



Introduction.

New Zealand's food and fibre sector is full of capable, and purpose driven people. Supported by DairyNZ, Livestock Improvement Corporation and an incredible group of partners, the New Zealand Rural Leadership Trust is privileged to be entrusted with growing many of these people in their leadership journey.

A key aspect of the rural leadership approach is research based scholarship. The clarity of thought and confidence this approach promotes is transformative.

The set of reports précised in the following pages are penned by Scholars from the Kellogg Rural Leadership Programme. The Kellogg programme has been equipping rural leaders for strategic impact since 1970. The reports enclosed are a sample of reports by Scholars from the Dairy Industry. They grapple with the big issues facing New Zealand Dairy and are written by people living and working in the Sector.

Many Kellogg and Nuffield Scholars go on to live their research. They build businesses. They advance community and social enterprises. They influence policy and advocate for animal and environmental outcomes, informed by an ability for critical analysis and their own research-fueled passion. Rural Scholarship is about impact.

In the following pages we are delighted to précis 14 dairy research reports by Kellogg Scholars. The full reports can be found at https://ruralleaders.co.nz/kellogg-our-insights/

The reports traverse topics as wide and timely as innovation, markets, people, sustainability and social issues.

Ngā mihi, Chris Parsons and the NZ Rural Leaders Team



Contents.

Domestic marketing of the dairy industry and social licence.	 4-5
Graeme Peter Corporate social responsibility in Aotearoa dairy farming.	 6-7
Stephen Ball Can a Northland dairy farm be high input and remain sustainable?	 8-9
Amber Carpenter Dairy farming, climate change and farm diversification.	 10-11
Jordyn Crouch How can the New Zealand dairy industry design workplaces that attract the best of the next generation?	12-13
Chelsea Smith Dairy Women's Network and pathways to gender diversity in governance.	 14-15
Brent Miller What is the true cost of transience to the NZ dairy industry?	 16-17
Charlotte Montgomery Who will run our dairy farms in the future?	 18-19
Hamish Fraser Funding the flow of milk: Dairy industry capital requirements.	20
Luke Beehre Dairy farming in Northland: Past, present, future, and the implications of change.	21
Grant Jackson Validating 'the brand' for NZ's target dairy consumers in China.	 22-23
Pablo Gallegos When milk engineering meets consumer demands and how this could affect the NZ dairy industry.	24-25
Julia Galwey The opportunities and challenges with establishing a New Zealand Veal value chain.	26-27
Sacha McDougall Can dairy farmers regain control of their narrative from inside the farm gate?	28-29

Minor edits have been made to some of the following pages by the NZ Rural Leaders Team.

Domestic Marketing of the Dairy Industry: a deeper look into our social licence.

Tracey Perkins - November 2021

The dairy industry is a leading contributor to the New Zealand economy, making up over 5% of GDP in seven regions and employing up to 50,000 people nationwide (Ballingall & Pambudi, 2020). In spite of this, we see increasing local interest in vegetarianism and veganism (Colmar Brunton, Better Futures Presentation, 2020) and we see increasing resistance to dairy farming practices and to the practices required to maintain the industry, such as pest and disease control.

This research was conducted with the purpose of understanding the current market in which we are operating and where our social licence currently sits. The major focus of our industry appears to be a focus on telling our story, which relies entirely on the truth of that story being palatable to the New Zealand public and the assumption that rural New Zealand shares the same worldview as urban New Zealand.

Given this dilemma, I researched the meaning behind a citizen's statement of "I support the dairy industry" and why the meaning behind that simple statement could hold some answers for our way forward as an industry.

Key insights included:

- Supporting the dairy industry does not mean that I am connected to the industry at all myself or through family
- Supporting the dairy industry does not mean I visit rural New Zealand
- Supporting the dairy industry does not mean that I am aware of all of the practices carried out on farm





Read - Domestic marketing of the dairy industry.

ruralleaders.co.nz/tracey-perkins-domestic-marketing-of-the-dairy-industry/

- Supporting the dairy industry does not mean that I am a consumer of dairy products
- Supporting the dairy industry does not mean that I agree with all of the practices carried out on farm, and some I may actively oppose
- Supporting the dairy industry does not mean that I like dairy farmers as people.

My research also revealed that the New Zealand citizen has two distinct and separate roles in dairy farming, and both should be addressed – that of a consumer and that of a stakeholder.

The New Zealand dairy industry sustains the life of hundreds of thousands of babies each year through infant formula (9% of overall dairy export, \$1.8B) (StatsNZ, Sense Partners, 2020), brings joy to dining experiences around the globe, and produces over 1500 dairy products and formulations (Ballingall & Pambudi, 2020). And yet, milk consumption per capita in our own country has decreased and alternative products are on the rise.

The recommendation is for industry to discuss and determine appropriate engagement methods between the public and the dairy farmer, with a view to understanding shared and opposing values as a baseline for moving the industry forward.

We have three primary concerns facing us as an industry; engagement to reduce the urban-rural values divide, commercial marketing to increase perception of value of our product and social marketing to ensure the sustainability of our social licence.

The way forward could utilise all three methods.

Corporate social responsibility in Aotearoa dairy farming.

Graeme Peter - December 2020

Corporate social responsibility (C.S.R.) is maturing rapidly in modern times as a way for companies to reflect the values of its customers, employees and investors. The United Nations (U.N) began working alongside corporate organisations to encourage C.S.R. integrity in 1999 with the most ambitious development by the U.N being the 17 sustainable development goals agreed upon by 193 member states in 2015.

Much of this maturing of C.S.R has been in response to societal pressure and consumer demand. Perhaps no industry has felt the effects of this pressure more than dairy farming. Dairy is facing rising compliance as the expectations of consumers and the public grow.

Dairy farming in Aotearoa is a unique business in that it is non-competitive at the supplier level. Farmers are not competing with their neighbour or any dairy farm, as they are collected by a processor. Creating an environment where some low performing businesses have been able to survive that wouldn't have in other more competitive industries, i.e. building firms.

The industry must prepare to exit a large number of farmers gracefully. With current debt levels and the stagnation or loss of land asset values, many farms will not have strong financial resilience for a drop in milk price.

Carroll's pyramid, a model for investigating a company's C.S.R. requirements, was used to analyse the Aotearoa dairy industry's current position. This broke the C.S.R. of a business into four pillars. The pillars are:

Philanthropic Responsibilities - voluntary or discretionary activities for the benefit of others or their environment.





• Read - Corporate social responsibility in Aotearoa dairy farming. ruralleaders.co.nz/corporate-social-responsibility-in-aotearoa-dairyfarming-current-situation-and-how-we-win/

Ethical Responsibilities - standards and expectations that reflect the concern for what consumers, employees and stakeholders regard as fair.

Legal Responsibilities - business is expected to comply with laws and responsibilities set by the Government; economic returns must be achieved within the framework of the law.

Economic Responsibilities - it is essential that a successful firm be defined as one that is consistently profitable.

To win in the future of Corporate Social Responsibility, farmers and the industry will need to achieve the following:

- Reinvent their business constantly, the end goal may be the same, 1. but the tools and methods are constantly evolving. Embrace change.
- 2. Removal of farmers that risk tarnishing the industry. One farmer is a danger to the reputation and acceptance of all.
- 3. Invest with the head, not the heart, to be sustainable for more acceptable returns on assets and manageable debt to asset ratios.
- Acquire greater financial skills and drive profitability. Farmers should 4. target to perform at the level of the current top 20% of operating profit. Action by the wider industry, including milk processors, must occur around educating farmers on profitability.
- 5. Understand the "why" behind compliance better, were compliance instigates from and what it enables.
- Formulate successful plans and models to exit a large number of 6 farms gracefully from the industry. Support in planning and strategic decision-making is lacking at the end of many farmers careers.

Can a Northland dairy farm be high input and remain sustainable? Stophon Pall November 2021

Stephen Ball - November 2021

Dairy Farming in New Zealand comes in many forms. Every farm business has to decide what level of input is best for them to be profitable and sustainable.

Historically, the primary constraint on moving to a high input system has been the financial and management ability of the farm and business operators. While this is still a significant factor, the environmental impacts of dairy farming have come under increased scrutiny.

New policies such as the National Policy Statement for Freshwater Management 2020 (NPs-FM) are designed to improve New Zealand's freshwater quality with minimum standards for specific attributes.

Regional councils must have updated freshwater plans in place by December 2024 that reflect the desired state of the region's freshwater, with attributes being at or above the stated National Policies bottom line standards.

Farms will be required to have certified Freshwater Farm Plans in place that align with the regional councils freshwater targets (Ministry For The Environment, 2020).

What do these policies mean for Northland dairy farming? And does it alter the viability of adjusting to a higher input farm system?

Analysis of financial data (2010 to 2020) in the Dairy NZ Economic Survey shows, on average, higher input systems were more profitable than medium and lower input systems with a higher operating profit/ha and higher return on dairy assets.

It should be noted that while higher input systems are more profitable on average, there is a wide range of results within each system. Case studies in this report modeling high input systems highlighted this variance with a range of profitability outcomes.



Analysis of freshwater river testing in Northland comparing sample results to various standards, including bottom-line standards set out in the NPS-FW, showed that sediment in Northland's rivers is the biggest concern, along with elevated phosphorus levels resulting from sediment loss. In the majority of testing sites, nitrate and ammonia levels met the policy bottom-line standards (Stats NZ, 2020).

This report concluded that a Northland dairy farmer could adopt a high input system under certain circumstances. The profitability of a Northland dairy farm business is heavily influenced by the level of investment required to meet environmental standards.

The case studies in this report reflected this, with farms requiring a higher level of investment being at higher risk of being financially unsustainable.

Should a Northland dairy farm business choose to move to a high input system, it is recommended that they:

- Understand the level of investment required to move to the new system and remain environmentally compliant
- Be aware of any further environmental impact the change will have, particularly regarding nutrient and sediment loss
- Understand the freshwater concerns in the catchment the farm influences and what limitations may be placed on their business
- Understand their current and proposed greenhouse gas emissions and factor in a potential cost to the business once the policy comes into place.



Read - Can a Northland dairy farm be high input and sustainable? ruralleaders.co.nz/stephen-ball-can-a-northland-dairy-farm-be-high-input-and-remain-sustainable/

Dairy farming, climate change and farm diversification.

Amber Carpenter - July 2019

All across the world, in every kind of environment and region, increasingly dangerous weather patterns and devastating storms are putting an end to the long-running debate over whether or not climate change is real.

"Not only is it real (climate change), it's here, and its effects are giving rise to a frighteningly new global phenomenon: the man-made natural disaster."

(Barack Obama, speech, Apr. 3, 2006)

In the race against climate change, this report explores the possibilities of the diversification of a dairy platform into horticulture. This report was not put together to come up with a solution, the purpose of this report is to start a conversation, provoke thoughts and ideas and create positive changes for the environment.

Agriculture produces nearly half of New Zealand's total greenhouse gas emissions, with one-quarter of our total greenhouse gases coming from biological dairy emissions (Methane and Nitrous Oxide). 85% of the dairy sector's emissions are made up on the farm, with the other 15% coming from agriculture transport and processing.

Horticulture is currently planted on 190,000 hectares in New Zealand, and according to statistics established, horticulture operations have higher profitability per hectare than dairy operations ranging from \$5,000 to \$20,000 and above. (Resigner, Clark, Journeaux, Clark, Lambert, July 2017).



SUSTAINABILITY



Read - Dairy farming, climate change and farm diversification.

ruralleaders.co.nz/dairy-farming-climate-change-and-farm-diversification-amber-carpenter/

Dairy operations have profitability of around \$2,500 per hectare. Currently, dairy is farmed on 2.6 million ha, fruits/berries 120,000ha, vegetables 70,000 ha and grains 449,000 ha (Stats NZ, April 2018).

According to the reports referenced in this paper, the available land to go into horticulture is anywhere between 1.5million and 3.2million hectares, taken from both dairy and sheep and beef. For dairy farmers to be able to diversify their current farming platform into horticulture, information is needed to understand what could grow best on their platform.

The option to diversify a farm business into other primary sectors is dependent on soil type, farm business and location. The idea of bringing sectors together onto the same sustainable platform which tells a story of bettering the environment, fits into what consumers are looking for.

Climate change is a complex and continuously changing subject. The science and information on where climate change is today and how we are going to tackle this as a species is forever evolving. There is a lot of evidence to suggest diversification into horticulture is not only beneficial to emissions but also potentially profitable. Although the research suggests these positive outcomes, it also notes that there is no one size fits all solution.

There is an opportunity to come together as sectors, from the grassroots level to industry heads, to achieve this common goal and support each other in how we are going tackling this "Titanic" problem.

We are the first generation to be able to end poverty and the last generation that can take steps to avoid the worst impacts of climate change. Future generations will judge us harshly if we fail to uphold our moral and historical responsibilities. (Ban, K. 2016)

How can the NZ Dairy Industry design workplaces to attract the best of the next generation? Jordyn Crouch - July 2021

In 2019, my partner Isaac and I were offered an 1100 cow contract milking job in the beautiful Bay of Plenty. We were 23 and 24 years old, I hadn't been dairy farming full time before and Isaac had roughly 3 years-experience, in primarily a farm assistant role. We received a lot of great advice prior to our first season. And what was the most common piece of advice we received?

"Cows are easy, people are hard."

After having many discussions with friends around a beer and always being asked "Do you guys really work eight days in a row?" or "Are you really waking up at 4am?" I began to wonder if we were doing right by our team, or if we were just accepting what had always been done.

This research project investigated what is being done in our industry and how we can learn from industry-leading employers, and out of industry leaders. The question is, "Learning from global workplace trends - how can the NZ dairy industry design workplaces to attract the best of the next generation into our workforce?"

Over the past 20 years the dairy industry has seen huge expansion, with the herd size doubling. As of 2018, the NZ dairy industry workforce was made up of roughly 40,000 people with 22,500 of these being employees.



PEOPLE/TEAM 13.



Read - Dairy industry workplaces to attract the next generation.

ruralleaders.co.nz/how-can-the-nz-dairy-industry-design-workplaces-to-attract-the-best-of-the-next-generation/

Nationally 88% of employees are either satisfied or very satisfied with their jobs, and research by StatsNZ identified six key metrics driving work satisfaction. These were hours and times of work, flexibility, job security, workplace autonomy, workplace relationships and work related stress and tiredness.

From my twelve semi-structured interviews with leading employers the key common themes across both in and out of industry employers were the need for clear communication, importance of developing a competitive workplace and the importance of flexibility and work-life balance.

My call to action is for our industry to question current practices. The areas that I believe are worth focusing on are:

- Encourage flexible rosters and pay scales
- Foster leaders not managers on farm
- Develop safe workplace cultures, allowing autonomy and innovation
- A shared purpose on every farm.

I have put forward many ideas in the final section, and my hope is that any farmer who reads this report considers each idea and whether they could implement one on farm.

My key recommendations are:

- 1. Look within.
- 2. Ask your people.
- 3. Try something!

Dairy Women's Network and pathways to gender diversity in governance.

Chelsea Smith - December 2018

"Diversity may be the hardest thing for a society to live with, and perhaps the most dangerous thing for a society to be without."

William Sloane Coffin Jr.

Dairy farming in New Zealand has advanced so much in the last decade. The transferable skills and strategic mindset that women develop from farming could qualify them for roles in banking, trades, accounting, animal health, HR and psychology, just to name a few.

I explored the ways that we can get dairy farming women into New Zealand boardrooms to see better outcomes for our businesses and economy. This is not about men versus women or disregarding the importance of experience, it is about what we need to do to be closing the gender gap on boards, having diversity of thought around the boardroom and avoiding 'group think'. It is about the individual having the confidence to bring their true self to the table and express their views.

For this study I conducted semi-structured interviews with 9 amazing women who have had an affiliation with Dairy Women's Network (DWN) in some capacity, whether it has been since the beginning of the network, on the trust board, as Regional Leaders, or winning Dairy Woman of the Year and other awards offered through DWN.

They are all based in New Zealand and represent gender diversity in the boardroom. I asked them about their journey to commercial governance and how they achieved it. I also spoke to 10 women and men represented on other agri-business boards in New Zealand to get their opinions.

The women I have spoken to have a great drive, determination and commitment for change. For the women who won Fonterra Dairy Woman of the Year and other awards offered through DWN, it has given them the profile and funding to further educate themselves and gain confidence and visibility, which has contributed to their further successes.

▶ PEOPLE/TEAM 15.



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Please note that I have formed my conclusions from a small pool of women whom I interviewed between September 2020 to February 2021, the outcomes could change with a bigger group. I interviewed women who in some cases were appointed, and other cases that were in farmer elected directorships. I decided not to delve into the percentage of women going for appointed versus elected roles as I believe it is another report.

I explored the need to see more women on boards and the current shortage of female representation in the boardroom. One of the reasons for fewer women on boards appears to be a lack of confidence or imposter syndrome.

Vulnerability, resilience, and the power of the mind can affect our behaviours and hinder future opportunities. As women we need to learn to manage the 'coach' and the 'critic' to create better outcomes for ourselves.



Read - DWN and pathways to gender diversity in governance.
ruralleaders.co.nz/from-the-back-paddock-to-the-board-room-dairy-womens-network-and-pathways-to-gender-diversity-in-governance/

What is the true cost of transience to the New Zealand dairy industry?

Brent Miller - April 2021

This report investigates whether the dairy industry has an issue with labour transience and what it truly costs a business to lose and retrain a new employee. I needed to firstly find out if, when, where, and how transience has become a problem in the dairy industry. Then what it truly cost a dairy farm to lose and replace an employee. Finally, I investigated the reasons people were leaving a job - and asked, was it preventable?

There were two parts to this research project 1). a literature review and 2). a survey of 23 dairy farmers to see what they thought about the cost of transience in the dairy industry.

Some of the key findings of the literature review were:

- New Zealand dairy farms have increased in average area from 220ha to 372ha
 Herd size has over doubled from 170 cows to 440 cows
 - Resulting in more labour being required on farm 21.1% of a dairy farm's budget is from labour costs
- The average dairy farm has quintupled farm debt in the last 28 years
- 7 out of 10 reasons people leaving a job could have been prevented. They are:
- Career development this has been the number one category for 10 straight years. Employees who are satisfied with their development are likely to stay
- Work-life balance this was up 23% since 2013.
 Job characteristics Flexibility of the job, long shifts, and suitability of hours
- Manager behaviour General behaviour and communication have each increased (gotten worse) in the last year
- Well-being to promote work-life balance consider flexitime and telecommuting, assistance with childcare/eldercare.
 Compensation and benefits many think compensation is the reason for turnover. Sometimes it is and sometimes it is not. Find out the real reasons for turnover in your organisation.

PEOPLE/TEAM 17.



Preventable reasons for turnover equate to 78% of our transience if we could solve this it would change our turnover rates from 24.5% down to 5.5%. This would be an astonishing change to our businesses.

Some of the key findings from the survey were:

- 96% of dairy farmers surveyed agree transience is a cost
- It takes a lot of time and effort to replace an employee
- The reasons for people leaving a job were Lack of support, long hours, pay not good enough and management not treating them well
- There were three main themes for why people stayed on farm they were good culture, Good employer, progression, fair salary package.

The main conclusions of this research project were:

- Transience has become worse because the dynamics of dairy farms have changed drastically throughout the years, with increased farm size, resulting in the need for more labour on the farm
- That transience is costing a considerable amount both in the way of money and stress and fatigue
- Three quarters of transience can be prevented. Which would result in considerable savings to a business.

Recommendations:

Turning over employees is costing dairy farming businesses and most of the reasons they are leaving are preventable. To capture the benefits of retention each farm needs to understand why people are leaving. Each farm needs to analyse the environment - asking their people what they want in the workplace and driving it from their needs and wants?



Read - True cost of transience to the dairy industry.

ruralleaders.co.nz/what-is-the-true-cost-of-transience-to-the -new-zealand-dairy-industry/

Who will run our dairy farms in the future?

Charlotte Montgomery

- December 2020

Dairy farming in New Zealand has undergone rapid growth over the last two decades. The increase in land value is making it difficult for progression to ownership for many.

The total number of available share-milking positions has been steadily decreasing, with an increase in owner operators choosing to employ Contract Milkers to run their farms.

To reach the goal of dairy farm ownership, those in the industry are becoming creative around their pathway for progression. What has not changed during this growth are the people.

Those who reach the goal of dairy farm ownership have key characteristics in common and when these characteristics are examined, they become keys to success.

For this study, rural professionals were interviewed, in a semi-structured format. These rural professionals were from reputable farm advisory firms and rural banks. There were four farm advisors interviewed and four rural banks, each giving their professional opinion on the progression to dairy farm ownership.

A thematic analysis was then done on the results. Four dairy farmers were interviewed, using semi-structured interviews. These dairy farmers had progressed to dairy farm ownership in the previous five years, all using different methods of progression.



PEOPLE/TEAM 19.



Read - Who will run our dairy farms in the future?

ruralleaders.co.nz/the-industry-the-farm-and-the-people-who-will-own-our-dairy-farms-in-the-future/

The results from these interviews were analysed with a thematic methodology. Results from the rural professionals' and farmers' analysis were compared and contrasted, to ascertain the common links.

Those who have reached the goal of dairy farm ownership in the last five years have exhibited:

- Determination
- Respectable reputations
- · Sound financial ability
- Knowledgeable and knowledge seeking
- Been a part of a strong team.

The pathway that they undertook to reach the goal of ownership differed between all the farmers. The pathway chosen was what was best suited their individual circumstance, rather than taking the pathway of the prior generation.

Recommendations for those who are starting out in the New Zealand dairy industry, with the aspiration to own a dairy farm, are:

- Stay focused on your goal of dairy farm ownership
- Be good with your money. If you do not know how, then learn to be
- Maintain a good reputation
- Knowledge is power, always take opportunities to learn.

"You can't solve today's problems with yesterday's solutions."

Funding the flow of milk: dairy industry capital requirements. Hamish Fraser - August 2013

Overall there is no clear picture that explains how the industry should fund future growth. However, if some simple rules that have been defined as part of this research are followed, then access to capital to grow the industry shouldn't be a limiting factor.

The key factor is the relationship between the asset values and profitability. Therefore, capital invested in the industry needs to be allocated to growth in productivity and if asset inflation occurs it needs to be at a rate slower than the growth in profitability.

Being able to focus on the factors within farmer's control, namely management, will improve the overall access to capital for the industry.

To answer one of the key questions of this research, is the amount of debt in the industry an issue or a limitation to future growth then the answer is, it depends. Simply put, what is important is the relationship between, asset value, debt and profitability.



Read - Dairy industry capital requirements.
ruralleaders.co.nz/funding-the-flow-of-milk-dairy-industry-capital-requirements-hamish-fraser/



Dairy farming in Northland: the past, present, future, and the implications of change.

Luke Beehre - December 2020

Bob Dylan's prescient comments from 60 years ago capture today's environment exceptionally well, with 'the times they are a-changin' and 'you'd better start swimmin' or you'll sink like a stone' (Dylan, 2020).

The dairy sector is a significant contributor to Northland's regional economy and has a vital role to play in the region's social, economic, and environmental prosperity. However, change is coming fast and it is likely to shape the nature of the industry for years to come.

To develop an understanding of the implications of this change – along with the potential opportunities, this report looks to develop a context and perspective. It explores the past, present and future of the industry, understanding what influences farmer change, works through current strategies and then considers some of the potential pathways ahead.

This is approached with a mix of in-depth interviews, selected readings, and critique.

It is apparent the region and sector have already experienced significant change and, in many ways, have proven to be stubbornly resilient and adaptative. Amongst this change there appear to be multiple trigger points that provide the opportunity to move beyond adaptation of a specific technology or practice towards a deeper change of hearts and minds.

For Northland farmers, the industry, and the region, opportunities will exist amongst this change and a challenge for leadership is that it intentionally contributes to help shape and influence the direction of the response.

Strategy, programme and project development, research and development extension, demonstration and design are all urgently needed. The opportunity this change offers will require determination and innovation, but the status quo can no longer be an option.



Read - Dairy farming in Northland and the implications of change. ruralleaders.co.nz/farmer-change-dairy-farming-in-northland-the-past-the-present-the-future-and-implications-for-change/

Validating the 'brand' for New Zealand's target dairy consumers in China.

Grant Jackson - August 2016

The New Zealand dairy industry, like many other primary industries, fueled by market volatility, is at a pseudo crossroads in its evolution. Does it look to secure its past dominance in global dairy commodity trade and optimise its investment into established commodity infrastructure? Or does it forego past heritage and investments, adopting a singular focused strategic migration into revenue dominance from consumer value-add exports and secure the perceived provenance value of our dairy products?

Anecdotally, the view of the majority of industry stakeholders is a push for the latter. New Zealand's dominant dairy exporter, Fonterra, has made a genuine contribution in this direction to date, but admits, it still has a long way to go.

Other dairy exporters are now re-aligning strategies to secure their share of the potential prize and as a result, considerable media and industry discussion has evolved on what needs to be done and the urgency behind the industry need.

I saw an opportunity to understand this subject better and apply a critical analysis of existing research, market participation and industry support initiatives to understand just what focus our industry needs in order to brand our products successfully.

China is an export market that has dominated export revenues for the New Zealand dairy industry in recent years and its demand for dairy with attributes like those associated with New Zealand is forecast to continue to grow.

Fonterra have recently stated the strategic importance of the Chinese consumer market within its strategic goals. With growing attention and market penetration within China from competing dairy export nations, there is no better time for New Zealand to form a plan, which includes identifying a target market.

23.



The report proposes that the target market should be the emerging upper- middle-class demographic within Chinese consumer society. These consumers had been found to be young, adventurous, well-traveled, independent thinking, while maintaining traditional Chinese benevolence and health/wellbeing values. They display much of the same behaviours observed within their western "lifestyle consumer" peers and combined with an empowerment to now establish a generation identity, are likely to be attracted to a brand purpose rather than more sterile functional attributes.

It appears that the "NZ Story" New Zealanders are familiar with and associate much of their industry pride with, is either not fully understood by the target market or does not resonate.

It was identified that only those consumers that associated environmental attributes with food safety benefits provided a willingness to pay a premium.

My recommendation for future research is to better understand the factors within the potential NZ story that will engage the interest of these target pioneering consumers, thus creating a value behind a desire to be associated with New Zealand.

There certainly needs to be energy directed at establishing a robust channel of current market intelligence within both the Chinese retail and e- commerce markets across all aspects of consumer needs and attitudes. Such information will need to feed brand development and future functional innovation focuses.

A word of caution though, as it may just be a matter of time before this ever-modernising and westernising consumer demographic simply "catch up" with their western peers and evolve an appreciation (outside of personal health benefits) for our existing ethical product value all on their own.



Read - Validating the brand for NZ's target dairy consumers in China. https://ruralleaders.co.nz/validating-the-brand-for-new-zealands-target-dairy-consumers-in-china-grant-jackson/

When milk engineering meets consumer demands and how this could affect the NZ dairy industry. Pablo Gallegos - June 2018

"If anybody anywhere in the world can use small amounts of energy, water and nutrients to create the same quality food as we can here then why would anyone buy from New Zealand?"

That's the question that Lance Wiggs director of several high-growth companies (www.lancewiggs.com) asked to his readers back in 2016.

Health, lifestyles, animal welfare, sustainability and environmental concerns are motivating consumers to lean towards milk alternatives. Today, there are many startups (new entrants) from Silicon Valley and from all around the world, creating food innovations every day. New companies are producing traditional agri-food locally, in non-conventional ways using less energy, water, nutrients and pesticides; and are animal-free.

New Zealand dairy companies are focused on producing high quality food and value-added products to keep, and gain more, competitive advantage in an increasingly tough global market. The truth is that without leading edge: agritech, biotechnology, environmentally friendly practices and well supported innovative businesses, it will be very challenging to stay competitive in the decades to come.

The aim of this report is to create awareness around milk alternatives and to better understand how they could affect the New Zealand dairy industry.





Read - When milk engineering meets consumer demands.

ruralleaders.co.nz/when-milk-engineering-meets-consumer-demands-and-how-this-could-affect-the-nz-dairy-industry-pablo-gallegos/

"We can't afford not to be part of the food revolution, if we are not aware of what other people are doing we can't be an effective competitor in any market."

This report is based on literature review, conversations with people working in the dairy sector and a survey created to assess the general knowledge around new milk alternatives.

Leading the change or being forced to change, that will be a key decision that New Zealand dairy is going to face in the years to come. The dairy industry in New Zealand must embrace new food technology so it could be prepared to take advantage of the new opportunities presented.

The findings and observation of this report are: animal's milk substitutes like soy, almond, rice, coconut milk, etc. have grown in popularity, although none of these alternatives has been disruptive to the dairy industry.

Now, there are game changing new options, improved alternatives to cow's milk making their way to the markets. Bio-engineered milk, plant-based milk manufactured using Artificial Intelligence and milk made from yellow peas are all rapidly rising on the horizon (intriguingly, Silicon Valley's horizon always seems to be brighter than others).

Food-tech startups are attracting a lot of attention nowadays, money is not an issue for most of them, they could potentially disrupt dairy markets globally and change the New Zealand dairy industry as we know it.

The opportunities and challenges with establishing a New Zealand Veal value chain.

Julia Galwey - December 2020

The New Zealand dairy industry has a growing risk with social licence to operate due to increased pressure from both customers and the public on the practice of slaughtering between 1.8 – 2.5 million surplus calves at an early age, either as a bobby calf or euthanised on farm. Internationally there is a significant veal market, with much of the production for this coming from surplus dairy calves.

However, despite having the highest global numbers for bobby calves, New Zealand does not yet have a veal industry here to further utilise some of these.

The purpose of this report was to provide some context and further understand the issue with bobby calves and the risk to social licence to operate, and then understand what the opportunities, benefits, challenges, and implications might be at the various points of the value chain with establishing a veal industry in New Zealand as a partial solution to reducing the number of calves slaughtered early.





Read - Establishing a New Zealand veal value chain.

ruralleaders.co.nz/new-zealand-veal-value-chain/

This a complex topic and includes a number of challenges and barriers that need to be addressed in order to establish a veal industry here including developing the integrated farm systems that suit our country and result in a product that is fit for the desired veal markets, finding sufficient land to incorporate these systems, market development and consumer education, processing capability and capacity, and reduced volatility in pricing to ensure sustainability of supply chain partners.

Further, the whole transition to fewer bobby calves needs to be carefully managed to ensure the current risk to the industry is not further heightened until solutions of scale are available.

The key to any success at scale will be good collaboration between industry sectors and partners. There are a number steps that need to occur for a veal industry to be established here including significant research, modeling and development of farm systems and markets, as well as some trials to develop the supply chain systems.

There is movement starting to happen at both industry and commercial levels and it is likely we can expect to see some change in the near future. While there are significant challenges to overcome, we may see innovation within the industry and a veal supply chain in New Zealand in the future.

Can dairy farmers regain control of their narrative from inside the farm gate?

Sacha McDougall - November 2019

As dairy has grown in scale, the sector has increasingly become the brunt of social discontent. The current social climate places media platforms in misplaced control of narratives with the growing apprehension stemming mainly from questions around the sustainability and historical poor practice highlighted in the media.

Since 2008, positive perception of the dairy industry from urban respondents has dropped from 78% to 47%, with rural outlook on the industry dropping from 83% to 50% (Ministry for Primary Industries, 2017). This decrease in trust and increase in negative public perception is having huge impacts on our industry inside farm gates filtering into mental health and wellbeing and staff attraction and retention.

My report aims to cover the effect changing values are having on trust in the rural sector and the impact it has on company and industry, it will break down the relationship between narrative and consumer trust and discuss why having control of your narrative is important, and discuss recommendations on how farmers can build trust and empathy; regaining control of their narrative from the ground up.

The main findings have been:

- 1. Change in industry trust is driven by changing consumer values.
- 2. Unconscious decisions affect the uptake of brand strategic narratives.
- 3. Misinformation is a key contributor to dairy farmers loss of control over their narrative.

On the basis of my research, my recommendations are as follows. Farmers need to:

- Develop credibility and authenticity built on results, history and consistency.
- 2. Step out of our echo chambers.
- 3. Demonstrate authenticity and humanise the industry.
- 4. Support credible, trusted social media platforms.
- Read Regaining control of the dairy narrative.
 ruralleaders.co.nz/can-new-zealand-dairy-farmers-re-gain-control-of-their-narrative-from-inside-the-farm-gate-sacha-mcdougall/

Kia ora tātou



