



Deloitte.

March 2011

Red Meat Sector Strategy Report

**Beef + Lamb New Zealand Limited
Meat Industry Association of New Zealand**



Contents

Foreword	1
Acknowledgements	2
Disclaimer	4
Glossary	5
1. Executive summary	7
2. Background and approach	11
3. The sector today	16
4. Sector opportunities	27
5. Market engagement models	35
6. Comparative land use profitability and the impact of the emissions trading scheme legislation	39
7. Risk Management	47
8. Understanding the sector's processing capacity	53
9. Capturing additional value for the sector	58
10. A blueprint for the sector's future	99
Appendix I – Red Meat Sector Workbook	109
Appendix II – Farmer responses	131
Appendix III – Benchmarking feedback	136
Appendix IV – Business plan template	142

Foreword

The New Zealand Red Meat Sector has always been a principal driver of New Zealand's economy and identity, generating nearly \$8 billion annually in export earnings, and forming the basis of the visual and social landscape of New Zealand. But throughout its history profitability has been inconsistent and often unsatisfactory for producers, processors and exporters alike despite huge scientific and technological advances in farming and processing, and despite New Zealand's status as one of the world's leading exporters. In recent years profitability eroded to unprecedented low levels, which created an economic rationale for sheep and beef land being transferred to other uses such as dairy farming, forestry, urban sprawl and the conservation estate.

B+LNZ and MIA initiated the development of this sector strategy to identify ways in which the profitability of the red meat sector can be increased, sustainably, and re-investment in the industry can be promoted.

The development of this strategy has involved a rigorous process with significant input from farmers, processors, marketers, government and service providers. The strategy therefore reflects the sector's collective views on issues and opportunities, underpinned by extensive commercial data and corroborated by in-depth analysis from Deloitte. The unprecedented level of collaboration amongst sector participants to develop the strategy reflects a shared recognition of the underlying challenges, as well as a willingness to engage with each other and a genuine desire for change.

The strategy identifies three areas with the greatest potential to sustainably increase profitability – in-market coordination, aligned procurement and sector best practice – while putting other long-held beliefs about known issues, including processor over-capacity and stock transport, into perspective.

The solutions proposed in the strategy are not simple. They are about changing mindsets, attitudes and relationships as much as they are about changing physical things.

The strategy includes a range of valid and effective actions that farmers and meat companies can take. However, it does not provide a one-size-fits-all prescription, which would not be appropriate or practical given the structure of independent and competitive exporters and characteristically independent producers. Sector participants should read the report and identify for themselves how they are able to action to address the challenges that have been identified and harness the potential inherent in that.

The possible gains presented in this report will take time to achieve, but are compelling not just for our sector, but for New Zealand as a whole. We are confident that by working together we can ensure that the Red Meat sector will remain a mainstay of New Zealand's economy and identity for generations to come.



Mike Petersen

Chairman

Beef + Lamb New Zealand



Bill Falconer

Chairman

Meat Industry Association of New Zealand

Acknowledgements

We would like to thank all of the businesses, sector stakeholders and participants from across the sector that generously provided their time for the interviews. We would like to especially acknowledge and thank:

- Rob Davison and Ariana Hemara-Wahanui – for their support of the process in collating data requests and additional analysis throughout the process
- Processors – for their cooperation and support in formulating a comparable request and subsequent information
- Farmers - for providing time to respond to detailed interviews, and for turning up to the consultation round prepared to debate and contribute
- Lincoln University, Massey University, AgResearch and the banking sector – for their willingness to engage, debate, challenge and consistently add value
- The Ministry of Agriculture and Forestry, and New Zealand Trade and Enterprise – for their support in funding the strategy work

Both sides of the farm gate have supported this process in providing data, information, ideas and perspective adding great value in developing this strategy.

Furthermore, we would like to acknowledge and thank both Scott Champion and Tim Ritchie along with the remaining members of the Strategy Management Group for their guidance, expertise, willingness to help and to share information and provide challenge throughout the project.

Strategy Management Group members:

Bill Falconer (Co-Chair) – Meat Industry Association, Council Chairman

Mike Peterson (Co-Chair) – Beef+Lamb New Zealand, Board Chairman

Dieter Adam – New Zealand Trade and Enterprise, Operation Director (Food & Beverage/Biotechnology)

James Palmer – Ministry of Agriculture and Forestry, Director Strategy Development

Scott Champion - Beef+Lamb New Zealand, Chief Executive Officer

Tim Ritchie – Meat Industry Association, Chief Executive Officer

Alasdair MacLeod – Deloitte, Partner

Management Group members:

Alasdair MacLeod – Deloitte, Partner

Kelvin Whall – Beef+Lamb New Zealand, Strategy Manager

Dan Coup – Meat Industry Association, Trade & Economic Manager

John Greer – Ministry of Agriculture and Forestry, Regional Team Leader

Jarred Mair – Deloitte, Associate Director

Deloitte Team:

Alasdair MacLeod – Partner

Jarred Mair – Associate Director

Hilary Parker – Analyst

Petra Belworthy – Project Coordinator

Disclaimer

This publication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the “Deloitte Network”) is, by means of this publication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this publication.

Glossary

- **Actual production:** actual number of animals processed
- **ASEAN:** Association of South East Asian Nations
- **Category approach:** a marketer approach where the product range is diversified to reduce product competition
- **EU:** European Union
- **Excessive competition:** where organisations compete to a point where profitability is affected and value is lost
- **Heifer:** female cattle having no more than six permanent incisor teeth
- **Hogget:** a young sheep having no more than two permanent incisor teeth
- **HRI:** Hospitality and Restaurant Industry
- **Installed capacity:** actual maximum capacity in place to process animals (per month): no of chains * actual shift capacity (including step up capacity) * no of shifts
- **Intellectual property:** The ownership of intangible and non-physical goods, such as research and development, business methods and industrial processes
- **Lamb:** a young sheep under 12 months of age which does not have any permanent incisor teeth in wear
- **MAF:** Ministry of Agriculture and Forestry
- **Maximum capacity:** a theoretical calculation: no of chains* maximum shift capacity (including step up capacity)* no of shifts + overtime availability i.e. Saturdays
- **ME:** metabolisable energy – the quality of pasture as a feedstuff is measured from the ME per kilogramme of dry matter
- **NZTE:** New Zealand Trade and Enterprise
- **Phenotype:** any observable characteristic or trait of an organism
- **SME:** Small to Medium Enterprises.
- **Soft commodity:** refers to commodities that are grown. Rather than mined.
- **Steer:** a castrated male bovine
- **Supply chain:** starts with product and adds cost
- **Sustainability:** The preservation and development of environmental, social and economic resources, in order to meet the needs of current and future generations.
- **Third parties:** All people collecting commission or headage that does not solely work for or supply a processor. Includes Stock & Station companies, stock traders, agents, etc.
- **UK:** United Kingdom of Great Britain and North Ireland
- **US:** United States of America

- **Value chain:** starts with the value in the market and identifies where value is contributed and information is freely available in a useable format

Other key terms

- **Sponsors:** Beef + Lamb New Zealand Limited and Meat Industry Association
- **Strategy Coordination Group:** A central group able to monitor and report the sector's progress in implementing the strategy and key initiatives.
- **NIWA:** National Institute of Water and Atmospheric Research
- **CGE:** Computational General Equilibrium model

1. Executive summary

The red meat sector (the sector) has been, and continues to be, critically important to New Zealand's economic future. New Zealand is unique amongst other developed nations, with approximately two-thirds of merchandised exports generated from the primary sector. In addition, New Zealand's year-round grass fed systems enable low input and natural outdoor grazing that produces high quality animal products for the world.

Despite the critical economic and social importance of the sector, it is currently a sector under threat from competing land uses that provide better returns. The threats to finishing country posed by dairy conversions, and to the hill country posed by forestry are well recognised. In order to provide a path to improved sector profitability the members of the Meat Industry Association and Beef + Lamb New Zealand commissioned the development of a sector strategy. The strategy is to set an 'umbrella' framework that individuals and business alike can use to identify future opportunities for growth and improved profitability. This process is unique. This is the first time in decades that both sides of the farm gate have come together and committed significant time, effort and data to a strategic process.

From this, the sector has a unique opportunity to embrace the support of both supplier and processor groups to collectively understand the sector's issues and opportunities, to build a fresh strategic framework and promote change that will return long-term profitability to sector participants. Although sector profitability has improved over recent years and increasingly so within the 2010-11 season for suppliers, the recent gains will not be long term unless sector participants collectively improve the level of transparent information within the sector and align their individual behaviours.

The recent price increases are masking many of the sector's issues and will not aid the sector to realise its many opportunities in the medium-long term. Sector participants need to rebalance the sector's incentives and practices to remove any one sector participant's ability to profit at the expense of another (e.g. processor versus farmer or farmer versus processor). Through building greater trust between sector participants the sector will be able to implement a self sustaining change process.

In order to achieve this, both processor and supplier groups need to address the threats to the sector. The current comparative returns from the sector are not sufficient to ensure that sufficient land remains to maintain critical mass for ongoing production of sheep and cattle products. In order to become competitive, the sector must become sustainably profitable and be able to attract the next generation of leaders to the sector. This is achievable. Suppliers and processors have access to the science, technology and business practices to achieve this now.

This is articulated in the strategy's vision. The purpose of the vision is to guide the sector's activities and behaviours. The vision for this strategy is to:

‘Improve the long-term profitability of all the participants in the red meat sector and thereby enhance the reinvestment and sustainability of the sector’

The development of this strategy and all of the findings, opportunities and actions has been formulated from a rigorous process that involved detailed:

- Information gathering
- Detailed farmer survey
- Global subject matter research
- Data analysis
- Broad consultation and translation to actions

On this basis, this strategy represents the sector's collective views, understanding and Deloitte's unique knowledge of the sector's issues based on the information provided. It is this structured engagement and collective knowledge that provides the basis of this strategy. This was only made possible through the cooperation of the suppliers, processors and the strategy sponsors.

The key influences on sector performance and profitability are not the traditional perceptions of: structural change, quota allocation and processor capacity. While additional benefit could be achieved through changes in sector structure and capacity, their direct benefits are not as significant as other sector opportunities. Moreover, the successful implementation of this strategy will inform the future evolution of the sector and its participants as they decide and implement their pathways to growth and greater profitability,

For this reason the strategy focuses on three core strategic themes and the implementation of the associated actions to maximise the improvement in performance and profitability. The table below states the strategy's core themes and the high level actions that the sector needs to consider to be successful.

Core strategy themes	High level activities
Coordinated in-market behaviour	Creating a strong brand position in premium markets Acting with scale through greater coordination of exports in target markets
Efficient & aligned procurement	Shifting the focus of competition from the 'farm gate' to offshore competitors Ensuring suppliers are receiving a fair and sustainable reward for their performance Increasing transparency of information

Core strategy themes	High level activities
Sector best practice	<p>Improving productivity at all stages in the supply/value chain</p> <p>Enabling a 'single voice' to provide clear leadership</p> <p>Creating a strategy coordination group able to support sector initiatives</p> <p>Developing New Zealand's farming systems</p> <p>Selling the New Zealand story</p>

Through the successful implementation of these activities the sector will be able to secure its future for the next generation and improve the financial well being of current sector participants. The strategy is designed to provide the information for sector participants to assess their needs and business direction – and act.

There is a level of complexity evident in the red meat sector that is not present in other parts of the primary sector. The production side of the sector is biological, weather dependent and seasonally variable, while the processing/exporting part of the value chain is primarily a disassembly process that requires finding a profitable home for all of the disassembled parts of the animal in order to generate sustainable profitability.

While some sector participants will be looking for a structural change to be a catalyst for the sector to change, this is not a pre-requisite. The sector needs to debate, refine and then adopt this strategy, and provide implementation resources and governance for the changes. From these activities the structural question will be answered by the actions of the sector's participants and their supply/value chain partner's performance. Proactive and engaged businesses will benefit from this strategy and in the long term will benefit the most from their reinvigorated relationships with their supply/value chain partners.

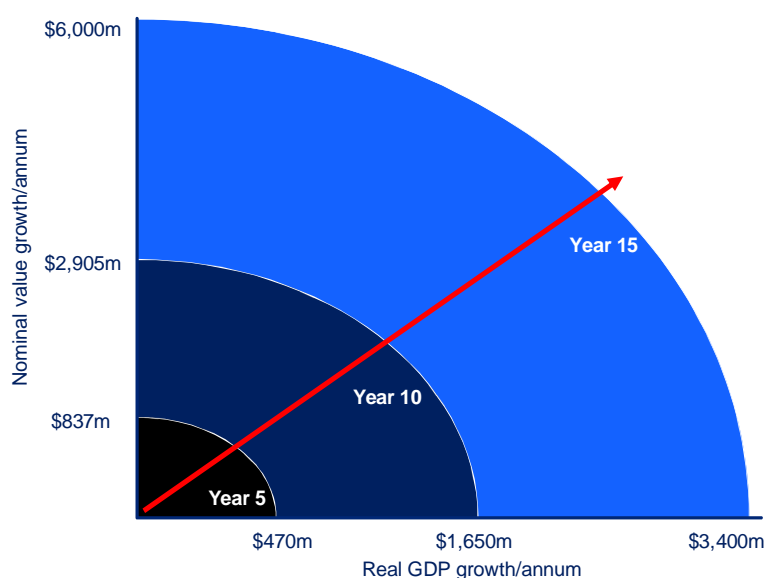
The benefits of the strategy have been modelled by New Zealand Institute of Economic Research (NZIER). Based on this modelling the forecast benefits to New Zealand will be an increase of 1.3% of GDP or real value change of \$3.4 billion in 2025.

The sector's \$6 billion (or approximately \$800 per hectare) of nominal value growth equates to \$3.4 billion (or approximately \$420 per hectare) of real growth for the sector by 2025.

The future growth in the sector has flow-on effects on numerous other primary sectors. As the sector demands grow, intermediate input supplying industries, such as utilities and agricultural services, grow by 2.4% and 3.6% respectively. Similarly, the increased incomes of people working in these sectors drive private consumption spending. In this instance the retail sector is expected to grow by 1.8% as households' discretionary income rises.

The net effect of these changes is 2.8% for household and government spending (which represents an extra \$5 billion of real consumption). Overall, a combination of increased export value, increased output and greater production from the same land (increased productivity) leads to an increase in New Zealand's wealth and living standards.

Figure 1: Sector added value and phasing



Source: NZIER

To be successful in enabling change, it is crucial that the strategy is owned by all sector stakeholders - the executives, management teams, owner operators and service providers. Each sector stakeholder has a role to play and is needed to enact the change. To ensure a sustainable change, the sector needs ***informed aligned behavioural change***. This means:

- **Informed** – participants have information enabling timely decisions, risk management, and increased certainty of outcomes.
- **Aligned** – each participant needs to understand their supply/value chain partner's strategies to be able to ensure that their efforts are not wasted through a misalignment of what each participant is trying to achieve.
- **Behavioural change** – each sector participant needs to do things differently if they want change to happen across the sector. This will mean behaving differently and supporting those who can also be seen to be behaving differently.

The execution of this strategy is crucial if the sector is to maintain critical mass. Key stakeholders have said the change and subsequent benefits are needed within the next five years if critical mass is to be retained. This strategy provides a framework for stakeholders to improve their understanding of the issues, opportunities and actions that can be taken to improve the long term security of the sector. To achieve the stated timeframes, stakeholders must find their place in this strategy and support and adopt its actions.

To further aid this process a workbook with relevant sector examples has been appended for sector participants to complete and assess their own position and seek to better understand the performance of their supply/value chain partners.

2. Background and approach

This strategy process is unique. The development of this strategy has benefited from the support of both suppliers and processors. This support has meant for the first time in decades a consolidated picture of the red meat sector has been developed. The issues and opportunities have been able to be quantified and actions designed to address the cause of the issues rather than the symptoms.

The content of this strategy has been compiled based on the input, feedback and challenge provided by a cross section of key stakeholders from all stages in the supply/value chain. Moreover, the concepts and intervention design reflect the feedback from the consultation process. This is the sector's strategy compiled and facilitated by Deloitte for the sector to own and implement.

2.1. Purpose

The purpose of the strategy is to provide B+LNZ and the MIA (the sponsors), and the New Zealand red meat sector, with a strategy that will enable the returns to sector participants to be enhanced. The agreed definition of 'strategy' in this context is:

“A framework to enable individual product groups or growers to identify ways in which they can improve returns, while also identifying industry wide opportunities and barriers that require collective action”.

In other words, it is not – and cannot be – a “one size fits all” document.

In developing the strategy consideration has been given to:

- Break-down of the improvement opportunities available at each stage of the value chain (and quantified)
- Ambitions expressed in terms of improved revenues and reduced costs as relevant
- Understanding the relative profitability gap – revenue drivers versus cost drivers
- Considering the whole value chain and all relevant products
- Communication of market requirements
- Quality of interaction between different stages of value chain
- Value of collaboration at different points in the value chain
- Value of generic marketing approaches
- Value of increased market power, scale or capability
- Levels of investment (available and appropriate) across the value chain
- Sustainability as a consumer and regulatory trend and its impact in the industry
- The quality and availability of people, skills and leadership across the value chain
- Access to technology and applied science
- Use of biotechnology

The purpose of this report is to inform the sponsors, government agencies and the sector's many constituent groups of the opportunities across the sector, identify any international and local barriers that need to be addressed and the combined opportunity to the sector when it has successfully implemented the strategy. The audience for the strategy is the sponsors, government agencies, the sector's senior executives, and all other sector participants (including service providers).

At every phase of the strategy development, the process was supported by the full range of sector participants, to a degree that is unprecedented.

2.2. Vision

For the purpose of this strategy, the vision was defined as:

Improve the long-term profitability of all the participants in the red meat sector and enhance the investment in and sustainability of the sector

The red meat sector needs to reinforce its importance to New Zealand, in particular, in the minds of policy makers, and the wider public. Creating awareness of the value and benefits of the sector will aid in the fight to maintain a productive sector of scale for servicing domestic and export demand.

The key to ensuring the sector's ongoing prosperity is achieving a balance of economic, social and environmental sustainability. The sector will need to keep innovating and developing its capability, processes and technology in order to remain ahead of world quality/health standards and product demand. New Zealand is well positioned for a world that is becoming increasingly health conscious, wealthy aging populations able and willing to pay for premium meat products and co-products/consumables.

2.3. Goal

The goal for the strategy is to:

Grow the New Zealand red meat sector to reach a nominal annual export value of NZ\$14 billion by 2025

For measurement purposes, the base year was defined as 2009 and the sector value includes the contribution of co-products, as their activity is reliant on and a contributor to, the long term sustainability of the red meat sector. The ability of the sector to continue to secure its production base and grow will depend on the red meat sector's ability to collectively change behaviours and invest in productivity improvements, and market development.

2.4. Approach

The following approach was adopted to undertake the project:

- Development of the following Initial Hypothesis:

That the absolute and relative profitability of the New Zealand red meat sector will sustainably improve by changing practices and behaviours that:

- ***Develop market led, differentiated value propositions that consistently achieve premium pricing;***

- ***Reinforce the integrity and quality positioning of New Zealand's red meat products in global markets;***
- ***Support a culture of innovation from behind the farm gate through to the market; and***
- ***Increase and protect available margins through integrated continuous improvement across the supply/value chain.***
- The Initial Hypothesis was agreed with the Strategy Management Group (SMG) who had oversight of the strategy development from the beginning of the process. The SMG was co-chaired by the Chair of the MIA Council and the Chair of B+LNZ Board, and had representatives from both NZTE and MAF.
- Using the Initial Hypothesis as a base, a survey questionnaire was developed, with slight modifications depending on whether the interview was to take place with a Processor, a Supplier, a Government Department, or a Third Party such as a bank, a transport company, or a stock and station business.
- A group of suppliers, processors/exporters, service providers, and market participants was selected by B+LNZ and MIA, and interviewed either face to face or by phone with the structured questionnaire used at all times to ensure a consistent set of data was collected.

The interview breakdowns were:

- Suppliers: 70
- Processors: 20
- Other sector stakeholders: 20
- Desk research and gap analysis of the sector's information was undertaken to identify key information trends and information requirements to inform opportunity identification.
- An online survey was developed, using the above questionnaire as a guide, which was responded to by 542 farmers.
- A very detailed spreadsheet was sent to all Processors, seeking a wide range of data that enabled a very comprehensive set of industry metrics to be developed. This data was provided under very strict secrecy requirements, and every effort has been made to ensure that none of the data used in this strategy can be traced back to individual Processors. There are sections in the strategy where this has resulted in a need to display conclusions without the ability to corroborate with data that can be interrogated. This is unfortunate, but also unavoidable.
- Following the collection of both primary and secondary data, the information was synthesised and some preliminary conclusions were developed. These preliminary conclusions were tested with the SMG, and then 'road tested' through an extensive consultation process involving 11 public meetings around the country, plus another 18 meetings with processors and key sector stakeholders. This consultation process provided invaluable feedback, useful refinement of ideas, and a solid endorsement of the preliminary conclusions. The consultation process also provided an opportunity for MIA and B+LNZ to demonstrate the spirit of unity that typified the sector strategy development.
- Processors have provided an extensive amount of data to inform the supply/value chain analysis and enable a whole sector view to understand the opportunities and issues in greater detail than any other sector analysis in recent history. The data collected includes:
 - Procurement numbers and costs

- Animal sizes
- Animals transported and associated costs
- Plant utilisation figures by chain
- Plant closure costs
- Activity costs
- Revenue sources
- Supply/value chain maps and information captured by key products in primary markets

Only two small processors have not participated and not provided any data, or any input into the process.

- Following the conclusion of the data analysis of the combined supplier and processor information the modelling outputs were entered into a prioritisation and impact assessment framework. Through using this standardisation tool the information could be translated into an intervention logic that was able to be applied to address the cause of the issues, action areas, and actions and allocated to sector participants for enactment.
- From this process and the input of over 1,500 people this strategy document has been compiled.

This document provides a strategic umbrella framework that articulates the issues, how to address those issues and sets out a set of implementable actions that enable the industry to achieve its vision. The actions are designed to:

- Inform commercial investment and strategy (across the value chain)
- Inform industry-good investment and effort
- Inform government investment and assistance
- Provide key stakeholders with information able to support voluntary, commercially justified investment and promote behavioural change.

The strategy has never sought to force uniformity across all sector participants, but rather to identify common issues, issues specific to stakeholders and opportunities that would benefit participants willing to invest in their future. It was agreed with the sponsors that the strategy will become an enabler to those willing to share in the vision for the sector and contribute to realising the sector's goal.

For this reason a strategy workbook has been developed to aid and inform discussions between supply/value chain partners and further promote aspects of their businesses that can return increased profits. This supports the need to identify:

- What is possible
- Barriers that require action
- Actions required to make a meaningful change
- Models that can support and promote the change required

The strategy therefore reflects the realities of the current economic conditions and needs of the stakeholders over the short-term and medium to long-term. The full term of the strategy is 15 years (out to 2025). To aid the implementation, a prioritised action plan over the next five years has been provided.

The strategy represents the analysis, findings and recommendations for the strategy sponsors to consider, engage with and provide ongoing leadership. The strategy reflects the views and perspectives of key stakeholders, individuals and businesses that interact with the sector, and where stated Deloitte's suggestions for the sector to consider.

3. The sector today

The sector remains a major contributor to New Zealand's rural communities and broader economy and has undergone many changes over the last century to create today's structure and behaviours. The deregulation in the eighties has significantly impacted the sector's structure and sector participant behaviours.

The power wielded by some key stakeholders at times in recent history was absolute. These past behaviours steered supplier's determination to break this power through increased competition between processors. The current structure and operation is the result of these changes, subsequent 'fine tuning' initiatives and the real shifts in power between suppliers and processors within wider production/market changes.

This process of ongoing change has had both positive and negative impacts on the wider sector and New Zealand's rural communities. Sector participants and stakeholders have continued to adapt their individual operations to work within the sector's environment. The real legacy of these shifts in power is a sector where mistrust between sector participants has manifested itself as a lack of loyalty from suppliers towards processors or an unwillingness by many suppliers to commit, actions which have resulted in masked signals back to suppliers.

Key stakeholders recognise that a real change is needed to secure their future. Land use change in New Zealand and the relative change in rural productive capacity have been dramatic. Dairy and growing forestry incentives will increasingly act as constraints if stakeholders do not change behaviours, increase profitability and seek ways to leverage other sector gains/advancements for their benefit.

In order to address the continued competition pressures for land a vision has been developed to focus the sector's activities and behaviours. The strategy vision is to:

'Improve the long-term profitability of all the participants in the red meat sector and thereby enhance the competitiveness and sustainability of the sector'

In order to achieve the strategy's vision, the sector needs to continue developing its systems and uniqueness. To do this stakeholders need to recognise the things that make New Zealand production system unique in a global context. This includes:

- Over 90% of sheep meat and 80% of beef products are exported¹
- Over 50% of beef is exported to the US for further processing²
- The majority of sheep meat continues to be sold through quota systems
- An almost exclusively free range grass fed production system
- The key traditional export markets' domestic lamb supply is counter seasonal to New Zealand's

The current market engagement strategies are dominated by a series of supply chains and a few value chains for specific products and markets. While the sector is not broken, it is not currently operating as efficiently and effectively it could. Stakeholders must recognise that they each fulfil different roles and that they rely on each other to be successful.

The current sector structure contains four key activities that do influence the current level of performance. They are:

- **Marketer** – this capability is predominately within a processor. The group's key characteristics are:
 - They are often only small team
 - They undertake very little investment in marketing or market development activities
 - They do share some common customers in key markets
- **Processor** – they are the second largest group in terms of capital invested into the sector, with plants of various scale located throughout New Zealand. The group's key characteristics are:
 - Dominated by four large processors operating multiple plants and processing the majority of stock flows
 - The smallest processors specialise - operate a single chain and species plant
- **Procurer** – this group is made up of many individuals, companies and farmers all acting as facilitator of stock movements across the sector's participants. The group's key characteristics are:
 - Dominated by two large independent rural services firms and processor procurement teams
 - They are the primary contact point for farmers
 - They can significantly influence which processor gets the uncommitted stock
- **Supplier** – in terms of capital invested the sector is dominated by the supplier group. The group's key characteristics are:
 - An estimated population of 12,250 commercial farmers
 - Farmers are an aging group (who have an estimated average age of 58 years³), with succession challenges from the next generation who display a lack of interest in taking over the family farm

¹ Source: Beef + Lamb New Zealand Economic Service

² Source: Beef + Lamb New Zealand Economic Service

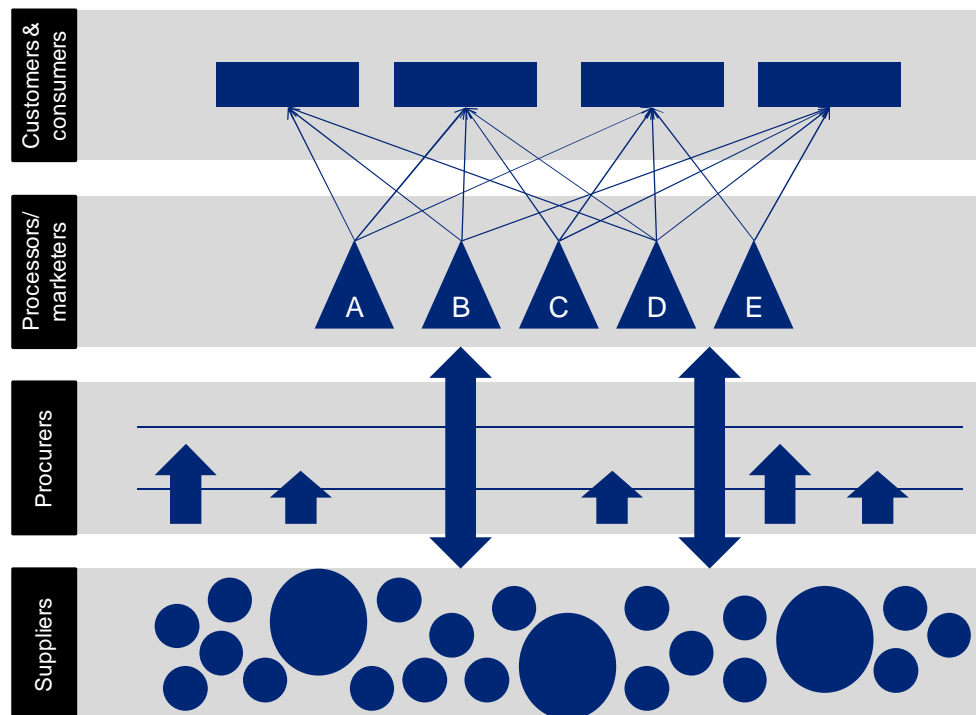
³ Source: Book by Joan Baker titled Your Last Fencepost

- An estimated \$80 billion in equity invested with an average of between \$5 and \$6 million per farm
- An average equity ratio of 80:20⁴

The sector's current structure

An operational view of how the sector is currently structured and core product flows are mapped out in the following Figure 2.

Figure 2: Current sector structure



The diagram illustrates that suppliers vary dramatically in scale from smaller sole operator farms through to large consolidated farms run under a corporate structure. Within the current market place these suppliers are not often getting clear market information (i.e. customer requirements). This is represented by the few arrows that are able to bridge the void created by existing procurement practices (i.e. stock traded directly with processors with market information flowing back to suppliers). As a result stakeholders progressively become locked into a structure that is partially optimised at a business level but not at a New Zealand level.

The end result of this is competition for supply of products to common customers by processors/marketers. This competition under certain market conditions means sales people/marketers are not optimising the value of products. The gap has been reduced over the last few seasons with the dramatic decline in animal numbers, but will return if stakeholders do not commit to doing things differently. Although the sector has been going through testing times in the recent past, the sector is not broken, though participants from all parts of the supply/value chain have identified that change is needed.

⁴ Source: Beef + Lamb New Zealand Economic Service

The sector is important to New Zealand

The sector is important to New Zealand from an economic, social and environmental perspective. Sector exports represented 35% of all agricultural exports in 2009 or \$7.6 billion of meat, skins, wool and co-products⁵. Participants need to remember that they are a significant sector for New Zealand. Many individuals and key stakeholders appear to have forgotten this, and there has been a failure to communicate this to the people of New Zealand. Revenues compare well to the Dairy sector who has exports of \$10 billion and represents 45% of agricultural exports.

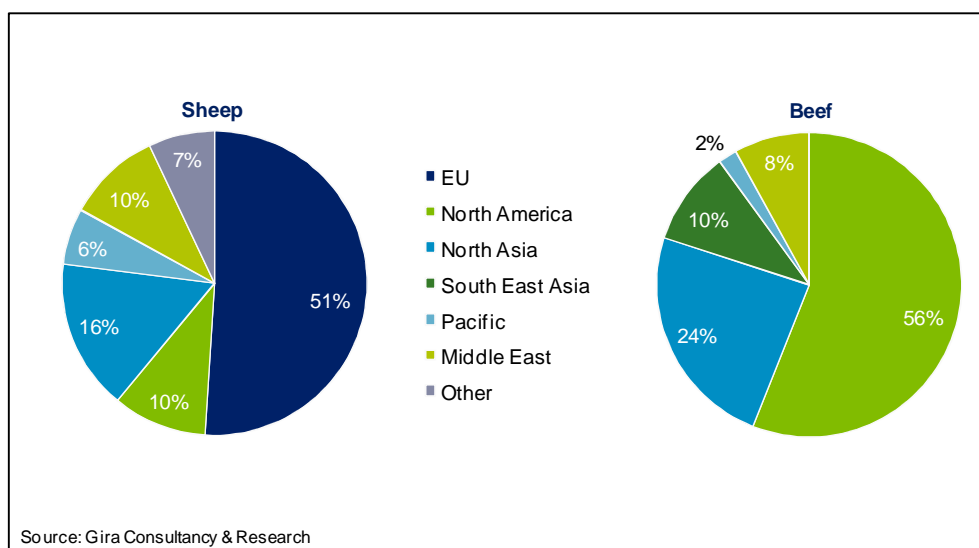
The sector's prospects

The future for the New Zealand's meat and co-products is bright. The sector's traditional markets need New Zealand's products as global supply is coming under pressure from an increasing population in emerging markets, an increasing number of globally wealthy and aging customers seeking quality sources of protein, and a declining domestic supply for some products in mature markets. Sector participants need to recognise these changes in their markets and proactively take steps to ensure they have a role in supplying high quality sustainable products to markets willing and able to pay a premium for New Zealand products. The sector can adapt to take advantage of these opportunities.

New Zealand's export markets

Since the first sheepmeat exports in 1882, New Zealand's red meat has been shipped overseas, leading to a highly developed and export focused sector. The sector's strong exporting focus means it has many of the capabilities and skills to respond to market changes and develop new markets.

Figure 3: Export destinations for tonnes of New Zealand sheepmeat and beef



⁵ Source: Beef + Lamb New Zealand Economic Service

Our largest traditional market for sheepmeat is the EU, which imports 51% of New Zealand's sheepmeat, as shown in Figure 3. This market was developed around New Zealand's ability to provide counter seasonal supply to Europe's, as the sector's production effectively complements Europe's home grown sheepmeat production. In the case of Europe, the scale of this market has meant that processors have built segments of the sector to specifically service the preferences of these customers – this has included animal traits including fat content, desired cuts and product sizing.

New Zealand's relationship with the EU market has benefited both parties over the years. However, sector participants do need to accept that as a result of this long standing market, many processor/exporters have developed a reliance and therefore have been slow to develop other lamb markets. The EU's product preferences are mainly traditional cuts (such as lamb legs). As a result, all residual products need to be sent to other markets to ensure maximum profitability from each animal.

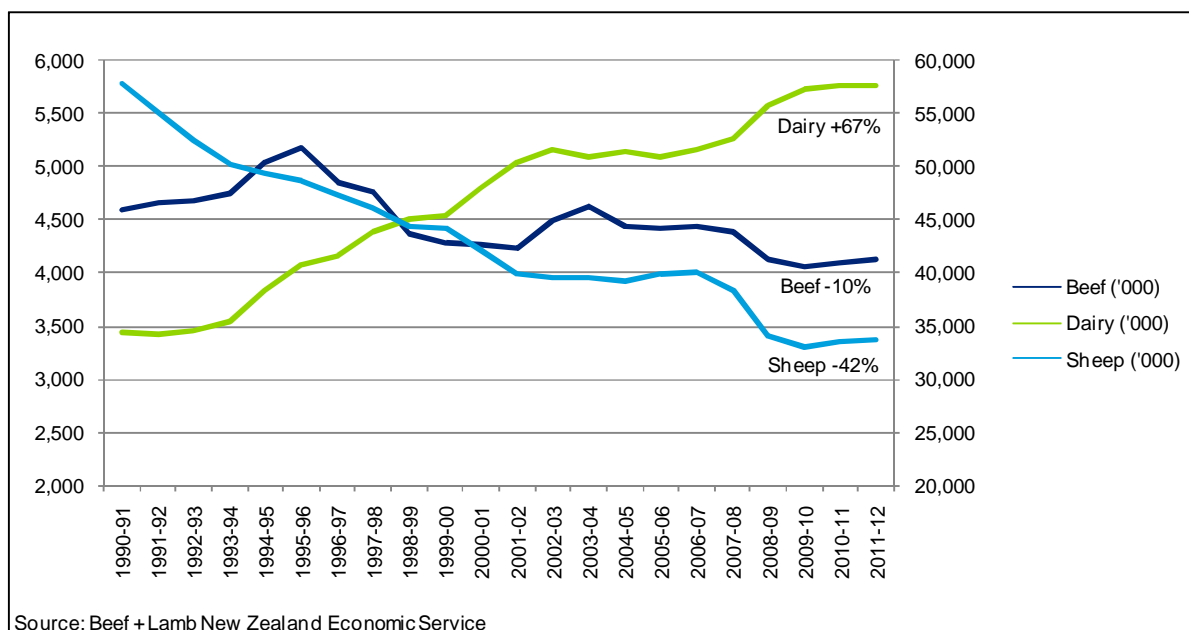
For beef, as shown in Figure 3, the traditional dominant market is North America. New Zealand sends 56% of beef to the USA and Canada, where demand is fuelled by the processed food sector that requires significant amounts of lean ground beef. The overall North American market is continuing to increase as the processed foods sector continues to expand (a trend observed since the economic crisis). New Zealand's manufacturing beef products are excellent products to mix with the North American beef because of the quality, food safety and leanness. All of these attributes have added to the competitive advantage of the sector's products in this key market.

As the sector's markets continue to develop, sector participants are constantly reassessing their product strategies in markets and understanding who their real customers/consumers are. The sector may export a significant proportion of production and represent significant scale in markets for sheep meat, but the sector is only a small producer of beef on the global scale. Stakeholders target their activities recognising the different context for sheep and beef products.

The size of the sector

The sector's declining sheep and lamb numbers are a continuing issue. The sector has experienced a decline in sheep stock numbers which has now reached the stage where the volume of products available could impact New Zealand's position in markets. This trend has been further amplified by the prolonged weather events between 2006 and 2008, and again in 2010-11. Over this time, increased numbers of capital stock were processed to manage feed restrictions as a result of the continuous dry conditions on the East coast of the North Island. By comparison, the beef herd production has remained relatively stable since the late nineties. Figure 4 shows this decrease in stock numbers.

Figure 4: Sheep and cattle numbers



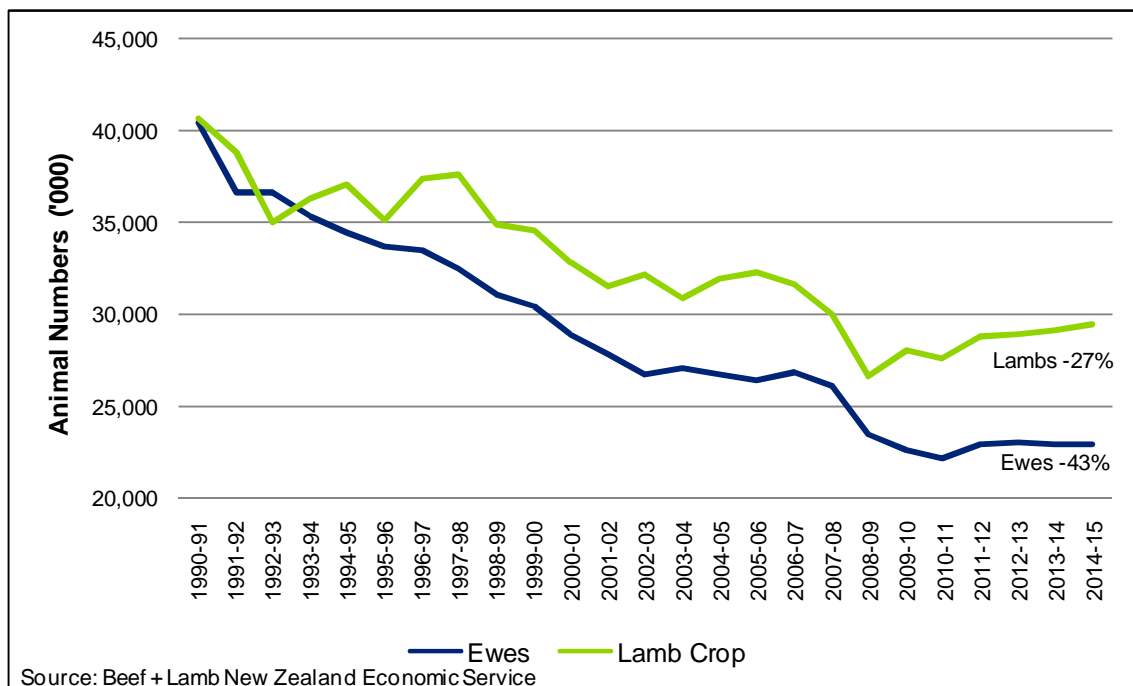
The decline in number of stock is partially explained by the 41% decline of commercial sheep and beef farms between 1984-85 and 2008-09 (a decline in farm numbers from 22,000 to 12,880⁶) and consolidation of farms into larger production systems (the average farm size has risen from 3,424 to 4,031 stock units over the same period⁷).

The sector has increased its productivity over the period to reduce the overall impact on sector revenues and volumes. The productivity gains have been achieved through an increase in lambing percentages across the sector combined with the finishing of lambs to a heavier weight. The net impact of this is that the overall decline in sheep numbers has not significantly reduced the sector's production. The actual and expected change in the sheep and lamb flocks can be observed in Figure 5 below.

⁶Source: Beef + Lamb New Zealand Economic Service

⁷Source: Beef + Lamb New Zealand Economic Service

Figure 5: Breeding ewe and lamb numbers



The sector's supplier capability

There are an estimated 12,250 commercial suppliers to the sector. As a group they vary significantly in:

- Scale
- Business structure
- Land type
- Production systems
- Species mix
- Forage types
- Geographic locations
- Environmental conditions

These variables all interact to create in many cases unique production conditions, which depending on each variable's expression can create very complex systems that suppliers need to manage and optimise to be profitable. Core to achieving this is understanding and optimising farm productivity within a 'biological, weather dependent and seasonally variable environment'. The strategy's research has identified the number of and sophistication of business plans these as an issue. From the supplier survey responses, 59% do not have a written business plan (refer Appendix II for a summary of summary of supplier responses to the online survey).

While 41% with a written business plan compares well with other SME business sectors within New Zealand. This figure is low when the complexity of the farming system is considered. Further highlighting the need to improve on-farm management capability is the fact that 27% of suppliers who answered the survey stated they did not understand their costs of production.

The underlying level of expected change in the sector's supplier base is larger than what would normally be expected. 50% of suppliers are expecting a change in business activities in the next five to ten years. In analysing these individual results around 50% of the 'yes' responses are indicating a change in species mix, with the next biggest group of responses indicating land use change to either dairy, horticulture, forestry, and to a lesser degree wind and honey farming.

Of particular interest to the strategy's implementation process is suppliers' appetite to invest in their business. From the responses, 70% of suppliers indicated that they had either a very strong or strong appetite to invest. However, this compares to only 58% having either a very strong or strong ability to invest further on farm. Initially the strategy will target the 58% of suppliers with the ability to invest in their farms and progressively build to include the remaining population of suppliers as their profitability improves.

The sector's processing capability

The sector's processing has historically been shaped by the supply of stock from farms. During periods of declining stock numbers processors must revert to aggressive competition for stock to survive. These periods of change often result in significant financial pressure being placed on processors by the need to pay above market prices for access to stock. These practices have led to short term spikes in the prices paid to suppliers, but have also led to processor failures in the past.

As a result of the past and current pressures, the following are features of the sector's processor capability:

- Some processors have restricted access to working capital
- Many processors are heavily reliant on third party procurement firms
- Some processors still operate moderate to high debt to equity ratios
- Some processors have legacy plant issues – efficiency levels, labour conditions, poor location, etc

In order to manage the impact of these challenges a few processors have invested and achieved dramatic plant efficiency gains (refer Appendix III). The majority of the processors are efficient, and currently have strong commercial incentives to continue to improve their performance. Any reduction in processing costs can lead to a significant increase in profits.

The sector's processors are currently forced to compete in two markets, firstly in the procurement of stock and secondly in-market selling products. This competition is reducing processors' profits and their ability to invest in their services and capabilities.

The sector's processors and marketers, when compared to other successful primary sectors in New Zealand, have several core differences. They are:

- A lack of formal support from government or dominant sellers (Dairy has Fonterra, Kiwifruit has Zespri, and Forestry has an Emissions Trading Scheme)
- A lack of maturity in developing and growing brands able to return value
- A large and uncoordinated farmer group
- A regulatory structure that imposes expensive compliance costs
- A lack of communication to sector participants and the wider New Zealand public

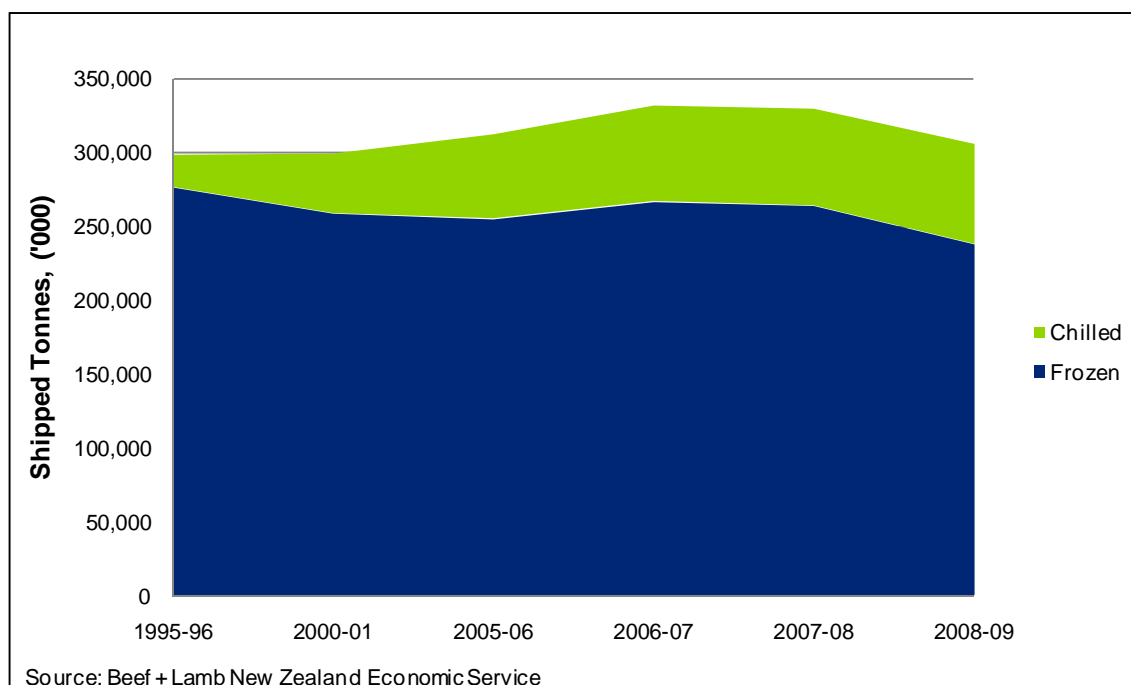
The market and business incentives are already in place to continually innovate and improve processor performance. However, processors' need to acquire stock and manage their utilisation of plant, which is forcing a tactical, short-term view and corresponding behaviours. This is rational and needed to survive in the current environment. However, this is not sustainable in the longer-term. The processors and suppliers need to work together to break the continued cycle of excessive competition and shift the focus to export markets to drive the growth of returns to stakeholders and New Zealand.

The sector's product mix

New Zealand has a track record of providing markets with high quality safe products grown from natural production systems (free range and predominantly grass fed). These attributes are becoming increasingly more important as consumers become more sophisticated in their purchasing decisions. As consumer awareness of where their food is coming from and the systems deployed to grow it increases, the sector's environmentally sustainable and natural products should be well positioned to benefit.

The sector has adapted its product mix over the last few decades. This can be seen in the change from frozen to chilled lamb products. In the 1970's, the export mix was 100% frozen, of which 92% was frozen carcasses⁸. With the adoption of new technologies during the 1980's chilled carcasses became a viable export through improved hygiene and application of food safety practices. This compares to the products in 2010 where only 2% of exports were frozen carcasses, and 26% exports were chilled product⁹. Figures 6 and 7 show how this transition has occurred through to 2008-09.

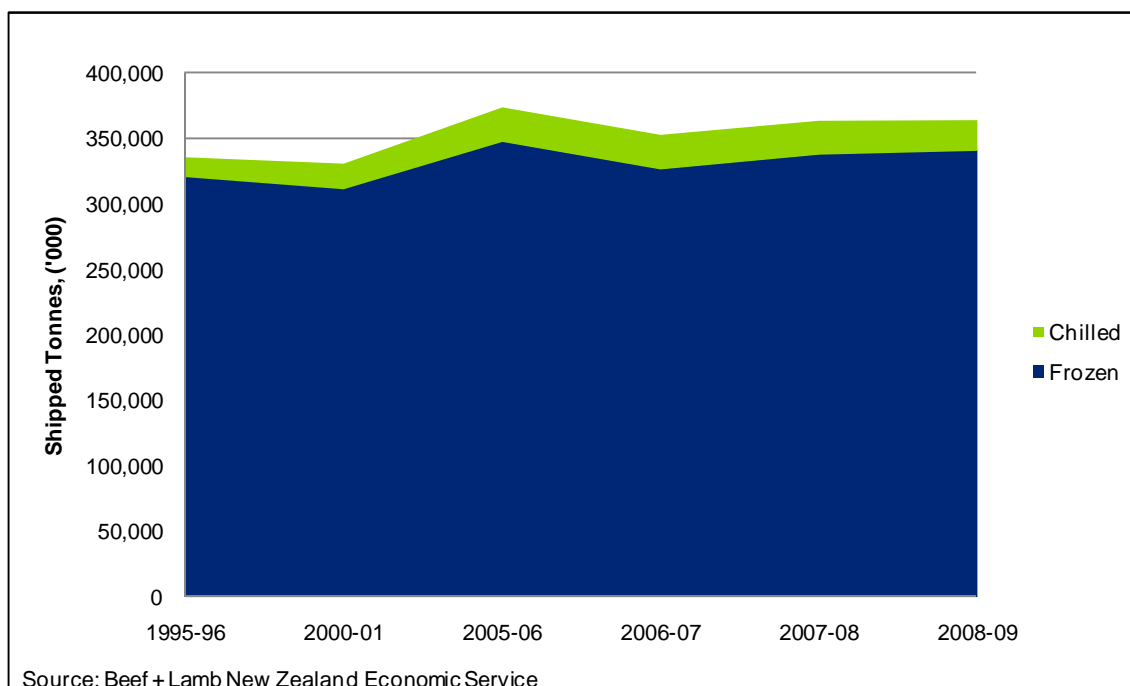
Figure 6: Export lamb shipped



⁸ Source: Beef + Lamb New Zealand Economic Service

⁹ A similar trend can be observed in the transition from carcasses to higher processed cuts – source: Beef + Lamb New Zealand Economic Service

Figure 7: Export beef shipped



Technological advancements have enabled this change from frozen to chilled product and improved the consumer experience of the products,

The sector's competitiveness

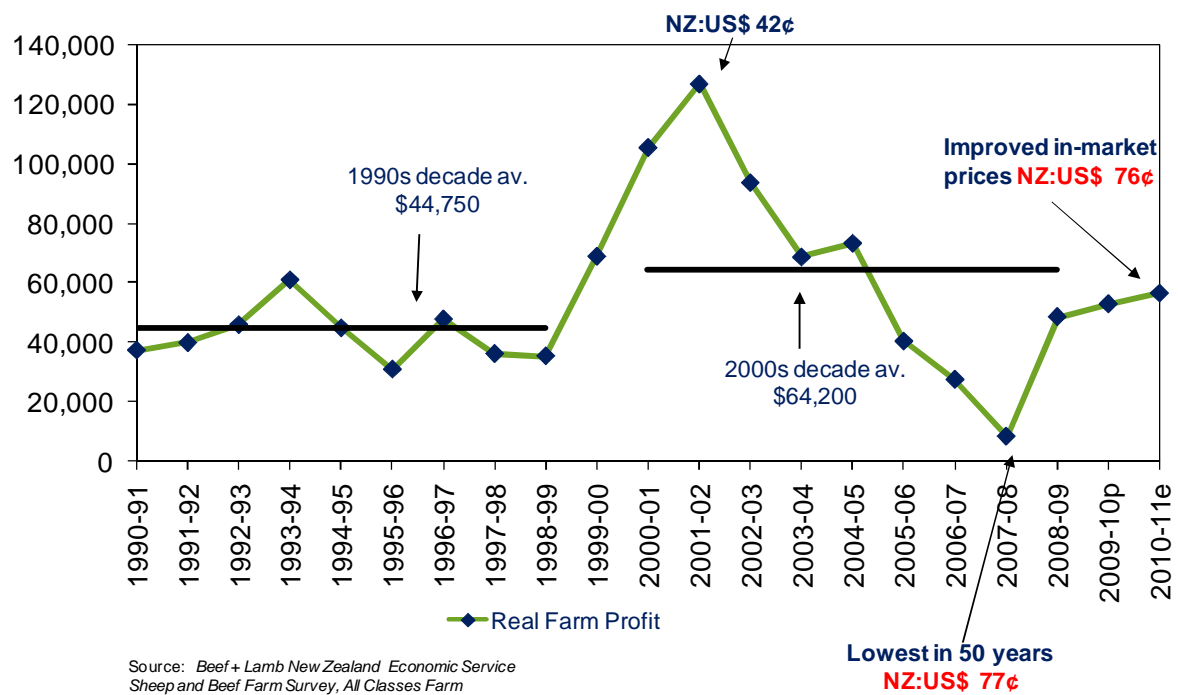
The profitability of the dairy sector has made it a desirable sector for some sheep and beef farmers. This has led to a significant amount of land use change away from sheep and beef farms in recent years. The greatest effect has been in the South Island with the conversion to dairy of traditionally high quality lamb finishing land.

The move from sheep and beef land to dairy is considerable. The dairy pastoral land area has increased to an estimated 2.14 million hectares in the 2010-11 year, which is a significant 59% increase since 1990-91¹⁰. This has impacted sheep, beef and deer pastoral land, which has dropped 27% in that timeframe. In order to stop the loss of land the sector needs to increase its comparative profitability.

The decline in farm gate prices a few years ago was the result of changes in sheepmeat and beef prices, as well as wool and other bi-product market returns. The following diagram outlines the impact of New Zealand's currency, in particular, the impact of a variable exchange rate on farm profitability.

¹⁰ Source: Beef + Lamb New Zealand Economic Service

Figure 8: Sheep and beef farm profit before tax (per farm)



Unfortunately, the low profits also occurred at a time of drought for some regions hurting many suppliers' returns. In some cases this has resulted in some suppliers losing their farms.

4. Sector opportunities

The sector currently has a unique opportunity to embrace the support of both supplier and processor groups to collectively understand their issues and opportunities. Both sides of the 'farm gate' have shown unprecedented commitment throughout this strategy process and a shared aspiration to develop a profitable sector for the future. Both suppliers and processors should seize this opportunity and capitalise on their collective efforts to make a change for their future.

This strategy process is unique. Processors and the wider sector have provided unparalleled access to their information to help understand their pressures and opportunities for growth. For the first time in many decades both suppliers and processors have a consolidated view of their respective opportunities and barriers to growth. From this process, stakeholders have an opportunity to change their behaviours and secure the sector for future generations.

Sector participants from all stages in the chain have expressed their desire and the need for change in the sector. The three areas of significant opportunity for the sector are.

Opportunity	Primary responsibility	Sector change required
Coordinated in-market behaviour	Processors/exporters	<p>Sector participants marketing and selling the sector's products can coordinate their activities to:</p> <ul style="list-style-type: none">• Provide security of supply• Develop markets• Develop a broader category approach
Efficient and aligned procurement	Suppliers and processors/exporters	<p>Sector participants need to rebalance the sector to stop any entity benefiting at the expense of another sector participant. The key needs are:</p> <ul style="list-style-type: none">• Improve access to transparent information to build trust• Provide a fair reward to participants for their performance• Remove non-value adding activities
Sector best practice	Suppliers and their service providers	<p>Sector participants need to understand <i>'the art of the possible'</i> to improve productivity and reduce risk across the sector. The key needs are:</p> <ul style="list-style-type: none">• Access to recognised experts• An understanding of what can be done differently and the associated benefits• A realignment of incentives to allow the sector to rebalance its processing capacity

The sector's market opportunities

Sector stakeholders should consider different approaches to markets. Current stock trends mean individual processors will not be able to supply all markets or large customers with the volume of product customers/markets require. Moreover, this situation is likely to persist in the next few years while stock levels are rebuilt. Over time, premium customers are going to seek greater security of supply. Individual processor/exporter ability to satisfy demand for products will progressively decline as customers continue to grow.

Processors/marketers will progressively require greater coordination of products to ensure they do not lose premium customers through a lack of supply. In particular, processors/marketers need to find ways to work together and meet their customers' growing needs for security of supply and desire for a sustainable long-term supply. This will include the need to consider who the next generation of consumers are for New Zealand's products, understand their needs and work to engage them in new products, values and brands.

The current environment in markets, and processors/marketers' ability to supply, will challenge the sector's way of doing business in the future. In particular, global population predictions indicate that across Africa and Asia populations could increase by another two billion people over the next 30 or so years. While the majority of protein demand will be in poultry and pork in these regions, the premium markets still offer opportunities for stakeholders willing to invest and develop markets for new innovative products.

With a young demographic in developing markets that do not share/understand the tradition of large roasts, have small cooking spaces and who are shifting to more convenience food based diet, the greatest opportunity will be in targeted specialist cuts of meat and traditional cuts (e.g. lamb flaps in China). Progressively this should result in a broad range of products being available for customers (a category approach). Sector participants need to consider what is possible and coordinate actions, not focus on the issues of the past¹¹.

The sector's procurement opportunities

The sector's ability to realise its opportunities will be limited if the current procurement model is not addressed. The procurement process restricts the sector's ability to implement changes and develop new opportunities without exposing businesses to unacceptable levels of risk. These risks include:

- Financial risk from investment in new product developments and in updating plant and equipment
- Market risk due to the scale of investment in market development
- Development risk from investment in research and development

Such investments can directly impact business cash flows (or lack of) and can weaken a business's ability to compete under the current procurement structure or conversely, based on the competitive nature of the sector, businesses could be vulnerable to attack from other sector participants. Dealing appropriately with these very real risks will result in:

¹¹ The main issues to consider are the misuse of sector powers, a lack of contractual commitment from both sides of the farm gate (a lack of trust), and a poor ability to invest in market development work.

- An opportunity for processors/marketers to improve in-market product promotion and coordination
- An opportunity to improve the communication of market signals to suppliers
- An opportunity to increase investment in value generating initiatives
- An opportunity to improve market development

The following diagram maps out the sector's current procurement dilemma.

Figure 9: The sector's inefficient procurement model

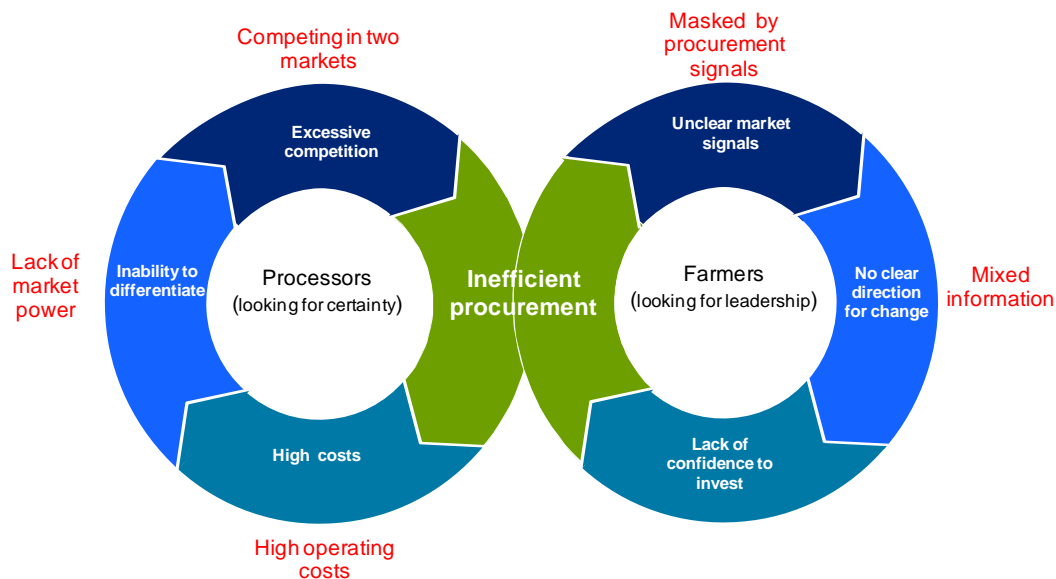


Figure 9 shows how both the needs of processors and suppliers are currently working against each other, allowing the current model to persist. The key need for processors is for certainty of supply to empower them to programme their activities and maximise the value of each component of the animal. The features that are primarily impacting processors are:

- Even with all of the advancements in developing efficient processing plants the operation of the plants will always be a high cost operation requiring sufficient levels of working capital and skilled staff to deliver the quality of product New Zealand has become known for.
- Regardless of the desire, many processors/exporters are unable to generate sufficient profits and control of products (new and existing) in larger markets to create enough scale in market to create greater negotiating power with customers.
- They are forced to compete simultaneously in two markets (stock procurement and in-market) while optimising their plants to make sufficient margin to make a profit. The excessive competition is limiting the sector's opportunities to generate greater profits as it drives a tactical relationship rather than a longer term strategic model.

Equally important on the supplier side of the process is the need for clear leadership to provide a vision and framework that suppliers can follow. While this strategy is the first step in this process the sector's suppliers are requiring:

- Accurate and timely information to understand what the sector's many customers need from them to inform production decisions. The current processing signals while acting as a proxy for market or consumers' needs is masking the true market signals and perpetuating the current process.
- Supply/value chain information and inputs that enhance their farming system through better management of animals to specification, on-farm risks, their cost structure and long-term profitability.
- Sufficient information, support and confidence that they will be able to achieve a return on investment comparable to the risk they have taken.

The net effect of these two cycles is an inefficient procurement model that is not sustainably benefiting either side of the farm gate. Moreover, this process is continuing to create distrust, a lack of alignment and commitment amongst participants. Uneven sector power depresses the long term profitability of the sector through minimising the ability of either side of the farm gate to invest in their businesses. However, the sector now has an opportunity to correct the model and improve respective returns based on fair market prices that reflect each participant's relative performance.

The sector's best practice opportunities

This strategy needs to be owned by all sector participants - the executives, management teams, owner operators and service providers. Each component of the sector has a role to play and is needed to enact the change. To ensure this, the sector needs informed, aligned behavioural change. This means:

- **Informed** – each participant needs and deserves sufficient information to be able to make timely decisions where the risks and likely outcomes are understood and their required actions are understood.
- **Aligned** – each participant needs to understand their supply/value chain partner's strategies to be able to ensure that their efforts are not wasted through a misalignment of what each participant is trying to achieve.
- **Behavioural change** – each sector participant needs to do things differently if they want change to happen across the sector – this will mean behaving differently and supporting those who can also be seen to be behaving differently.

Sector stakeholders need to transition to a longer-term strategic model where individual businesses act collectively to achieve sufficient scale to enable market development initiatives and apply science and technology developments to enhance profitability.

The sector's top performers are good business people, they are highly profitable and exhibit many of the attributes sector participants will need as the sector moves forward. The top performers are not working any harder than other sector participants. Rather they do things differently and are deliberate about where they focus their energies. The sector's top performers provide a point of comparison and more importantly they prove that improved profitability is possible today.

A defining feature of the sector's top performers is their willingness to adopt new science and technologies, trial them in their businesses and adapt their business processes and systems where the return on investment meets their requirements. In order to assess the application of a new idea, top performers have developed data capture, performance monitoring and data analysis capabilities. The net result of this investment of effort is they are able to exert precise influence over their

business's performance and understand the impact of any change. That is, they are able to optimise their business through tracking the business's outcomes rather than individual components of their business (this is consistent in both farming and processing).

Importantly the top performers are located throughout the supply/value chain and are defined by their behaviours rather than their physical attributes or the attributes of their assets. The following table outlines the attributes of high performing processors and suppliers:

High performing processor attributes	Common attributes	High performing supplier attributes
Focused on their customer/ consumer needs	Focused on building and maintaining quality relationships with their supply/value chain partners and customers	Focused on improving the quality of their pastures
Focused on continued investment in plant efficiencies	Focused on what they can control	Focused on improving their knowledge and access to experts
Focused on product form and quality	Focused on their costs	Focused on managing variability in their flock/herd
Focused on product innovation and value capture	Able to benchmark their performance	Focused on optimising their profitability through matching land use to land type
	Focused on shortening the value chain	Focused on leveraging off other sectors where there are opportunities for mutual benefit

For top performing suppliers, where other land use options offer greater returns in the current environment, many have adapted to leverage a benefit from those sectors. For example, where dairy has encroached on traditional sheep and beef land some top performing suppliers are achieving an additional \$300 a head for leasing either beef or pure breed Friesian bulls to dairy farmers.

Sector modelling

The estimated changes of the strategy themes on the economy by have been entered into NZIER's CGE model. This was done through imposing changes on selected variables within the model and allowing the effects to flow through the rest of the economy. The key variables were:

- **Land use** – as the relative profitability of dairy and meat farming changes there will be conversions of land from one use to the other. We represent that by changing the area of land available to each industry.
- **Productivity** – productivity changes at both the farm and processing level are expected to occur over the next decade. These were split into labour, capital and multi-factor productivity shifts.

- **Overseas demand** – changes in overseas tastes and improvements in the matching of meat products to market preferences are expected to increase demand for New Zealand's meat exports.

The CGE technique used by NZIER calculates impacts as changes from a baseline level. That baseline level is projected to 2025 using NZIER's Quarterly Predictions macroeconomic forecasts. Results are then reported as percentage changes from the baseline forecast. Where dollar values are reported they are calculated using the forecast future value of the variable; changes in forecasts will affect those dollar values.

Figure 10: Strategy benefits (cumulative percentage change)

Industry	Type	Impact
Agricultural services	Supplying	3.6%
Electricity/Water/Gas	Supplying	2.4%
Retail	Household expenditure	1.8%
Construction	Investment	0.58%

Source: NZIER

The combination of increased productivity and higher export demand generates persistently greater export revenues for the red meat industry. By 2025 our modelling suggests that the sheep and beef farming sector will have grown by 27% over baseline due to the strategy's initiatives.

In combination with the increased export demand, that causes meat production to rise by 26% over baseline by 2025. Given estimated meat production value of \$8 billion in 2011, this implies a real increase in output of \$2.5 billion by 2025.

The growth in the sector has flow-on effects on numerous other primary sectors. As the sector demands more intermediate input, supplying industries such as utilities and agricultural services grow by 2.4% and 3.6% respectively. Similarly, the increased incomes of people working in these sectors drive private consumption spending. In this instance the retail sector is expected to grow by 1.8% as households' discretionary income rises.

The net effect of these changes is 2.8% for household and government spending (which represents an extra \$5 billion of real consumption). Overall, a combination of increased export value, increased output and greater production from the same land (increased productivity) leads to an increase in New Zealand's wealth and living standards.

Global changes

At a global level the demand for soft commodities is likely to continue to increase as the global population increases. However, the expected population changes do not automatically mean existing markets and emerging markets can handle more volume.

Most of the population growth is expected to be in Asia and Africa within the emerging economies of China and India. The sector needs to deepen its understanding of these markets to understand the opportunities and how best to realise the identified opportunities. This will require different market engagement models and increased coordination of product to markets.

With the emergence of large highly populated countries onto the global stage, New Zealand has an international opportunity to support the creation or modernisation of government agencies and their policies. Security and value capture of the sector's intellectual property will be important to the sector's success. The sector's influence could extend off the farms and out of plants to include the development of central organisations, government department capability and influence of policy settings. This gives the sector the opportunity to influence/control production and inform the standards, giving the sector first mover opportunities in some target markets.

The application of these capabilities is very dependent on each stakeholder's ability to understand the local environment and establish lasting trusted relationships with key individuals. The first step in this is to understand the scope and scale of the countries and local regions the sector is engaging with.

A key driver for this opportunity is the increasing demands on central governments. The obesity epidemic of the West, and the need for access and security of protein in the East will drive government policies in the foreseeable future. The sector can reasonably expect to see Western governments encourage a lowering of consumption along with messages around lowering fat content of products. This will be contrasted by the promotion of healthy protein sources to increase health in emerging countries across Asia.

The net effect of these two emerging trends will be more consumption of meat and edible co-products in certain markets. Key policy changes and emerging global trends that could be expected in the future as a consequence of these trends are:

- Food security issues to increase
- Food production waste will become more of an issue
- Production subsidies could be maintained to support each country's ability to feed its population
- Food producing superpowers will emerge
- Growth in land conversions to food production will increase in emerging countries
- Governing institution policies and regulations will need to be refreshed to reflect the changing realities of food supply and production

These trends will build on the existing trends of:

- Climate change and environmental protection
- Competition for key resources
- Ethical requirements from consumers

If the sector can act to deepen its understanding and position its products these changes represent significant opportunities for growth and value capture. Developing messages that align to a discerning consumer's ethos will be critical to the sector's success. The more that can be done as a New Zealand primary sector message, the stronger it will be with customers and consumers. If this can be achieved, New Zealand will have the potential to become a food super power of high quality premium foods to the world's wealthy.

5. Market engagement models

A core requirement of this strategy is to understand what value market power, scale or capability could provide the sector. How the sector engages with its customers and markets is a key determinant of the relative power the sector can exert. As indicated, 'making better use of scale' is a critical value driver.

In order to maximise capability in this value driver the sector must consider which models can optimise returns within the existing sector structure. While achieving actual scale is able to increase operational efficiencies and more effectively focus on customers/consumers, proxies for scale can achieve the same outcomes without structural changes being required and without the disadvantages that very large organisations can bring.

Proxies for scale can also provide targeted scale efficiently and effectively, if sector participants are willing to change behaviours. There are three main types of proxies for scale that can be applied in the sector. They are:

- **Collaboration models** – these can be characterised through agreements and operating models for a small number of participants.
- **Cooperative models** – these are characterised by a formal agreement to establish a new entity with an ownership structure created to manage the interests of the many owners.
- **Coopetition models** – these are formal agreements focused on agreed customers/markets to minimise direct competition and share resource for a mutual benefit.

The current sector does not consistently exhibit the characteristics expected of exporters of quality meat products to discerning consumers around the world. This is primarily the result of a large and fragmented supplier base paired with a very competitive processor group of sector participants. Under this structure each sector participant has to maximise their autonomy to grow their business, manage their risks and secure investment capital to develop their business.

While the current approach has produced diversity in processor and farm models, it has also created a sector of low investment as a result of a shortage of investment capital. Sector participants need to break down their isolation and consider what would be possible if a different model was available.

In order to understand what could be achieved, sector participants require an understanding of the key events that have helped shape the sector as it is in 2010-11. They are:

De-regulation

In the early seventies, the sector was regulated to control revenue to the farmer, and increase livestock numbers. Minimum prices for sheep and wool were set, and despite profitability, there was little motivation to improve practises and develop technology. As the sector developed it was forced to rely on new and undeveloped markets in order to sell the additional, subsidised production.

In the late eighties, the industry went through a period of rapid deregulation. Price floors were removed, sheep and wool prices more than halved, and farmer profitability dropped by over 50% in one year. The deregulation also allowed new entrants and drove efficiency and technological improvements, especially in the processing plants.

Repeated Industry Restructuring

In the eighties, the vast majority of the 26 operational processing plants¹² had been operational since before 1912. There had been a very restrictive application process for opening any new processing plants, but this was changed with the amendments to the Meat Act in 1981.

Since the eighties, processors have amalgamated and changed their structure repeatedly. There are currently four major processors, of which two are companies and two are cooperatives. However, a the sector's smaller processor provide considerable competition for the larger processors, such that the large processors must respond. They are highly competitive. Each has a vision for their business and the sector as a whole.

5.1. The current market engagement model

The current sector engagement model essentially involves many businesses operating individually and potentially competing amongst themselves. Despite the independence and flexibility of this behaviour, it is fragmented and individuals are unable to achieve scale or coordinate activities to maximise returns to the sector.

The current fragmented approach relies on early adopters to invest in research and development to shoulder the risk and reap the rewards. However, the result is a small amount of research and development because no-one is prepared to undertake the investment, despite the potential upside for them.

Conversely, this current model has meant that both suppliers and processors have the opportunity to develop and own relationships both vertically and horizontally within their supply/value chain. There are some very good examples of this within the sector both domestically and offshore. However, the lack of transparent information and communication between the sector's many participants is an issue. This translates into many individuals acting and behaving in an uncoordinated manner, perpetuating the sector's inability to exploit current opportunities. The following table outlines the current sector's advantages and disadvantages.

	Participants	Sector	Market
Advantages	<ul style="list-style-type: none"> flexibility independence 	<ul style="list-style-type: none"> diversified risk product variety 	<ul style="list-style-type: none"> choice of product/supplier space to negotiate

¹² Source: "Meat Acts" :the New Zealand Meat Industry 1972 – 1997, by Mick Calder and Janet Tyson

	Participants	Sector	Market
Disadvantages	<ul style="list-style-type: none"> • lack of information sharing • minimal access to technology 	<ul style="list-style-type: none"> • difficult to plan • no scales of production 	

Ad-hoc Collaboration

Although the majority of the industry is exhibiting fragmented behaviour, there are a number of participants using an ad-hoc collaboration approach to manage some of their risks, and extract more value from their products. These sector participants are attempting to develop greater scale, while maintaining the independence and flexibility of an individual business.

Often ad-hoc collaboration is created due to a particular set of circumstances. A key driver for adoption of this model is the desire and need to minimise/manage risks. Based on the information collected for this strategy, ad-hoc collaboration continues to be used by both suppliers and processors.

5.2. Alternative Structures

Collaboration

There is an opportunity for the sector to learn the lessons of the past and from other sectors, to work more collaboratively for the good of themselves and New Zealand. Collaboration can be:

- **Voluntary** – is short term, and makes planning difficult
- **Contractual** – is difficult to achieve in competitive sectors
- **Legislated** – is not considered realistic due to New Zealand's commitment to operate by the World Trade Organisations (WTO) competition rules

Cooperative

Any formal structural changes that could be applied to sector participants are excluded from the scope of this strategy. On this basis the cooperative model has not been developed.

Coopetition

Deloitte notes that coopetition is a term to describe a behaviour where sector participants who normally compete in every way may choose particular market opportunities where they could not supply a market, and build a 'coalition of the willing' in order to tackle it. This can be deployed with the existing company structures through a formalised joint venture or through another structure (e.g. the Lamb Company in North America). Through the application of this model, it is feasible to have entities that are concurrently competing in one market, collaborating in another.

Coopetition agreements create economies of scale while the independence of individual entities is maintained. It also minimises direct competition for markets they have collaborated in, and potentially maximises the value they have in the product.

The coopetition structure could be beneficial for the red meat sector in many ways. Processors are selling the same product into traditional markets, and many customers' demands exceed the sector's largest processor's ability to supply. Processors are already competing for the procurement of stock, and competition at the two points in the supply chain is leading to destructive behaviour – this is unsustainable. Collaboration is needed in large emerging markets for products with no point of difference.

Competition is still an important part of the coopetition model. Although collaborative marketing has worked in the international market place, processors have continued to develop new products and technologies. Competing to supply products with a point of difference keeps the sector evolving.

This model is commonly used in the IT sector and it has successfully been used in the New Zealand avocado industry under the AVANZA brand.

AVANZA pools together 85% of New Zealand's avocado industry for marketing and distribution into the Japanese and American marketplaces. The member companies all sell, distribute or market their products in domestic and other international marketplaces.

The member companies came together because of a shared view that there was considerable duplication of resources resulting in competition rather than value. AVANZA has been very successful in increasing the market share of New Zealand avocados in the target markets. It has also increased the stability of fruit prices to each member resulting in better returns per tray and provided superior market intelligence back to the members.

The following table outlines the sector's advantages and disadvantages with the application of a coopetition model.

	Participants	Sector	Market
Advantages	<ul style="list-style-type: none"> enables better use of resources 	<ul style="list-style-type: none"> creates scale in market 	<ul style="list-style-type: none"> increased certainty of supply
Disadvantages	<ul style="list-style-type: none"> potential for competitors to use information provided 		<ul style="list-style-type: none"> decreased competition

The red meat sector needs to act strategically to improve profitability in the future. Despite dysfunctional behaviour in the past, it is possible for the sector to come together to gain scale in market, without legislated collaboration. Coopetition is a good fit for the sector. Through a coopetition model, processors would create scale in the market place, and would be in a better position to build New Zealand's brand. Coopetition in non target and new markets and new products will allow the evolution of the sector to continue.

6. Comparative land use profitability and the impact of the emissions trading scheme legislation

The sector competes directly with many different land based forms of production, including agri-businesses ranging from dairying and forestry through to arable cropping, to horticulture, urban expansion and tourism. Over recent years (between 1990-91 and 2008-09) the sector has reduced by 3.3 million hectares (or 27%). Much of this land has been in the fringe land (unimproved grazing, life style properties) which has experienced a 1.6 million hectare reduction, and with finishing-breeding country and hill/high country both losing 0.9 million hectares respectively¹³.

If these trends continue there would still be a meat sector. The issue is whether the sector will have the critical mass to maintain key markets and be positioned to capitalise on future opportunities. In relative size the sheep and beef sector represents 80% of pastoral land area (8.8 million hectares) with dairy and dairy support representing the other 2.14 million hectares¹⁴.

The areas that will come under greatest pressure are the South Island's finishing land (from dairying) and the North Island's hill/high country (from forestry). The sector needs to address the causes of this decline and through transparent market signals improve the sector's relative competitiveness/profitability to position the sector for growth.

Competitiveness of sector land use

The key sector issue in terms of change in land use is relative profitability. In order for the sector to be sustainable, all stages in the process need to be viable – breeders, finishers and processors. Each stage has an equally important role, and each is heavily dependent on the others.

However, all stages of the sector are at risk:

- Breeders are under pressure from forestry expansion
- Finisher - breeders are under pressure from dairy and horticulture expansion
- Processors are under pressure from a decline in stock numbers

While these risks are often described in relation to the land's topography, recent advances in science and technologies are reducing this. The historical norm that a minimum rainfall of 1,000mm a year is required to enable dairy expansion no longer holds. New Zealand's researchers believe that with new farming systems and forage genetics, dairying is now viable on land with only 800mm annual

¹³ Source: Beef + Lamb New Zealand Economic Service

¹⁴ Source: Beef + Lamb New Zealand Economic Service

rainfall¹⁵. Increasing access to water from irrigation schemes will further exacerbate this problem. The sector cannot afford to continue to lose prime finishing land if it is going to meet existing and future consumer needs.

By comparison, forestry is targeting land near to communities with good road access and stocking rates of less than nine stock units per hectare. The key issue with forestry relates to its economics, and the timeframes to realise value. Forestry acts to lock up land for long periods (on average between 25 and 30 years) to allow trees to reach sufficient size before they can be harvested to recoup the investment and maintenance costs before any profits. This makes any land converted to forestry less responsive to market needs and use change.

The ETS is altering the economics of forestry and changing the relative profitability of forestry and sheep and beef farms. New Zealand sheep and beef farms are complex operations, with many different animals used at different stages in production, each having a role to play on the farm.

The combination of many sector participants reaching retirement age, a tight economic environment with lower land prices and a shortage of talent wanting to become farmers poses risks to the sector. For the sector to maintain critical mass and attract talent back onto the farm, the sector needs to be more effective and ultimately more profitable.

Despite sheep and beef farming lagging other land use profitability (as seen in Figure 11), the sector has some very high performing and highly profitable farmers. The sector can be competitive as long as sector participants are prepared to implement existing science and best practice.

Figure 11: Comparative Profitability 2010 for Farming per hectare¹⁶ comparison

(NZ\$) per hectare	Dairy	Sheep & Beef	Forestry
Net cash income	6,751	470	280
Farm working expenses	3,566	279	60
Farm profit before tax	1,470	86	220

The figures show that dairy was significantly more profitable on a per - hectare basis last year when compared to the other land uses. Comparatively, forestry harvested last year was also more profitable based on its low cost structure. Although the indicative sheep and beef farm was not as

¹⁵ Source: Derek Moot – Lincoln University

¹⁶ Dairy data taken from the MAF National Dairy Model 2010. These figures were originally based on a 138 hectare farm and have been recalculated per hectare

- Sheep and beef data taken from the MAF National Sheep and Beef 2010 Pastoral Monitoring Report. These figures were originally based on a 771 hectare farm and have been recalculated per hectare.
- The gross revenue for forestry is based on a 28 year annuity for radiata pine at a discount rate of 8% per annum.
- Forestry revenue calculated based on domestic average log price for Sept 2010 quarter of \$97/tonne.
- Assuming a typical medium yield of logs for forestry under an intensively managed stand at age 28 of 580 m3/ha.
- Gross revenue includes a deduction for harvesting costs of \$51/m3 which includes roads, harvesting and transportation costs.
- The prior three years performance for sheep and beef were:

(NZ\$)	2006/07	2007/08	2008/09
Net cash income	415	388	464
Farm working expenses	244	253	254
Farm profit before tax	62	89	89

profitable last year these figures are expected to improve considerably for 2011. In considering these figures consideration should also be given to:

- The degree of up front capital investment required
- The timing of revenues and expenses
- The environmental impact of the operations

Understanding the ETS

The ETS represents an attempt to build a robust mechanism to introduce a price of green house gas emissions into the national economy. Through the use and application of designed incentives it is felt that the ETS is a way of meeting international obligations around climate change, specifically, New Zealand's commitment around the Kyoto Protocol.

The Kyoto Protocol is an international environmental treaty aimed at reducing global warming. The protocol works via a formal commitment of participating countries to reduce six key greenhouse gases:

- Carbon dioxide
- Methane
- Nitrous oxide
- Sulfur Hexafluoride
- Hydrofluorocarbons
- Perfluorocarbons

These gases are comparably measured through their carbon dioxide equivalent (denoted CO₂-e) amount. New Zealand has committed to reducing emissions to the 1990 emitted amount by 2012, and to reduce emissions to 10-20% below the 1990 emitted amount by 2020. From 1990 to 2006, the gross greenhouse gas emissions increased by 26%. This compares to the increase in emissions from the combined dairy and sheep & beef sectors of only 3.8% through to 2008¹⁷ (refer to Figure 12 below).

The ETS's primary goal is to provide incentives to reduce emissions. The government believes that the ETS is the least-cost way of putting a price on emissions, and creates an incentive for everyone to change their behaviour. The aim is to do this by moving the cost of emissions onto those who cause them. The ETS legislation will primarily impact five emitting sectors:

- Energy
- Agriculture
- Industrial processes
- Solvents

¹⁷ Source: Ministry for the Environment

- Waste

Currently, approximately half of the New Zealand's total greenhouse gas emissions are produced by agriculture, and overall they have continued to slowly grow.

The sector is already facing some of the costs of greenhouse gas emissions as the energy sector entered the emissions trading scheme in 2010. This has impacted the price of electricity and fuel, increasing processing and on-farm expenses and transport costs. Under current plans the agricultural sector is going to be directly impacted from 2012 as compulsory monitoring of emissions begins, and farmers will have to face the cost of their methane and nitrous emissions in 2015. The introduction of this legislation will challenge farmers to look at their businesses and the way they are running them. As compliance costs increase and the incentives build, there is going to be growing motivation to move less profitable farming businesses into more profitable land uses. The impact will be felt sector wide if the ETS is implemented as currently proposed.

How the sheep and beef sector stacks up against dairy

The sector is very different to dairy, and direct comparisons are very difficult because of the significant differences in farming system intensity. The differing levels of inputs and outputs illustrate they are fundamentally different systems. Figure 12 provides some comparative ratios between the two sectors.

Figure 12: Dairy comparisons with sheep & beef

Year	1 Dairy as a multiple of sheep & beef stock units per hectare	2 Dairy as a multiple of sheep & beef gross margin per hectare	3 Dairy fertiliser as a multiple of sheep & beef \$ per hectare
2002-2003	2.8	2.3	7.0
2003-2004	2.7	2.0	7.8
2004-2005	2.8	2.2	7.1
2005-2006	2.7	2.5	8.2
2006-2007	2.7	2.5	8.4
2007-2008	2.7	4.1	10.6
2008-2009	2.9	1.8	11.0
2009-2010	3.0	2.6	9.5

Source: B+LNZ economic service

- **Column 1** – shows that the dairy sector is operating at a higher stocking intensity, with the range over the period being between 2.7 and 3.0 times higher stock rates per hectare.
- **Column 2** – shows that the dairy sector is operating at a higher profit margin per hectare, with the range over the period being between 1.8 and 4.1 times higher profitability per hectare.
- **Column 3** – shows that the dairy sector is operating with higher on-farm expenses, for fertiliser, the range over the period was between 7.0 and 11.0 times higher fertiliser costs per hectare.

The figures clearly show that dairying is an intensive and highly effective form of land use in New Zealand. However, this needs to be weighed up against the impact on the environment. The greater the intensity of the farming system the greater the care required to manage the impact on the local environment. For example, in 2008 the dairy sector had 4.12 tonnes CO₂-e per hectare compared to 1.50 tonnes CO₂-e for the red meat sector¹⁸.

The dairy sector's intensive model requires significantly higher expenditure on inputs to maintain their production. As column three above shows, the dairy sector invests significantly higher amounts into fertiliser compared to the sheep and beef sector. However, when the output produced per hectare is considered in relation to the fertiliser the sheep and beef sector use, the red meat sector is producing more kilograms of protein per hectare than dairy. Figure 13 below shows how production compares between 2002-03 and 2009-10.

Figure 13: Ratio of kilograms per hectare to fertiliser expenditure (dairy versus red meat)

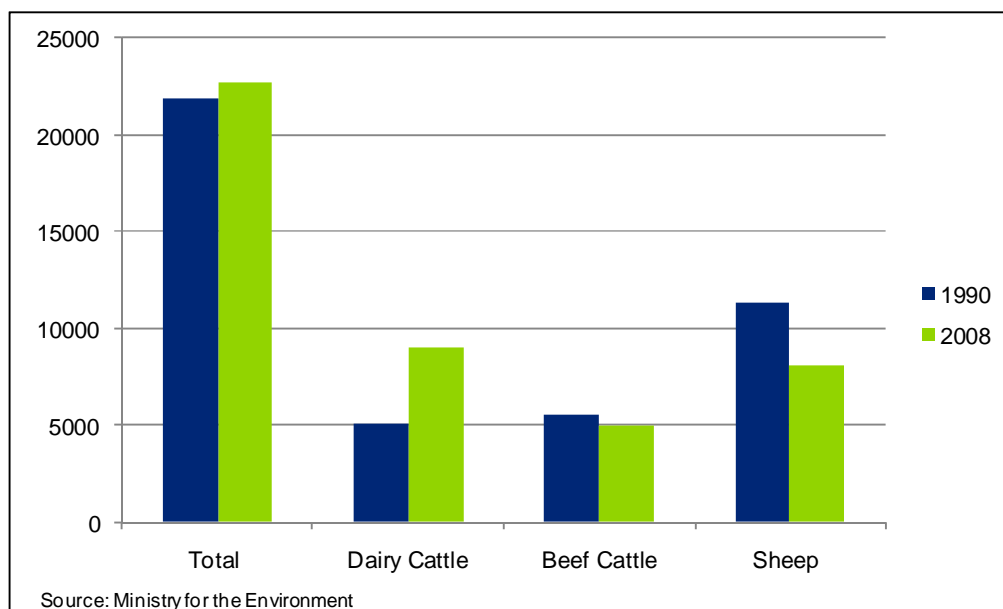
Conversion of fertiliser expenditure into kgs/ha of protein		
Year	Dairy	Meat
2002-03	1.95	2.58
2003-04	1.92	2.73
2004-05	1.74	2.40
2005-06	1.95	3.04
2006-07	1.89	3.00
2007-08	1.64	3.58
2008-09	2.19	4.11
2009-10	2.23	3.69

The dairy sector is being proactive in managing its environmental impacts and improving its practices. While the red meat sector is blessed with the virtue of land area (much of this is low intensity hill or high country land) to help minimise localised impacts, the sector does need to try and improve its emissions.

¹⁸ Source: Ministry for the Environment

Figure 14 below shows how emissions have changed since 1990 across the dairy and sheep & beef sectors. The results show the impact of land use change over this period and the net increase across the sectors.

Figure 14: Agricultural emissions - change in GgCO₂-e from 1990 to 2008



6.1. ETS Incentives

The ETS is designed to incentivise the

- Reduction of greenhouse gas emissions and uptake of environmentally sustainable technologies – through an imposed charge
- Planting of trees – carbon sinks or credit earning offsets

The net result is that emitting sectors, such as agriculture, will have to pay an emissions tax on their net amount of emissions. Within this calculation, farmers will have the opportunity to earn credits to offset their emissions. In practice this could see farmers planting areas of their farms in trees, reducing their effective land area available for sheep and beef farming. The degree of the credits is dependent on the individual's willingness to plant trees.

In some cases the potential forestry earnings available under the ETS will be sufficient for farmers to exit the red meat sector all together. For other farmers the implementation of the ETS will help protect productive land and could fund farm improvements over the short-term. In addition, the use of tax credits as a tax offset will be a strong motivator for some farmers.

Forestry impacts

The design of the ETS's incentives means that forestry owners will be paid a credit for owning and maintaining the trees which absorb carbon. The effect is that a forestry operator receives additional income for limited additional outputs. Figure 15 below shows how the additional revenues flow through to profit and how increases in the traded carbon price affect profitability (for trees planted post 1990).

Figure 15: Comparative profitability 2010 for farming per hectare including impact on forestry of ETS legislation¹⁹

(NZ\$)	Dairy	Sheep & Beef	Forestry (to maturity)	Carbon price \$15	Carbon price \$25	Carbon price \$30
Net cash income	6,751	470	280	390	464	501
Farm working expenses	3,566	279	60	60	60	60
Farm profit before tax	1,470	86	220	330	404	441

The net effect is that forestry will become a more appealing form of land use for some participants as the price of carbon increases. However, sector participants also need to consider the wider impacts of the ETS. They are:

- There are significant costs incurred after harvest. They are either in the form of replanting costs or the repayment of the carbon accumulated in the trees. If the trees are replanted, as the new trees are planted and grow progressively the credits are earned and the cycle continues – it is a recursive process
- The land value and rate of appreciation can be impacted by converting to forestry – participants need to seek information for their own region to understand their individual situation.
- The carbon credits gradually decrease and stop accruing at a point dependent on the type of tree – this is based on the tree's ability to absorb additional carbon (their size and growth rates)
- The paying back process for the credits is at the market price at that time which could be higher than the price earned for the credits (there is pricing risk)
- One's ability to pay the credits back in the future depends on the price of credits, the price of the wood and whether the individual or business has sold the credits earned from previous years
- If the individual or business cannot fund the credit repayments the land will remain locked into trees, and future land development will be based on this initial repayment of credits creating a barrier to land use change under this scenario. If this payment cannot be made, the land will lose all cash flow generating abilities

These points are important in deciding how to use the ETS system and ensuring individuals are not locked into long term land uses that they do not fully understand. The sector could benefit from the ETS over the short term if farmers have poor producing land that can be locked up over the longer-term.

¹⁹ Carbon stocks per hectare for forestry have been averaged over nine areas of the country for *Pinus radiata*.

Furthermore the market has introduced forestry investment models where farms are matched with investors to share the risk and the initial high capital outlay. For some farms these supported management schemes have allowed the productivity on-farm to increase as land use, to land type has been optimised. The key for any person looking to grow trees for carbon credits is to get reliable expert advice, understand the full implications for their situation and make an informed decision.

Issues for consideration in relation to the ETS and the red meat sector

The ETS legislation is going to have a significant impact on the red meat sector, and in its current form will challenge the role of many of the sector's participants across the supply/value chain. Some of the points in the scheme that will put added pressure on the sector and in some cases how they could be improved are listed below:

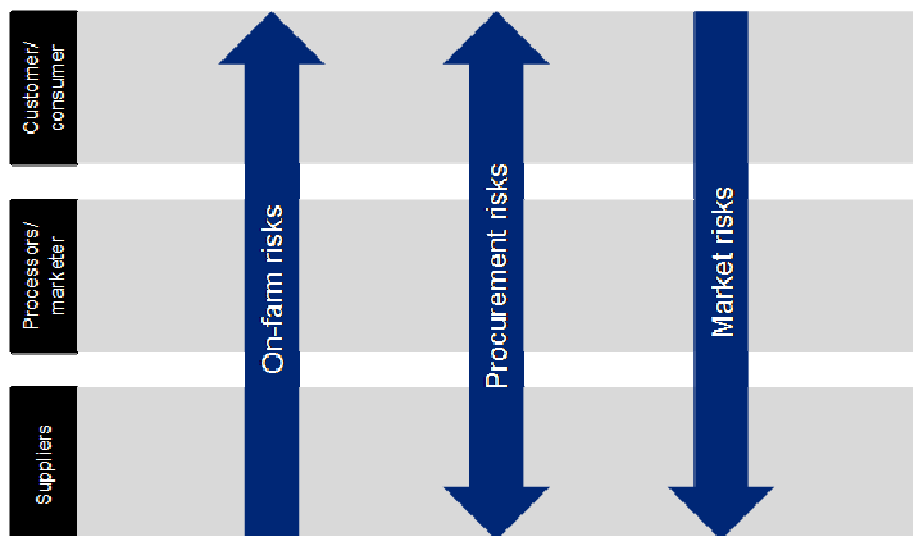
- The obligation for administering the scheme is with the processor – this could be shifted back to the farm using the farm's capital stock numbers as the point of measurement. Under such a change, any productivity gains are incentivised, not penalised. In addition, the farmer can minimise the administration cost as they are already monitoring stock numbers for their annual accounts and reporting purposes.
- The current proposed scheme does not link the end cost of carbon with consumers. Therefore the net effect is that the farmer bears the entire cost. This is a significant issue when the end consumers for the sector are predominantly offshore. The net effect is the sector's production becomes less competitive in its land use.
- When the scheme is applied to agricultural methane and nitrous oxide in 2015, there will be an allocation of NZU's (carbon credits) to provide assistance to trade exposed industries.
- As the scheme's intention is to meet the country's obligation from the Kyoto Protocol, the scheme should match the intention to reduce green house gas emissions, regardless of how this is achieved. Currently, some proven methods of reducing green house gases are not included in the scheme's methodology for calculating a single participant's net carbon emissions. The legislation should include all techniques and technologies scientifically proven to reduce emissions in the methodology used to calculate net emissions.

Regardless of whether global warming is real or not, it is real in the mind of the sector's consumers, and as such the sector needs to be able to respond. An ETS scheme is one way to do this. The ETS is a mechanism to show customers/consumers that the sector is addressing the issues important to them. The critical issue for the sector is how to optimally implement the ETS in such a way that it is able to achieve the required targets, with incentives that enable productivity gains and the sector to increase its returns.

7. Risk Management

One of the themes that emerged strongly from the primary research for this strategy was that successful participants – wherever in the sector they operated – focused closely on the risks that they could control. These risks can be grouped by who they affect, Figure 16 illustrates where the identified risks impact the sector stakeholders.

Figure 16: Sector risks



At a high level, the sector's risks can be grouped by:

On-farm risks	Procurement risks	Market risks
<ul style="list-style-type: none"> • Fragmented leadership risk • Climatic risk • Financial risk • Competing land use risk • Inadequate succession planning risk 	<ul style="list-style-type: none"> • Legal risk 	<ul style="list-style-type: none"> • Market risk • Currency risk

Two new risks have emerged over the last two decades. First of these is the risk associated with competing land use driven by the continued rise of dairy conversions on what has traditionally been finishing country, coupled now with the threat posed to hill country by forestry. Second of these is the issues created by inadequate succession planning.

When considering these risks through this section, each risk has been described in isolation in order to discuss the drivers of the risks, and where possible potential mitigating factors. However, it is worth noting that all of the above risks are interlinked to a significant degree. The reality is that they are all sector risks, and need to be viewed in that context.

7.1. Market Risks

These are the risks and sub-risks that are generated in market or from the sector's interface with the market.

Market Risks

There are three key subcomponents of market risk:

- **Market access** – the market access issue is driven by politics, bio-security concerns and health risks. Such issues are the responsibility of the Minister of Trade, and the Ministry of Foreign Affairs and Trade (MFAT). Support on market access issues is provided by many interested parties, and the processes are well established.
- **Market demand** – while there has been a strong linkage between in-market pricing and demand, there are clear examples where the price escalation has reached a point that has triggered a collapse in demand.

Over recent decades special interest groups and supermarkets have informed and shaped market risks through trying to lead consumer preferences. For example, the climate change lobby, and their 'food miles' argument and debates over relative carbon footprints of differing forms and locations of production.

- **Market reputation** – New Zealand's ability to secure premiums for meat products in markets is partly dependent on the sector's reputation and its customer/consumers perceptions. Examples include:

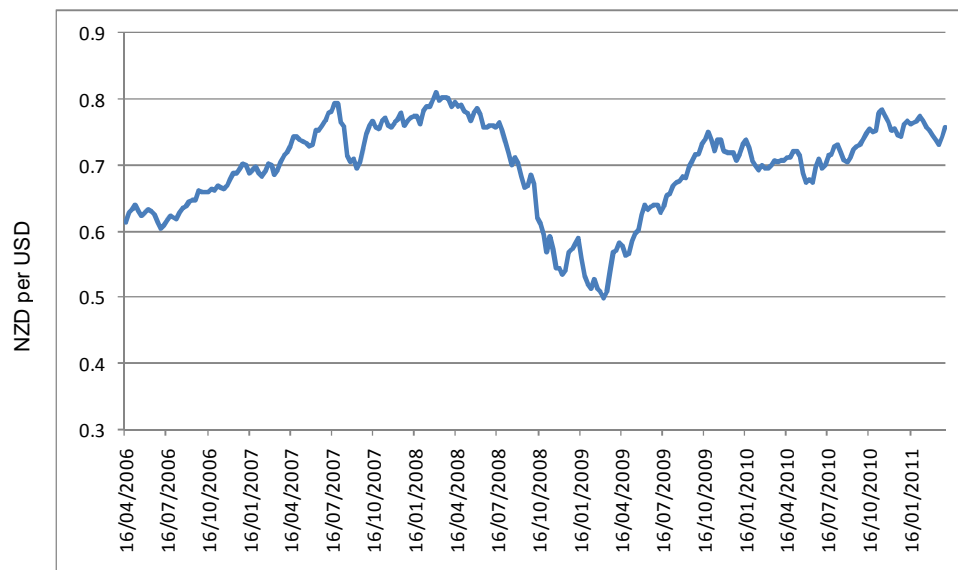
- Animal welfare issues
- Health impacts
- Religious non-compliance
- Genetic modification/cloning

More recently, the debate has moved to consideration of the maximum amount of red meat that individuals should eat. If those proposals are adopted, the implications for market demand in our traditional markets could be profound. However, there is some opportunity to mitigate the impact through telling the New Zealand story better and through building new markets where consumption is low.

Currency Risk

There is no doubt that the volatility of the New Zealand dollar has had an impact on the overall profitability of the sector. The movement of the NZ\$ vs. US\$ is shown below over a 10 year period.

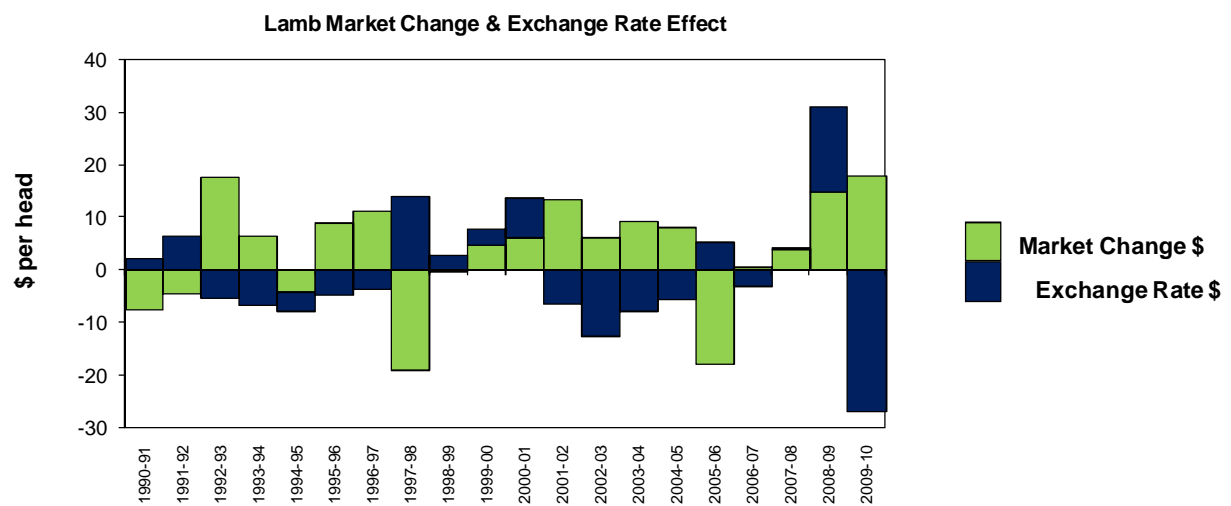
Figure 17: Currency Chart



Source: Oanda.com

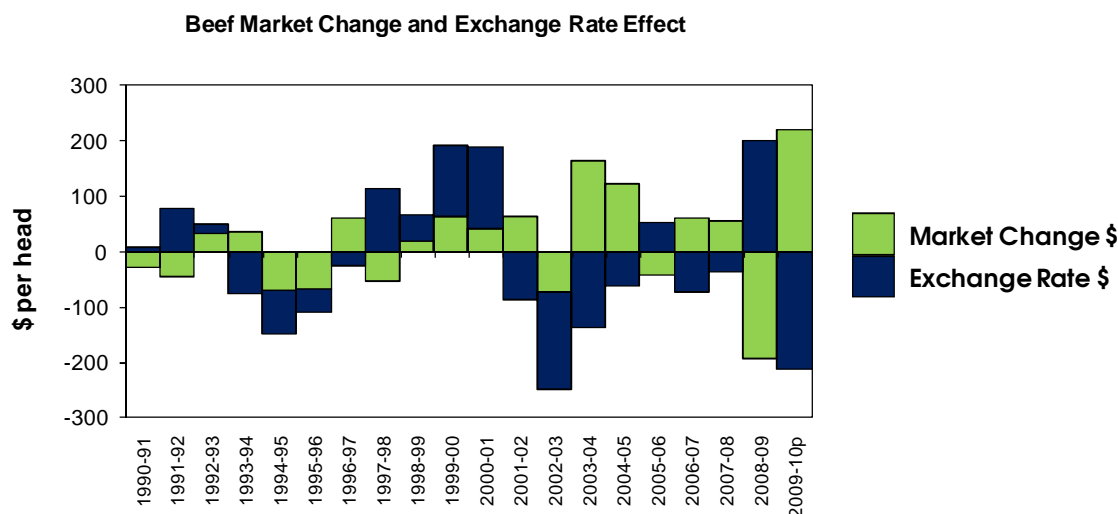
The figure shows the volatility in the New Zealand dollar against the world's reserve currency. Two key points to note are the scale of increase in value since March 2006 and the impact of the economic crisis as observed in March 2009. There is a view that the movements in the value of the NZ\$ act as a balancing mechanism for changes in the in-market pricing of New Zealand product.

Figure 18: Lamb exchange effect



Source: Beef + Lamb New Zealand Economic Service

Figure 19: Beef exchange effect



Source: Beef + Lamb New Zealand Economic Service

Some processors have tried to manage the volatility of the NZ currency through the use of market instruments like forward contracts and options. The use of these instruments can be very effective if the business has the appropriate skills to manage their use. If capability is an issue, businesses trying to manage their risks should consider outsourcing the work or hiring an expert. Otherwise misuse or an uninformed business can increase risks back down through the supply/value chain.

Figures 18 and 19 show a shift in the early 2000's where the market and exchange impacts have generally moved against each other minimising their impacts, but also the benefits.

7.2. Procurement Risks

These are the risks and sub-risks that are generated by the interface between the sector's main stakeholders.

Legal risk

The principal legal issue identified during this project was the lack of contractual enforcement with respect to procurement contracts. It is clear from the data collected during the research that both sides of the contractual process have breached contracts without consequences in the past. It is also clear that some form of contractual rigour is essential for the sector to move from the current situation to one where there is a genuine and sustainable commitment in both directions between suppliers and processors, whether operating in a supply chain or a value chain.

In Deloitte's view, in order to not expose any one processor to undue risk, the sector should consider the creation of an arbitration service that is independent of any processor and that is capable of maintaining oversight over contractual commitments. In the absence of a unified industry good body, this would require setting up a separate entity similar to the Tenancy Tribunal. However, absorbing the function into an effective and united industry-good body would be preferable.

7.3. On-farm Risks

These are the risks and sub-risks that are generated either on-farm or are environmental that impact activities on-farm.

Fragmented Leadership Risk

In the data-gathering phase of this strategy, and quite emphatically in the wider consultation process, there was considerable comment on the issue of lack of leadership. We note that the issue is not one of lack of leaders. There are many leaders within the sector, but the sector is suffering because it does not have a unified voice.

In the discussion above regarding market access, comment was made about the lack of understanding in senior decision-making circles about the relative scale and importance of the red meat sector. This is in part due to the competing voices that represent constituencies within the overall sector. There are too many peak bodies to do the sector justice.

It may well be that a single sector voice is required to improve communications across the sector. Such an outcome would be desirable if it led to a sustainable change in the way that the sector represents itself to the wider community, and the way that the sector collectively faces the significant challenges identified.

Climatic risk

New Zealand is a country of significant climatic variation, varying from warm subtropical in the far north to cool temperate climates in the far south, with severe alpine conditions in the mountainous areas.

According to NIWA, the mountain chains that extend the length of New Zealand provide a barrier for the prevailing westerly winds, dividing the country into dramatically different climate regions. The West Coast of the South Island is the wettest area of New Zealand, whereas the area to the east of the mountains, just over 100 km away, is the driest.

This level of climate variability leads to a degree of complexity when managing a pastoral farming system. None of this is new, and answers to mitigate the issue have been around in varying forms for decades. However, there have been some advances in pasture cultivars, irrigation/water storage and management that do offer opportunities to mitigate the climate risk further.

In addition, there is clear evidence that those farmers who do focus strongly on what they can control are more successful than those who do not. In the context of climatic impact, in addition to using different cultivars and possibly the use of supplementary feed to reduce the risk of sudden dry weather, some farmers are collaborating with others or with a processor in order to have additional options available to them for finishing their lambs or calves if they lose feed. Others have simply focused on a stocking regime that is designed to minimise risk rather than to maximise revenue.

Financial risk

The sector has always faced financial risk as do all business sectors in the country. However, there are some factors that have exacerbated the level of financial risk that the sector is currently facing. These are:

- **Interest rates** – The average amount of equity on farm is 80%. The level of debt has grown from \$6.4bn in 1999-00 to \$16bn in 2010-11. Given these high levels of debt carried by some farmers, and up until recently by a number of processors, the level of interest rates can be a significant issue for the sector during periods of low profitability. While the recent cut by the Reserve Bank will have a positive impact, a number of those interviewed viewed interest rates as a significant influence on the profitability of their business. Given the complete lack of ability to influence the rate, it is counterproductive to spend time worrying about it at an individual level.
- **Cost management** – top performing businesses, in any sector, understand – and actively manage - their costs. Looking on farm first, the online survey that formed an early part of the data collection provided the worrying statistic that 27% of suppliers responding did not understand their costs. This was to a limited extent corroborated by the interviews, where a number of farmers referred questions on cost to their accountants – ignoring the fact that their accounts are produced for tax purposes, and usually months after the financial year in which the cost data could have been used as a management tool. All the top performing farmers interviewed understood, and managed, their costs. It is vital for any business to be able to do this.
- **Remote decision making by major banks** – banks making lending policy changes from Australia was a recurring concern voiced throughout the data collection process, particularly by those who were struggling to generate sufficient cash flow to service debt. The data collection process found that there were suppliers who were covering both interest and principal on their loans, but were in breach of banking covenants due to revaluation of property and were increasingly under pressure from their bank..

Competing land use risk

In recent years, there has been a significant loss of finishing land through dairy conversion, and a loss of good hill country to forestry. While there is no doubt about the importance of matching land use to land class – and some land may well be optimally used in planted in pines – the risk of continued loss of land to red-meat farming brings with it the risk of loss of critical mass. This risk is documented elsewhere in the report. However, from a farmer view point, one critical issue to consider is the opportunity created by running a 'portfolio management' approach that optimises land use to land class.

Inadequate succession planning risk

This issue is by no means confined to the red meat sector – it is an issue facing the majority of SMEs in New Zealand. However, that is cold comfort to the sector. The facts are that the average age of a red meat farmer is in the mid to high 50s, and the average return on assets is inadequate to attract the next generation into the sector. Many suppliers spoke of the lack of interest from their children in the farm, and many had made inadequate succession plans. Unless alternative models (such as 'sweat equity' or 'share-farming') are pursued, it is hard to see how the sector will deal with this in the short or even medium term.

8. Understanding the sector's processing capacity

New Zealand's processing environment is diverse and highly competitive. This is the consequence of companies, cooperatives and individuals responding to changes in regulation, technology, plant closures, credit issues and limitations on resources. The result is a group of independent economic entities with significant capital invested in the sector fighting over small margins (based on data provided) often determined by access to stock and demand for products.

This environment has created high levels of distrust amongst companies where information is managed and maintained within the businesses to minimise the risk of the information being used against them. The processing sector's history is littered with the consequences of businesses that have failed as the result of not managing their risks.

The current processors are the survivors of this highly competitive environment - they each have a vision for their business and the sector. They have survived through continuing to optimise their business operations and returns from every product they produce. They have done this in equally valid but very different ways as they strive to distinguish themselves and their products. This diversification is an asset and one that should be built upon to create a stronger category view in markets as the traditional lack of product differentiation across the sector is not sustainable.

The recent decline in stock numbers has been significant, and poses a real threat to processors and the sector. The sector has experienced a similar situation in the past, most recently during the 1990's there was a significant shortage of animals that contributed to the failure of some processors. While the protection of businesses cannot and should not occur in a market driven sector, the value lost and the resulting impact can and should be minimised for the benefit of the remaining sector participants.

The current environment differs from the past, there are:

- **Stronger balance sheets** – many have repaid debts limiting the influence of/reliance on banks in the short term
- **Better use of technology** – many have invested heavily in new plants lifting productivity and enabling lower marginal cost structures to manage their processing workload

These differences will help in the short term. However, if the current situation continues as it is expected to, the sector's processors will come under significant pressure both operationally and on their balance sheets. Because of the declining stock numbers the current situation is not sustainable.

The sector has provided a significant amount of detailed information into the strategy development process. For the first time a strategy process has had the sector's data from both sides of the farm gate. Much of the information has been provided on the condition that it remains confidential. For this reason the information provided has been independently analysed on behalf of the entire sector to gain a true and fair understanding of the issues. The following sections discuss the findings of the independent analysis.

8.1. Export processor performance

The sector's environment for processors has meant that many of New Zealand's meat processors are amongst the best in the world. The analysis shows that they are heavily incentivised to continue to innovate and invest in their capabilities. More importantly, the processor's investments and direction for their businesses are increasingly being communicated to the sector. This is best seen in the information they provide suppliers, their annual reports, presentations to suppliers, and public discussions of the issues and opportunities. This is significant compared to previous periods where little engagement had occurred.

Many processors have invested tens of millions of dollars in their plants and have plans to continue this level of investment over coming years. These investments and the subsequent innovations will benefit the sector as a whole for many decades to come. The sector's processors should be recognised for their efforts in these areas.

The analysis of the processor data has shown that historically they have been very effective in managing the sector's variable stock flows through working with staff and unions to remain flexible to the needs of their suppliers. However, their ability to manage the variability in the stock profile has decreased, affecting their ability to efficiently process meat over the past few years.

The analysis showed that the gap between the processors' installed capacity and their actual processing number has increased steadily over recent years. There has been a 80% increase in this gap between 2006-07 and 2008-09. Using the sector data provided, the overall cost to the sector is just under \$4 million per month (or \$48 million per year).

The animal numbers processed are most affected in the few months before and after the traditional peak processing periods, and any effect is further increased by a highly variable peak. Over the last few years the peak processing volume has tended to decrease. Predictions for the 2010-11 season are for a significantly reduced peak due to the low number of animals and the availability of grass which is enabling suppliers to grow larger heavier animals, altering the traditional processing profile.

The sector's processors have very different operating models and the quality/volume of data required to ensure a reasonably fair comparison has been high and the responding processors have been very supportive in the data provided. The analysis of processors' revenue and expense data show that in some cases the variance across the processors can be significant (refer Appendix III for further detail).

Several examples are:

- The transportation of animals is a significant cost to processors and the sector. The analysis shows that those processors that have to source animals outside the regions where their plant/s are located incur significantly higher costs (as would be expected).

These practices are rational at a processor level as they need stock. However, this behaviour increases costs to the sector. Based on the data provided, the annual cost to processors for transporting stock to plant is in excess of \$100 million dollars a year (any transport costs paid by farmers or third parties are excluded from these figures). While much of this cost is unavoidable, better coordination of stock to plants would produce savings to the sector.

- Processing chain speeds also vary for beef, sheep and deer. Importantly though, the average speed for sheep and lamb is increasing, reflecting the ongoing investment processors are making in improving their plants.
- The analysis also indicated that those processors that are actively operating or seeking to establish value chains are consistently achieving higher average prices in markets for all species compared to their counterparts. On average these processors between 2006 and 2009 have been earning:

(\$ per kg)

- between \$0.57 - \$0.89 more for Lamb in any year
- between \$0.27 - \$0.78 more for Mutton in any year
- between \$0.55 - \$0.89 more for Cattle in any year
- between \$0.23 - \$1.49 more for Deer in any year
- Similarly, the prices paid to farmers at the 'farm gate' also varied greatly. In fact, in some years particular species had more than twice the variance than the comparable revenues in market.
- The data show significant costs being incurred by processors in relation to procurement costs of \$45 to \$50 million dependent on the year²⁰. The processor procurement costs reflect both internal and external procurement capabilities - where applicable. Given the short supply of lambs and sheep the average cost of procuring animals is increasing, while other than steers, the average procurement cost for cattle has declined slightly.

Since the deregulation of the sector in the 1980's the lack of regulations on the processing sector have contributed to maintaining excess capacity and competition through low barriers of entry and high barriers to exit. A significant issue for the sector in the current environment is the exit costs for processors. These costs are the result of redundancy costs for long serving staff, the loss of capital value on the balance sheet and the behavioural impact from suppliers shifting processors due to the closure of plants.

Based on the data provided, the exit costs can vary significantly due to the circumstances of each plant. However, the public comments by The Silver Fern Farms Chairman at Methven in December 2010 are conservative, that is, a one million capacity lamb plant would cost at least \$10 million to close. The two main cost drivers are the capital write-down on the balance sheet and the operating costs from making redundancy payments.

8.2. Processor capacity

As stated, the data provided is confidential and cannot be published. Therefore, the sector's sensitive figures have been aggregated to protect individual company information.

Lamb

The sector does have a declining lamb base, with another step change reduction in numbers in the current season; the result is that the sector will have considerable unused capacity. Much of the

²⁰ These figures exclude any costs incurred by suppliers through store stock or sale yards.

reduction is in the months either side of the traditional processing peak, as well as a declining peak. What this means from a total throughput perspective is that the sector does have a worsening utilisation position.

The sector's peak processing figures in March 2010 meant that the sector needed all of its capacity for a very short period to process animals at the peak. These results indicate that the sector needs to manage the peaks better. This could be done through better management of supply to plant and/or better management of risks on-farm to reduce the need to send stock to plant all at once.

The costs of these uncontrolled peaks on the sector are substantial. Based on the data provided, the estimated impact of the fixed costs across the plants for the difference between the peaks in 2009 and 2010 was in the order of \$44-\$51 million dollars for lamb plants. These costs represent the cost of maintaining plant that might not have been needed if the peak had been better managed. These costs will be significantly bigger in 2010-11 with the further decline in lamb numbers and a flat processing profile from a warm wet autumn.

If the sector makes gains in managing the flow of animals to plants there will be opportunities to consolidate the sector's capacity. The degree of consolidation will be dependent on:

- The trend in stock numbers
- The cost of redundancies
- The sector's commitment to not opening new plants without a significant reversal of stock numbers
- The willingness of farmers to provide committed support to the proactive processors over a longer period e.g. commitment to supply stock to the processor for a minimum of 3 years to allow any closures to be managed economically

Using the sector's historical peak week processing capacity as a proxy of long run utilisation, the sector has operated a 12.5% to 15% reserve capacity to manage any adverse events where stock needs to be processed quickly. Based on this data and the sector's performance over the late 2000's when the sector was impacted by a series of droughts, this extra capacity was sufficient to manage the processing of animals from affected regions. However, the recent declines in lamb numbers (as stated above) mean that the sector's reserve capacity has increased significantly in the current 2010-11 season.

Cattle

The sector is not experiencing the same decrease in beef numbers as it is for sheep. Beef numbers have stayed relatively stable in the recent past, making the downward trend in sheep numbers less devastating for the sector.

In comparison with lamb, beef plants have much higher third party procurement costs. The following section outlines some of the differences between the lamb and beef plants.

Transport costs are a significant proportion of costs, and are likely to increase with the application of the ETS legislation from 2010. However, the difference between the lowest average cost to the highest average cost was significant. For example with the transport costs of steers, the lower cost processor group ranged from mid \$10's through to high \$20's, this compares to the higher cost operators group that ranged from low \$40's through to around \$60 per head.

Procurement costs are significant and vary greatly across processors (refer Appendix III). Based on the data provided, the greatest variance is for steers in 2008 at nearly \$20 and followed by heifers with a variance of \$15 per head.

Based on the cost information provided and animal numbers procured by the processors, the utilisation of beef plants is much higher than for sheep and lamb. The fixed cost from additional capacity in plants for beef is estimated to be less than \$5 million. Based on the information provided, the number of cull cows being processed is continuing to grow, peaking in April and May each year. Their numbers at the peak have increased to represent between 40% and 43% of all beef killed in these months. The sector can expect the number of cull cows and their impact on capacity to increase as the dairy sector expands and the national herd increases.

8.3. Overview of processor capacity

Processors are experiencing a period of increased over capacity in lamb plants in particular. This increased over capacity did impose an estimated cost on the sector of up to \$55 million in 2008-9. The short and late peak period in 2009-10 however meant that this capacity was required by the suppliers. The continued decline in lambs since 2008-9 means that the cost to the sector will be much higher in 2010-11.

The sector will have difficulty in realising the full benefits of rationalising over capacity if the processors are unable to manage exit costs in an efficient manner. To do so will require supplier support. This would be best provided via a contractual commitment to supply stock after the closure of the plant. Moreover, unless suppliers are able to manage the on-farm risk more effectively, processors will always need to carry a significant level of reserve capacity to manage a larger peak as a result of adverse events on-farm.

9. Capturing additional value for the sector

Sector participants will benefit from a clear understanding of how value is created and destroyed across the sector (both domestically and internationally). A 'value driver' is a critical organisational ability that gives it a competitive advantage that improves returns.

New Zealand's sector structure has very few truly vertically integrated businesses, which means that very few participants will be able to directly influence all of the sector's value drivers. The sector requires coordinated and collaborative partnerships between likeminded individuals or entities throughout the supply/value chain.

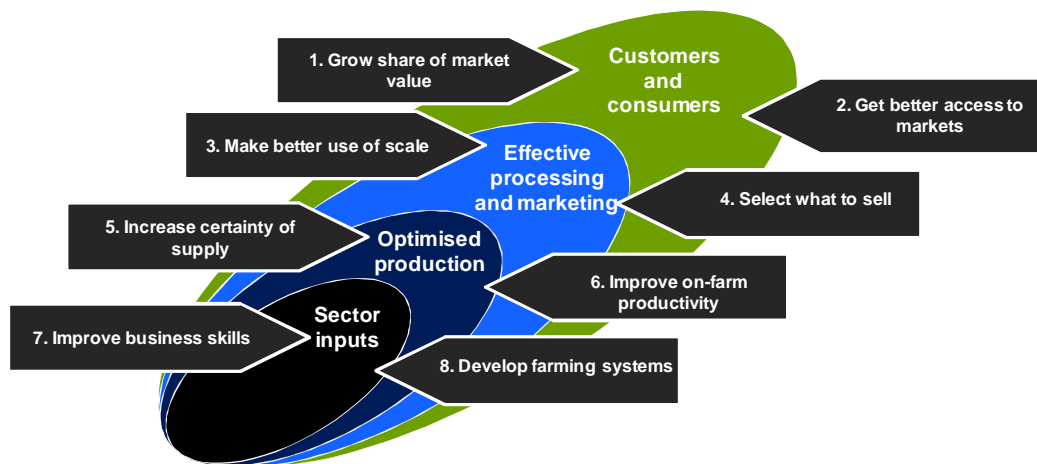
The strategy consultation process has highlighted that the sector has lost trust between suppliers and processor/exporters. The sector needs to rebuild trust between sector participants. This section discusses eight value drivers that provide a framework to understand value creation and provide a means for sector participants to open up a dialogue with each other. Collectively the sector needs to:

- Understand each participant's strengths and weaknesses
- Be honest and transparent with their strategies
- Align their efforts

Sector participants collectively will benefit from knowing how to use the value drivers to improve the sector's performance through targeted actions.

Throughout the consultation process, sector participants have said the sector needs action within the next five years to ensure critical mass is maintained. In response to the sector's requirements the strategy's data and opportunities have been split into the sector's immediate opportunities (within the next five years) and its medium to longer term opportunities (within five to fifteen years) for each value driver. The following figure outlines how the value drivers relate to each of the core components of the sector.

Figure 20: The sector's value drivers



The figure shows how the sector was divided into four primary stages based on position within the value chain from market to farm. They are:

1. Customers and consumers
2. Effective processing and marketing
3. Optimised production
4. Sector inputs

Each stage represents an essential component of the sector that needs to be optimised. The sector can no longer afford to optimise different stages of the sector at the expense of the others – the sector needs to be optimised to produce sustainable profits that can be returned to the sector for the sector's future.

Each stage has been overlaid with value drivers that will optimise sector performance by informed, aligned behavioural change. The following section relates the three key sector themes (coordinated in-market behaviour, efficient and aligned procurement and sector best practice) to the value drivers and discusses each value driver. Furthermore, each of the sector's challenges and opportunities, and required attributes are discussed to help direct activities as the sector moves forward²¹.

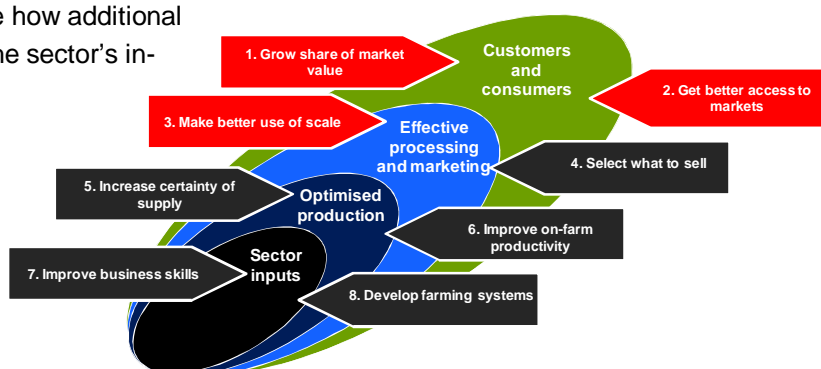
²¹ A workbook has been developed to aid sector participants assess the performance of their supply/value chain. Please refer to the workbook in Appendix I.

9.1. Sector theme 1: Coordinated in-market behaviour

Three of the sector's value drivers describe how additional value can be obtained through modifying the sector's in-market behaviour. They are:

1. Grow share of market value
2. Get better access to markets
3. Make better use of scale

Each value driver is described below.



Grow share of market value

Value driver description: the ability to capture a larger proportion of the final sale price and/or achieve premium prices to increase revenues.

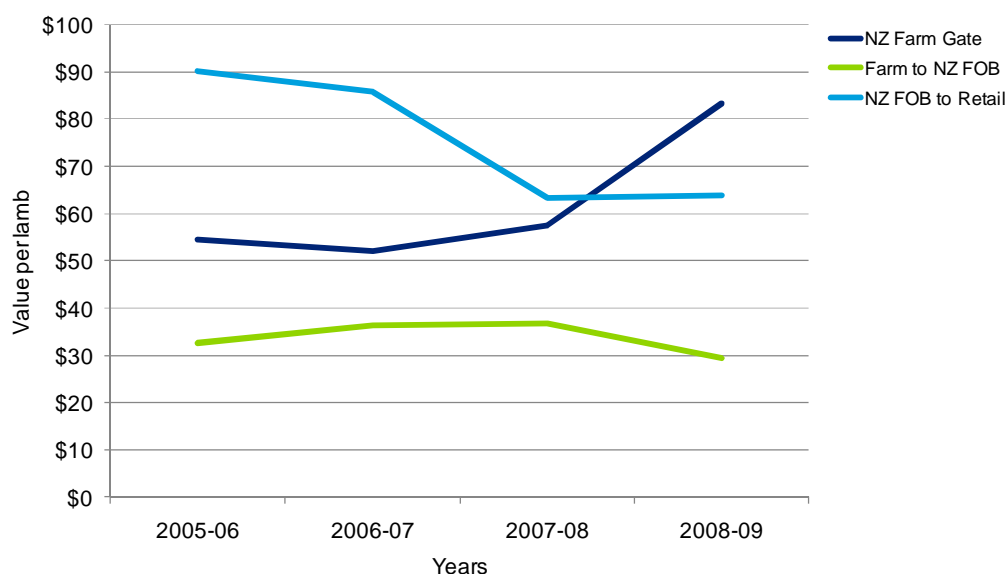
The sector's ability to optimise value from markets is dependent on the sector's ability to create and maintain relative power in target markets. Currently the market power continues to reside with the sector's customers (i.e. wholesalers, re-processors and/or supermarkets). This is the result of several factors:

- Lack of New Zealand owned consumer brands
- Limited alternative markets for key products
- Local subsidies propping up uneconomic domestic supply in traditional export markets
- Economic size and power of the supermarkets
- New Zealand's traditional production focus for exports
- New Zealand's long and uncoordinated supply/value chains
- New Zealand's fragmented exporter group
- Lack of differentiated products from New Zealand

Recent changes in the global demand for protein and decreasing supply of some proteins (e.g. lamb) have seen importers/re-processors and retailers increase prices to suppliers to secure product. New Zealand has an opportunity to do things differently within the current global market to lock-in current gains and secure its local production/processing capabilities and ensure the sector's participants are fairly and sustainably rewarded.

The estimated proportion of value returned to New Zealand has increased since 2007-08. The following graph shows the estimated returns to the New Zealand farm gate and how they have increased over the recent seasons.

Figure 21: New Zealand Lamb to Britain (\$NZ per Head 17 kg CWE lamb)



Source: B+LNZ Economic Service

The key things to note from the graph are:

- Over the period the estimated value of all meat products has remained relatively consistent at NZ\$177 in nominal terms (over this period the sector has not grown the value of its products)
- The return to farm gate has increased NZ\$29 (53%). This was achieved by a corresponding decrease of NZ\$27 (29%) for the businesses working in the 'FOB to Retail' part of the chain
- Over the period the sector's returns to internal transport, processing and shipping participants have remained relatively constant (a small decline).

The entire sector needs to better understand who the competition is. As one farmer said:

"We are not fighting the farmer down the road, across the fence, or the processor who provides us a service – we are fighting other producers of protein".

Stakeholders must also accept that excess internal competition along with competing on price alone will be unsustainable over the longer term.

The sector's immediate opportunities and needs

New Zealand's traditional approach to market for meat products has been production led or a 'product push' model. Many processors/marketers still use this approach. Processors/marketers must differentiate and improve their approach to market (even with commodity products). New Zealand is a large exporter of primary products who can cement its values and attributes into its customers' and consumers' minds. As one processor said:

"New Zealand is a producer of high integrity, quality protein and co-products able to meet discerning consumer needs".

If sector participants collectively accept this, a new approach to export markets is possible. The next step is then to ask what the sector's participants are prepared to do to achieve this.

There is no right or wrong market engagement model – in fact, diversifying products and approaches to reduce competing with other New Zealand products will help capture value from markets. Moreover, the current sector scale and number of export markets can sustain multiple approaches.

Stakeholders will benefit from aligning to customers within markets and being aware of what they are required to do to succeed. If it is lower value high quality commodities (e.g. frozen carcasses), they need to ensure they have the right focus and market mix to maintain margins. Alternatively, if they want to be known for high value, high quality customer orientated products, they must ensure that they are able and prepared to invest in production systems to reduce risk and increase the uniformity of specialist products.

Both approaches are valid and require stakeholders to get closer to customers and consumers. Understanding the needs of customers and consumers, their preferences, desires, and habits is essential to a value chain approach. Participants will benefit from closer consumer relationships. Customers are looking for innovative products and the ability to deliver a consumer experience second to none

This approach does work. New Zealand has created primary sector companies who have succeeded in understanding and effectively employing their knowledge of their customer and end consumer to improve sector profitability. Two relevant examples are:

Fonterra who has successfully integrated itself into its customer supply chains through solving customer problems and helping manage the risks for their customers. Fonterra has achieved this in two ways:

1. A strategic alliance with Nestlé who requires large volumes of quality milk products for its value added goods
2. Through securing supply of milk from North America to fill supply shortfalls in the New Zealand season. This approach has been successful and is being extended with further investment in milk production in China.

Icebreaker has taken a high quality commodity input and created a selection of high value textile products designed to meet their consumers' needs. Moreover, Icebreaker has been effective in selling the New Zealand story – communicating their business ethos to engage and allow consumer segments to align with the brand's principles and values.

Although each company has taken a different approach to market, both companies have features that the sector needs to build. They are:

- **Committed suppliers** – they trust their value chain partners (they either use enforceable contracts or purchase of shares to lock in alignment)
- **Transparency of price** – suppliers have greater transparency of price and can better plan their season's production
- **Committed to quality** – they both differentiate themselves through quality, safe products

- **Developed brands** – both companies have brands with a strong presence within their consumers' consciousness (e.g. Tip Top)
- **New Zealand's story** – their trusted brands and consumer goods are enhanced by their association with New Zealand.

There are opportunities to learn from and leverage the gains made by these companies, in particular Icebreaker, as some of the sector's suppliers indirectly supply Icebreaker. Although the sector is made up of many small farming businesses (roughly 12,250 commercial farmers generating their primary income from the farm²²), large private entities and cooperative structures that must interact to produce high quality animal products across many markets, they all have a common base product and production environment. Icebreaker's suppliers understand the benefits of their contracts and a functioning value chain. These suppliers provide the sector a base to build from.

The sector's medium to longer-term opportunities and needs

Shifting to a consumer-led market engagement model creates challenges and costs for marketers. The ability to guarantee consistency and supply of products becomes more important. Consumers will not tolerate poor quality or lack of availability – they will seek out alternatives or substitute products. This poses risks to the sector.

There is the opportunity to understand and assess the benefits of finishing animals outside the normal production windows for their farm, that is net of the opportunity's benefits and associated costs. This could include wintering more stock and increasing production costs. Or alternatively New Zealand could seek to source stock from off shore to meet global consumer needs. This could mean:

- **Purchase of stock** – buying and processing other countries' supply offshore
- **Licencing New Zealand intellectual property (IP)** – contracting offshore suppliers to produce stock to customer specifications using New Zealand IP and selling the products under a consistent brand
- **Buying offshore production** – New Zealand suppliers buy farms (in part or whole) and supply under a collective brand

The key to success is the creation and management of a product brand or supplier group brand. Fonterra, Zespri and Pink Lady are all good examples of how differing offshore production models can capture and return profits to a country or group.

The other common feature of these successful models is the quality of their assurance programmes, application of on-farm systems and management of product to markets. The sector's strength in lamb production and export volumes provides the sector an initial starting point. New Zealand will never be able to exert significant influence over global beef production – the sector's production is too small. Accordingly, New Zealand beef producers, processors and marketers need to be more targeted and market focused leveraging New Zealand's other strengths.

As an example of this under New Zealand's free trade agreement with China, an opportunity would be

²² Source: Beef + Lamb New Zealand Economic Service

- **Market brand** – New Zealand has many of the attributes and qualities the newly wealthy and well educated young Chinese are looking for. New Zealand is a trusted brand. The development of an independent quality brand built off a safe and secure quality assurance programme aligned to New Zealand's safety story that can be augmented with other countries' products would allow New Zealand to capture the value from managing the interface with high value customers and consumers (the Zespri model).

New Zealand will have other opportunities in other markets as a result of the current free trade discussions with several emerging markets. Sector participants should continue to consider these opportunities, undertake consumer research and due diligence, and where appropriate act (either as a group or individually). Through investing in relationships now and anticipating future changes, participants can position themselves to exert greater influence in-market through lobbying and third parties.

Value driver summary

What: Grow share of market value

How: value is created from knowledge of the consumer/customer, their needs, motivations, and the ability to communicate these to create tailored/differentiated products able to generate product demand at premium prices.

Issues the sector must address:

- Improve market focus and consumer awareness
- Improve financial resources to fund new initiatives
- Improve the alignment of objectives between the farmer, exporter, importer/re-processor and retail groups
- Improve the ability to:
 - invest in relationships (on both sides of the farm gate)
 - provide the customer with security of quality supply
 - negotiate with retail with equal power
- Improve New Zealand's product story through the supply chain

Supply/value chain attributes required:

- An understanding of the customer's businesses, and consumer's needs and desires
- The ability to anticipate issues, and resolve them with appropriate direction and speed
- The technical, financial and people capability to exceed customer requirements (including delivery time, supply, environmental and animal practices, packaging, product form and shelf life to name a few)
- The ability to access an appropriate cool chain to reach the customers' shelf space (particularly in emerging markets)
- The ability to collect and communicate customer and consumer information able to ensure appropriate and timely responses to market

Sector opportunities:

- The ability to control foreign production and coordinate product to customers – New Zealand can act as an aggregation point into China
- The ability to extend to a secure 52 week supply
- The ability to enter into specialty markets – the Asian gift trade and processed meats
- The ability to improve the differentiation of consumer goods across the sector

Implementation issues:

- The perceived need for processor/marketers to own the relationship with supermarkets
- The willingness of processors/marketers to collaborate to develop a brand

Get better access to markets

Value driver description: *the ability to maintain access to international markets without undue constraints (e.g. commercially, economically, politically and culturally).*

The sector is reliant on export markets. They determine the profitability of the sector because of the scale of the sector's production and current sector approach – for example, the sector exports around 90% of its meat production. New Zealand has historically been fortunate to have stable markets that understand the sector's products and demand large volumes every year. The key traditional markets are:

- The EU for sheepmeat
- The United States of America (US) for manufacturing beef.

These markets will continue to be New Zealand's primary markets until other markets are developed and able to match or exceed existing prices sufficiently to redirect the flow of products into new markets. This means that the EU and US markets will dominate the sector's production in terms of animal attributes required (e.g. lean meat with large primal cuts). However, as the sector accesses new markets, their needs will have a significant impact on animal attributes the sector will need to produce. How the sector balances these market requirements will impact on returns participants can achieve.

The sector's immediate opportunities and needs

The New Zealand government continues to work to further the opportunities for New Zealanders to access markets with minimal impediments. The government is focused and working to improve access to several major markets that could open up considerable benefits for all participants in the sector. These include:

- South Korea
- Russia – Kazakhstan - Belarus
- India
- US (via the Trans Pacific Partnership negotiations)

These are on top of the current Australian, China, Thailand, P4 and ASEAN agreements. While this list may not seem large, at the successful conclusion of these negotiations New Zealand will have agreements with the markets that are the fastest growing, wealthiest, most populated and most informed on New Zealand produce.

The ongoing discussions on new free trade agreements are the result of broader global changes, which are the result of stalled WTO negotiations, the recent financial crisis and the desire for countries to position themselves through free trade agreements as the global economy recovers. In some instances, New Zealand's status as the only country to have a free trade agreement with China is a great draw card. Many countries seeking to begin negotiations are seeking insights and to learn from New Zealand before they attempt to engage with China.

Economic thinking is being influenced by four fundamental changes in the global economy that will endure for many generations. They are:

1. A shift in economic power from West to East
2. Aging baby boomers in developed countries – health conscious and wealthy
3. Emergence of global scale amongst retail outlets
4. Emergence of an affluent middle class in emerging countries (e.g. China, India and Brazil).

Sector stakeholders do need to continue to develop new markets in order to minimise the risk of a single market failure, and thereby enable the sector to better manage its collective product flows and risks. The development of competing markets for existing products is important – reducing the current situation of single market risk would enable sector stakeholders to not be perceived as price takers.

On occasions participants have been unable to walk away from a deal. The ability to walk away from a deal because there is competing customer in another market with the means and desire to buy the product at a good price changes everything. The changes include the ability to manage the transfer of costs back down the supply/value chain and the improved ability to capture a fair reward for the sector's products back to suppliers.

While governments traditionally influence market access, participants need to recognise that large supply/value chain companies can and have over the last decade impacted the sector's ability to access market segments. In particular, large retailers trying to differentiate themselves from their competitors can and do set product specifications that can act as barriers. New Zealand does not have the power, nor the sector resources, to fight these companies in major markets.

However, the sector can take the opportunity to work with major retailers to inform their standards, thereby informing market standards for competing producers from offshore. Ensuring a minimal quality supply to these markets will help stabilise market returns back to sector participants and importantly the suppliers.

The sector's medium to longer term opportunities and needs

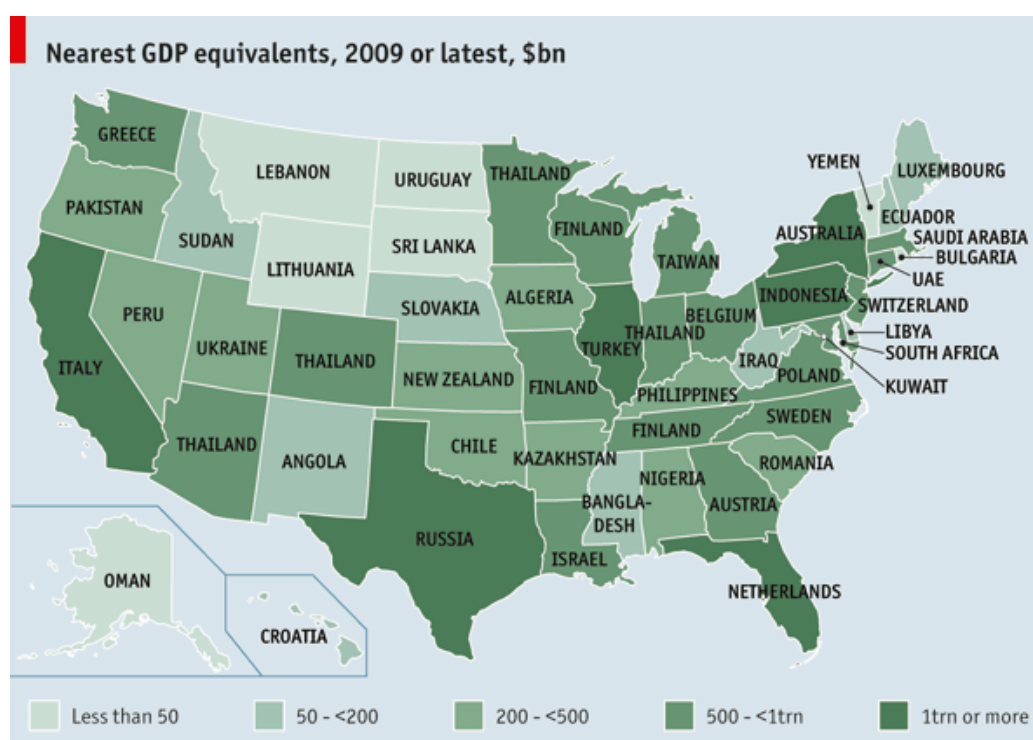
The sector is reliant on networks of integrated cool chains to ensure products are delivered to consumers in a good condition, able to maximise their shelf life and consumer experience. These networks are established in the main markets and controlled by companies who in many markets are continuing to get bigger and stronger in their ability to influence their supply channels. To safeguard the sector's interests, participants need to consider how they can improve their businesses and, where appropriate, effectively integrate with supply/value chain partners, differentiate their products through a broader category approach, and partner with external parties to improve their competitiveness.

When considering the sector's access needs, the sector is a small player globally. The sector needs to continue to focus on targeting the premium markets with discerning consumers willing and able to pay a premium.

On this basis, the sector's markets for some products may only be province, city or demographically focused. For example, Europe currently has just over thirty cities with populations over one million people. By comparison, India already has 23 cities and China already has 160 cities with over one million people. These cities will continue to grow in size and number as those countries' populations continue to grow.

Even in existing markets there are many markets. For example, the United States of America can be looked at as many countries each with different needs and preferences. The following image provides a comparative look at which country has equivalent GDP to each US state (as a point of interest New Zealand is Kansas and Australia is New York State). When considering large countries, states, regions, cities and even demographic groups or linked entities could be considered as the target market.

Figure 22: The size of the states if they were countries



Source: *The Economist*

There is a need to be deliberate about which markets to try and improve access to. At the moment there is little or no public communication about priorities or those markets where existing barriers are causing value to be lost. By comparison the Horticulture sector commissions a horticulture export market report every two years that highlights these issues. The report also quantifies the progress in addressing, and the impact of, these issues for their sector.

The sector would benefit from better focus and coordination of activities, and improved signals to central government departments. In particular there is a need for better communication of the issues and what needs to change (if anything) to improve the sector's market entry position.

Value driver summary

What: Get better access to markets

How: value is created from the ability to access premium markets and customers without being impeded/restricted without disproportionate profit-eroding barriers.

Issues the sector must address:

- Improve clarity on which markets to target – where Government assistance is required
- Improve customer and consumer understanding in target markets
- Address fragmented approach to export markets for undifferentiated commodity products
- Increase viable alternative markets for high value products

Supply/value chain attributes required:

- An in-depth understanding of barriers to sustainable market entry, market channels and market selection strategies
- An agreed sector wide view of market access priorities
- The ability to achieve a sustainable and consistent quality of supply to satisfy market demand and specification
- The ability to access a cool chain through a clearly defined and sustainable path to your customer/consumer

Sector opportunities:

- The ability to secure lower costs of entry into existing markets (e.g. Korea)
- The ability to position the sector's production for the next generation in emerging markets
- The ability to undertake vertical integration in emerging markets to increase value capture and manage access risks

Implementation issues:

- The introduction of private standards that block or restrict access (i.e. non tariff trade barriers [NTTBs])
- The shortage of capital to fund long term market development
- Develop good governance practices to monitor any offshore investments
- Develop an awareness of the key issues and opportunities for the sector

Make better use of scale

Value driver description: *the ability to realise the benefits of scale (financial, contractual terms, market access and customer opportunities) through relative volume of branded and/or coordinated product to customers.*

The sector will never be able to compete with other countries' scale of production – such as the emerging power of Brazil's beef production. The sector will never feed the world, and nor does it have to, to be profitable. More production is not always the answer. To ensure sustainability of the

sector its participants need to achieve a critical mass relative to the individual and collective market needs – and act as if they have scale.

All macro indicators for protein based products show significant and sustained demand growth for decades to come (driven by population and real wealth growth). The sector's production base and supporting infrastructure is not currently optimised or well positioned to capture the growing demand in emerging markets that traditionally prefer poultry, pork and fish. In particular, beef products stand to benefit most from these trends due to the 'westernisation' of the populations in emerging countries.

The sector's immediate opportunities and needs

Current predictions are that food production will need to double by 2050²³. This is a significant opportunity for the sector if it acts to effectively position itself. If the sector is to benefit from these expected changes it must seek ways to coordinate the supply of its products and ensure it maximises the value of all products into target markets.

There is an opportunity to get this right. Active stakeholders could benefit significantly – those willing to embrace the changes and meet customer needs. The sector can secure its future prosperity through its collective actions.

The sector's medium to longer term opportunities and needs

The profiles of the sector's lamb consumer base in traditional markets are typically 'baby boomers' who traditionally purchase larger pieces of meat (e.g. leg roasts) or specialty cuts for special occasions. Those products are not attracting the next generation. The sector needs to continue to adapt its products to stay relevant to consumers, otherwise the sector's products will not be relevant and the sector could lose key markets.

This is an issue for lamb producing sector participants, not just companies in these key markets. The sector needs to address this issue as a sector if it is going to be able to maintain these markets as high value/high volume markets. No one company or farmer group can develop these markets on their own.

The first step is to clearly identify the products the sector is willing to collaborate on and develop sector activities for marketing and logistics management. From this base product range, companies will be able to progressively innovate and develop sustainable categories of products for the next generation of consumers.

Conversely, with approximately 50% of the sector's beef being re-processed in the US, the end products are varied and able to be consumed in many forms. The majority of these highly processed products are targeting young or convenience consumers positioning the sector's production well with current consumption trends. The greatest opportunity in these markets is for a joint venture to produce processed products with greater health properties (i.e. lower fat and salt).

Sector participants each need to take individual responsibility for their behaviours and how they maximise profitability to their stakeholders whether they are shareholders or suppliers. Participants

²³ Source: David Hughes – Imperial College, London

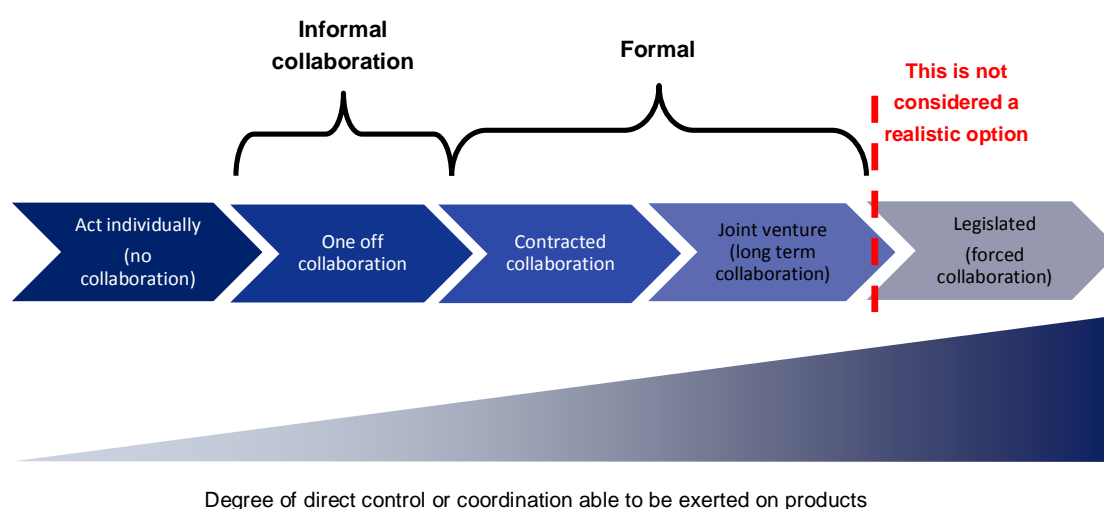
will not benefit their core stakeholders if they trade only on price. Moreover, they do not need to give up their independence or competitive nature to achieve better profits.

Understanding alternative market engagement models is essential to the sector's success in securing long term sustainability. The following table outlines where and when collaboration should and should not be considered.

When collaboration should be considered	When collaboration should not be considered
If products are only differentiated on price	If processors/exporters have a branded and differentiated product
If customer requirements exceed a single exporter's ability to supply product	If processors/exporters have exclusive relationships with customers
If market demand or product sustainability is in question	If processors/exporters have invested into a joint venture with an in-market partner
If it is a new market requiring significant development.	

The range of collaboration options and how they are applied is provided below.

Figure 23: Collaborative models available to the sector



Both sides of the farm gate have, at one time or another, let the other side down and as a result both sides must collectively rebuild trust around their behaviours and actions. Finding ways to collaborate can help this process. Selecting how to collaborate is equally as important as who to collaborate with.

A legislative solution is not considered a viable option because of New Zealand's position and commitment as a member of the World Trade Organisation. The sector does not need legislation to return sustained profitability to participants. An alternative approach will be to build confidence in how to collaborate through a series of coordinated market pilots, learn from the process and build comfort to enable a more formal and permanent market engagement approach to be built (this could be in place within five years with commitment from participants).

In Deloitte's view, the establishment of a coopetition model could be the appropriate outcome for the sector (given its scale for supply and market development capability for higher value products). Under this market engagement approach, participants each maintain their competitive base, able to drive innovation and efficiency gains, while enabling them to realise market opportunities (in selected markets) through acting collaboratively with increased scale to deliver a consistent quality and volume to customers.

The benefits to the sector from a coopetition market engagement approach are:

- Stronger relationships with clients
- Competitive tensions are maintained in differentiated products and non target markets
- Improved logistical management of product to large key markets
- Reduced in-market support costs
- Improved access to market development funding
- Improved brand development
- Improved investment in market research, product and consumer understanding
- Improved coordination of base research for the sector
- Improved profitability for participants within the market engagement model

Through acting with scale and a common base it is possible for the sector to become the global benchmark price for lamb (i.e. the 'Brent Crude Price' for lamb). Unlike many other soft commodities there is not a traded commodity price for the meat products the sector produces. Fonterra for example has created a commodity price for milk powder through the development of their on-line auction. Now all Fonterra negotiations are on the basis that this is the minimum price and that any additional requirements for customer specification will be at a higher price than the base commodity.

In Deloitte's opinion this is one option that the sector could leverage to create a base traded price for commodity products like manufacturing beef, non-prime lamb cuts, tallow and offal commodities (a coordinated commodity model). Such a service further acts as a single point of aggregation for companies to come together and sell to customers.

Additional benefits of an auction capability include:

- Transparent pricing for the base commodity – a price floor
- A point to aggregate non differentiated products to supply larger markets – a market based single point of sale
- Companies understand where the price floor is and can ensure their differentiated products are achieving higher prices
- Traders and domestic processors/marketers can access additional supply if required

The auction format and creation of a base commodity pricing mechanism opens up the opportunity for New Zealand to operate a soft commodity market where New Zealand could become a clearing house for other countries' commodity products. The New Zealand price could become the global standard.

The sector will need to learn how to use an auction facility, but significant opportunities for future innovation around market instruments and risk management tools could be developed in the future. Through collaborative action and smart tools the sector can grow its competitiveness on the global stage and achieve many of the benefits that the Dairy and Kiwifruit sectors benefit from.

Value driver summary

What: Make better use of scale

How: value is created from the increased opportunities, ability to provide continuous supply, exert market leverage and access concessions from service providers.

Issues the sector must address:

- Enhance the New Zealand's approach to emerging markets by exporters
- Improve awareness about the 'size of the prize' and benefits of alternative approaches
- Increase capital for investment

Supply/value chain attributes required:

- The ability to create scale to invest in product and market development
- The ability to create scale to invest in channel development to enhance existing channels and investigate alternative channels to markets and consumers
- The ability to create scale to manage a 'New Zealand Inc' identity offshore through a coordinated presence within markets
- The ability to create scale to invest in processing capabilities to emphasise product qualities that improve profitability

Sector opportunities:

- The ability to grow the sector's reach into emerging markets
- The ability to introduce a new generation of consumers to New Zealand products
- The ability to utilise new tools and capabilities to access customers

Implementation issues:

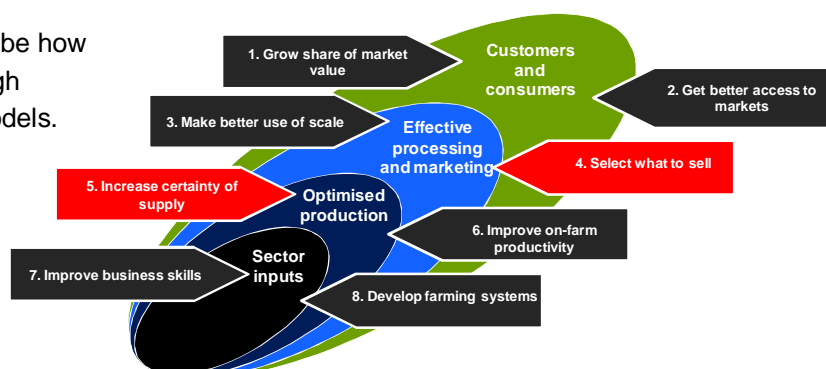
- The need for willingness to collaborate in markets
- The sector has a lack of trust
- The sector will be limited in which markets coopetition can operate

9.2. Sector theme 2: Efficient and aligned procurement

Two of the sector's value drivers describe how additional value can be obtained through correcting the sector's procurement models. They are:

1. Select what to sell
2. Increase certainty of supply

Each value driver is described below.



Select what to sell

Value driver description: *the ability to differentiate the product/co-products in the eyes of the customer/consumer, giving relative advantage for the products against competitors or product substitutes.*

Many of the sector's markets are established and the sector has a respected international reputation as producers and processors of high quality meat and co-products. Processors/marketers are focused on optimising the value of meat from their animals across their customer base within existing markets – suppliers need to acknowledge this. One processor/exporter stated “*we have to optimise the value of the entire animal to make a profit*”.

The sector's immediate opportunities and needs

The sector has developed systems to optimise the whole animal's value based on existing markets, customer mix and product demand. However, as new markets become available, understanding and 'selecting what to sell' becomes increasingly important. For example, processors and marketers will have greater customer/market options that require substitution decisions for current supply. This will have the effect of rebalancing animal attributes, the subsequent products and co-products. The sector will need to manage this transition carefully to ensure no value is wasted.

Optimising value is a very complex and highly specialised skill that the processors' and marketers' continue to develop to combat the increasingly complex challenge of which markets/customers to supply. So much so, that many utilise complex algorithms to aid and inform their product mix/marketing decisions based on the flow of animals they can get. In making their decisions, processors/marketers also consider:

- Their ability to access the right animals that will meet customer requirements
- Their ongoing ability to service long-term customers (a strategic view to relationship management)
- The extent of forward contracts (supply commitments)
- The nature of the relationship with the customer
- Their ability to supply product
- The proposed terms of trade for transactions
- The market risk (e.g. payment, access to reliable cool chains, transport, etc)

To enable these complex decisions to be made and value optimised, all sector participants need to respond to the market signals provided and support their supply/value chain partners. If the sector does not, there is a risk that sector participants will sub-optimize their collective returns through inaction and a continuation of the status quo.

The sector's medium to longer term opportunities and needs

There is a cost from value lost (or wasted) through products that cannot achieve a premium price in markets. This is why some processors and suppliers have been working together to control animal specifications for some time. The sector needs to learn from its experiences and grow its capabilities to deliver an integrated production process that delivers to customer/consumer specifications. This process would be aided by processors providing increasingly higher levels of information, support, base genetics across the breeds and forage information to increase and guide suppliers to the desired outcome. Some examples of what this support could entail are:

- New genetics, forages and farming systems
- Formal commitment to customers through annual supply agreements
- Improved marketing capability
- Increased research to improve science application through the supply/value chain

In conjunction with supporting supply/value chain partners, the sector needs to develop branding strategies and intellectual property able to sustainably differentiate the sector's high value products in market – in the consumers' minds (a value chain approach). The sector is not well known for its consumer brands. This is partially explained by the current channels to market, a lack of a shared understanding of the value that brands can add and what is required to develop brands that resonate with consumers through a set of shared values.

An example of a commodity brand adding value is:

ZespriGold: Zespri over the last two decades developed and marketed a new novel 'gold kiwifruit' variety that is sweeter than the traditional green variety. ZespriGold has been in the market for over a decade now and is reported to have earned well over a billion dollars for its New Zealand growers, achieving premiums over other Zespri products. Zespri has maintained this premium position with a deliberate branding programme and through controlling supply of Zespri Gold.

ZespriGold is a strong promoter of their products and what they represent – they sell their story and achieve premiums over their competing and substitute products. The brand is well established and now attracts a loyal consumer base. A cross section of the strategy's interview participants have stated²⁴ that the sector needs a strong brand and brand strategy.

With the development of a recognised brand, sector participants will be able to innovate and develop new product offerings to consumers. These may not be meat. There are many potential uses for outputs from the processing activity. Some examples are:

- Pharmaceuticals

²⁴ The interview participants included: farmers, service providers, processors and customers.

- Nutraceuticals
- Ingredients
- Blood products
- Pelts, hides, leather

Value driver summary

What: Select what to sell

How: value is created from the ability to target customer/consumer needs while maximising the value of the component parts of the animal, co-products and nutraceuticals (either directly or through partnering).

Issues the sector must address:

- Improve understanding of consumer needs
- Improve understanding of emerging markets
- Improve consistency in production systems
- Improve willingness to invest capital into initiatives to grow the sector

Supply/value chain attributes required:

- The ability to create relationships that are able to be translated into long term contracts
- The capability to monitor and respond to market conditions
- The ability to effectively communicate market requirements back to supply/value chain partners
- The ability to develop new channels to market

Sector opportunities:

- The ability to grow competing markets
- The ability to develop new animal, forage and product combinations to improve the consumer's experience

Implementation issues:

- The ability to effectively target the sector's production
- The ability to produce new products requiring different production systems and specifications

Increase certainty of supply

Value driver description: *the ability to provide an increasing proportion of programmed seasonal supply or processing capacity so that informed long term investment planning can occur.*

Many participants exemplify this value driver through a commitment of supply and service to their supply/value chain partners. Estimates across the sector are that loyal supply of stock from farmers could be as high as 75% for lamb (cattle would be less due to the high use of auctions). For lamb, it is estimated that of the 75%, between 20% and 30% for some companies is at a contracted price. This is a very high level of loyalty across the sector.

However, this also means that roughly 25% of sheep farmers and more beef farmers do not display loyalty to a supply/value chain partner. This group of suppliers is thought to be made up of several types of farming operation. They include:

- **Mixed production:** a farmer may graze/finish a smaller number of stock to support their wider farming operation (e.g. crops, horticulture, etc)
- **Small holdings (lifestyle properties):** the primary source of income is not from their on-farm production and their size of farm is small to very small
- **Stock traders:** farmers who buy and sell stock for their farm, other farmers and processors – the trading is their primary source of income
- **Unaligned agents:** agents who are not aligned to a processor, and who have farmers who are loyal to them
- **Unaligned sheep and beef farmers:** similar to a typical farmer, except they do not support a supply/value chain partner enabling them to shift their supply to try and maximise their returns through beating the schedule. A key distinguishing characteristic is their willingness to 'gamble' with their supply (high risk profile)

Regionally this has a significant impact on the utilisation of processing capacity and consequently the marketer's ability to effectively market products (e.g. some marketers are reluctant to engage customers in advance out of fear they will not be able to fulfil supply contracts). In an extensively disaggregated sector such as this one, such a high level of uncertainty can destroy value for suppliers and processors alike.

The sector's immediate opportunities and needs

Achieving higher levels of supply certainty is a key value driver for the sector. With certainty the sector's processors and marketers will be able to better manage key risks and volatility within their interface with the market through increased use of contracts, and manage volatility in New Zealand. The primary risk that could be managed more effectively is exchange rate volatility. With fixed price market contracts exporters can use financial instruments to manage their exposure to currency fluctuations, thereby reducing their price volatility and that of their suppliers.

Suppliers looking to manage their risk should consider supporting processors/exporters who offer fixed price contracts. If suppliers understand their costs, and know that they can make a fair profit at the point of signing a contract – the supplier must honour the contract. Conversely, if the processor/marketer offers a contract they also must honour the contract price and terms. Although this may seem simple, suppliers have not honoured fixed price supply contracts this season. This behaviour is a core driver of mistrust amongst participants and must change.

Supporting sector change

Through aligned informed decisions the sector can increase its collective returns. The sector needs stock agents, farm advisors, accountants and farm input suppliers to help achieve the changes required. This means that they too need to change how they provide services to the sector.

In Deloitte's opinion, while some agents and agent behaviours are detrimental to the current operation of the sector's performance, high performing agents who act as points of aggregation that help coordinate stock through the supply/value chain do provide an important service (i.e. within the store market, times of adverse events and when solely working for a processor – not competing with the same processor's procurement staff) . We believe key attributes of a high performing stock agent are:

- **Representation:** a stock agent should always declare who they are acting for and where they intend to place the stock before the transaction is completed – the farmer needs to be the final decision maker
- **Transparency:** all documentation and information relating to the transfer of animals and/or kill information must be provided back to the farmer
- **Disclosure:** an agent must declare all of their interests and potential conflicts to farmers they are acting for – there must be separation between agents buying for themselves and buying for a processor. Furthermore, if an agent has a supply contract with a processor the agent should declare their contracted price to the farmer (or their margin)
- **Advice:** an agent should be certified competent to be able to provide on-farm advice to farmers – including a declaration of their qualifications
- **Reporting:** all agents should disclose their fee structure, whether they receive payments from processors and what the cost of each transaction will be before the transaction takes place. This would include all commissions that could reasonably be expected from transacting through stock yards.

With clarity over transactions, behaviours and better communication of the market's signals the sector should be able to strengthen relationships and trust between participants and service providers.

The sector's medium to longer term opportunities and needs

The next step in commitment of supply is an annual contracted commitment. Ideally suppliers would contract a minimum of 70% of their supply to a single processor (ideally suppliers would be prepared to supply 100% with the remaining 30% supplied out of contract). The reason for limiting the amount of stock contracted for supply will allow farmers scope to manage on-farm seasonal variation and animal conditioning.

Suppliers will have the option to sell stock to another processor depending on the cost of delivering to different specifications or managing stock not to specification for up to 30% of their stock. Under this approach a supplier would select a processor to supply pre-season and open a dialogue regarding what they can do and how each party can support the other for their mutual benefit.

The processor/marketer will conversely understand what they have to market and can actively seek to secure the best market prices possible (reduce under selling due to working capital constraints). The key defining attributes of this arrangement are:

- Suppliers will be able to receive clear market signals for their products and understand their share of the final sale price
- Suppliers and processors/marketers would have an open dialogue.
- Suppliers will be able to compare processor/marketer performance (e.g. their efficiency, investment decisions and their margins through the level of cost deducted)
- Processors will be able to invest into relationships and progressively reward loyalty
- Agents will be able to focus on aligning stock supply to processors at specification
- The sector will be able to determine what the optimal processing capacity is

This will help the sector to begin to build trust between all participants. The commitment of supply is not commitment of price or fixed price contracts. Rather, processors and marketers would be focused on markets and consumers to maximise their price and value capture for themselves and suppliers.

Impacts on processors

The sector's processors face significant barriers to exit from capacity and the exit costs are often greater than the annual losses from carrying excess capacity. This has seen sub-optimal behaviours at a sector level but rational behaviour at a processor level. These suboptimal behaviours include:

- Variance in animal transport costs (Appendix III)
- Animal prices exceeding market prices
- Excessive use of third party buyers – who have competed with the processor's own stock procurement staff

These behaviours are further entrenched through the costs a processor would face with a plant closure. They are:

- Reduced value on the balance sheet
- Decommissioning costs of buildings and equipment
- Staff redundancy costs
- Loss of stock supplied

Although these costs are offset by a corresponding reduction in fixed and variable costs plus the opportunity to sell the land, often the costs of redundancies in particular mean it is uneconomic to close plants. The sector can partially overcome these costs for the benefit of both suppliers and processors. To achieve this, suppliers would be required to provide a longer term level of commitment to enable capacity rationalisation.

Although many of these costs are real and cannot be significantly mitigated²⁵, the additional cost to a processor from lost supply can be managed. The sector would need suppliers to support processors who proactively act in the supplier's best interests.

²⁵ These costs may include staff redundancy costs and plant decommissioning.

For example, if the sector recognised it has excess capacity and a processor indicated that they would be prepared to close a plants or plant– suppliers need to be prepared to support them in return. This may mean the processor exercising a contract clause requiring suppliers committing their supply for up to three years to allow those processors to manage the closure costs. This would have the effect of:

- Increased utilisation (value capture) for those processors closing plants
- Greater efficiency as a sector
- Lower long term fixed costs – higher marginal returns from animals processed

To ensure that the sector's processing capacity can manage one-off events that require additional processing capacity²⁶ the sector will need to manage any capacity rationalisation process carefully. Maintaining a 12.5% to 15% level of reserve capacity is essential for suppliers while risk management practices on farm are improved. Moreover, a reserve capacity will allow a level of competitive tension between the processors ensuring they maintain transparency of information and pay a fair reward to suppliers based on the market price.

With security of a fair market price, suppliers will not be disadvantaged under this approach. In fact they will benefit over the longer term as their processors become increasingly more efficient and are able to return marginally higher levels of value to them or increase their investments into markets to grow value.

This approach will deliver an aligned sector with incentives that benefit suppliers and processor alike, while ensuring neither side can exert excessive power over the other.

²⁶ This equates to the long term industry average reserve capacity level excluding overtime provisions.

Value driver summary

What: Increase certainty of supply

How: value is created from aligning with like-minded businesses able to provide clear market signals, and who are prepared to reward the ability to produce to customers' specifications while minimising supply/value chain costs/risks.

Issues the sector must address:

- Improve contracted supply (not price) – domestically and within international markets
- Improve trust and lasting relationships between sector participants
- Improve programmed processing
- Improve the sophistication in risk management practices

Supply/value chain attributes required:

- An annual commitment from each supplier of at least 70% of stock to a supply/value chain
- The transparent communication of market requirements between supply/value chain partners
- An efficient means to aggregate and manage stock between sector participants, including a redesigned stock agent industry

Sector opportunities:

- The ability to minimise the effects of currency and one-off weather events
- The ability of service providers to better target their services and add value to the sector
- The ability to improve the transparency of sector information
- The ability to reduce marginal processing costs

Implementation issues:

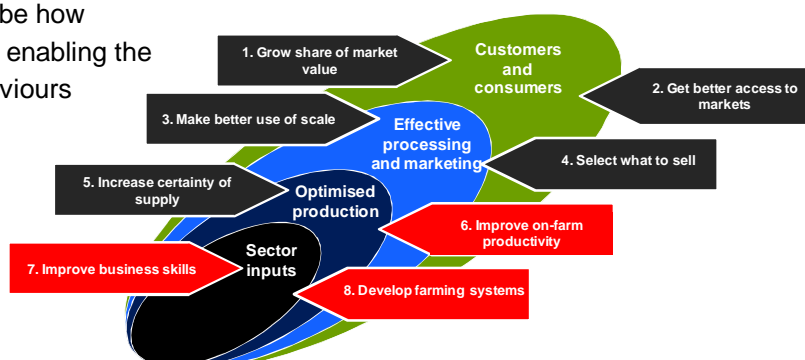
- The costs to reduce processing capacity
- The right sizing of the sector's reserve capacity
- The influence of non committed supply on behaviours

9.3. Sector theme 3: Sector best practice

Three of the sector's value drivers describe how additional value can be obtained through enabling the sector's application of best practice behaviours and capabilities. They are:

1. Improve on-farm productivity
2. Improve business skills
3. Develop farming systems

Each value driver is described below.

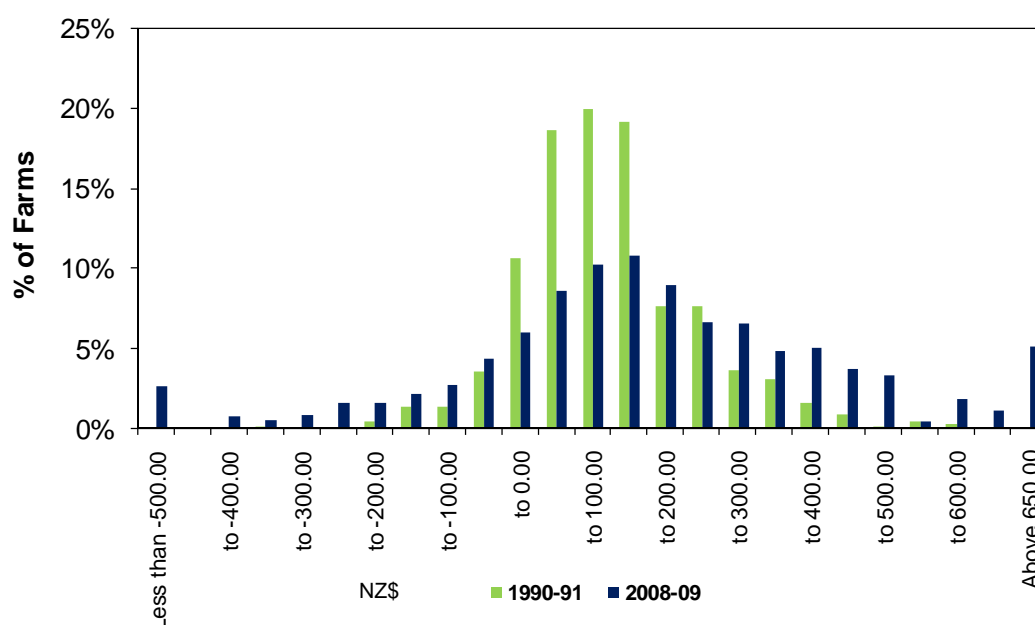


Improve on-farm productivity

Value driver description: the ability to optimise the production environment, available production systems and increase influence through the supply/value chain.

The sector's suppliers have performed well over the last decade and have continued to develop capabilities to improve both the effectiveness and efficiency of converting grass into protein (meat, wool and co-products). However, for whatever reason, not all sector participants have applied available knowledge and technologies, and as a result, have not developed their enterprise to its potential (refer to the following figure).

Figure 24: A changing sector profile in farm profit per hectare



Source: Beef + Lamb New Zealand Economic Service Sheep & Beef Farm Survey

This is not to suggest farmers need to work harder. With the right information and support, the risks can be managed and performance improved for the same level of effort.

Figure 24 shows that the farmer profitability performance in the sector no longer resembles a normal distribution. Top performers are making more money and the number losing money has increased in proportion to the farmer population (from 17% to 23% for the years compared). Moreover, there has been a shift in the middle performers as they increase their profitability – as can be seen in the proportional increase between \$300 and \$500 profit per hectare groups.

Importantly this is not a land class, farm size or farm type issue. The same variability exists across a range of farm classes and types. This has occurred over the same period that the sector lost a lot of the best finishing land to other land uses. This shows that things can improve on farm with the land the sector has and that suppliers can improve their profitability.

Information describing how to improve animal health, the environmental foot print of farms, pasture management, soil biology (soil composition), and protein production are available now. This is a fact. Participants can improve all aspects of the sector with the science and technology available now – participants do not need to wait.

The sector's immediate opportunities and needs

Each supplier is responsible for their own actions. Suppliers can either be active to guide the change in the sector (not just in their own businesses), or they can sit back and be a passenger as others decide the future of the sector and for them. They must each inform their behaviours and engage. Through greater participation, deliberate actions and increased knowledge, the sector can be secured and be made viable for future generations. For example suppliers can:

- **Record** – assess and write down all of the things that will make a difference in their business's performance, prioritise the benefits and impacts and actively seek information to realise the opportunities and manage the risks
- **Share** – participate in regional or national discussion groups and tell people what works, what the issues are and seek to understand what others have done to manage similar situations. While each participant's farm will be unique, many of the problems are not
- **Inform** – seek people or businesses who can help
- **Plan** – develop business plans that will address business needs
- **Pilot** – trial what has been learnt, then measure and monitor progress – share any issues, get advice, persevere, and adapt to improve outcomes
- **Implement** – be bold and implement the changes on the farm with confidence from the pilot activity
- **Improve** – continually measure, refine and improve what has been implemented.

Figure 25 provides a comparison between the top 20% and bottom 20% of North Island Hill Country farms for revenue, expenditure and some production metrics. Important points to note are:

- The bottom 20% are losing \$100 per hectare
- The top 20%'s costs are 32.5% (or \$226) per hectare less than the bottom 20% of farms
- The top 20% of farmers are producing 31.3% more wool per stock unit than the bottom 20% of farms

Figure 25: Comparative figures for the top 20% and bottom 20% of North Island hill farms in 2005-06

	Units	Bottom 20%	Top 20%	% Difference
Gross Revenue	\$ per ha	596	722	+21.1%
Total Expenditure	\$ per ha	696	470	-32.5%
Key Indicators				
Stocking Rate	SU per ha	9.9	10.3	+4.0%
Lambing Percentage	%	123.6	126.9	+3.3%
Wool Production	kg per SU	4.63	6.08	+31.3%

Source: Beef + Lamb New Zealand Economic Service

The data collected for the strategy show that the sector's top performers are not defined by their land class, their age or the size of farm. Rather it is their behaviour and willingness to invest in their businesses that defines them. Collectively the sector has locked a high level of capital into its land prices. This practice is unsustainable in the current economic environment. Participants need to shift their focus to making profits with regular positive cash flows to enable investment throughout the sector.

Even small shifts in relative profitability have a significant impact on the sector as a whole. Figure 26 shows that for middle performing farmers the value per stock unit to step up to the next decile of performance has a significant impact on profitability. Some examples are provided below.

Example 1

On average a farmer that shifts from the 40th to the 50th percentile²⁷ would achieve a \$5.18 profit increase per stock unit (or a 72% increase in profitability).

Example 2

On average a farmer that shifts from the 50th to the 80th percentile would achieve a \$16.58 profit increase per stock unit (or a 134% increase in profitability).

²⁷ A percentile describes the value of a variable below which a percent of observations can be found, in this instance the sector's suppliers have been split into ten groupings each representing 10% in the total number of sector participants based on their EBIT earnings. A farmer at the 50th percentile is the median i.e. the midway between the lowest performing farm (at 0%) and the highest performing farm (at 100%)

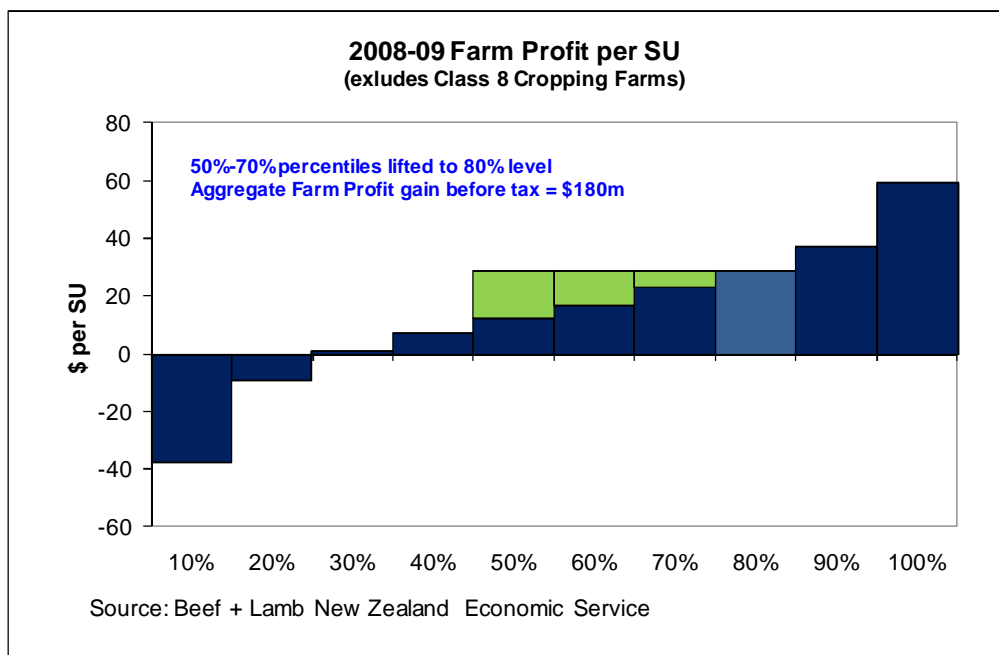
Figure 26: The 'size of the prize' from improved farm profitability

Percentile bands	Farm profit (\$/Su)	Percentage gain
40% to 50%	5.18	72%
50% to 60%	4.62	37%
60% to 70%	5.86	35%
70% to 80%	6.10	27%
80% to 90%	8.50	29%

Source: Beef + Lamb New Zealand Economic Service

Making such a change will not be easy for all suppliers. The purpose of these comments is to raise with sector participants what is possible and the 'size of the prize' or 'benefit' for those who are prepared to take deliberate, aligned and informed steps to improve their lot. Moreover, if participants move together, the benefit to those farms in the 50th, 60th and 70th percentiles reaching the 80th percentile is \$180 million dollars of profit per annum (as depicted in Figure 27). The value gained is represented by the additional green bars lifting their profitability per stock unit to that of the 80th percentile (the light blue bar).

Figure 27: Farm profit per stock unit



The sector will need help to make these gains real. Suppliers will need to help each other out with what they know and what they are doing. In order to start conversations amongst suppliers the list below outlines several things that the top performing suppliers are doing to improve their profitability:

- **Improving the management of their pastures through matching land type with its optimal use** – renewing pastures, tailoring and targeting fertiliser use and improving their stock mix (complementary species with different grazing habits, improving fencing, etc)

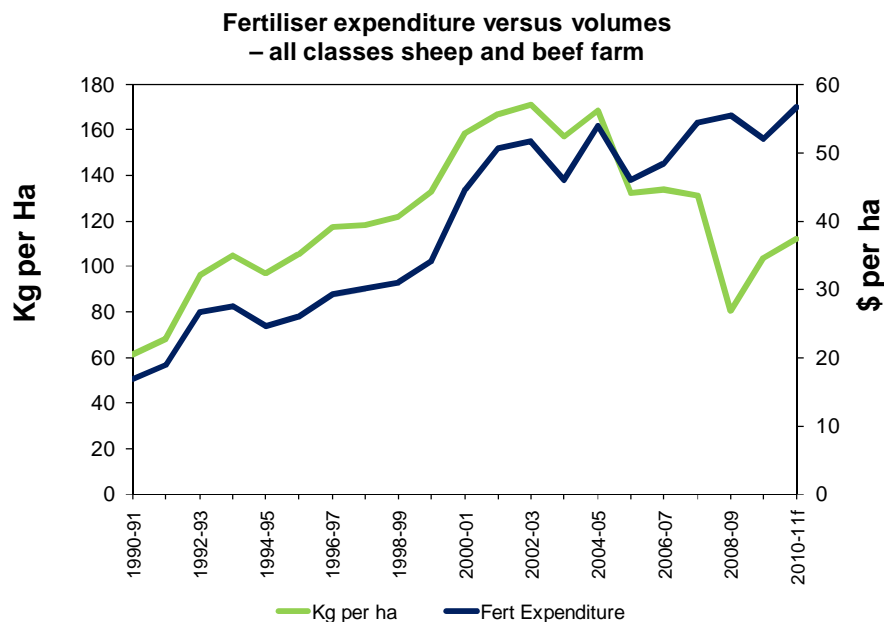
- **Improved on-farm genetics through tracking both flock/herd and individual animal performances** – animal robustness/suitability to the environment, parasite resilience, growth rates, size of primal cuts, and progressively, animal quality attributes that influence taste and shelf life
- **Improved farming practices through better knowledge of the biological systems on their farms** – optimal use of drenches, efficiency of forages through the ruminant system, use of crops to manage environmental risks or increase animal weight gain, condition scoring and specialist tests to target management on-farm (soil testing, animal immunity testing, etc)
- **Improving business skills through an increased use of technology and different practices** – have a written business plan²⁸, regular weighing of animals, use of weather stations to inform animal rotations, the measurement of each paddock's ME, increased data capture and monitoring (use of spreadsheets and farming management software to manage costs and production).

The sector's medium to longer term opportunities and needs

The sector's top performers have an in-depth understanding of their costs and how they translate to on-farm activities. This behaviour translates into a strong focus of what they can control or influence. The sector needs to embed this thinking across all segments and activities.

A key cost for on-farm production is the cost of fertiliser. On many farms around New Zealand fertiliser has not been applied over recent years. This is because of the high costs involved, a lack of profitability from successive droughts and a lack of understanding of the long term benefits of nutrient cycles on-farm. The figure below shows how fertiliser use has declined as a result of its price.

Figure 28: Fertiliser expenditure compared to volume



Source: Beef + Lamb New Zealand Economic Service

²⁸ Please refer to Appendix IV to view an example Landcorp's business plan template

Figure 28 shows that as the price of fertiliser has continued to increase at the same time that pressure has come onto farm budgets, fertiliser volumes have decreased significantly, although total fertiliser expenditure has remained comparatively constant. The sector's ability to manage fertiliser costs without compromising production and animal condition is essential over the medium to longer term.

Value driver summary

What: Improve on-farm productivity

How: value is created from the ability to optimise farming systems to produce quality products on time, to specification.

Issues the sector must address:

- Improve positive cash flows - many farmers rely on capital gains for survival or to create wealth (land banking)
- High cost of entry for new farmers
- Aging farmer base – the sector needs a succession plan
- Improve ability to afford key on-farm inputs (e.g. fertiliser)
- Improve education of farmers and marketers
- Develop a progression pathway for sector workers
- Continued excessive cost increases from central and regional government (e.g. RMA, inflexible rating schemes, employment laws, and the ETS).

Supply/value chain attributes required:

- The ability to sustainably access capital to optimise profit
- The ability to access land to optimise production and productivity
- The ability to access suitably trained and motivated staff
- The ability to access and store water
- The ability to retain knowledge and provide for the succession of land ownership/management

Sector opportunities:

- The ability to increase production through new genetics, forages, farm management and systems
- The ability to improve on-farm nutrient cycles to manage costs

Implementation issues:

- The ability to effectively get sector participants to take up best practice
- The willingness of sector participants to change behaviours
- The ability to access capital for on-farm investment

Improve business skills

Value driver description: the ability to understand, monitor and model your business's performance to inform your business decisions – including the value of advice you receive.

The sector operations and activities through the supply/value chain are very complex. This is best described by the statement 'the sector operates in a biological, weather dependent and seasonally variable' sector that relies on an efficient disassembly and marketing process.

Both sides of the 'farm gate' need to be operating efficiently to optimise value to the sector. This means participants need to identify business partners to work with, in particular those who are willing to build sustainable relationships.

The sector's immediate opportunities and needs

Each side of the farm gate must acknowledge the faults and failures of the past, and rather than allocating blame find ways to stop them from happening again. This means sector participants will need to remove the imbalance of power in the sector and act as equals. That is, stopping one side of the 'farm gate' profiting at the expense of the other, as this approach has clearly not worked.

Sector participants need to change their behaviours – neither side of the farm gate can function effectively without the other. Improving business skills at all stages in the supply/value chain along with improved transparency of information can help improve trust amongst sector participants. Below is a list of opportunities for the sector to improve its collective skill base and potential returns through less wastage.

The sector needs to 'improve business skills' in the following key areas:

- **Marketing practices** – the sector needs to focus on how to market and create brand wealth rather than simplistically selling products – participants should consider hiring experts to accelerate this process.
- **Logistics** – the sector needs to increase its collective coordination of product through greater collaboration – there is a need to minimise consignment selling and 'price positioning' due to shipping product without a customer.
- **Currency management** – the sector needs to improve its treasury skills to manage risk and reduce volatility.
- **Processor governance** – the sector needs to recognise that 'a race to the bottom on price' has destroyed value for the sector. Participants need to acknowledge that they can improve their respective shareholder's value in other ways, that is, they must stop diverting resources to fight amongst themselves and focus on the sector's true competitors offshore.
- **Access to working capital** – the sector needs to improve access to capital to reduce discount selling because of an urgent need of cash to operate their businesses.
- **Procurement** – the sector needs to align its production and remove the value destruction/waste created by excessive competition – participants need to have transparency of their transactions and their costs.
- **Farmer business skills** – the sector needs to collectively improve its capabilities to manage businesses to make informed aligned decisions.
- **Farmer skills** – the sector needs to grow its understanding of the science and technology available today, finds ways to use it and implement the changes on-farm – participants need to stop making excuses for not changing.
- **Central industry bodies** – the sector needs to increase the transparency of information and develop a single voice to aid sector communication..

- **Farm advisor skills** – the sector needs to ensure its advisors are suitably qualified to provide advice to the sector – participants should require advisor certification, minimum professional development each year, disclosure of experience and qualifications, and any conflicts of interest.
- **Farm accountant services** – the sector needs more than accounts done. Participants need a ‘trusted advisor’ able to provide advice and services to grow businesses.
- **Science and technology application on-farm** – the sector needs to increase funding to science and technology with a particular requirement on providers to think beyond discovery, and more on the design of how to communicate findings and knowledge to the sector to increase up-take. The sector needs improved outcomes within five years.

All sector participants need to improve their existing skills base to improve their services and outputs. They can do this if they are open to change and open a dialogue with other sector participants.

The sector’s medium to longer term opportunities and needs

The sector is comparatively rich in operational data at a sector level. However, the sector is not resourced to provide sufficient analytical services to suppliers and processors. The sector’s central bodies need to collectively manage this data and provide a seamless reporting service across the sector. Consideration will need to be given to:

- Sector-good research coordination and consortia management
- Sector benchmarking and KPI’s for both sides of the farm gate
- Sector database and analytics services
- Sector funded market research
- Sector based risk management reporting
- Sector capability building and mentoring funding
- Sector best practice farm operation
- Sector certified advisors and service providers
- Sector product reviews and testing
- Sector genetics oversight
- Sector coordination of engagement with other primary sectors
- Sector administered development pathways
- Sector environmental advocacy
- Sector lobbying of regional and central government

Key to providing this service will be a common voice that has the sector’s support and resources to communicate as a single voice.

Core to this organisation will need to be a revitalised Beef + Lamb Economic Service with the resources and tools to service a wider sector customer base. A significant change will need to be applied to the data collection and use rules. The sector has data with significant value to participants at an aggregated level, yet it has not been used to its potential. The Beef + Lamb Economic Service should issue research papers based on the sector's data and provide insights into sector operation and evaluation of key initiatives.

Another business skill that needs to be developed is business planning. Sector participants vary in their level of sophistication in their business planning, from processors with sophisticated planning and budgeting processes, down to sole operator farms with no planning or understanding of costs. The sector requires a minimal level of planning to enable informed aligned decisions and success. Improved business planning, measurement and monitoring practices will be key to enable wider sector changes.

The sector's contractual maturity is low. Historical practices of paying flat schedule prices where individuals try to game other sector participants to increase individual profits has not worked for the sector. The current system has incentivised poor behaviours and in some instances has led to contractual breaches. In addition, the current schedule's averaging of stock prices are insulating sector participants from how they are performing and in some cases the reality of what their product is really worth.

The sector needs to move to an incentive based payment system where an individual's performance is rewarded through higher prices at the farm gate. Factors that should be considered for incentive payments could include:

- Meat to specification
- Yield
- Quality of pelts
- Meat pH
- Intra-muscular fat
- Tenderness
- Flavour
- Size of primal cuts

The incentives should be based on market prices and broken down on all payment documents to ensure total transparency back to suppliers. This approach will reward on-farm investment that improves animal quality and practices that aid animal condition through to processing.

Value driver summary

What: Improve business skills

How: value is created from the ability to optimise an operation and align with business partners to make timely informed decisions and exert absolute control of the business.

Issues the sector must address:

- Improve business training courses for owner/manager farmers
- Develop standard business templates for the sector
- Improve transparency of information
- Establish a single voice to lead the sector
- Establish an implementation group able to monitor sector behaviours and report progress

Supply/value chain attributes required:

- The ability to capture detailed data through improved technology
- The ability to store and analyse sector information and performance
- The ability to integrate technologies on-farm
- The ability to improve automation in processing plants
- The ability to communicate information and improved practices real time
- The ability to identify and monitor value added by service advisors

Sector opportunities:

- The ability to reduce risk through greater transparency of information and informed decisions
- The opportunity to create a sector coordination group
- The ability for sector participants to redesign their stock procurement approach (incentive based payment schedule)

Implementation issues:

- The ability to capture and analyse the data
- The ability and willingness for sector participants to change behaviour

Develop farming systems

Value driver description: *the ability to apply and integrate foundational science and technologies to capture how New Zealand's unique attributes differentiate products.*

New Zealand is endowed with many attributes that enable efficient production of protein off the land (e.g. a temperate climate, water, quality soils, variation in topography, etc). These attributes have enabled the primary sector to grow and bring prosperity to both rural and urban communities. This can be seen in the continued strength of primary exports and the prosperity of the economy from the recently increasing commodity prices.

Although the sector is still critically important to New Zealand's economy, many New Zealanders have forgotten or lost sight of this with the rapid rise in the dairy sector. As a consequence of this, rural communities have lost sight of the importance of the sector and the number of jobs the sector creates through using all components of the animals to produce exports of \$7.6 billion in 2009²⁹. This value has been created by the hard work of the sector's participants, and those who came before them (including processors, suppliers and service providers), and in particular how participants have worked with their supply/value chain partners to create quality products for consumers.

The sector's immediate opportunities and needs

Understanding consumers across key markets, their differing needs and product preferences is critical to the future of the sector. While the sector has enough science and technology now to restore profitability levels to sector participants, participants and industry good organisations need to continue to invest in new science and technologies that enhance the sector's position in the market for all animal derived products (e.g. meat, wool, skins, tallow, processed products and pharmaceuticals).

The sector needs continued investment into science and technologies focused on both sides of the 'farm gate'.

- **On-farm**

- Improved forages for hill farmers
- Improved forage management practices
- Improved animal data capturing equipment
- Improved broadband at an economic price
- Improved genetic measurement and selection
- Improved nutrition management

- **Off farm**

- Improved packaging (targeting quality, shelf life and smell)
- Improved phenotypic measurement and selection
- Improved measures of taste and tenderness
- Improved automation in plant
- Improved information systems

²⁹ Source: Beef + Lamb New Zealand Economic Service

With continued innovation, participants will be able to increase the value they provide to their customers and consumers (through improved quality, shelf life and product development). Moreover, sector participants need to capture the increased returns for the sector in New Zealand.

The sector's medium to longer term opportunities and needs

Historically the sector has been very responsive to clear market signals, although controlling supply and coordination has been poor. This has been observed with responsiveness to required animal weight changes and also the uptake of scanning technology.

Beef producers need to adapt their systems to improve their leverage of the dairy sector. Approximately 30% of New Zealand's beef is sourced from the dairy sector – the sector's beef producers are not controlling and improving the supply of inputs into their production systems³⁰. Beef producers have the opportunity to improve the quality and productivity of beef production through better coordination and a shared understanding of dairy needs.

Several areas where the sector needs to improve the beef system are:

- **Improved genetics:** they can improve the output of the artificial insemination (AI) process through using better beef breed genetics that allow fast growth rates, quality beef and ease of calving for the dairy farmer (greater productivity)
- **Improved use of technology:** the sector can improve productivity through persuading dairy farmers to use sexed AI to increase their access to bulls/steers (greater productivity)
- **Improved immunity:** the sector can improve the survivability of dairy calves through the application of best practice in the first few days of life for the calf – some rearers are experiencing death rates up to 25% of calves (reduce costs and greater productivity)
- **Improve the balance of the capital herd:** through increasing the number of bobby calves being finished the need for capital stock (breeding cows) will reduce, to the extent that the grazing requirements of the pasture in the local environment are still met (greater productivity)

Improving farm systems will require individuals, companies and Government to work together for the benefit of the sector. With the increasing number of animals coming out of the dairy sector the derived products from these animals could be branded and collectively managed to achieve greater market recognition of their quality. While only a small amount of these animals will be used for prime cuts at this stage, they offer a high quality commodity for the processed meats sector. The quality and leanness of the meat will become an increasingly important differentiating factor in the coming years as the US attempts to tackle its obesity crisis.

³⁰ Source: Beef + Lamb New Zealand Economic Service

Gaining market access into the US for a low fat New Zealand minced meat burger pattie could create significant value. The sector could develop an accreditation process similar to the New Zealand heart tick for the US market and developing markets, and position the sector's products as a healthy alternative to the traditional burger pattie. The sector will need to leverage New Zealand's strong food technology capabilities to deliver a readymade product that does not compromise on flavour or quality. This is an opportunity for the sector to use the coopetition model, as no one processor can supply or develop this market to make these products a success.

Additional options the sector should consider are:

- **The development of new forages for hill country farmers:** many of the paddocks on the hills have not been cultivated since the land was cleared. Hill country farms need new forage varieties that can be aerially sown and are robust enough to handle regular grazing and drought resistance. Increasing the dry matter production off New Zealand's hill country would offer the sector a step change in farm productivity and animal numbers.
- **The specialisation of farming systems:** some farmers are trying to farm their land beyond what it can support. The result of this is higher costs and low-to-no profits. Sector participants need to specialise and grow what their land can sustainably produce. To support this, the sector needs to integrate where possible between breeders to finishers ensuring hill country breeders are fairly rewarded too.
- **Integrated farming systems:** the encroachment of other primary sectors on key finishing blocks has reduced the sector's ability to produce animals at historic numbers. However, the increasing number of dairy farms does create opportunities for sector participants to benefit. For example, under the dairy system most cows undergo AI and subsequently a bull is used to ensure the herd is in calf and can produce milk. This need for bulls offers opportunities for the sector's participants to provide and grow this service (e.g. sector participants provide bulls with the required genetics for a fee and once the bull's duties are completed they can be processed – therefore increasing sector returns from the animal).

The sector has many opportunities to refine and improve its profitability. The key to ensuring sustainable long term profitability is to continue investing in research and technologies that offer significant benefit and where value can be captured for New Zealand (the proven application of the research findings). In order to implement this approach the sector will need to consider how research is funded and the future mix of research programmes.

The sector's research programmes need to ensure that the sector has a stable number of researchers and technology developers to service their needs. At the moment many of the sector's top researchers and scientists are (like the sector's farmers) reaching retirement age and new graduates are not emerging to take their place. This poses a significant risk for the sector in the next few years. Possible solutions are:

- Rebalancing the research programmes to provide researchers continuity of work over several years – creating a more attractive and stable work environment

- Creating sector-funded Masters and PhD support to cover student fees and some living expenses, and in turn bonding³¹ them to the sector
- Creating strategic relationships with research and technology providers enabling teaching and technical staff the opportunity to undertake funded application of their research on-farm and publish their work
- Requiring all research and technology programmes to have a two stage process, first scientific trials to prove capability and second farm trials to prove the science works in the real world.

³¹ For example, a student's student loan could be repaid after a set period of service.

Value driver summary

What: Develop our farming systems

How: value is created from the ability and willingness to invest in new capabilities that increase production and/or enhance the product's differentiating story to customers/consumers.

Issues the sector must address:

- Improve access to finishing land
- Improve recognition for the competitive advantages to New Zealand from having a strong red meat sector
- Improve coordination in telling the Red Meat sector's story to the sector's customers and consumers
- Improve access to researchers able to develop sciences and technologies for the Red Meat sector
- Improve investment in science and technology development – and application
- Improve collective ability to invest in long term sector development initiatives
- Improve alignment between land prices and productive ability

Supply/value chain attributes required:

- The ability to leverage New Zealand's international identity, cultural differences and reputation for producing quality products
- The ability to coordinate science and technology providers
- The ability attract and influence consumers' needs with similar values as our Red Meat sector

Sector opportunities:

- The ability to tell the New Zealand story
- The ability to leverage other primary sectors
- The ability to rebalance the sectors' dairy beef production system
- The production gains from new hill forages
- The productivity gains from new science and technologies that can be applied on farm

Implementation issues:

- The ability to access existing New Zealand marketing – Tourism New Zealand's 100% Pure brand
- The ability to influence dairy farmers to implement beneficial calf rearing genetics and practices

9.4. Transitioning to strategy implementation

Transitioning the value drivers into implementable actions will require discipline from all stakeholders in the sector. To aid this transition process, six characteristics have been developed for stakeholders, describing how they need to act and what they can reasonably expect in return from their supply/value chain partners. They are:

1. **Informed aligned behaviour change:** participants need sufficient sector and participant information to make appropriate decisions.
2. **Deliver quality product on time, to specification as required:** participants need to improve value returned through a managed flow of their quality product.
3. **Honest, trusted transparent behaviour:** participants need to act with integrity and fulfil their obligations to the best of their abilities.
4. **Market pull production planning:** participants need to embrace and be led by accurate and timely customer/consumer information.
5. **Continuous process and product refinement:** participants need to maximise value enhancing activities, information linkages and remain consumer focussed.
6. **Fair reward relative to loyal performance:** participants need to be fairly rewarded for their continued performance delivering to consumer requirements in order to position the sector for growth.

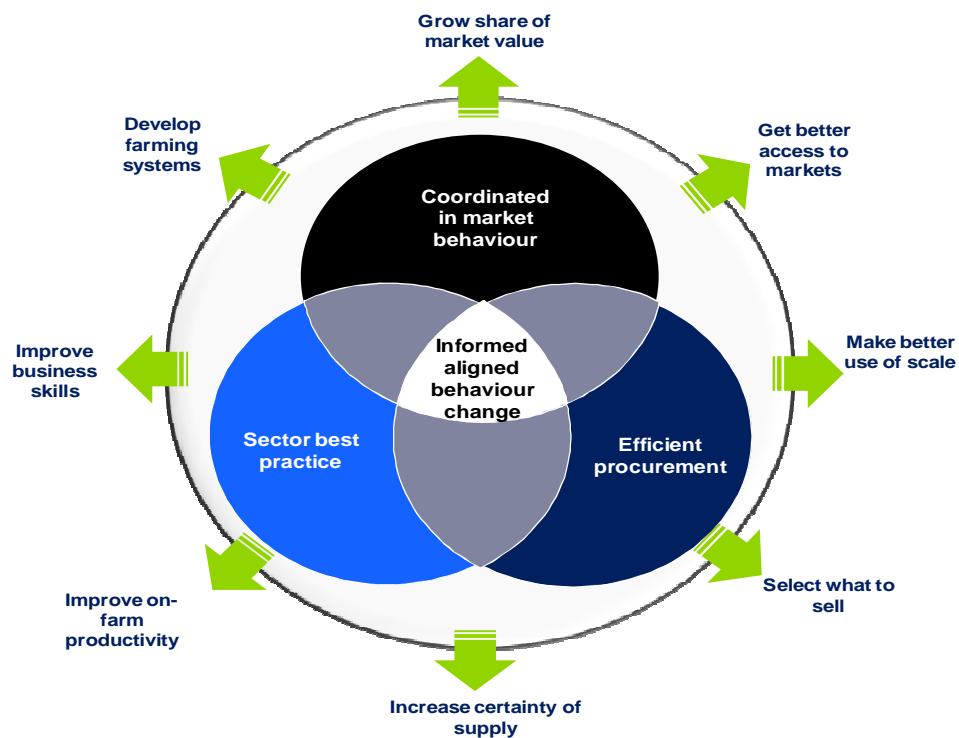
These characteristics help define how the sector will operate in the future. They provide a minimum standard, and through their application they provide a means to develop an understanding of supply/value chain partner's performance. Through a realisation of these characteristics the sector can improve its probability of achieving the strategy's vision.

The sector has many opportunities to improve its profitability. The following diagram provides a summary of the sector's opportunities from the strategy. At the heart of the strategy is informed aligned behavioural change which will enable the implementation of the three core strategy themes. They are:

- Coordinated in market behaviour
- Efficient procurement
- Sector best practice

These three themes are interrelated and each requires the other two to be successful. From the strategy's central themes radiate the eight value drivers that with focus over time will progressively improve the sector's performance and profitability back through the supply/value chain.

Figure 29: The strategy diagram



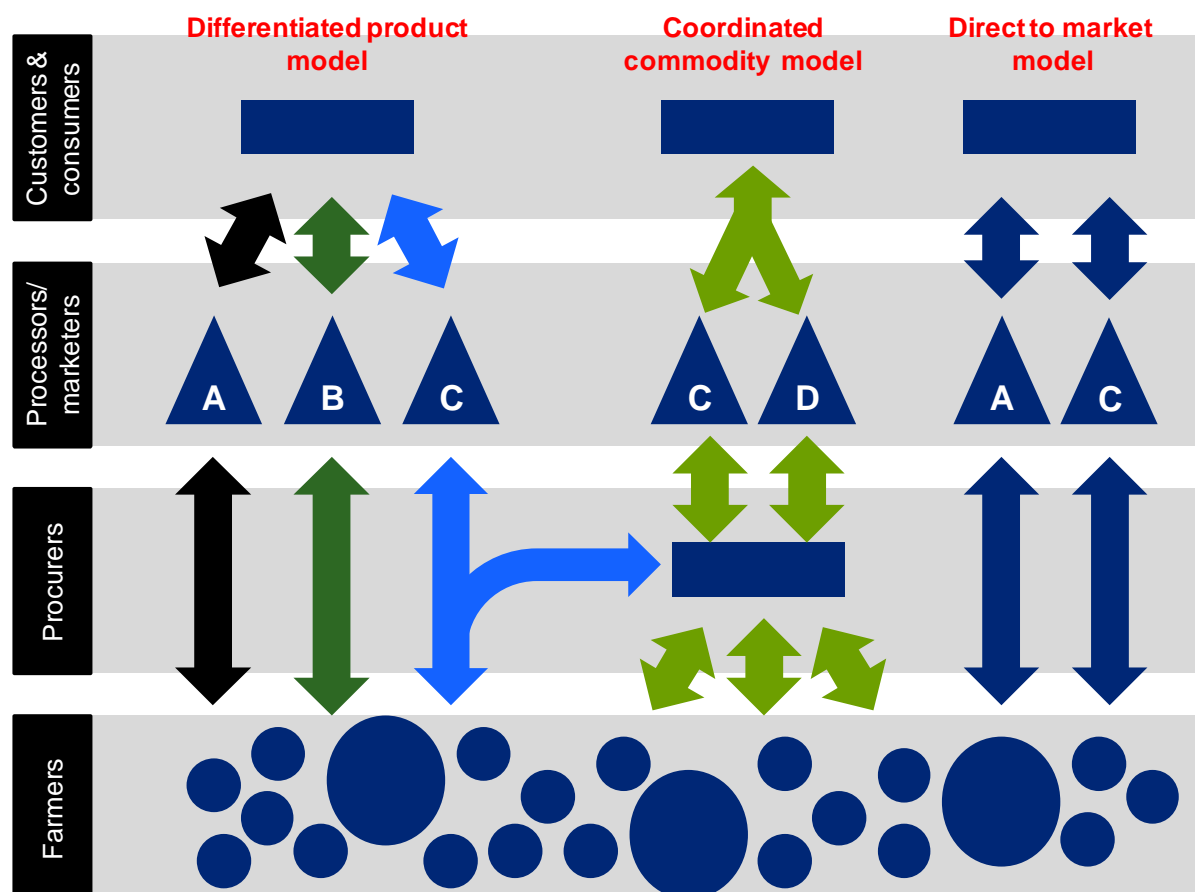
Each core strategy theme will have a set of actions the sector requires to be implemented to enable the required change. These actions are supported by each value driver summary which outlines the attributes each supply/value chain will require, the opportunities from each value driver and any issues that could be encountered as the strategy is implemented. With these elements combined a 'blue print for the sector's future' is created which over time will inform the structure of the sector and the market engagement models employed.

10. A blueprint for the sector's future

New Zealand's sheep and beef sector has played an integral part in the country's growth and prosperity over the last century and will do so into the future. Sector participants will ultimately decide what form the sector will take. Participation in influencing the future of the sector is voluntary and the strategy cannot force anyone to change their behaviour. Rather this section draws together the concepts outlined in the strategy and provides a blueprint for sector participants to follow - if they choose.

The sector has the scale and scope in market to operate several engagement models. Businesses will need to choose which model they will use to align to their businesses needs, goals and opportunities. A business may engage in more than one engagement model dependent on their scale and ability to maximise price for products. The following diagram shows how multiple models might work together for the sector.

Figure 30: Future market engagement models



Differentiated product model: for the sector to become more secure, increasing the number of targeted products must be considered by the sector as global markets and consumers become more sophisticated in purchasing decisions. This will be particularly true as product form changes occur within key markets, and emerging markets demand greater access to quality protein. The key attributes for the sector's success under this model are:

- Strong premium consumer brand
- Control of product from paddock to processing plant and from plant to customer
- Quality of products
- Recognised world leading assurance programmes
- Selection of animals and feed programmes that deliver to specification
- Guaranteed year round supply (via domestic or offshore production)
- Integrated information flows back from the consumer
- Coordinated data management able to inform research and development investment

A key differentiating feature from the current sector's model is that the procurement stage in the process provides two way information flows and strengthens the control of animal progression towards achieving specification (from breeders to finishers). In most instances this should be controlled by processors able to ensure compliance with all assurance programmes.

To ensure value is optimised, all market prices need to be optimised. Under this model, animals that do not meet specification will be redirected to other markets, along with products not required by the premium markets. The sector will need to have a secondary market system to manage these products and coordinate their path to markets (as represented by the product flow between the differentiated and coordinated commodity models). A current example of this is the sale of lamb flaps into Asian markets.

Coordinated commodity model: Unlike many industries, the sector's products are not built. Rather, they are the result of many choices in how to best process an animal to optimise the animal's value through product returns from markets. This means that many products that are not sought after by premium markets and cannot be easily differentiated need to be managed to maximise the animal's value and to reduce competition on price. In these circumstances, optimised returns will be best achieved through coordination of base commodity products to customers.

Within this model there are two points of aggregation. Firstly, at the stock procurement/processing stage, components of animals not able to be directed to premium markets are managed in a collaborative manner (either by the processor or stock agent). The second aggregation point is through coordinated marketing and customer management to ensure prices are maximised at a sector level with fair reward returned to suppliers based on market prices.

The intention is to find common market entry points (e.g. supply to re-processors) or large global customers where scale of supply could not be managed by one business alone and would be better managed through effective rebalancing of the power at the point of sale. That is, the sector will have a better opportunity to access a fairer share of the market price.

The key attributes for the sector's success under this model are:

- Strong brand
- Strong integration of information
- Strong trust amongst sector participants
- Strong culture for innovative solutions and services
- Strong relationships with the market/customer

The differentiated and coordinated models work together. Through the application of the coopetition model, sector participants will be able to improve their influence further up the value/supply chain while creating critical mass able to invest in opportunities previously beyond individual participants' abilities.

Direct to market model: this model builds on the current model to further develop the sector's specialist capabilities and value propositions to deliver to the sector's markets, customers or consumer's needs. This model is best applied where the product is differentiated in some way. This might be:

- **Terms of trade:** extended payment periods from markets requiring financing arrangements that are outside normal sector arrangements
- **Bundled products:** where sector participants are bundling products across New Zealand's primary sectors to common customers, where the meat products are only part of the value offering
- **Specialist products:** where the sector is processing products to high end value added products. These might be:
 - Pharmaceuticals
 - Nutraceuticals
 - Ingredients
 - Energy generation
- **Small niche markets/customers:** where sector participants hold relationships within markets that are high value small volume customers. These might be:
 - HRI segments in key markets
 - Direct sales to restaurant chains or hotels
 - Gift markets

Sector participants who deal direct to market need to invest in their relationships and points of differentiation. Through understanding the various models available to the sector, and their requirements and differing ability to return value to suppliers, suppliers will be able to decide which approach they would like to produce for. Furthermore, suppliers will know what they can produce, and based on the information they will be able to select who to supply and be able to monitor their supply/value chain partner's performance.

10.1. Strategic theme: Efficient and aligned procurement

The sector has an opportunity to redesign the key interface between the sector's suppliers and processors/marketers. In order to secure the sector for generations to come, the sector will need to do things differently, support each other, coordinate efforts and celebrate their mutual successes.

There is a need to remove the traditional imbalance of power between sector participants. The sector must put aside the mistakes of the past, learn from them and develop a new sector framework where farmers are fairly rewarded for their performance and where processors are sustainably profitable. Solving the procurement system is a fundamental enabler for the other strategy initiatives to be enacted successfully.

Core initiatives

- Develop a framework to formalise an annual commitment of supply to selected supply/value chain partners, with a focus to:
 - Develop a minimum commitment of 70% (but up to 100%) to a processor/marketer
 - Develop coordinated stock management capabilities/services
 - Redesign and align stock agent services
- Develop a comparative reporting framework with sector key performance indicators, with a focus to:
 - Improve information flows and transparency
 - Develop an information exchange
- Increase investment in consumer taste and product preference tests to deepen the sector's understanding of preferences and trends
- Develop incentive based pricing for all stock, with a focus on:
 - Increased transparency of stock values
 - Develop formal benchmarking to monitor supply/value chain partner performance
- Develop a contractual framework for suppliers to support processing capacity rationalisation

10.2. Strategic theme: Increased coordination of in market behaviour

The sector has an opportunity to coordinate activities in order to manage the growing supply requirements of customers and consumers. To meet these evolving requirements, sector participants will need to put aside historical tensions so that they can enhance their services and products at a sector level. That is, sector participants will need to adapt practices to manage supply of products, timing to market, and collectively develop mechanisms to ensure consumer needs and market standards are exceeded.

Core initiatives

- Improve the sector's product range, targeting a category approach to enhance the sector's value proposition to customers and consumers
- Review sector channels to market, to identify opportunities for enhancing the sector's pathways to customers and to identify partnering opportunities with other New Zealand primary sectors
- Develop an exporter charter that sets out the exporter's commitments to service and quality, with a focus to:
 - Define management practices for coordinated products to market/customers
 - Develop a consistent minimum quality assurance practices
 - Develop a performance reporting framework
 - Develop a comparative information sharing framework to increase information transparency
 - Develop a market pilot for a single product for a single market/customer
- Develop a coopetition market engagement model to improve New Zealand's ability to supply large emerging markets/customers, with a focus to:
 - Develop a product list of coordinated products
 - Develop a framework for market development
 - Develop a logistics management capability
 - Develop a framework for in-market joint ventures
 - Develop a sector brand and marketing programme
 - Develop an online sales capability for customers
- Identify priority markets to focus market access activity, with a need to:
 - Quantify the size of the prize from gaining access
 - Quantify the nature of the existing barriers
 - Develop a prioritisation process
- Improve the supplier connection with markets and customers, by:
 - Facilitated customer visits
 - Develop in-market promotions to bring customers to visit New Zealand farms
 - Develop market awards to reward supplier's performance with market visits

10.3. Strategic theme: Sector best practice

As custodians of the land, sector participants have a responsibility to ensure the sector is more financially environmentally, and socially sustainable for future generations. The sector currently has the opportunity to secure and progressively improve the sector's environmental footprint and returns through the application of existing science and technologies throughout the supply/value chain.

Moreover, the sector needs to be profitable to attract and retain people in rural communities – this includes farm labourers, farm managers/farmers and processing staff. To ensure this, sector participants need to protect core land resources, their unique attributes, and develop programmes that enhance the growing environment for future farming generations.

Core initiatives

- Develop a complete nutrient management system able to optimise inputs for efficient conversion of animal feed to protein
- Advance best practice animal welfare practices to further enhance production, quality and reduce the impacts on meat production
- Develop an improved extension programme to improve the communication of science and technology, its application and information capture/benchmarking to inform future science and technology investment
- Develop progression pathways for young people to enter the sector, in order to:
 - Attract and retain the best people in the sector
 - Develop equity-sharing models
 - Develop an on-farm skill base
 - Develop a business management skills base
- Improve sector information systems to ensure integrity of sector data, and skills to gain access to timely information
- Review the proposed ETS scheme to identify ways the ETS's incentives can be redesigned to ensure continued sector growth

The implementation of the strategy's core initiatives will initiate a change programme that will revitalise the sector, sector participant's businesses and provide a solid foundation for the sector to grow in the future. The strategy will need a sustained focus and commitment from sector participants to implement. In order to support sector participant activities, a strategy coordination group is required to coordinate activities, to monitor progress and report with a single voice to the sector.

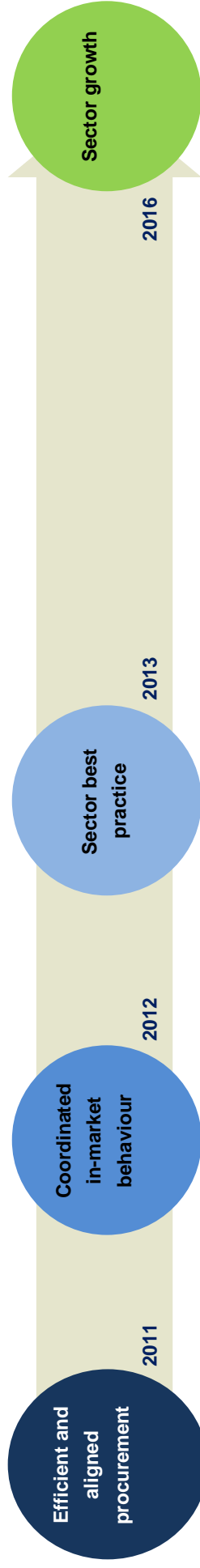
A central coordination group with scale and resources will require support from government to facilitate the change. The establishment of an coordination group will ensure accountability for delivering key initiatives that are best developed and deployed from a neutral position where the whole sector can benefit.

The following diagrams outline:

- The desired outcome from implementing the strategy's initiatives, highlighting areas where capabilities will be enhanced and where capabilities will be developed

- Deloitte's prioritisation of the key strategy actions for the sector's consideration
- Deloitte's high level performance measurement framework for the sector to consider.

Figure 32: The sector strategy's five year priority plan



Processors/ Marketers

Pilot in market coordination in developing markets	Implement performance based pricing	Develop a competition model	Review processing capacity and investigate/develop innovative products	Optimise processing capacity
--	-------------------------------------	-----------------------------	--	------------------------------

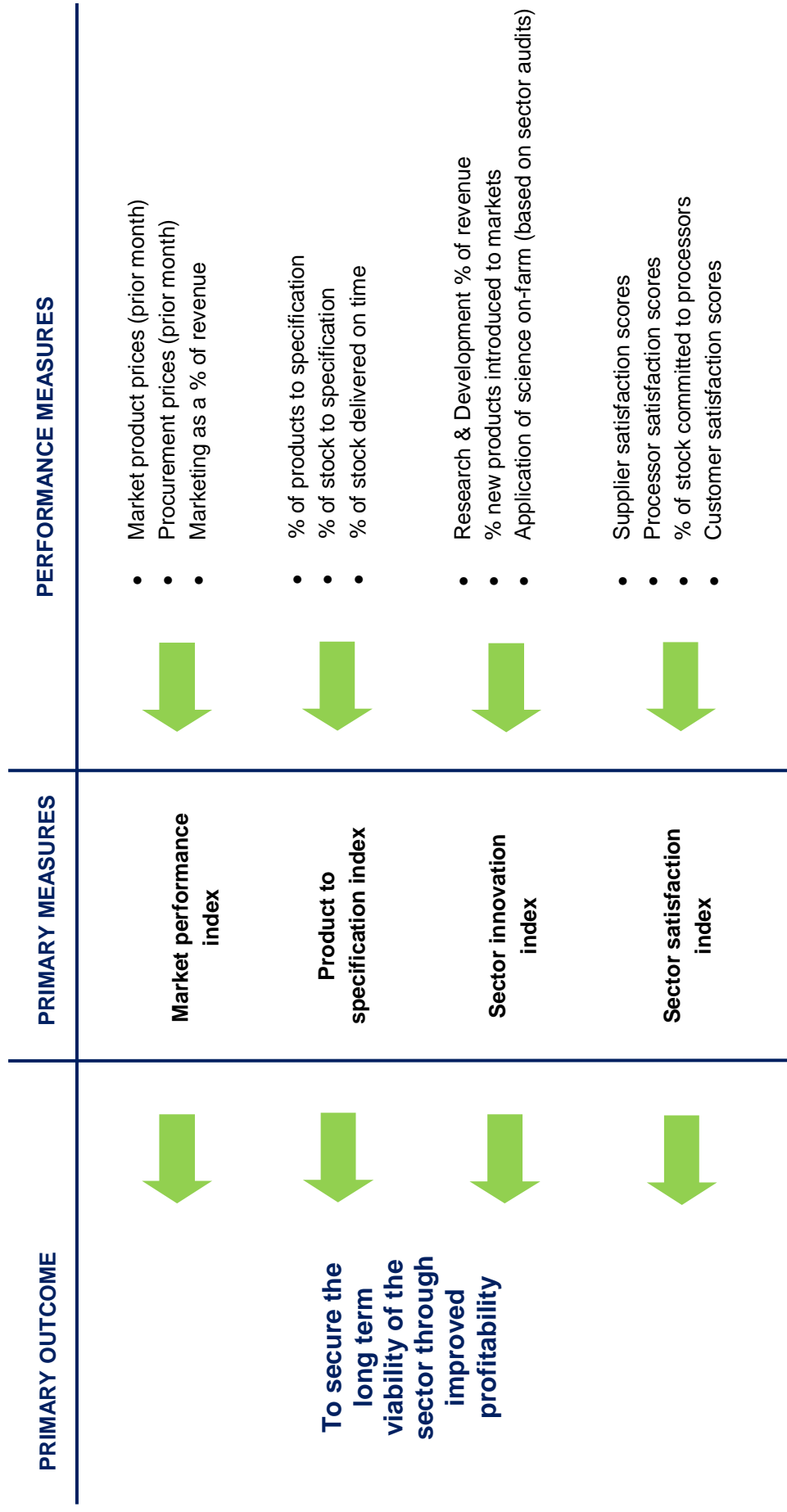
Strategy Sponsors

Develop commitment contract with support clause	Undertake a farm audit programme	Design mentoring programme and extension programmes	Develop and deploy new productivity and environmental procedures
Develop a strategy coordination group	Develop a list of sector experts and their services	Implement a single sector database	Develop an aligned marketing programme
Implement sector KPI's and reporting framework	Develop and implement enhanced stock management guidelines	Develop revised science programme	Develop best practice guidelines and leveraged dairy beef model
Develop a sector marketing charter	Identify target markets and quantify the sector opportunities	Undertake targeted consumer studies	Undertake market development studies

Farmer/ Suppliers

Complete the workbook & develop a business plan	Engage with preferred processor and sign a commitment of supply	Invest in farm improvement initiatives	Adapt and improve productivity and delivery of product to specification
---	---	--	---

Figure 33: Sector Performance Measurement Framework



Appendix I – Red Meat Sector Workbook

This workbook is a tool for sector participants, to enable them to assess the position of their business and that of their supply/value chain partners. The questions are designed to raise the awareness of each individual's or entity's supply/value chains, based on the eight value drivers identified in the Red Meat strategy.

Not all of the questions will apply to all individuals or entities in the sector. Individuals and entities may need to discuss with their supply/value chain partners what activities they are undertaking and how they are performing. The sector needs to change the nature of its discussions to make informed aligned change possible and real.

In raising the awareness and transparency of how each sector participant is performing, individuals and entities will be able to make informed decisions in relation to who to support, their needs and how to best work together to increase profitability. Or conversely, inform decisions of who should not be supported.

Each stakeholder must answer the questions honestly and seek honest answers from supply/value chain partners' to maximise the effectiveness of the workbook questions.

Assessment Scale

0	1	2	3	4	5
Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good

Grow share of market value

Description: the ability to capture a larger proportion of the final sale price and/or premium prices to increase revenues.

Value: is created from knowledge of the consumer/customer, their needs, motivations, and the ability to communicate these to create tailored/differentiated products able to generate product demand at premium prices.

To capture a greater share of the final retail price the sector needs to optimise its value creating activities to grow its relative power in relation to other market participants. Sector participants must consider:

Customer awareness

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you understand your customers?	0	1	2	3	4	5
To what extent do you capture consumer information?	0	1	2	3	4	5
To what extent do you incorporate your customer information into your product development programmes?	0	1	2	3	4	5
To what extent do you understand customer's product preferences and needs?	0	1	2	3	4	5
To what extent do your products meet your customer wants and needs?	0	1	2	3	4	5

Retail environment

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you understand your products' competitors/substitutes?	0	1	2	3	4	5
To what extent do you understand how many supply/value chain participants are there between you and your consumer? (Can you shorten your supply/value chain?)	0	1	2	3	4	5
To what extent do you understand how much of the final retail price you capture? (Do you know how much the other supply/value chain participants are capturing?)	0	1	2	3	4	5
To what extent do you influence how your product is sold and marketed?	0	1	2	3	4	5
To what extent are you able to communicate your product requirements to your supply/value chain partners?	0	1	2	3	4	5

What is my 'grow share of market value' score?

(add them up divide by 10)

/50 - final score =

“The industry has to be market-led, and we can’t compete on price.”

The meat industry of the past was a classic example of the “pure” business model, according to Silver Fern Farms chief executive Keith Cooper – production driven, focused on low costs, margins were consistent. “Volume was the key, with lots of big plants.”

That all changed with the bombshell removal of agricultural subsidies in the mid-1980s, resulting in gradual declines in production to the present. However the industry largely maintained the same approach, focusing on high throughput as the main strategic revenue driver.

There was a major shift in the 1990s to add some value to carcasses by producing cuts to retailer specifications, but this did not remove the product from the influence of commodity price cycles as can be achieved with a true consumer brand. In the past decade, market demand has only increased the need for value add approach, but has seen the industry struggle with high costs from plant closures and downsizing while small operators have emerged with efficient systems, built with the increasingly critical fresh, chilled supply market in mind.

The sector has been slow to respond to the changes in consumer preferences and lacked the understanding of what consumers will pay more for. The salmon industry is a good example of where they have tailored product to their consumers’ needs.

Salmon has progressively provided refined and more tailored products. The effect has been the comparative per kilogram price of \$26.99 for a salmon steak to \$103.80 for shaved smoked salmon targeting the ready to eat/entertaining consumer groups. The red meat sector has until now not realized these opportunities to add considerable value.

Silver Fern Farms has chosen to try to replicate this model since Cooper became CEO in 2007. At that point the company was still reliant on high throughput, killing in the peak season and retaining frozen stock. “We had no value generation, so we’ve had to close plants, flatten the supply chain and try to equalize with the small operators.”

The aim of the change in strategy is to maintain scale of operation but introduce a more nimble flexible capacity in response to consumer demand and aim for an asset utilisation at around 85%. This has, however, required greater consistency of supply and therefore greater commitment from suppliers. In return the company has responded with annual contracts to suppliers and provided insulation from commodity price fluctuations.

Silver Fern’s strategy is to:

- Gain clear insights into consumer preferences and choices
- Create value from a true consumer brand
- Devise a segmented marketing plan targeting affluent consumers based on the convenience, quality of the product, food safety and health values

The advertising to support its new products has a very strong theme of Kiwi parochialism and aims to cement the brand as unique and from New Zealand. The introduction of a premium market brand to create customer pull has been a big focus. “Before, no one had considered having a consistent premium brand, but we decided we needed to create a connection between suppliers and the consumer via customers.”

This has been trialled in New Zealand supermarkets with ready to cook products that lend themselves to ease of preparation and contain recipe and cooking instructions, and a major move away from simply supplying in bulk for retailers. The aim is to create brand loyalty and therefore compete on value, not price.

The branding is working. Market research shows that Silver Fern Farms is the most top of mind brand with 3 out of 4 naming a brand mentioning Silver Fern Farms. The other features of the range are the special cuts, consistency of quality, cooking suggestions and overall packaging design along with the more intangible benefits of NZ-ness and the integrity of the natural inputs.

“We need to operate like an FMCG marketer.” Silver Fern Farms is enabling consumers’ to have the confidence in products they can more readily consume regularly and that are consistently available.

It has involved a heavy investment in consumer research to understand what they know about the product and what they’re after. Silver Fern Farms found many New Zealanders had surprisingly little knowledge about how to cook cuts of lamb, for instance, but had a strong desire to consistently have a great outcome to please family and friends creating a great experience. Hence the move towards producing standardized sizes and quality so the product performs the same every time, in keeping with the instructions on the packet.

The initiative is being replicated in export markets supported by the Farm IQ programme, which among other things will research what consumers are looking for in product quality, safety and sustainability measures.

“It’s about understanding what the consumer will pay a premium for and having confidence its worth paying more for , creating a system for farmers to grow to those requirements and capturing those premiums back inside the farm gate to encourage different farming systems.” The focus for everyone must now be squarely on the consumer.

Get better access to markets

Description: the ability to maintain access to international markets unobstructed (e.g. commercially, economically, politically and culturally).

Value: is created from the ability to access premium markets and customers without being impeded/restricted or without disproportionate profit-eroding barriers.

To gain better access to markets the sector needs to identify key markets, understand the entry requirements for the sector (and sector competitors), and work with Government where required to optimise market access. Sector participants must consider:

Market understanding

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you understand your target market entry requirements?	0	1	2	3	4	5
To what extent do you understand your target market product regulations?	0	1	2	3	4	5
To what extent do you understand your target market's structure?	0	1	2	3	4	5
To what extent do you understand your target market barriers (if any)?	0	1	2	3	4	5
To what extent do you understand your competitors? (their products, their market approach, etc)	0	1	2	3	4	5
To what extent do you understand the channels to market, and who controls them?	0	1	2	3	4	5

Market preparedness

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you proactively assess the markets you supply?	0	1	2	3	4	5
To what extent do you sustain your market presence?	0	1	2	3	4	5
To what extent could you respond to new market barriers?	0	1	2	3	4	5
To what extent do you lead/influence market standards?	0	1	2	3	4	5
To what extent do local producers welcome your product/s? (How well do you understand their needs/drivers?)	0	1	2	3	4	5

What is my 'get better access to markets' score?

(add them up divide by 11)

/55 - final score =

Make better use of scale

Description: the ability to realise the benefits of scale (financial, contractual terms, market access and customer opportunities) through relative volume of branded and/or coordinated product to customers.

Value: is created from the increased opportunities, ability to provide continuous supply, exert market leverage and access concessions from service providers.

To make better use of the sector's scale, the sector must identify either large premium or niche markets that can support products' relative volume within the primary export window.

Sector participants must consider:

Your scale

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you understand the volume in your target market and your competitor's volumes?	0	1	2	3	4	5
To what extent do you understand your/New Zealand's presence in your target market? (e.g. access to support)	0	1	2	3	4	5
To what extent can your business sustain investment in growth?	0	1	2	3	4	5

Sector's scale

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent are your products differentiated from others in the sector?	0	1	2	3	4	5
To what extent do you collaborate (formally/informally) within markets to meet your customers/consumers needs?	0	1	2	3	4	5
To what extent does the sector undertake market development?	0	1	2	3	4	5
To what extent does the sector undertake research able to improve our scale?	0	1	2	3	4	5

What is my 'make better use of scale' score?
(add them up divide by 7)

/35 - final score =

Select what to sell

Description: the ability to differentiate product /co-products in the eyes of the customer/consumer, giving relative advantage on products and competitors/substitutes.

Value: is created from the ability to target customer/consumer needs while maximising the value of the component parts of the animal, co-products and nutraceuticals (either directly or through partnering).

To make better informed decisions on what to produce and how to process the raw material – the sector must capture, record, monitor and analyse information to ensure products are able to meet or exceed customer and consumer expectations at a satisfactory profit.

Sector participants must consider:

Customer relationships

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you have pre-sold products under contract each year?	0	1	2	3	4	5
To what extent do you have return customers each year?	0	1	2	3	4	5
To what extent does your customer understand the value you add to their business?	0	1	2	3	4	5
To what extent do you provide supporting information to your customer/s to help distinguish your product/s?	0	1	2	3	4	5

Tailored products

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent is your product different from your competitors within the same market?	0	1	2	3	4	5
To what extent do you monitor and assess competitor products within your product category?	0	1	2	3	4	5
To what extent do you place importance on product development? (how do you differentiate your products?, how much of your revenue do you invest in developing your product/s?, do you own any protectable intellectual property?, do you understand how to protect and commercialise intellectual property?)	0	1	2	3	4	5

What is my 'select what to sell' score?

(add them up divide by 7)

/35 - final score =

“Working at the top end”

Alliance Group Limited Chief Executive Grant Cuff offers two hypothetical scenarios for where New Zealand's red meat sector could end up in the next couple of decades: be a market-led, environmentally sustainable industry exporting predominantly value-added products aimed at top end consumers or focus on mass production that increasingly uses battery-style farming practices to maximise on-farm efficiencies, targeting the emerging markets hungry for protein.

Most people with knowledge of the meat industry would know Alliance Group has been pursuing steps since the mid-1990s that would help position New Zealand's red meat industry firmly in the former, and far more palatable, option.

Alliance Group has led and participated in a number of initiatives during that time – described by the company as its “farm to fork” strategy – which have contributed to farmers having greater knowledge and awareness of what consumers are wanting and how they can alter their farming practices to meet these changing demands. This process began in 1997 with a report titled *Securing the Future*, and has since included a range of research programmes, brand launches and facilities upgrades.

Cuff describes the suite of initiatives as a series of incremental changes to increase carcase yields and improve the overall flock standards over time. By showing farmers what they are looking for in an animal, and paying a premium for it, he hopes to “gently” influence farmers to providing animals which meet the company's product specifications. “We've progressively put systems in place since 1997 and said to farmers ‘here it is, you can start using it’. And they seem to appreciate that approach, which is more carrot than stick.”

Alliance Group's approach works by giving several pieces of information straight to the farmer. One particularly important piece of information is the detailed kill sheets which provide them with a range of yield grading data about each lamb sent to an Alliance Group plant. It provides information on weight, fat, shape, and colour through its hi-tech VIAscan™ photography and scanning system, in the three primary areas – leg, loin and shoulder – and effectively charts how every carcase has performed in relation to the company's yield targets. For animals that consistently achieve the specified targets, there's a premium paid over and above the standard schedule rate.

Another essential component which gives farmers greater information about how to improve flock genetics has been the Central Progeny Test (CPT) database. The CPT database was established in conjunction with a range of sector partners, and essentially scores and ranks the genetic traits of rams across all breeds. Alliance Group believes that there are good genetics in every breed, and it is not its job to tell farmers what the right breed to farm is. “There is no magic answer. Lamb is still a variable product, whose outcome will still depend on the weather and other uncontrollable factors. But we can improve consistency, and tighten the variation in the flock”.

Identifying the best attributes of a particular breed will gradually enhance flock quality over time while retaining genetic diversity of the national flock. This is safer because New Zealand's variable farm land means there will be breeds which are best suited in some localities but not others. Farmers can use the CPT database, or work with their ram breeder to improve their animal yield, and achieve the premium Alliance Group pays.

The CPT data analysis pinpoints the best genetic traits of a breed that suit a particular area and the information to farmers is conveyed via growth index sheets based on a range of measures, including weaning and carcass weights, meat values, facial eczema rates, and so on. Since these two programmes, VIAscan™ and CPT database, have been under way, there has been a steady improvement of yield in the important leg and loin areas.

Alliance Group has also implemented programmes to make its business more environmentally friendly. There is more and more demand from consumers for sustainable and environmentally friendly products.

"It's coming regardless of legislation. The customers want it now."

Alliance Group has been working on a sustainability initiative called hoofprint™ for the last three years. It is all about helping farms record their carbon footprints, and improving them over time. The hoofprint™ software automatically uploads VIAscan™ kill sheet data, and combines with other key farm metrics to get an accurate farm carbon footprint. In the future, this data will be able to be used for communication with key markets about our sustainable farming approach. Alliance Group's aim is to reduce the carbon footprint of its whole chain, and is practicing what it preaches by reducing its own greenhouse gas emissions by 26% since 2000.

The company continues to focus on market-led initiatives, such as taste and tenderness research, and sustainability measures as these take on greater importance in export markets. All of Alliance Group's initiatives are ultimately incorporated into the company's brand promise of quality and excellence.

"We try to keep up with the top end consumer, and position ourselves to be not where they are now but where they will be next year, and feed this information back to farmers."

Increase certainty of supply

Description: the ability to provide an increasing proportion of programmed seasonal supply or processing capacity so that informed long term investment planning can occur.

Value: is created from aligning with a business with like-minded businesses able to provide clear market signals, and who are prepared to reward the ability produce to customer's specifications while minimising supply/value chain costs/risks.

To maximise the value from better certainty of supply, to each supply/value chain participant needs to develop a formal business relationship (farmer to processor) that is able to manage risk for all parties.

Sector participants must consider:

Supply / value chain partners

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you have return customers?	0	1	2	3	4	5
To what extent do you have certainty of revenues each year?	0	1	2	3	4	5
To what extent is your revenue contracted?	0	1	2	3	4	5
To what extent is your supply programmable/consistent?	0	1	2	3	4	5

Supply certainty

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent of your infrastructure is being operated at optimal levels? (measurement: less than 50% = 0, 50-60% = 1, 60-70% = 2, 70-80% = 3, 80-90% = 4, 90-100% = 5)	0	1	2	3	4	5
To what extent do you reinvest into your infrastructure?	0	1	2	3	4	5
To what extent is your production contracted within end-to-end contracts?	0	1	2	3	4	5
To what extent is your currency cover effective?	0	1	2	3	4	5
To what extent do you have price certainty from your partners?	0	1	2	3	4	5

What is my 'increase certainty of supply' score?
(add them up divide by 9)

/45 - final score =

“We’re working as a team”

Willie and Sue Macdonald have owned Middlehurst Station in the Upper Awatere Valley in Marlborough since 1998. The couple's Marlborough high country property spans a massive 16,000ha with an additional 550ha property for finishing in North Canterbury, and has around 60% merino sheep and 40% beef.

Since owning the farm they have concentrated on land and genetic development, gaining them an increase of stock numbers and increases in production of meat and wool. They feel that their future is in building long-term relationships with their customers to meet the market needs and provide sustainability for their family and Middlehurst Station. Their aim is to establish a sustainable, productive family farming business and to ensure that positive high country traditions are maintained and passed on – and have fun while they do it!

The Macdonald's have forged a long-term supply contract with the New Zealand Merino Company who has given them a benchmark for the marketing of their product. Through the Icebreaker barcode system, Willie and Sue's customers trace their garment back through the transparent supply chain to the farms that grew the merino fibre it was made from. They also have a long term mutual understanding with ANZCO who provided security of space i.e. killed stock when Willie & Sue wanted them killed. Both ANZCO and New Zealand Merino provide mutually guaranteed revenue and supply streams which in turn provide a win:win situation for them and the country. Value was also added by not involving stock agents – if they don't add value they shouldn't be in your business.

Willie says his supply contracts for wool, have resulted in a \$1.50 a head premium over and above the industry benchmark during the past 10 years. It has enabled a vital investment in R&D – “you've got to invest in your future, you don't get anything for nothing.”

It's likely they will also support the initiative by the Merino Company and Silver Fern Farms to market high country merino lamb, again via a long-term supply agreement. The branding initiative involves leveraging elements of the unique high country “story” that has enormous appeal to consumers. This factor is of critical importance to the Macdonalds, as they regard the alignment of their own values with those of processors as being essential to the long-term viability of the sector.

Along with benefits to financial planning, the Macdonalds hope it could lead to longer-term, price-fixed contracts with other suppliers, such as fertiliser companies.

The choice of a long-term supply contract is based on a vision for the industry whereby suppliers and processors are able to respond more effectively to market signals. There are three critical motivations for a long term contract:

- Price security, enabling financial planning for farm development;
- Breeding objectives, enabling genetics to be sourced to meet future market demand;

- Personal rewards, from the pride generated from both knowing where the end consumer product is sold and forging closer ties with the companies they supply

Greater communication from companies about product specifications and data relating to the raw materials has enabled efficiencies to the woolshed operation, through the removal of some processing steps. “It means we’re working more as a team,” says Willie. “We’ve got enough of a gamble with the weather that we can do nothing about, so why would we then go and expose ourselves with our produce?”

The overall motivation is to move away from the boom and bust cycle typical of the sector, and to be able to rely on a guaranteed trajectory of growth. This fits in with the Macdonald’s vision for their property, and provides security for finance and for investment in breeding. It seems simple and common sense.

The Macdonald’s success can be attributed to having a vision they wanted to aspire to and knowing what they need to do to get there. This process was helped by forging relationships with banks and processors alike who shared their values and were transparent – they worked as a team to obtain the couple’s ultimate end goal.

“We want to make the most of this opportunity we’ve got, so we have to be interested outside the farm gate. We don’t want to be confined to being a market seller of raw produce.”

Improve on-farm productivity

Description: the ability to understand, monitor and model your business's performance to inform your business decisions – including the value of advice you receive.

Value: is created from the ability to optimise farming systems to produce quality products on time, to specification. Greater value can be captured through investing and extending influence either vertically or horizontally.

To establish best practice production capability in your business (and within your production environment) you must understand and utilise optimal production systems, appropriate technologies and science to create increasing value in your products.

Sector participants must consider:

Best practice

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent are motivated to improve your current performance?	0	1	2	3	4	5
To what extent do you understand value creation and loss within your business?	0	1	2	3	4	5
To what extent do you capture value from your activities?	0	1	2	3	4	5
To what extent do you integrate within your supply/value chain?	0	1	2	3	4	5
To what extent do you understand what best practice looks like? (do you share what has helped on your farm with other farmers?, do you know where to get expert advice?, do you know what technologies/farming systems you can use? do you understand their limitations?)	0	1	2	3	4	5
To what extent do you understand what top performing entities are doing to improve profitability?	0	1	2	3	4	5

What is my 'improve on-farm productivity' score?

(add them up divide by 6)

/30 - final score =

“The quiet overachiever”

Bruce Calder acquired his 358ha Bay of Plenty property in the mid-1970s in a ballot draw to settle farmers on government-owned land. It was a lucky break – but he’s turned that luck into good fortune through a progressive programme of land use diversification which not only maximizes value but delivers a constant cash flow.

From a Central Hawke’s Bay background, Bruce originally intended to build up enough equity in the property to enable him to sell up and return to farm where he grew up. Thirty-five years later, he considers the Bay of Plenty has all that Hawke’s Bay has to offer and more, and is the envy of many of his old friends.

Bruce’s farm business has evolved from a fairly traditional sheep and beef unit into one which has year-round revenue streams from a number of different land uses, including dairy winter grazing, high quality red clover hay for the equine industry, bull leasing and sale, pine trees, and sheep and beef.

Bruce modestly says his success is based on “making logical decisions around financial benefit and pasture improvement”. That’s involved a critical matching of land class to land use, then investing heavily in diversification to ensure it has the best chance of paying off.

That’s not to say there weren’t difficulties to overcome along the way. The soil in the Bay of Plenty has a high pumice content, and is particularly drought prone because of its lack of water retention, and erosion in major flood events. To combat erosion he has used extensive planting of exotic and native trees, shrubs and bush to minimize the impact during heavy rainfall, and retiring gully areas to reduce risk.

Pasture management has also played a crucial part in maximizing the land’s potential. Where there were 16 paddocks when he moved on to the farm in 1975, there are now 170 – many specifically fenced for hay making – linked by a loop track for ease of stock movement.

The rotation of stock, from the dairy winter herd and leased bulls (which are usually off the property for three months in summer), fosters pasture growth and preservation at the critical climatic times of year.

Hence, while neighbouring properties suffer in drought conditions, Bruce’s pastures are relatively green because they are only lightly grazed during low rainfall, and he is able to harvest two crops from some for his lucrative red clover hay making venture (which produces 20,000 bales a year).

This combination of profitable and environmentally sustainable farming, through pasture management, fencing off streams and wetlands, and native plantings, was recognised with Bruce and wife Tessa winning the Supreme Award in the 2010 Bay of Plenty Ballance Farm Environment Awards.

Bruce says the key driver for his decision making has been around maximizing the pasture growth. Regular guidance from agricultural consultants, along with financial input from his bank manager and accountant, has helped in making the right decisions – “most of the time”.

Add to this some innovative initiatives such as rolling hay bales down steep sidings, and using stock to trample the hay and seeds into the ground which then leads to pasture rich in red clover, and it becomes clear there’s an instinctive drive behind some of Bruce’s decision-making. Throw in hi-tech biological controls for noxious weeds and pests, along with under-sowing any paddock a tractor can safely traverse, and he now has some of the best pasture in the Bay.

Bruce’s mantra is that any diversification must be environmentally sustainable and deliver superior returns. Yet at 63, you could excuse a bit of “me time” for him and wife Tessa and a trip to Europe this year seemed reasonable payback. However, that’s been cancelled because of a recent turnover in farm manager and a desire to find an elusive sixth revenue stream – “I’m always looking for a challenge”.

Essentially, the focus is on constant growth – not just of the pasture but the folding stuff. “You need to aim for 10% growth each year,” Bruce says. Maybe once he’s found that sixth revenue stream, the well-deserved holiday in Europe with Tessa will be back on the agenda.

Improve business skills

Description: the ability to apply and integrate foundational science and technologies to capture how New Zealand's unique attributes differentiate products.

Value: is created from the ability to optimise an operation and align with business partners to make timely informed decisions and exert absolute control of the business.

To improve your control of your business through increased awareness, focus and improved management processes.

Sector participants must consider:

Business management

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent are your business processes understood and documented? (How regularly do you review your progress (against your plan)?)	0	1	2	3	4	5
To what extent do you capture detailed data to support your production? (Financial data, grass production data (growth, ME, etc), animal growth rates, animal condition data, etc)	0	1	2	3	4	5
To what extent do you benchmark your performance (both informally and formally)?	0	1	2	3	4	5
To what extent do you monitor the value you receive from your advisors or service providers? <i>(do you discuss what is working and what has not worked on farm?, do you share what your problems are?, has their advice improved profitability?, etc)</i>	0	1	2	3	4	5

What is my 'improve business skills' score?

(add them up divide by 4)

/20 - final score =

“It was quite a scary decision but it’s been awesome.”

Ashley Cole’s in charge of the stock on her 970ha King Country farm while husband Ash handles the land and infrastructure. They’ve been farming on their own account for 10 years and the 70:30 mix of sheep (breeding and finishing) and beef has produced some more than healthy returns over the past few years – “we’ve been making money hand over fist”.

But then Ashley would know. She monitors the farm’s financial position on almost a daily basis, and has a stringent requirement that any money invested in the farm has to have at least a \$2 return for every \$1 put in. That’s not to say she is shy of making investment decisions when the numbers stack up. The couple are avid users of the latest R&D, in particular around animal genetics and computer-based tools to monitor progress.

“It’s all about adopting the best practice, then knowing where you are along the way, and what you can sell and for what price at the end. I haven’t reinvented the wheel, I’m just using the technology available.”

One of the most significant financial decisions Ashley has made recently has been about cutting cost rather than investing. After years of using stock agents to make the decisions regards the marketing of finished stock to the meat companies and often disappointed, she chose to go it alone and deal directly with her preferred meat company – although it didn’t happen without some serious soul-searching.

“It felt like I was almost trespassing on someone else’s domain. Stock agents are your mates and for years farmers have been getting advice about when to do things, what price you’ll get for your stock – it’s a mindset that’s very difficult to break.”

Ashley has been dealing directly with a company for the past few months, agreeing on a price and stock commitment 2-3 weeks before delivery. If the agreed price is lower than the company’s schedule closer to her supply date, then so be it. The guarantees around price and supply far outweigh the highs (and lows) obtainable through the Sunday night ring-around.

Still, it wasn’t easy making the first move with the meat company. “I think I had heart palpitations – I haven’t been so nervous about a cold call in ages.”

The result has been a greater sense of control about a vital part of the business that was left in others’ hands. “When you’re in control of your stock, you can make the decisions about when and where they go to market.”

“Now I’ll go and find a meat company that wants larger weight lambs if that’s what I’ve got.”

At this stage the only tangible financial benefit is saving a 75 cent a head drafting fee. Ultimately, though, she feels meat companies will come to realise there is value in dealing directly with farmers and reward them accordingly.

There is virtually no extra work for farmers, she says, as they will almost certainly be drafting anyway, and she now receives killing information on the same day (instead of up to several days later) which helps inform her decision-making for when to send the next mob of stock to the works.

Ashley believes farmers need to talk more to others who are doing well and work out the best practices to adopt to suit their individual farm environments and business goals. It is important farmers work on their business not in it, and have sound planning in place. “There’s no point thinking about this year, it’s done. You need to be planning for next season and the years after.”

Third party advice from consultants or farm advisors is also invaluable. “A good adviser should challenge you to think about the purpose for each element of the business. You’ve got to think about the purpose of each individual paddock or stock unit – and how to turn them into profit.”

Develop farming systems

Description: the ability to apply and integrate foundational science and technologies to capture how New Zealand's unique attributes differentiate products.

Value: is created from the ability and willingness to invest in new capabilities that reinforce or enhance the products differentiating story to customers/consumers.

To increase the value the sector gets from improved uptake and application of existing capabilities (science and technology) and new innovations.

Sector participants must consider:

Science and technology application

(Please circle one)

	Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good
To what extent do you understand what is limiting your businesses' growth?	0	1	2	3	4	5
To what extent do you know what capabilities are being developed? (have you let B+LNZ know what you need?, have you asked if you could help with new innovations?, have you asked what is possible?)	0	1	2	3	4	5
To what extent do you identify and maximise local advantages? (e.g. land use to land class - soil, rainfall, temperature, grazing crops, etc)	0	1	2	3	4	5
To what extent is your production optimised? (e.g. does your animal mix maximise your profits?, do you know how to improve live weight gains within your conditions?, do you know what comparable entities profits are?)	0	1	2	3	4	5
What is my 'develop farming systems' score? (add them up divide by 4)	/20 - final score =					

“The discussion group junkie”

James Brownlie runs a 50:50 combination of breeding sheep and breeding and finishing beef on a remote 1054ha of Wairoa district hill country (East Coast of the North Island). The original property was a raw state farm acquired after being on the marginal lands scheme in the 1970s – it was 545ha, a lot in scrub, but had good soils.

The step change in productivity came for James when he made the discovery, that despite appearances, his ewes were in relatively light condition when rams were introduced to the flock that brought about a significant change in performance. By improving their feeding regime and improving their condition scoring prior to mating, his lambing percentage increased from 125 to 140 in one year.

A fair amount of research has gone into most of James' decision-making over the years. He's a self-confessed discussion group junkie, actively participates in Beef + Lamb New Zealand field-days and he's not averse to taking the paid advice of people who he believes in and trusts. This has led to an established relationship with consultants Chris Mulvaney and Don MacColl of AgriNetworks, who James has now been using for eight years.

They visit his farm every six months to provide best practice advice on stock management, animal health and pasture care, under the auspices of the StockCARE program (previously known as Sheep for Profit). Essentially the program looks in detail at a range of measures of farm performance throughout the year to determine where improvements can be made, with the ultimate goal of lifting the performance of the entire country's sheep flock.

A critical recent initiative is to time the introduction of the rams to his flock by working backwards from when the farm's spring grass growth is at its peak to coincide with when ewes will be “milking like mad” their newborn lambs. This should ideally work out to be a time within the ewes' cycle that they are ovulating more intensely later in the season – thereby increasing the potential lambing percentage.

Several years later, he's now also aiming for a better productivity measure when lambs are weaned rather than continually striving for higher lambing percentages, which at one point (with Hogget Lambing included) reached 162%. While he's now achieving a ewe flock weaning percentage of around 140-145%, the lambs are also heavier – in the low 30kg range, up from 25kgs at the start of the “Sheep for Profit” program¹.

“I've moved from [lambing] numbers to kilos [of meat]. It's about kilos of lamb weaned per ewe wintered. There's no point having thousands of lambs if they're all lightweights.”

Historically the half and half split (sheep to cattle) has provided a good balance, both economically and for pasture management.

¹ 3000 lambs (150% Lambing – the original goal) weaning at 25kgs give 75,000kgs of liveweight.
2800 lambs (140% lambing) at 33kgs average yields 92,000kgs of animals – 22% greater yield.

An early lesson James learnt was he had to focus on being “a grass farmer, not an animal farmer”. Pasture management is critical on the East Coast where low rainfall can play havoc with stock growth rates. “You’ve got to groom pastures. Don’t let grass get old – ever,” James says. “A scientist told me fresh grass goes through a lamb’s rumen in six hours, but old grass takes it three days to digest.”

He maintains a balance of older cattle, which are not as fussy with pasture as his younger bulls, and strives to ensure his lambs are able to access fresh shoots as much as possible.

Another critical lesson, and one he’s carried with him during his farming career, is to focus on what you can control and not on the things you can’t. A strong driver of performance for James has always been debt repayment, but underpinning that is a commitment to “giving it a good go, boots and all”. That’s led to James acquiring additional property each time his farm became mortgage-free.

James admits there’s now a huge amount of information out there about best practice for farmers to tap into, however the need for farmers to learn has never been greater. It’s vital to keep the eyes and ears open about what is going on in neighbouring areas, and take ownership of the issues and problems affecting the farm business within your control. “Luck is when preparation meets opportunity.”

He agrees that a fair degree of mental discipline is required to prioritise, and see the wood from the trees, “but provided you’re satisfied you’ve followed due process, you’ve got to then go and back yourself”.

James is not one for trialling new practices – “I’m not a dabbler, conservatism doesn’t work for me.” Once the homework on a change is done, and it stacks up, he goes for it with full commitment.

James crunches the numbers on a regular basis, benchmarking performance against previous years and the rest of the industry. In addition there are the monthly reconciliations and GST returns, and an annual big figures wash-up. The critical factor he says is to “do the sums honestly”. Having targets that are able to be flexible is also important, along with factoring in non-financial elements that reflect the farm’s business goals.

His overall approach is one of striving for continual improvement – “you have to do it”. Ultimately, he aims for a “sustainable, profitable farming enterprise with the people working on it and animals living on it having the best quality of life”.

Your results

1. Grow share of market value	
2. Get better access to markets	
3. Make better use of scale	
4. Select what to sell	
5. Increase certainty of supply	
6. Improve on-farm productivity	
7. Improve business skills	
8. Develop farming systems	
Total	/40

Measurement:

less than 0 to 3 = 0 / 4 to 10 = 1 / 11 to 17 = 2 / 18 to 24 = 3 / 25 to 31 = 4 / 32 to 40 = 5

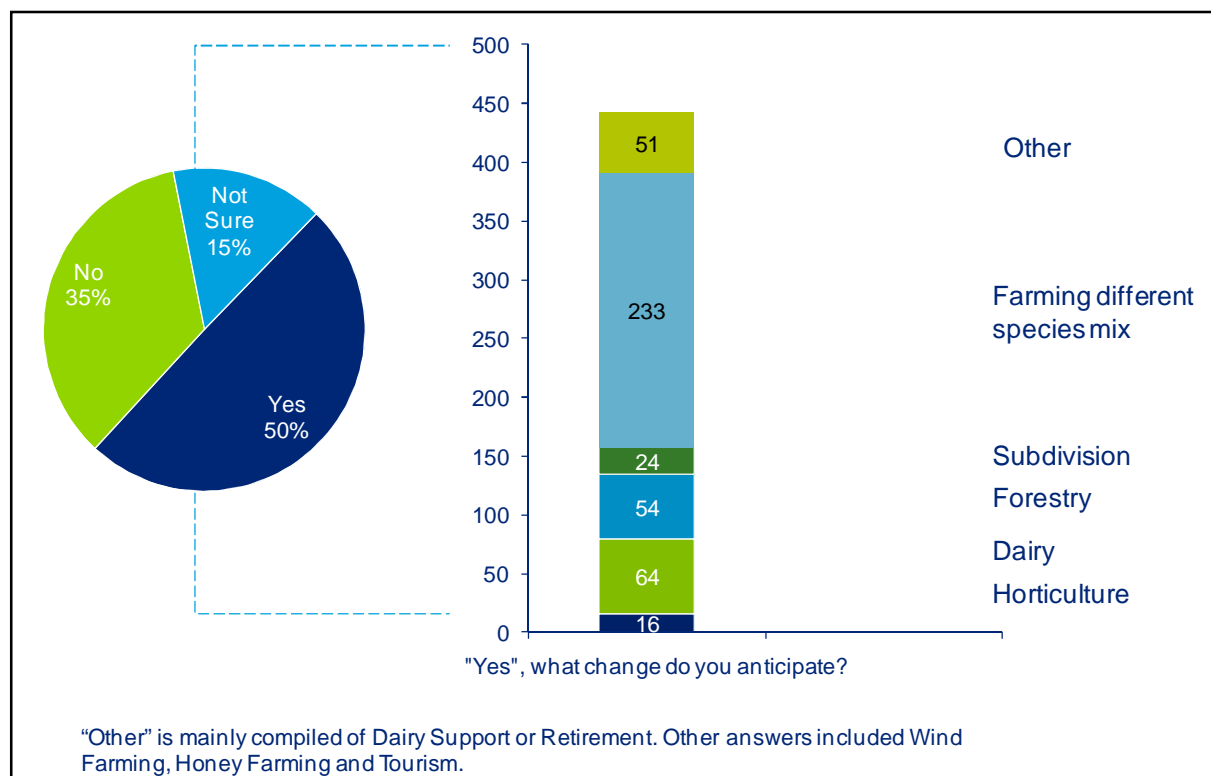
0	1	2	3	4	5
Not achieving	Barely achieving	Basics in place	Work to do	Nearly there	All good

Appendix II – Farmer responses

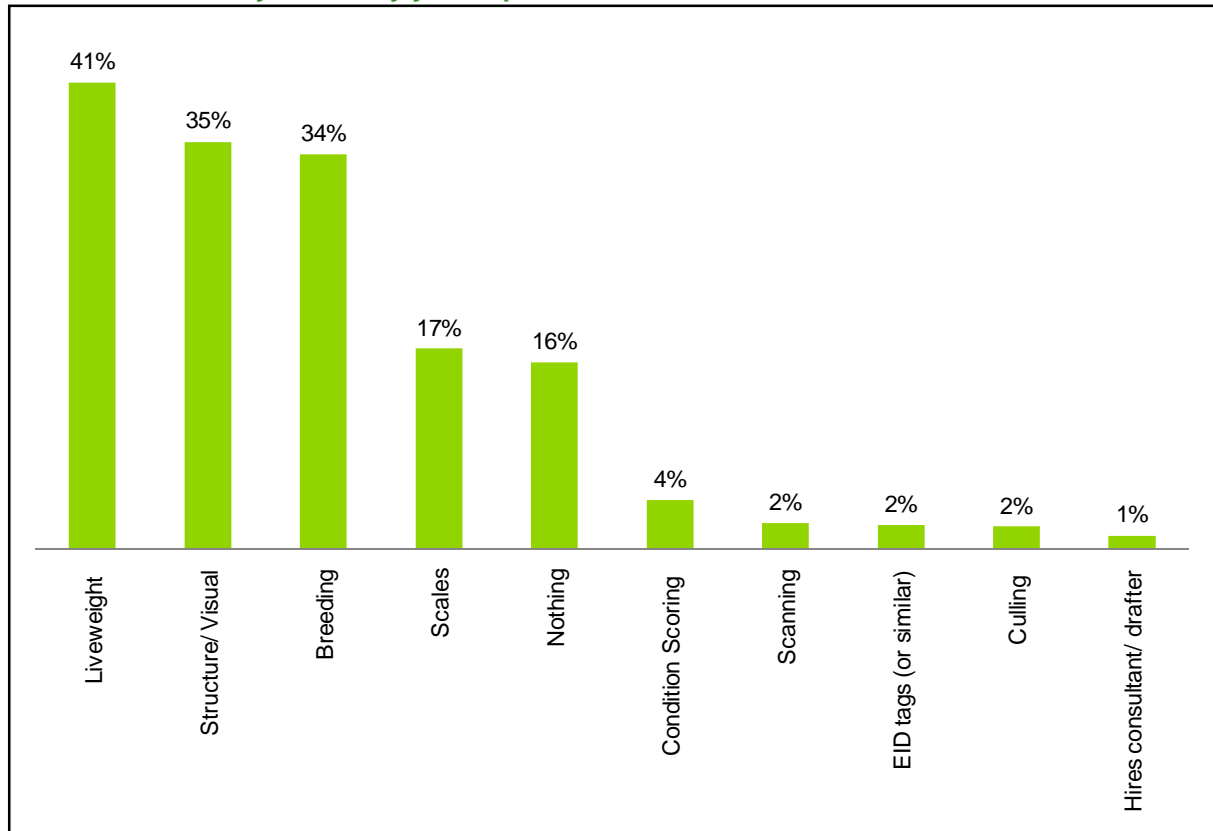
Farmer responses to online questionnaire

Question	Yes	No
Do you have a written business/farm plan for your farm?	41%	59%
Do you have a significant alternative income stream (not related to your farm business - e.g. tourism, contracting, off-farm income)?	35%	65%
Do you have off-farm investment in meat processing/exporting companies?	45%	55%
Do you know your cost of production?	73%	27%
Do you perceive that there are barriers to collaboration in the current industry model?	85%	15%

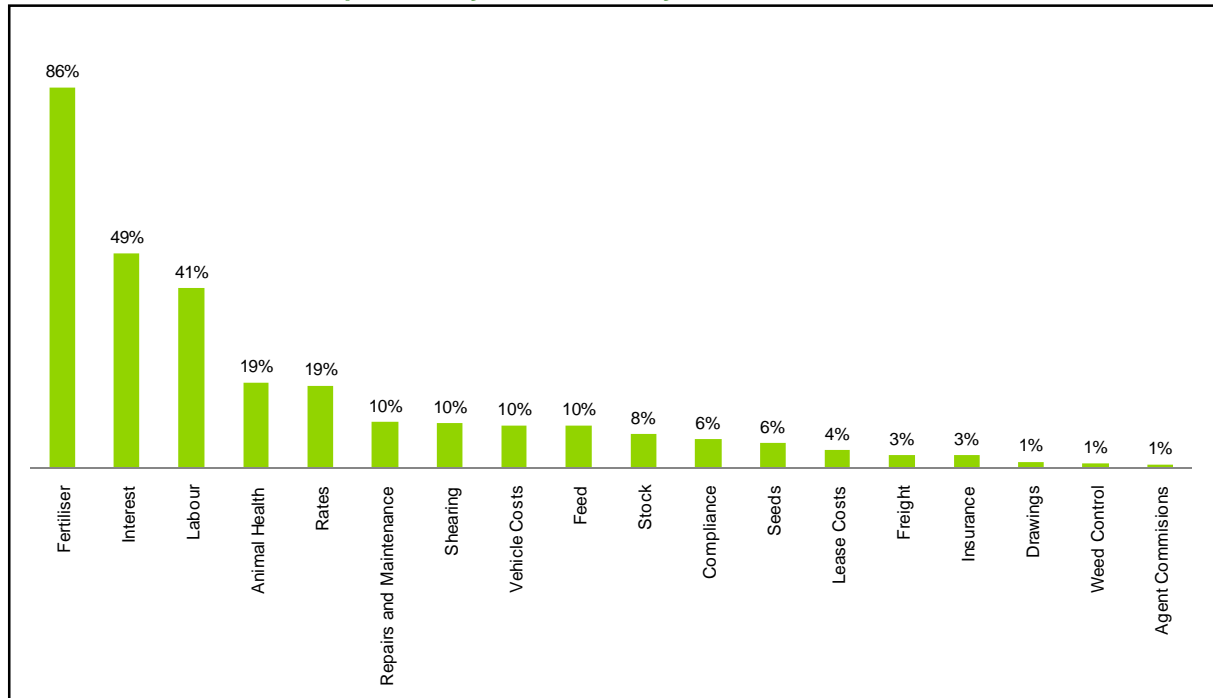
Question – Do you see the focus of your business activities changing in the next five to ten years?



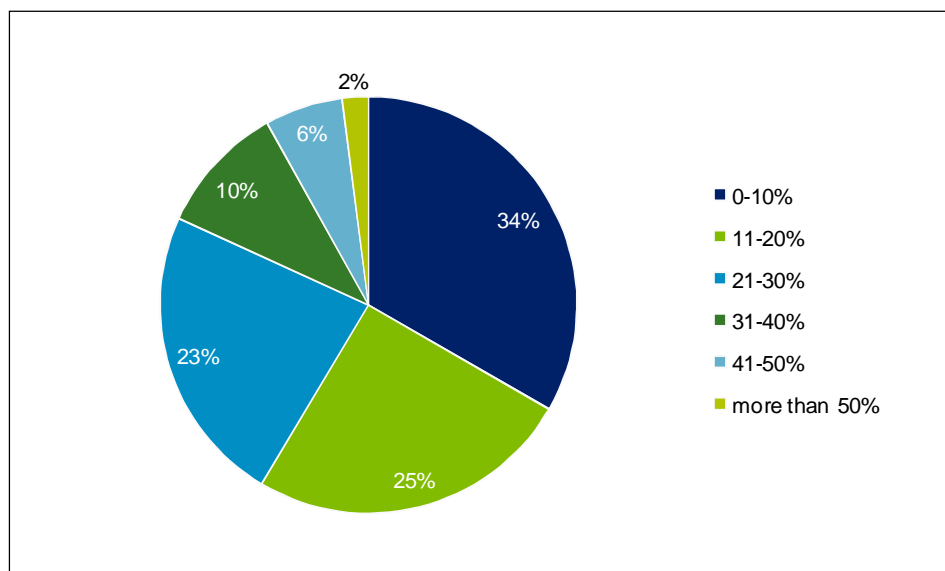
Question – How do you identify your top stock?



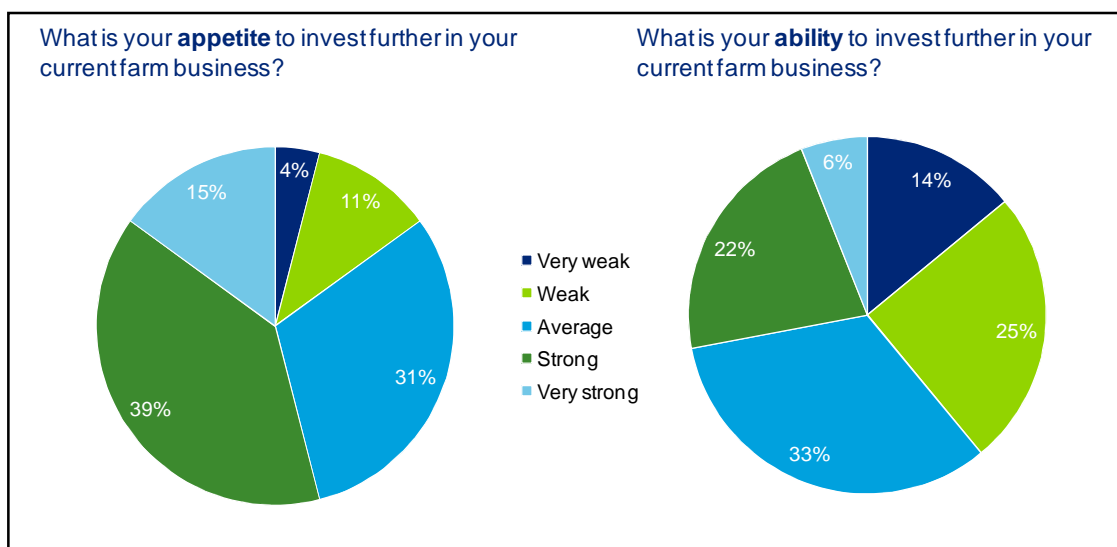
Question – What are the top three key cost items in your business?



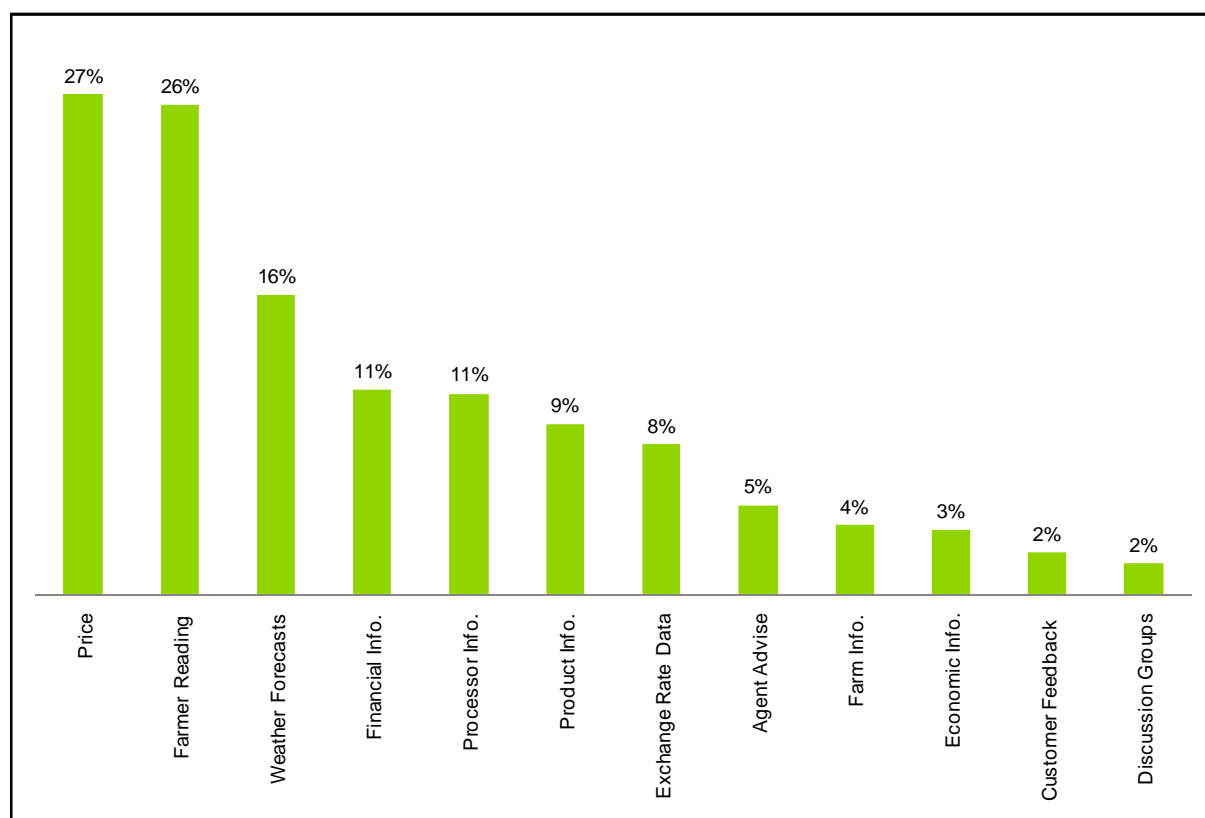
Question – What is your amount of debt servicing as a percentage of Gross Farm Revenue?



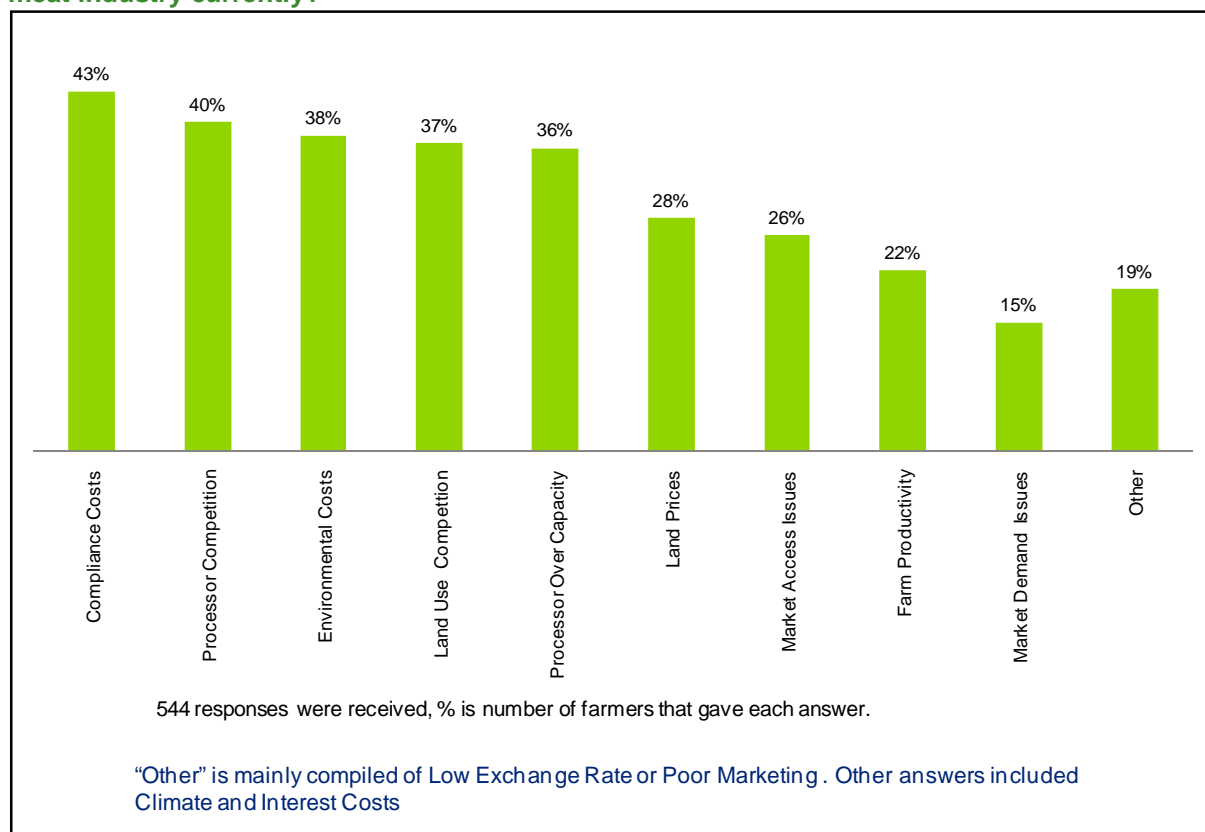
Farmer appetite vs. ability to invest further in their business



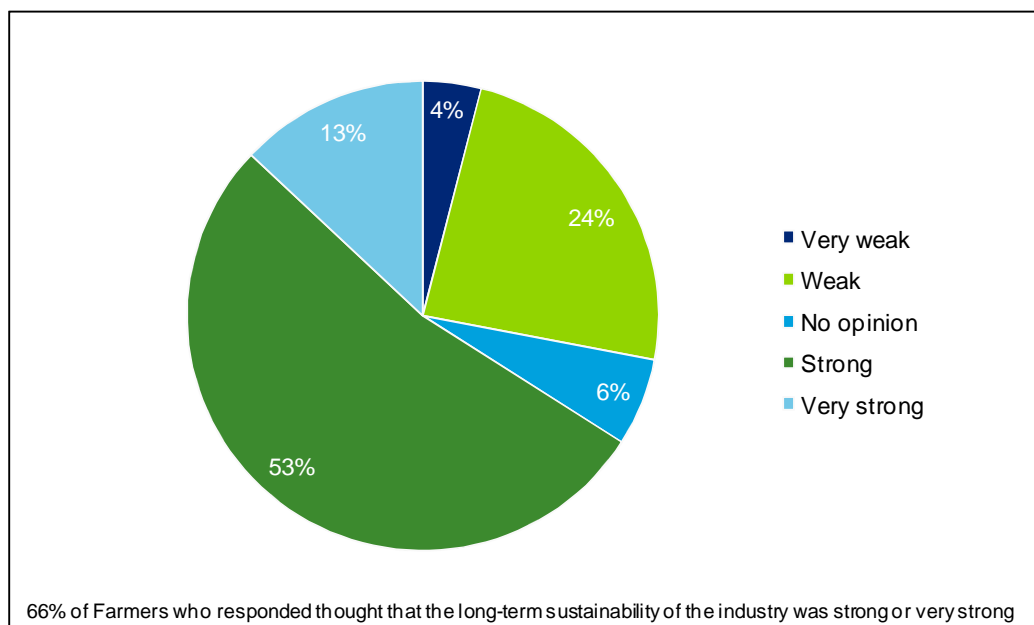
Question – What is the most important information for your business?



Question – In your opinion, what are the three greatest issues impacting profitability in the red meat industry currently?



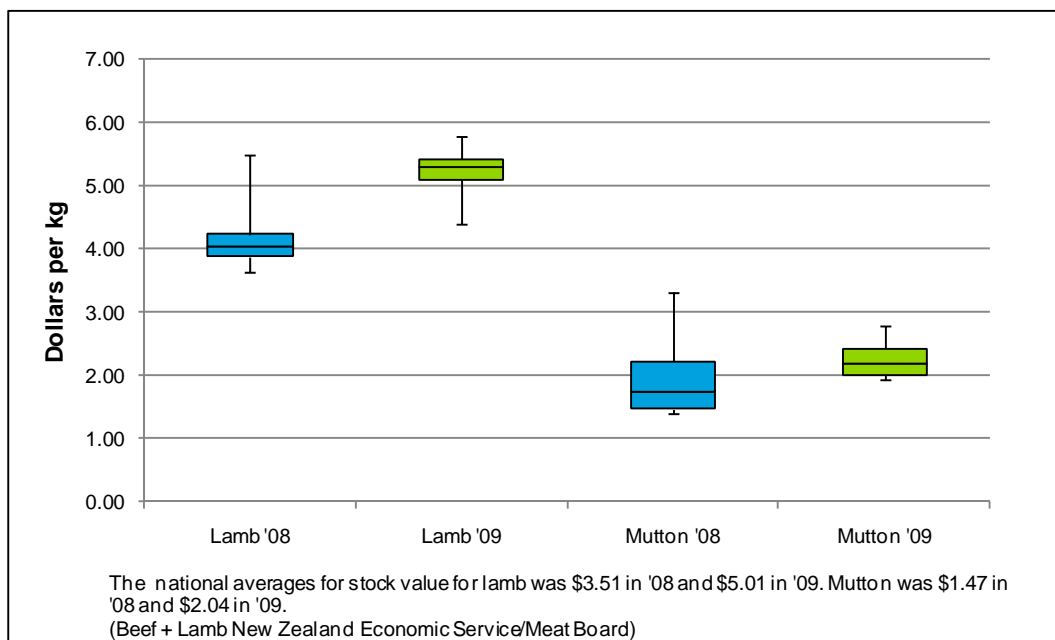
Question – What is your view of the long-term sustainability of the red meat industry?



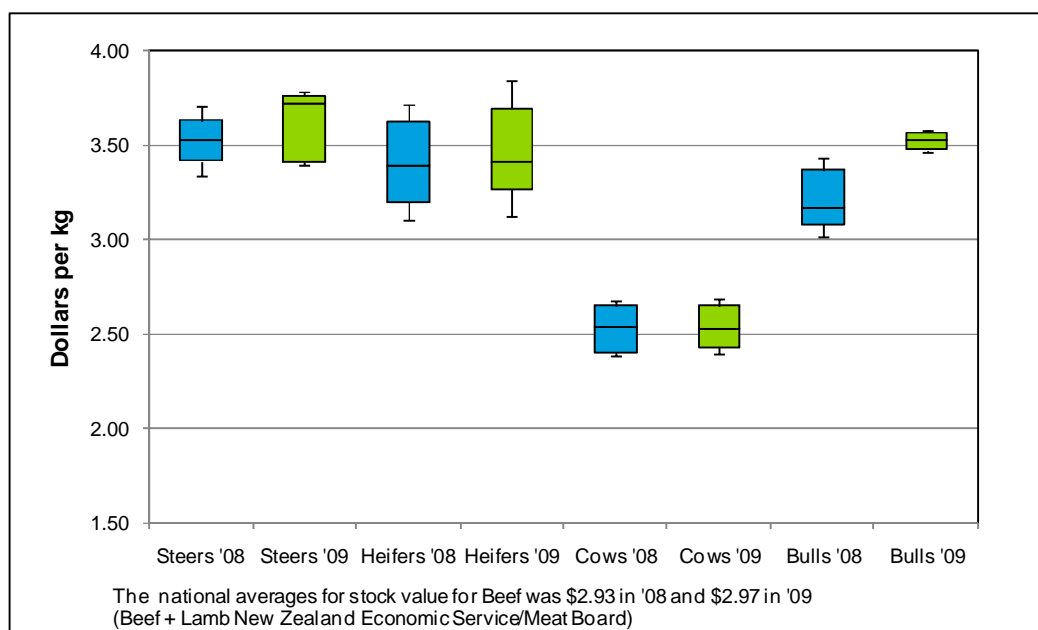
Appendix III – Benchmarking feedback

The following graphs are box plots. The box shows the lower quartile, median, and upper quartile of the data, while the error bars show the upper and lower extremes. Each processor's data has been averaged per annum by species. The graphs show the spread between processors for price, procurement costs and transport costs. The final graph shows the variance in processing speeds at a chain level. While the spread of the data can be seen, individual processors are un-identifiable. In the case where a processor may have been identifiable, the upper extreme has been removed from the graph.

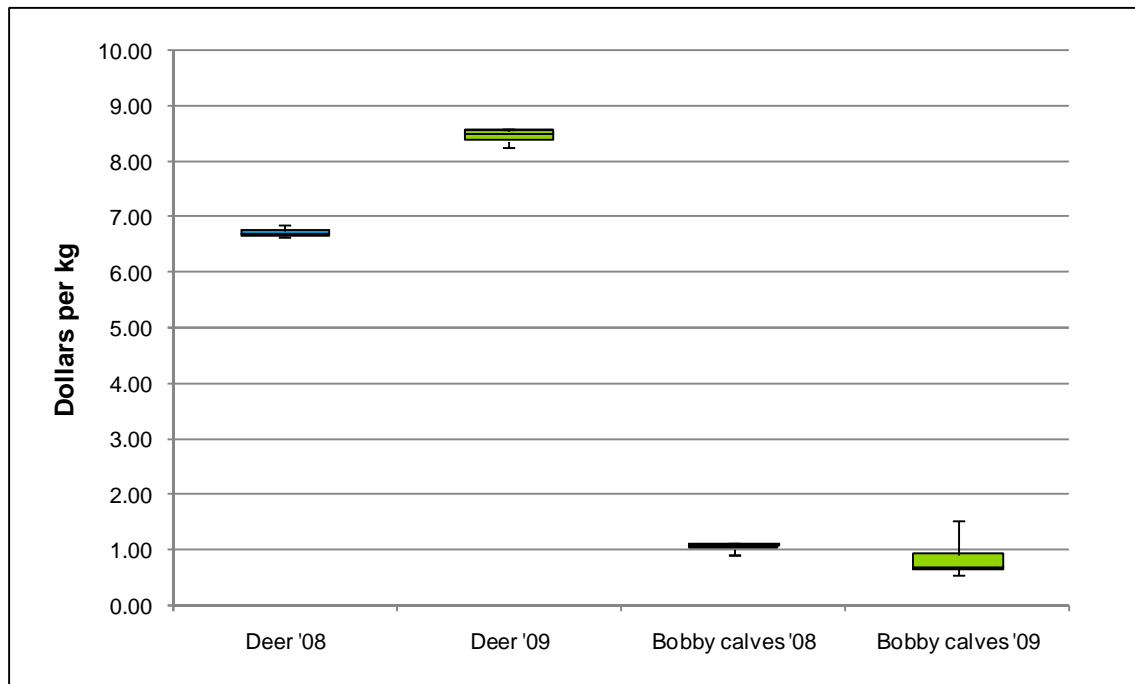
Average price paid per kg – Sheepmeat



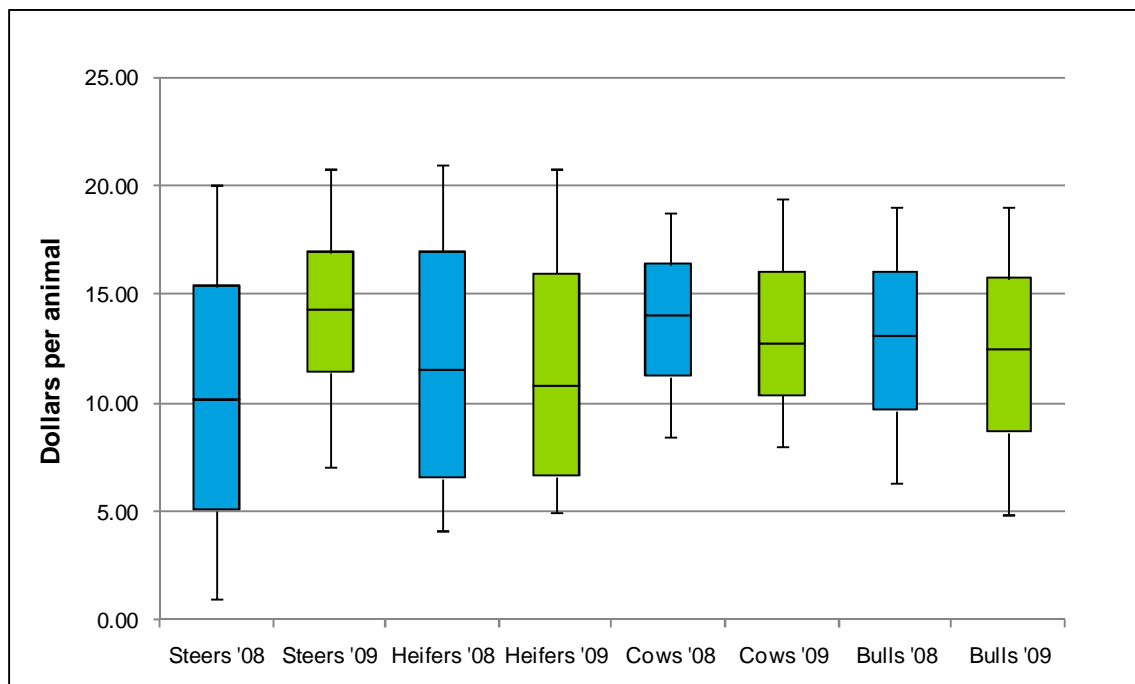
Average price paid per kg – Beef



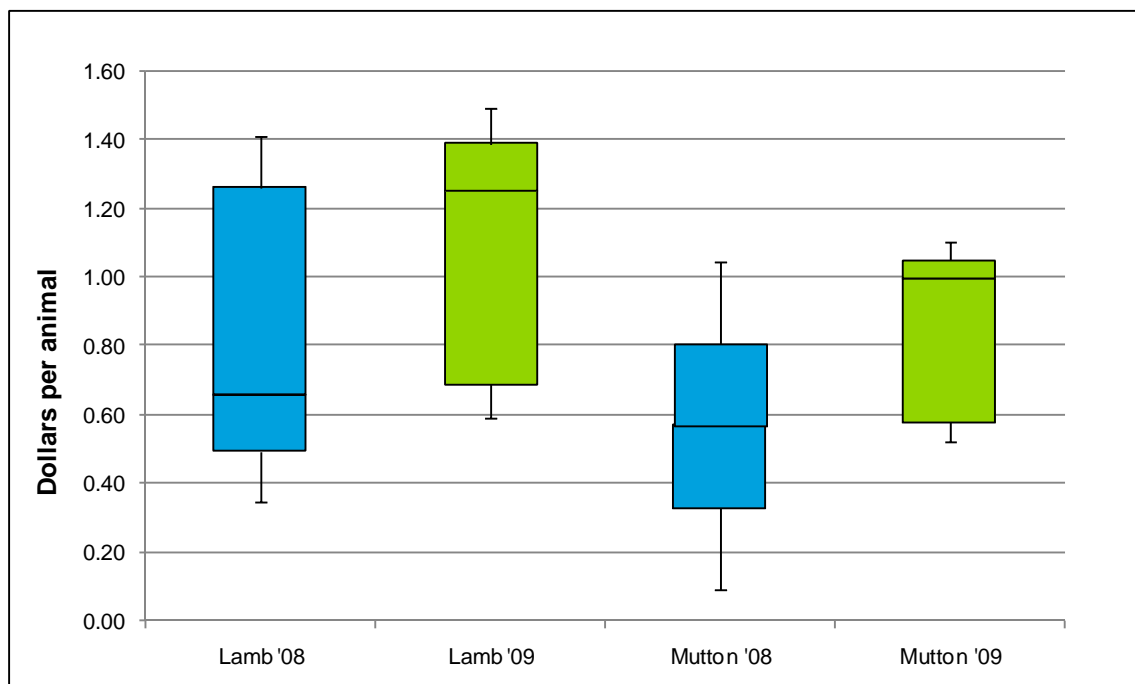
Average price paid per kg – Other



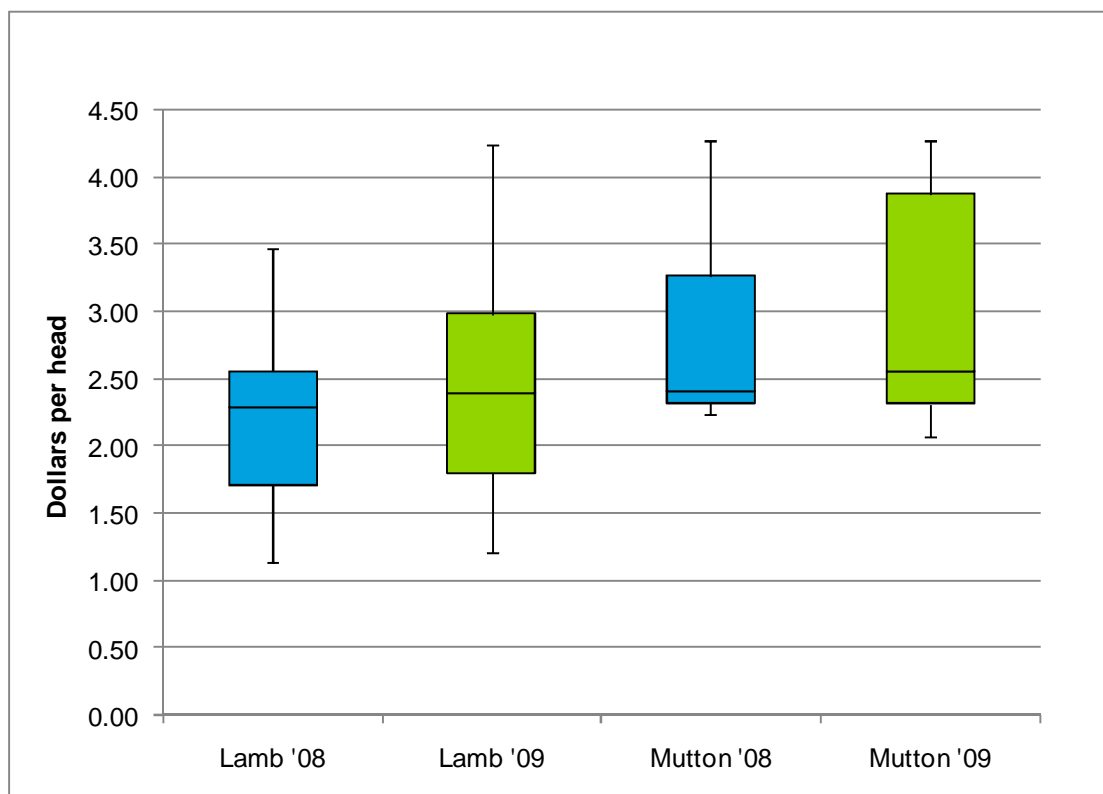
Procurement costs – Beef



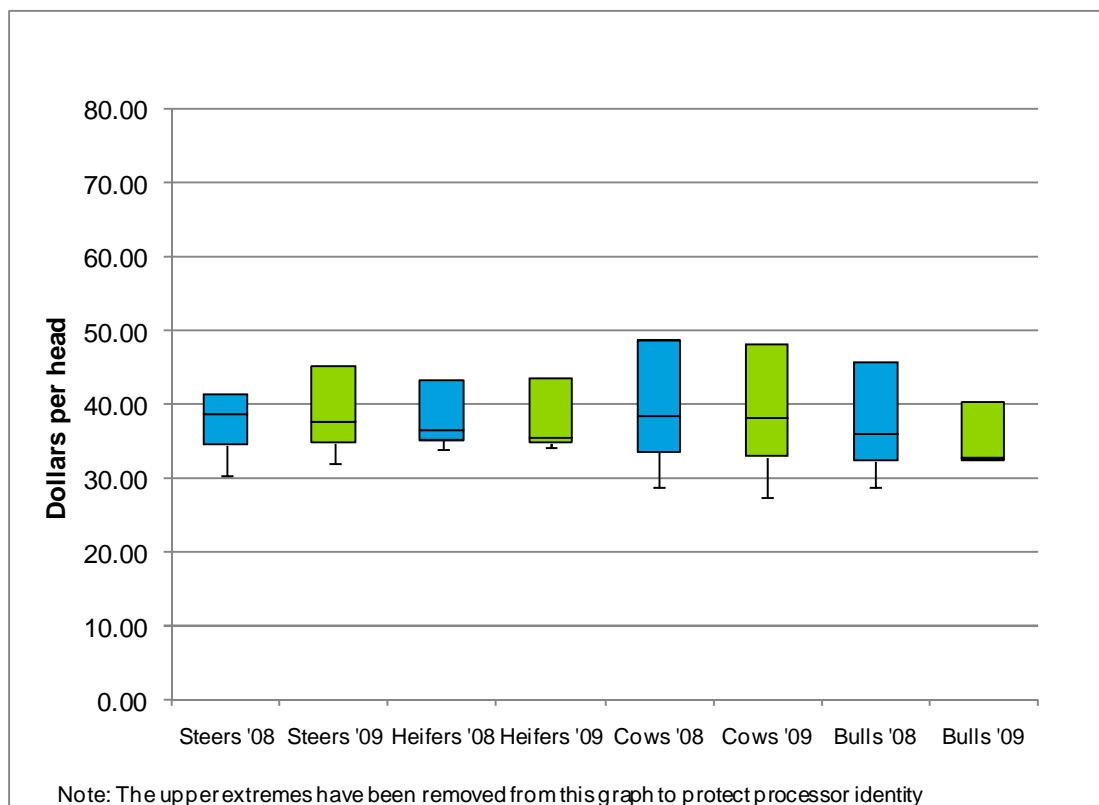
Procurement costs – Sheepmeat



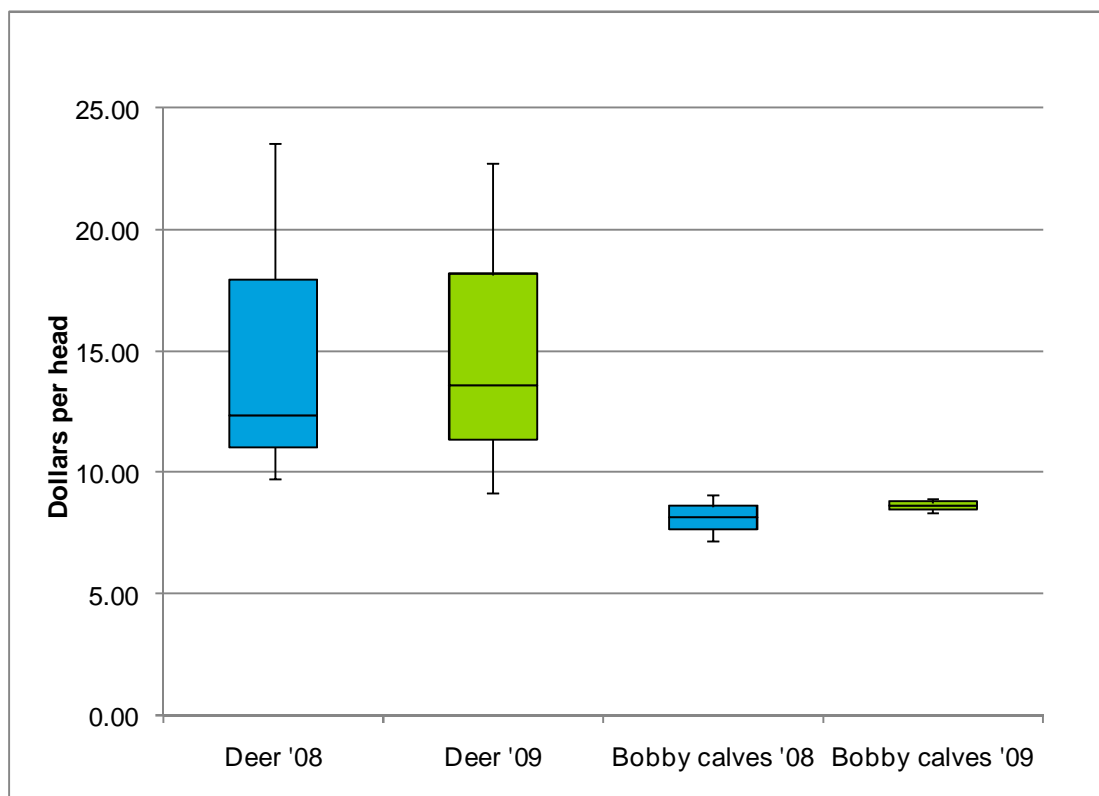
Transport costs – Sheepmeat



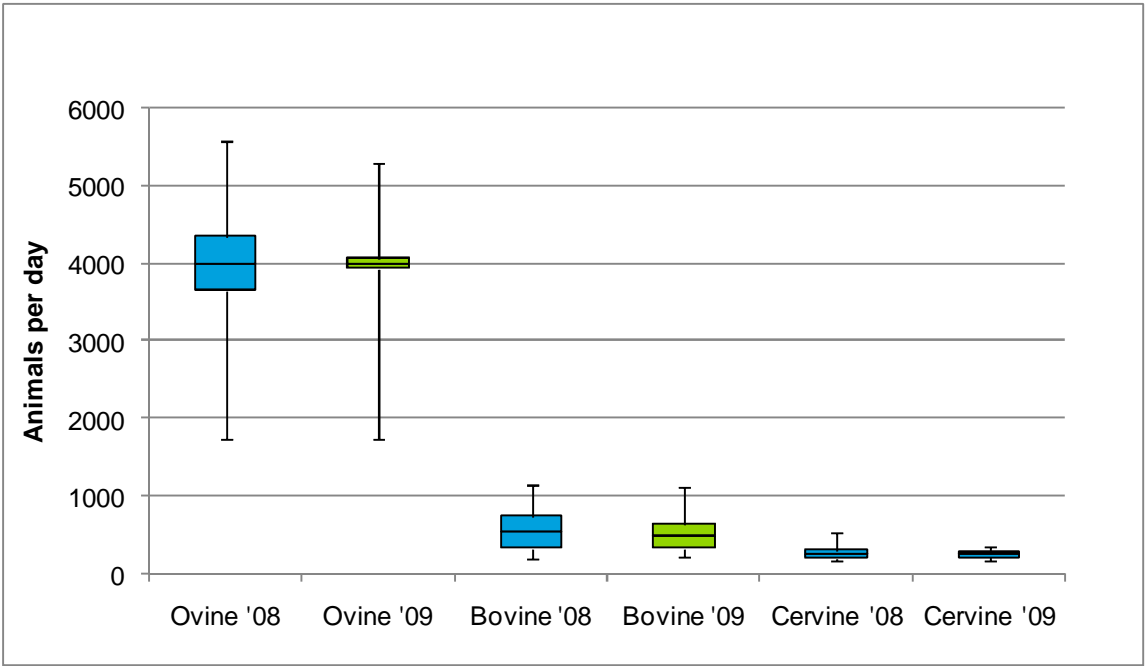
Transport costs – Beef



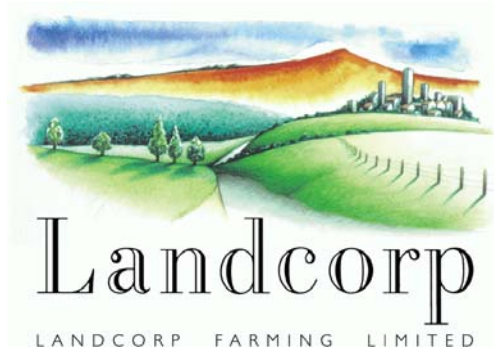
Transport costs – Other



Processing speeds



Appendix IV – Business plan template



FARM BUSINESS PLAN

for

[X] Farm

[Cost Centre]

Prepared By
PLANNING & MANAGEMENT TEAM:
[X], Farm Manager
[X], Business Manager

[Date]

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	3
2.0	CURRENT AND FUTURE FARMING POLICY	4
2.1	Effective Farm Area by Enterprise	4
2.2	Sheep Policy	4
2.3	Cattle Policy	4
2.4	Dairy Cattle Policy	4
2.5	Deer Policy	4
2.6	Fertilizer.....	4
2.7	Weeds	4
2.8	Pests	4
2.9	Animal Health	4
2.10	General.....	4
3.0	GOALS AND OBJECTIVES	5
3.1.	Achievements & Gaps Last Year.....	5
3.2	Farm Goals.....	5
3.3	Business Goals	5
3.4	Animal Performance Targets.....	5
4.0	FARM DEVELOPMENT PLAN	8
4.1	5 Year Physical & Financial Performance	8
4.2.	October Review Operations Report.....	8
4.3	TM1 Report – KPI Year 1 (March Budget, Physical and Financial)	8
4.4	5 Year CAPEX Requirements	9
4.5	5 Year Growth Plan	10
4.6	Balanced Scorecard	12
5.0	STRATEGIC RISK ANALYSIS	13
5.1	SWOT Analysis:	13
5.2	Risk Profile:	13
6.0	PEOPLE INITIATIVES	15
7.0	RESOURCE DATA	16
7.1	Fixed Resource Data	16
7.2	Flexible Resource Data	16
8.0	MONITORING PROGRAMME	17
8.1	FarmPride.....	17
8.2	Financial Monitoring	17
8.3	Stock Monitoring.....	17
8.4	Pasture Production	17
8.5	Farmax/DPR.....	18
8.6	Animal Health/Welfare.....	18
8.7	Soil Fertility.....	18
8.8	Effluent Monitoring.....	18
9.0	GENERAL.....	19
	APPENDICES	20
1.	Environmental Plan	20
2.	Farm Map	21
3.	FPA Map	22

1.0 EXECUTIVE SUMMARY

- X
- X

2.0 CURRENT AND FUTURE FARMING POLICY

2.1 Effective Farm Area by Enterprise

- X

2.2 Sheep Policy

- X

2.3 Cattle Policy

- X

2.4 Dairy Cattle Policy

- X

2.5 Deer Policy

- X

2.6 Fertilizer

- X

2.7 Weeds

- X

2.8 Pests

- X

2.9 Animal Health

- X

2.10 General

- X

3.0 GOALS AND OBJECTIVES

3.1. Achievements & Gaps Last Year

Achievements

- X

Performance Gaps

- X

3.2 Farm Goals

The objectives of this business describe the physical performance required to meet the goals and how this is to be achieved.

- X

3.3 Business Goals

- X

3.4 Animal Performance Targets

The aim of the Farm Manager should be to reach these animal performance targets using all possible means, as long as financial viability is not compromised, and all other goals, objectives and company policies are adhered to.

Sheep and Lambs

SHEEP: LIVEWEIGHT TARGETS			
Class	Date	Target Liveweight	
		Minimum	Average
Lambs	Weaning		
Ewe Lambs	May		
Ewe Hoggets	October		
2 Tooth Ewes	April (tupping)		
	July (scanning)		
	September (pre-lamb)		
	Weaning		
M. A. Ewes	April (tupping)		
	July (scanning)		
	September (pre-lamb)		
	Weaning		

SHEEP BREEDING: REPRODUCTIVE TARGETS				
Class	Dry (%)	Scanning (%)	Lamb Loss (%)	Lambing (%)
MA Ewes				
Hoggets				

FINISHING LAMBS	
Liveweight gain per Day	Finished Carcass Weight

SHEEP: BREEDING CALENDAR		
Joining Date	Mating Period	Birth Date

Cattle

CATTLE: LIVELWEIGHT TARGETS			
Class	Date	Target Live weight	
		Minimum	Average

FINISHING CATTLE		
		Kg Liveweight Gain/day
Yearling Steers	Winter	
	Spring	
	Summer	
	Autumn	
	Finish	

CATTLE: BREEDING CALENDAR		
Joining Date	Mating Period	Birth Date

BEEF BREEDING: LIVELWEIGHT TARGETS			
Class	Date	Target Liveweight	
		minimum	average
Heifer Calves	(Weaning)		
Steer Calves	(Weaning)		
Yearling Heifers	1 st October		
Yearling Heifers	(pre-calving)		

M.A. Cows	(pre-calving)		
M.A. Cows	(mating)		

BEEF BREEDING: REPRODUCTIVE TARGETS			
Class	Dry (%)	Calf Losses	Calving (%)
MA Cows			
Yearling Cows			

Deer

DEER BREEDING: LIVELWEIGHT TARGETS			
Class	Date	Target Liveweight	
		minimum	average
Weaner Stags	(Weaning)		
Weaner Hinds	(Weaning)		
Ma Hinds	(pre fawning)		
Ma Hinds	(mating)		

DEER BREEDING: REPRODUCTIVE TARGETS			
Class	Dry (%)	Fawn Losses	Fawning %
MA Hinds			

DEER FINISHING: LIVELWEIGHT GAIN TARGETS (grams/day)		
Month	Stags	Hinds
Winter (May – August)		
Spring (September – November)		
Summer (December - March)		

OTHER PERFORMANCE TARGETS:		
Deaths & Missing:		
Sheep:		
Cattle:		
Deer:		

4.0 FARM DEVELOPMENT PLAN

4.1 5 Year Physical & Financial Performance

[Insert from Reporting Services]

4.2. October Review Operations Report

[Insert from TM1]

4.3 TM1 Report – KPI Year 1 (March Budget, Physical and Financial)

[Insert from TM1]

4.4 5 Year CAPEX Requirements

Farm:

	Year 1	Year 2	Year 3	Year 4	Year 5
Budget Year	2011	2012	2013	2014	2015
<i>Capital Developments</i>					
Forestry	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Airstrips	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Clearing & Felling	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cultivation & Grassing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Drainage	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fertiliser & Lime	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Erosion Control	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Irrigation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fencing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Power & Telephone	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Shelter - Planting	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Shelter - Structures	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Tracks, Roads & Bridges	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Water Supply	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Weed & Pest	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Yards & Dips	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Capital Developments	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<i>Capital Purchases</i>					
Land Purchases	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
New Buildings	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Plant Purchases	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Vehicles (incl. Tractors & Bikes)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Furniture & Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Capital Purchases	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Capital Budget	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

4.5 5 Year Growth Plan

FARM:			
CURRENT		YEARS 1, 2, 3, 4	YEAR 5
Financial	Production	→	Financial Production
Net Farm Profit: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00			Net Farm Profit: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00
Gross Income: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00			Gross Income: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00
Gross Expenditure: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00			Gross Expenditure: Total: \$0.00 Per SU: \$0.00 Per Ha: \$0.00
Income:Expenditure: 0%			Income:Expenditure: 0%
Return on Investment: 0%			Return on Investment: 0%
Capital: 0%			Capital: 0%
Production: SU: 0 Total Ha: 0 kgLW/ha: \$0.00 Total: \$0.00			Production: SU: 0 Total Ha: 0 kgLW/ha: \$0.00 Total: \$0.00
Cost of Production: COP/kgLW: \$0.00			Cost of Production: COP/kgLW: \$0.00

NOTES:

• X

4.6 Balanced Scorecard

[INSERT]

5.0 STRATEGIC RISK ANALYSIS

5.1 SWOT Analysis:

The following analysis of the strengths, weaknesses, opportunities and threats for [X] Farm has been prepared by the Farm Manager and farm staff:

Strengths

- X

Weaknesses

- X

Opportunities

- X

Threats

- X

5.2 Risk Profile:

Consequence	Extreme	100					
	Very High	70					
	Moderate	50					
	Low	10					
	Minor	1					
			1	2	3	4	5
			Likelihood				

Availability of Quality Staff:

Casual Staff (SC)

Permanent Staff (SP)

Climatic Reliability:

Drought (CD)

Excessive Rainfall (CR)

Snow prone (CS)

Animal Health:

Facial Eczema (AHFE)

Johnes Disease (AHJ)

Yersinia (AHY)

Parasite Resistance (AHPR)

TB (AHTB)

Financial Performance: (PF)

Physical Performance: (PP)

Comment:

- X

6.0 PEOPLE INITIATIVES

- X

7.0 RESOURCE DATA

7.1 Fixed Resource Data

[INSERT]

7.2 Flexible Resource Data

[INSERT]

8.0 MONITORING PROGRAMME

Monitoring is a key part of the management programme to measure the success or otherwise of the farm business. It provides the platform for objective decision making.

8.1 FarmPride

- Refer to FarmPride audit document updated annually.
- The farm is audited [INSERT].

8.2 Financial Monitoring

- Monthly reports to Business Manager.
- October and February official budget revisions.
- Expenditure control to adhere to original budget and subsequent revisions as is appropriate.

8.3 Stock Monitoring

- X

SHEEP		CATTLE	
Lambs	Weaning	Calves	Weaning
Replacement Ewe Lambs/Hoggets	May October	Replacement Weaner/yearling heifers	May Pre mating
Two tooth Ewes	Tupping Scanning Pre-lamb Weaning	Two Year Heifers	Pre-calve Mating
MA Ewes	Tupping Scanning Pre-lamb Weaning	MA Cows	Pre-calve Mating

DEER	
Fawns	Weaning
Hinds	Mating Pre-Fawning

- Refer to Operational Policies and Guidelines (section [15]) for further information.

8.4 Pasture Production

- X

8.5 Farmax/DPR

- X

8.6 Animal Health/Welfare

- X
- Refer to Operational Policies and Guidelines (section **[15]**) for further information.

8.7 Soil Fertility

- Soil and herbage tests are completed on an annual basis.
- Refer to Operational Policies and Guidelines (section **[49]**) for further information.

8.8 Effluent Monitoring

- X

9.0 GENERAL

- X

APPENDICES

1. Environmental Plan

[INSERT]

2. Farm Map

[INSERT]

3. FPA Map

[INSERT]

Auckland

Deloitte Centre
80 Queen Street, Auckland 1010
Private Bag 115033
Shortland Street, Auckland 1140
New Zealand
Tel: +64 (0) 9 303 0700
Fax: +64 (0) 9 303 0701
8650

Hamilton

Deloitte house
24 Bridge Street, Hamilton East
Hamilton 3216
PO Box 17, Hamilton 3240
New Zealand
Tel: +64 (0) 7 838 4800
Fax: +64 (0) 7 838 4810

Christchurch

60 Grove Road
Christchurch 8011
PO Box 248
Christchurch 8140
New Zealand
Tel: +64 (0) 3 379 7010
Fax: +64 (0) 3 366 6539

Wellington

Deloitte House
Levels 11-16, 10 Brandon Street
Wellington 6011
PO Box 1990, Wellington 6140
New Zealand
Tel: +64 (0) 4 472 1677
Fax: +64 (0) 4 472 8023

Dunedin

Otago House
481 Moray Place
Dunedin 9016
PO Box 1245, Dunedin 9054
New Zealand
Tel: +64 (0) 3 474 8630
Fax: +64 (0) 3 474

www.deloitte.co.nz

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/nz/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

Deloitte provides audit, tax, consulting, and financial advisory services to public and private clients spanning multiple industries. With a globally connected network of member firms in more than 140 countries, Deloitte brings world-class capabilities and deep local expertise to help clients succeed wherever they operate. Deloitte's approximately 170,000 professionals are committed to becoming the standard of excellence.

Deloitte New Zealand brings together more than 900 specialists providing audit, tax, technology and systems, strategy and performance improvement, risk management, corporate finance, business recovery, forensic and accounting services. Our people are based in Auckland, Hamilton, Wellington, Christchurch and Dunedin, serving clients that range from New Zealand's largest companies and public sector organisations to smaller businesses with ambition to grow. For more information about Deloitte in New Zealand, look to our website www.deloitte.co.nz.