biological assets		**25**	**(32)**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 10: TAX

	Group 2021 $m	Group 2020 $m
Net profit/(loss) before tax	34	(32)
Tax (expense)/benefit at the New Zealand tax rate 28% (2020: 28%)	(9)	9
Taxation adjustments:		
Non-assessable income	7	7
Non-deductible expenses	(3)	(8)
Total tax (expense)/benefit	**(5)**	**8**

The total tax expense comprises deferred tax payable in future years. Current tax payable is nil (2020: nil).

The Group has tax losses of $150m (2020: $154m) with a tax effect of $42m (2020: $43m) available to be carried forward and offset against taxable income in future periods.

Imputation credits available for use in subsequent reporting periods are nil (2020: nil).

Deferred tax liability

Deferred tax assets and liabilities are presented as a net asset/(liability) in the Statement of Financial Position. The movement in deferred tax assets and liabilities is provided below:

	Tax losses utilised $m	Biological assets $m	Property, plant and equipment $m	Other $m	Group 2021 $m
Balance at 1 July 2020	**43**	**(32)**	**(15)**	**1**	**(3)**
Amount recognised in Profit or Loss	3	(7)	1	(2)	(5)
Amount recognised in Other comprehensive income	-	-	-	(3)	(3)
Balance at 30 June 2021	**46**	**(39)**	**(14)**	**(4)**	**(11)**

	Tax losses utilised $m	Biological assets $m	Property, plant and equipment $m	Other $m	Group 2020 $m
Balance at 1 July 2019	**44**	**(36)**	**(17)**	**-**	**(9)**
Amount recognised in Profit or Loss	(1)	4	4	1	8
Amount recognised in Other comprehensive income	-	-	(2)	-	(2)
Balance at 30 June 2020	**43**	**(32)**	**(15)**	**1**	**(3)**

NOTE 11: ACCOUNTS RECEIVABLE

Trade and other receivables are recognised at cost, less any provision for lifetime expected credit losses.

	Group 2021 $m	Group 2020 $m
Trade debtors	7	6
Milk income receivable	23	19
Other receivables and prepayments	12	13
Total accounts receivable	**42**	**38**
Current*	38	31
Non-current	4	7
Total accounts receivable	**42**	**38**

* Settled within 12 months.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 12: PROPERTY HELD FOR SALE

Properties are identified for sale when a sales plan has been implemented and an unconditional sales contract is expected to be signed within a year or a property is subject to a Treaty settlement sale. Properties held for sale comprise farm land and associated buildings. Properties subject to Treaty settlements may be classified as held for sale for periods greater than one year while settlement terms are negotiated. These properties are still likely to be purchased by claimants, and it is probable that their value will be recovered by way of sale rather than ongoing operations. Property held for sale is measured at the lower of the carrying value of the property when it was classified as property held for sale and fair value less sales costs. The Group currently holds three properties for sale with a carrying value of $27m (2020: $27m).

NOTE 13: LIVESTOCK

Livestock are recorded at fair value less estimated point-of-sale costs. Changes in the value and volume of livestock arising from purchases, sales, births, deaths and aging are recognised within revenue in the Statement of Profit or Loss. Changes in value due to general livestock price movements are recognised in the Statement of Profit or Loss within fair value movement in biological assets. Livestock valuations at 30 June 2021 were provided by independent valuers. These market values reflect livestock of similar weight and age throughout New Zealand.

	Note	Sheep $m	Beef $m	Dairy $m	Deer $m	Group 2021 $m
Balance at 1 July 2020		**76**	**82**	**89**	**26**	**273**
Birth and growth of animals	2	33	35	29	11	108
Livestock losses	2	(5)	(2)	(3)	(1)	(11)
Book value of livestock purchased and sold	2	(32)	(37)	(27)	(12)	(108)
Fair value gain/(loss)	9	13	3	10	(2)	24
Balance at 30 June 2021		**85**	**81**	**98**	**22**	**286**

	Note	Sheep $m	Beef $m	Dairy $m	Deer $m	Group 2020 $m
Balance at 1 July 2019		**84**	**87**	**91**	**43**	**305**
Birth and growth of animals	2	36	37	28	17	118
Livestock losses	2	(5)	(2)	(3)	(2)	(12)
Book value of livestock purchased and sold	2	(32)	(33)	(28)	(16)	(109)
Fair value (loss)/gain	9	(7)	(7)	1	(16)	(29)
Balance at 30 June 2020		**76**	**82**	**89**	**26**	**273**

	Group 2021 $m	Group 2020 $m
Current*	90	84
Non-current	196	189
Total value of livestock	**286**	**273**

* Intended to be sold within one year

Livestock numbers comprise:

	Group 2021	Group 2020
Sheep	419,659	433,907
Beef	77,394	80,426
Dairy	72,976	73,364
Deer	78,349	86,207

Animal numbers have reduced in the year to June 2021 for several reasons. These include exits from two dairy farms, environmental considerations and de-intensification to address environmental considerations.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 14: FORESTRY AND CARBON ASSETS

	Group 2021 $m	Group 2020 $m
Forests	48	38
Carbon credits	46	33
Total forestry and carbon assets	**94**	**71**

Forests

Forest establishment and direct management expenses are recorded as planting costs. Forestry stands below ten years of age are valued at cost. After ten years, any forestry stands over two hectares in size are recorded at fair value. Forestry stands of less than two hectares are not valued as they are not considered economically viable to harvest. Changes to value due to forestry growth are recognised within revenue in the Statement of Profit or Loss. Changes due to movements in forestry prices are recognised in the Statement of Profit or Loss within fair value movement in biological assets.

Forestry valuations at 30 June 2021 were provided by independent valuers. These market values reflect the specific characteristics of the forests and recent sales in both the domestic and export log market. The valuation is for productive tree crops only and excludes the value of land and improvements and any value arising from participation in the Emissions Trading Scheme ("ETS").

	Note	Group 2021 $m	Group 2020 $m
Forests value at start of year		**38**	**37**
Planting		8	5
Growth		2	1
Book value of forests harvested/sold		(1)	(2)
Fair value gain/(loss)	9	1	(3)
Forests value at end of year		**48**	**38**
Current*		3	2
Non-current		45	36
Forests value at end of year		**48**	**38**

* Intended to be harvested within one year.

The age of Landcorp's forests are shown below:

	Group 2021 Hectares	Group 2020 Hectares
Between 0 – 10 years	9,237	8,640
Between 11 – 25 years	2,645	1,977
Greater than 25 years	308	251
Total hectares planted	**12,190**	**10,868**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 14: FORESTRY AND CARBON ASSETS continued

Carbon credits

As a forester, Landcorp is allocated carbon emission credits ("NZUs") and will incur liabilities through the ETS. Landcorp holds credits for forestry plantations. Should these plantations be harvested and/or deforested, a liability would be incurred up to a maximum of the credits received.

At 30 June 2021, Landcorp held no pre-1990 NZUs (2020: 143,460 NZUs) and 1,087,483 post-1989 NZUs (2020: 927,257 NZUs). NZUs are revalued at each reporting date and any fair value movement is reflected within Other comprehensive income. Had the Group's carbon credits been measured on an historical cost basis, their carrying amount would have been $24m (2020: $17m).

	Note	Group 2021 $m	Group 2020 $m
Carbon credits value at start of year		33	21
Disposals		(6)	-
Additions	3	8	3
Fair value gain		11	9
Carbon credits value at end of year		**46**	**33**

NOTE 15: EQUITY ACCOUNTED INVESTMENTS

Equity accounted investments are initially recognised at cost and the carrying value is increased or decreased to recognise Landcorp's share of surplus or deficit of the investee after the date of acquisition. Cash contributions made to the investee increase the carrying amount of the investment. Distributions received from the investee reduce the carrying amount of the investment. If Landcorp's share of losses exceeds its investment, a liability is recognised to the extent that Landcorp has incurred a constructive or legal obligation. The carrying values of investments are reviewed annually for indicators of impairment and carrying values are adjusted accordingly if required. A list of equity accounted investees is shown in Note 28.

	FarmIQ Systems Ltd	Melody Dairies Limited Partnership $m	Spring Sheep Dairy Limited Partnership $m	Wharewaka East Ltd $m	Group 2021 $m
Balance at 1 July 2020	1	12	7	4	24
Cash contributions	1	-	4	-	5
Distribution	-	-	-	(3)	(3)
(Loss)/profit from operations	(1)	(1)	(3)	1	(4)
Total equity accounted investments	**1**	**11**	**8**	**2**	**22**

	FarmIQ Systems Ltd	Melody Dairies Limited Partnership $m	Spring Sheep Dairy Limited Partnership $m	Wharewaka East Ltd $m	Group 2020 $m
Balance at 1 July 2019	1	7	6	3	17
Cash contributions	-	5	3	-	8
Loss/(profit) from operations	-	-	(2)	1	(1)
Total equity accounted investments	**1**	**12**	**7**	**4**	**24**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 16: SHARE INVESTMENTS

	Group 2021 $m	Group 2020 $m
Share investments at fair value through Profit or Loss:		
Other	1	1
Share investments at fair value through Other Comprehensive Income:		
Fonterra Co-operative Group Limited	23	24
Waimakariri Irrigation Limited	10	10
Other	3	3
Total share investments	**37**	**38**

The Group is required to hold certain shares and investments in co-operative companies to facilitate farming operations. Shares are held as a consequence of business operations and are not held for trading.

Share investments are initially recognised at cost, and subsequently revalued to fair market value. Landcorp has elected to account for fair value changes through Other comprehensive income except in cases where the shares can be redeemed at "par" value from the issuer. In such cases any value change will be accounted for through the Statement of Profit or Loss.

Any dividends from share investments are recognised in the Statement of Profit or Loss.

NOTE 17: PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of land and improvements, protected land and plant and equipment.

Land is measured at fair value and buildings are measured at fair value less accumulated depreciation and any impairment after the date of valuation. The revaluation of land and buildings is undertaken by an independent valuer every three years. During a revaluation the valuer will conduct a physical inspection of a representative group of properties within each portfolio. The fair value of each remaining property is determined by considering a range of operational data for the property concerned together with information relating to sales of comparable properties. Additions to land and buildings after the most recent valuation are recorded at cost less accumulated depreciation.

The last full valuation was performed on 30 June 2019. In years where there is not a full valuation, a material change assessment of the property portfolio is performed by an independent valuer. Upon identification of a material change, an indexation to market price is carried out and carrying amounts are adjusted. Carrying amounts were adjusted on 30 June 2020 to reflect a decline in market values. An assessment was undertaken during the year which indicated there had been no material change in property values. The Directors have determined that the carrying value of the property portfolio is appropriately recorded at fair value at 30 June 2021.

Revaluations are undertaken using a level 2 fair value methodology. They employ a market approach and take into account general factors that influence farm land prices as well as market evidence such as recent farm sales in the relevant regions. The valuation also considers the price effects of various legal obligations placed on Landcorp's land ownership. The impact of the Conservation Act 1987 relating to the establishment of marginal strips and conservation management plans is considered where applicable. In the North Island, deductions of 0–6% have been made for the effects of the Treaty of Waitangi (State Enterprises) Act 1988 and the memorials pertaining to section 27B of the State Owned Enterprises Act 1986, which provides for the resumption of land on recommendation of the Waitangi Tribunal. The South Island properties include a deduction of up to 5% to reflect the effect of the Right of First Refusal memorial granted to Ngāi Tahu under the Ngāi Tahu Claims Settlement Act 1998.

Improvements on leased land are held at cost.

Protected land is defined in the Agreement Concerning Landcorp Land Protected from Sale, signed with the Crown in 2007 and amended in June 2013 (the Protected Land Agreement) and relates to land that the Crown wishes to protect from sale for public policy reasons. Protected land (including buildings on protected land) was valued at fair value at the time it was classified as protected land as this is the ongoing fair value of the land to Landcorp. Buildings are measured at this value less accumulated depreciation.

Plant and equipment is measured at cost less accumulated depreciation and impairment losses.

Depreciation is provided on a straight-line basis on all property, plant and equipment other than land and land improvements over their useful lives. The useful lives of property, plant and equipment are as follows:

- Buildings 30 – 60 years
- Leasehold improvements lease term
- Plant and equipment 3 – 10 years

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 17: PROPERTY, PLANT AND EQUIPMENT continued

	Land and improvements				
	Freehold land and buildings $m	Leasehold improvements $m	Protected land $m	Plant and equipment $m	Group 2021 $m
Opening balance	1,012	75	96	134	1,317
Additions	14	-	1	10	25
Disposals	-	-	-	(9)	(9)
Balance at end of year	1,026	75	97	135	1,333
Accumulated depreciation					
Opening balance	-	(11)	(1)	(98)	(110)
Depreciation	(3)	(2)	-	(11)	(16)
Disposals	-	-	-	9	9
Balance at end of year	(3)	(13)	(1)	(100)	(117)
Total property, plant and equipment	**1,023**	**62**	**96**	**35**	**1,216**

	Land and improvements				
	Freehold land and buildings $m	Leasehold improvements $m	Protected land $m	Plant and equipment $m	Group 2020 $m
Opening balance	1,071	74	94	132	1,371
Additions	15	1	2	10	28
Disposals	(1)	-	-	(8)	(9)
Impairment (loss) recognised in profit and loss	(9)	-	-	-	(9)
Fair value movement of land and improvements	(61)	-	-	-	(61)
Reversal of depreciation on revaluation	(3)	-	-	-	(3)
Balance at end of year	1,012	75	96	134	1,317
Accumulated depreciation					
Opening balance	-	(9)	(1)	(93)	(103)
Depreciation	(3)	(2)	-	(12)	(17)
Disposal	-	-	-	7	7
Reversal of depreciation on revaluation	3	-	-	-	3
Balance at end of year	-	(11)	(1)	(98)	(110)
Total property, plant and equipment	**1,012**	**64**	**95**	**36**	**1,207**

Had the Group's freehold land and buildings (other than land and buildings classified as held for sale) and protected land been measured on an historical cost basis, their carrying amount would have been freehold land $577m (2020: $566m) and buildings on freehold land $57m (2020: $59m).

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 17: PROPERTY, PLANT AND EQUIPMENT continued

Freehold land and buildings comprise the following property portfolios:

	North Island Dairy $m	South Island Dairy $m	North Island Livestock $m	South Island Livestock $m	Group 2021 $m
Opening balance	63	162	434	353	1,012
Additions	1	1	9	3	14
Balance at end of year	64	163	443	356	1,026
Accumulated depreciation					
Opening balance	-	-	-	-	-
Depreciation	-	(1)	(1)	(1)	(3)
Balance at end of year	-	(1)	(1)	(1)	(3)
Total freehold land and buildings	**64**	**162**	**442**	**355**	**1,023**

	North Island Dairy $m	South Island Dairy $m	North Island Livestock $m	South Island Livestock $m	Group 2020 $m
Opening balance	68	186	447	370	1,071
Additions	2	2	7	4	15
Farms transferred	-	(6)	-	6	-
Disposals	-	-	(1)	-	(1)
Impairment (loss) recognised in profit and loss	-	(6)	(2)	(1)	(9)
Fair value movement of land and improvements	(7)	(13)	(16)	(25)	(61)
Reversal of depreciation on revaluation	-	(1)	(1)	(1)	(3)
Balance at end of year	63	162	434	353	1,012
Accumulated depreciation					
Opening balance	-	-	-	-	-
Depreciation	-	(1)	(1)	(1)	(3)
Reversal of depreciation on revaluation	-	1	1	1	3
Balance at end of year	-	-	-	-	-
Total freehold land and buildings	**63**	**162**	**434**	**353**	**1,012**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 18: LEASES

Leased assets and liabilities are initially recognised in the Statement of Financial Position at the present value of remaining unpaid lease payments discounted by Landcorp's incremental borrowing rate. Thereafter leased assets are depreciated over the life of the lease and lease liabilities reduce as lease payments are made. After commencement of a lease, any subsequent changes to the lease payments are reflected as a lease remeasurement adjustment.

Leased assets are largely made up of farm land in Wairakei, north east of Taupō. The lease was entered into in 2004 and expires in 2049. The lease requires Landcorp to convert what was previously forestry land into pastoral farming land. At 30 June 2021, approximately 12,632 hectares had been leased. A total of 12,715 hectares of land is expected to be leased by the conclusion of the lease term. Other leases are also held for office buildings and telecommunications equipment.

	Wairakei Estate $m	Other leases $m	Group 2021 $m
Opening balance	238	13	251
Lease remeasurement adjustment	(2)	-	(2)
Additions	-	1	1
Balance at end of year	236	14	250
Accumulated depreciation			
Opening balance	(8)	(3)	(11)
Depreciation	(8)	(3)	(11)
Balance at end of year	(16)	(6)	(22)
Total leased assets	**220**	**8**	**228**

	Wairakei Estate $m	Other leases $m	Group 2020 $m
Opening balance	238	13	251
Additions	-	-	-
Balance at end of year	238	13	251
Accumulated depreciation			
Opening balance	-	-	-
Depreciation	(8)	(3)	(11)
Balance at end of year	(8)	(3)	(11)
Total leased assets	**230**	**10**	**240**

The undiscounted maturity analysis of lease liabilities is as follows:

	Less than one year	Two to five years	More than five years	Group 2021 $m
Lease payments	15	60	367	442
Interest expense on lease liability	(11)	(44)	(144)	(199)
Total lease liabilities	**4**	**16**	**223**	**243**

	Less than one year	Two to five years	More than five years	Group 2020 $m
Lease payments	15	60	386	461
Interest expense on lease liability	(12)	(45)	(155)	(212)
Total lease liabilities	**3**	**15**	**231**	**249**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 18: LEASES continued

The Group acts as a lessor of farm land provided under operating leases. Income from operating lease agreements is recognised as lease income on a straight-line basis over the term of the lease. Lease terms are of various lengths and some leases include rights of renewal. The undiscounted lease payments to be received are as follows:

	Group 2021 $m	Group 2020 $m
Less than one year	1	1
Two to five years	3	3
More than 5 years	10	8
Total undiscounted lease income	**14**	**12**

NOTE 19: BANK LOANS

Cash advance facilities available to Landcorp at 30 June 2021 were $315m (2020: $315m). Bank loans are the drawn components of these bank cash advance facilities. Facilities may be borrowed against, or repaid, at any time by Landcorp and are subject to a negative pledge agreement which means that Landcorp may not grant a security interest over its assets without the consent of its lenders. Facilities are either on a daily floating interest rate or a short-term fixed rate and therefore carrying value approximates fair value.

	Group 2021 $m	Group 2020 $m
Within one year	85	30
Two to five years	132	184
Total bank loans	**217**	**214**

Financial guarantees

Landcorp has provided limited guarantees to the Ministry for Primary Industries in relation to primary growth partnerships with Spring Sheep Dairy Limited Partnership. In addition, Landcorp Pastoral Limited has provided a limited shareholder guarantee of Spring Sheep Dairy Limited Partnership's indebtedness to its lender, ASB.

NOTE 20: INTEREST RATE DERIVATIVES

Interest rate derivatives are valued at fair value ('exit price' basis). Accrued interest is calculated based on the market 90 day rate which was 0.35% at balance date (2020: 0.49%) and is removed from the revaluation. Fair value gains or losses on these financial instruments are reported in the Statement of Profit or Loss. All material interest rate derivatives held have expiry dates beyond 12 months.

NOTE 21: REDEEMABLE PREFERENCE SHARES

Redeemable preference shares were issued as a capital injection under the terms of the Protected Land Agreement. They carry no voting rights and are not eligible for dividends or any share of net assets on wind-up. When requested, Landcorp will transfer properties referred to in the Protected Land Agreement to the Crown. On transfer, the redeemable preference shares are redeemed at the initial value of the property.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 22: CAPITAL MANAGEMENT

The Group considers its capital as comprising all components of Shareholders' Funds.

Share capital

Under the State-Owned Enterprises Act 1986, Landcorp's ordinary shares are held equally by the Minister of Finance and the Minister for State-Owned Enterprises. This prevents Landcorp from raising capital from other sources. Ordinary shares carry one vote per share and carry the right to participate in dividends. There are 125,000,000 authorised shares on issue (2020: 125,000,000). All shares are fully paid up.

Retained earnings

Retained earnings comprise Landcorp's accumulated net profits including transfers from revaluation reserves when the underlying asset has been sold, less any dividends paid. Retained earnings also includes any payment from the Crown for additional capital expenditure incurred on the properties defined in the Protected Land Agreement.

Share revaluation reserve

The share revaluation reserve comprises the cumulative net change in the fair value of share investments, until the investment is sold.

Asset revaluation reserve

The asset revaluation reserve is used to record changes in the fair value of land and buildings and intangible assets. Revaluations are reflected in the asset revaluation reserve and included in Other comprehensive income, with any revaluations below cost or recoveries to cost being recognised in the Statement of Profit or Loss.

NOTE 23: VALUATION OF FINANCIAL INSTRUMENTS

Landcorp is a party to financial instruments as part of its normal operations. Financial assets and liabilities carried at fair value are categorised into a fair value hierarchy (refer to Note 1) based on the observability of inputs used to measure fair value. The following table sets out the classification of financial asset and liability categories according to the measurement bases together with the carrying amount as reported in the Statement of Financial Position. There have been no transfers between levels during this year (2020: none).

	Amortised Cost	Fair value hierarchy			Group 2021 $m
		Level 1	Level 2	Level 3	
Accounts receivable	42	-	-	-	42
Share investments at fair value through Profit or Loss	-	-	1	-	1
Share investments at fair value through Other					
Comprehensive Income	-	33	3	-	36
Total financial assets	**42**	**33**	**4**	**-**	**79**
Accounts payable and accruals	19	-	-	-	19
Interest rate derivatives	-	5	-	-	5
Bank loans	217	-	-	-	217
Total financial liabilities	**236**	**5**	**-**	**-**	**241**

	Amortised Cost	Fair value hierarchy			Group 2020 $m
		Level 1	Level 2	Level 3	
Accounts receivable	38	-	-	-	38
Share investments at fair value through Profit or Loss	-	-	1	-	1
Share investments at fair value through Other					
Comprehensive Income	-	34	3	-	37
Total financial assets	**38**	**34**	**4**	**-**	**76**
Accounts payable and accruals	14	-	-	-	14
Interest rate derivatives	-	12	-	-	12
Bank loans	214	-	-	-	214
Total financial liabilities	**228**	**12**	**-**	**-**	**240**

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 24: RISK MANAGEMENT

The Board has adopted a risk appetite statement which acts as a link between the strategic objectives of Landcorp and its risk management framework. The Board, as the governing body, is ultimately accountable for risk and has delegated oversight of the risk framework (including risk register and monitoring the internal audit programme) to the Audit and Risk Committee. In addition, Landcorp has a Treasury Management Committee ("TMC"). The TMC is chaired by the Chief Financial Officer and comprises the Financial Controller and an External Treasury Advisor. A quorum is three members, one of which must be the Chief Financial Officer or in their absence the Chief Executive. The TMC meets on a bi-monthly basis to co-ordinate and oversee the operation of the Company's treasury function and to monitor financial risks. Details of financial risks and risk management policies are explained below.

Risks due to agricultural activities

Agricultural risks

Landcorp's geographic spread of farms usually allows a high degree of mitigation against adverse climatic (e.g. drought or flooding) and environmental (e.g. disease outbreaks, biosecurity) effects at a regional level. When adverse climatic events occur the company will often seek to accommodate livestock on other Landcorp properties.

The geographic spread of Landcorp's forestry assets provides a high degree of risk mitigation against risks associated with forestry, such as fire and disease.

Landcorp has environmental policies and procedures aimed at supporting the business while ensuring compliance with environmental and other laws. Environmental policies are designed to be compliant with laws in target export markets in addition to New Zealand.

Climate Change

Landcorp is exposed to climate change risk across its portfolio and is actively working to build its understanding of, and resilience to, these climate-related risks. Opportunities to adapt to and mitigate this risk are reflected in medium term and long-term strategic goals, with diversification and geographic spread being essential considerations. Landcorp's forestry assets generate carbon credits that can be used to offset the company's emissions should agricultural biological emissions become included in the Emissions Trading Scheme. Landcorp's investment in Focus Genetics is enabling the company to pursue low emission genetic traits to reduce its emission profile over the long term.

Landcorp reports its gross and net greenhouse gas emissions and is working to adopt the Task Force for Climate-Related Financial Disclosures ("TCFD") framework for assessment and disclosure of climate-related matters in future years.

Financing risk

The nature of pastoral farming means that most of Landcorp's revenue is received in the second half of the financial year, whereas expenses are incurred throughout the year. Landcorp manages this financing risk through budgeting and actively managing working capital requirements, as well as maintaining credit facilities at levels sufficient to meet financial commitments as they fall due.

Market risk

Commodity price and volume risk

Landcorp has multiple revenue streams from livestock (sheep meat, beef and venison), as well as generating milk revenue. This diversification assists in lowering the commodity risk related to the price of any single commodity. Landcorp is exposed to risks arising from fluctuations in the price and sales volume of milk and livestock.

To mitigate commodity price risk for livestock, Landcorp's policy is to fix up to 50% of sales revenue within one year and up to 25% between one and two years by entering into fixed price contracts and/or "guaranteed minimum price/schedule plus" contracts directly with processors.

Commodity price risk for milk is managed through the sale of NZX milk price futures. Landcorp maintains milk price hedging between specified minimum and maximum risk control limits based on a three-year milk production volume forecast covering the current season, next season and season thereafter. The minimum and maximum limits are linked to prevailing milk futures prices requiring management to hedge more at higher prices and less at lower prices.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 24: RISK MANAGEMENT continued

Interest rate risk

Interest rate risk is the risk of loss arising from changes in interest rates. Landcorp is exposed to interest rate risk on borrowings used to fund investment and ongoing operations. Landcorp has an interest rate risk management policy designed to identify and manage interest rate risk in order to provide greater certainty of funding costs. Management monitors the level of interest rates on an ongoing basis, and will fix the rates of interest payable using derivative financial instruments. Forward rate agreements and interest rate swaps may be used for risk management purposes and to maintain policy compliance. Liabilities which are interest rate sensitive will mature or re-price within the periods shown in the table.

	Note	Within one year $m	Two to three years $m	Four to five years $m	Greater than five years $m	Group 2021 $m
Bank loans	19	217	-	-	-	217
Interest rate derivatives		(110)	60	50	-	-
Net interest rate exposure		**107**	**60**	**50**	**-**	**217**

	Note	Within one year $m	Two to three years $m	Four to five years $m	Greater than five years $m	Group 2020 $m
Bank loans	19	214	-	-	-	214
Interest rate derivatives		(100)	30	60	10	-
Net interest rate exposure		**214**	**30**	**60**	**10**	**214**

Sensitivity analysis

The effect of a 1% increase/decrease in interest rates on Landcorp's net profit before tax is a decrease/increase of $1m (2020: $1m) on finance expenses (includes any hedging instruments used in the year).

Foreign currency risk

Foreign currency risk is the risk of adverse impacts on cashflow caused by fluctuations in foreign exchange rates. Landcorp is exposed to both direct and indirect foreign currency risk. Direct risk arises where Landcorp has receipts or makes payments denominated in foreign currency. Indirect risk exposure arises where the value of NZ$ denominated earnings fluctuate due to currency movements, for example when livestock processors sell meat into overseas markets.

To mitigate direct foreign currency risk, sales revenue and expenditure denominated in foreign currency derived from a contract where the value exceeds $50k is fully hedged when the contract is signed using foreign currency derivatives such as forward foreign exchange contracts and foreign currency options. Direct foreign currency hedging in place at 30 June 2021 was $0.3m (2020: nil). Indirect foreign currency risk is not hedged.

Credit risk

Credit risk is the risk of loss due to customer default. Landcorp has a credit policy to manage credit risk exposure, which requires credit evaluations to be performed on all customers requiring credit over $500k. New credit limits greater than $3m require approval by the Board. Landcorp's maximum exposure to credit risk is represented by the carrying value of accounts receivable. There are no significant concentrations of credit risk except for milk customers. At 30 June 2021 Landcorp did not expect the non-performance of any obligations (2020: none). All material trade and other receivables are current, with no debts falling due past 30 days at 30 June 2021 (2020: none).

Liquidity risk

Liquidity risk is the risk that Landcorp will encounter difficulty in raising funds at short notice to meet financial commitments. Landcorp actively manages its funding facilities to ensure that no more than 40% of its total debt facilities mature in one financial year, and no more than 40% of its total debt facilities are with a single bank. Landcorp regularly forecasts funding requirements. The three-year Business Plan is used to forecast the longer-term funding requirements. The policy requires that committed funding facilities are $10m greater than current quarter peak requirements.

The table below analyses Landcorp's financial liabilities by period of contractual maturity. Total amounts do not match to the Statement of Financial Position and related notes as contractual flows are the absolute undiscounted amount of future cashflows, including forecast interest expense on interest-bearing liabilities.

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 24: RISK MANAGEMENT continued

	Note	Within one year $m	Two to five years $m	No fixed maturity $m	Group 2021 $m
Accounts payable and accruals		19	-	-	19
Bank loans	19	91	133	-	224
Interest rate derivatives	20	2	5	-	7
Redeemable preference shares	21	-	-	87	87
Total contractual maturity		**112**	**138**	**87**	**337**

	Note	Within one year $m	Two to five years $m	No fixed maturity $m	Group 2020 $m
Accounts payable and accruals		14	-	-	14
Bank loans	19	35	188	-	223
Interest rate derivatives	20	5	8	-	13
Redeemable preference shares	21	-	-	87	87
Total contractual maturity		**54**	**196**	**87**	**337**

NOTE 25: CAPITAL COMMITMENTS

At 30 June 2021 Landcorp had $0.4m contracted capital commitments. (2020: none)

NOTE 26: CONTINGENT ASSETS AND LIABILITIES

At 30 June 2021 Landcorp had no contingent assets or liabilities.

NOTE 27: RELATED PARTIES

Ultimate controlling party

The ultimate shareholder of the Group is the Crown. The Group undertakes many transactions with other Crown entities, state owned enterprises and government departments.

Transactions with subsidiaries and jointly controlled entities

During the year Landcorp entered into the following transactions with related parties (received/(paid));

	Group 2021 $m	Group 2020 $m
Melody Dairies Limited Partnership – cash contributions	-	5
Spring Sheep Dairy Limited Partnership – cash contributions	4	3
FarmIQ Systems Ltd – cash contributions	1	-

At 30 June 2021, $4m was included in accounts receivable as owing from Wharewaka East Ltd (2020: $7m).

At 30 June 2021, $1m was included in accounts receivable as owing from the Crown in accordance with the Protected Land Agreement (2020: $2m).

No other transactions or balances with related party entities are considered material. No expense has been recognised in the current year for bad or doubtful debts in respect of amounts owed by related parties (2020: none).

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED 30 JUNE 2021

NOTE 27: RELATED PARTIES continued

Key management personnel compensation

Key management personnel have been defined as the Directors, the Chief Executive Officer and the executive team for the Group, who have responsibility for planning, directing and controlling the activities of Landcorp.

Short-term employment benefits paid to the executive team for the Group during the year were $3.5m (2020: $3.5m). These amounts include at-risk incentive payments for the prior year.

Post-employment benefits paid to the executive team for the Group during the year were $0.1m (2020: $0.1m).

Directors fees paid during the year were $0.5m (2020: $0.5m).

NOTE 28: SUBSIDIARY COMPANIES AND JOINTLY CONTROLLED ENTITIES

Subsidiaries	Principal activity	Balance date	Percentage held 2021	Percentage held 2020
Landcorp Estates Ltd	Property development	30 June	100%	100%
Landcorp Pastoral Ltd	Invests in Focus Genetics and Spring Sheep Dairy	30 June	100%	100%
Landcorp Holdings Ltd	Holding protected land	30 June	100%	100%
Landcorp Pastoral Ltd has the following subsidiaries:				
Focus Genetics Limited Partnership	Development and sale of genetically superior sires	30 June	100%	100%
On 16 September 2014, Landcorp acquired 100% of the Focus Genetics Limited Partnership. Genetic royalties goodwill of $2m (2020: $2m) has been included within Other assets.				
Focus Genetics Limited Partnership has the following subsidiaries:				
Focus Genetics UK Ltd	Livestock genetics	30 June	100%	100%
Focus Genetics S.A. Ltd	Livestock genetics	30 June	100%	100%
Focus Genetics Australia Pty Ltd	Livestock genetics	30 June	100%	100%
Rissington Uruguay SA	Livestock genetics	30 June	100%	100%

Joint ventures	Principal activity	Balance date	Percentage held 2021	Percentage held 2020
Wharewaka East Ltd	Property development	31 March	50%	50%
Spring Sheep Dairy Limited Partnership	Production and marketing of sheep milk products	30 June	50%	50%
Sweetwater Farms Unincorporated Joint Venture	Dairy farming	30 June	0%	33%

Associates		Balance date	Percentage held 2021	Percentage held 2020
FarmIQ Systems Ltd	Development and licensing of farm management software	30 June	26%	26%
FarmIQ PGP Ltd	Integrated red meat value chain PGP (completed)	30 June	18%	18%
Melody Dairies Limited Partnership	Specialist milk drying services	30 June	35%	35%
Manuka Research Partnership (NZ) Limited	PGP examining plantation of mānuka trees for honey	30 June	0%	10%

NOTE 29: SUBSEQUENT EVENTS

On 24 August 2021, the Directors approved a dividend of $5m, which is equal to 4 cents per share to be paid on 31 August 2021 (2020: $5m, 4 cents per share).

INDEPENDENT AUDITORS' REPORT

TO THE READERS OF LANDCORP FARMING LIMITED'S GROUP FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2021

The Auditor-General is the auditor of Landcorp Farming Limited Group (the Group). The Auditor-General has appointed me, Sonia Isaac, using the staff and resources of KPMG Wellington, to carry out the audit of the financial statements of the Group on his behalf.

OPINION

We have audited the financial statements of the Group on pages 59 to 81, that comprise the statement of financial position as at 30 June 2021, the statement of profit or loss and other comprehensive income, statement of movements in equity and statement of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information.

In our opinion the financial statements of the Group:

- present fairly, in all material respects:
  - its financial position as at 30 June 2021; and
  - its financial performance and cash flows for the year then ended; and
- comply with generally accepted accounting practice in New Zealand in accordance with New Zealand equivalents to International Financial Reporting Standards and International Financial Reporting Standards.

Our audit was completed on 24 August, 2021. This is the date at which our opinion is expressed.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Board of Directors and our responsibilities relating to the financial statements, and we explain our independence.

BASIS FOR OUR OPINION

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

RESPONSIBILITIES OF THE BOARD OF DIRECTORS FOR THE FINANCIAL STATEMENTS

The Board of Directors is responsible on behalf of the Group for preparing financial statements that are fairly presented and that comply with generally accepted accounting practice in New Zealand.

The Board of Directors is responsible for such internal control as it determines is necessary to enable it to prepare financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible on behalf of the Group for assessing the Group's ability to continue as a going concern. The Board of Directors is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

The Board of Director's responsibilities arise from the State Owned Enterprises Act 1986.

RESPONSIBILITIES OF THE AUDITOR FOR THE AUDIT OF THE FINANCIAL STATEMENTS

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

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of these financial statements.

We did not evaluate the security and controls over the electronic publication of the financial statements.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board of Directors and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements, or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- We obtain sufficient appropriate audit evidence regarding the financial statements of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and the performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

INDEPENDENCE

We are independent of the Group in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standards 1: *International Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board.

Other than the audit, we have no relationship with or interests in the Group.

Sonia Isaac
KPMG Wellington

On behalf of the Auditor-General
Wellington, New Zealand

PĀMU AT 2021 MYSTERY CREEK FIELDAYS

2021'S MYSTERY CREEK FIELDAYS WAS AS BIG AS EVER, AND PĀMU WAS PLEASED TO BE THERE AGAIN. IT IS A KEY OPPORTUNITY TO CONNECT WITH OUR MANY STAKEHOLDERS, ALL IN ONE PLACE.

This year, we were focused on letting potential employees know what Pāmu has to offer as a great place to work. It was an opportunity to showcase our new employee brand, It's Our Nature. We also had deer milk ice cream giveaways, which created quite a stir!

It was great to see many of our farm staff stop by, as did the Prime Minister, a range of MPs, suppliers and partners, along with many interested members of the public.

There really is nowhere else rural New Zealand comes together like Fieldays!

We will be back in 2022.

DIRECTORY

CORPORATE AND REGISTERED OFFICE

Level 2
15 Allen Street
PO Box 5349
Wellington 6140

AUDITOR

Sonia Isaac, KPMG
(under appointment of
the Auditor-General)

BANKERS

Westpac New Zealand Limited
ANZ Bank New Zealand Limited
ASB Bank Limited

WEBSITE

pamunewzealand.com

FURTHER INFORMATION

If you would like more information on anything contained in this report, please contact:

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Chris Day

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Dr Tanira Kingi

Belinda Storey

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LEADERSHIP TEAM

Steven Carden
Chief Executive

Mark Julian
GM Dairy Operations

Bernadette Kelly
GM People, Safety and Engagement

Lisa Martin
GM Sustainability and Farm Systems

Steven McJorrow
Chief Financial Officer

Alistair McMechan
General Counsel and Company Secretary

Sarah Risell
GM Pāmu Foods

Andrew Sliper
GM Forestry and Horticulture

Stephen Tickner
GM Livestock Operations

PĀMU™

Landcorp Farming Limited Integrated Report for the year ended 30 June 2021