

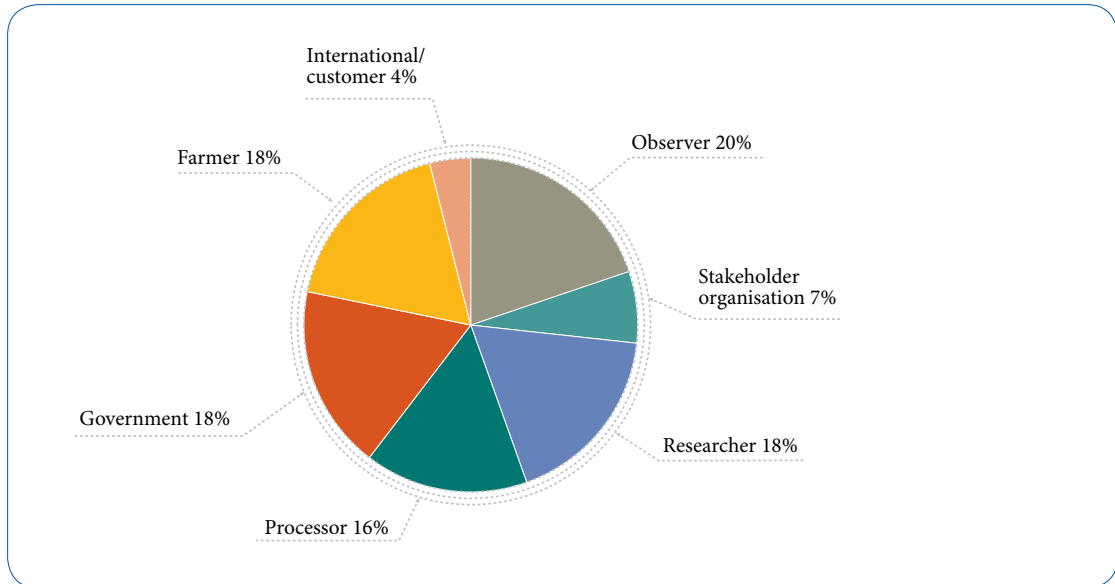
7 APPENDIX A: THE DELPHI SURVEY

The Delphi is a systematic interactive forecasting method used to generate forecasts from a panel of independent experts. Typically, carefully selected experts answer questionnaires in two or more rounds. After each round, a facilitator provides an anonymous summary of the respondents' forecasts from the previous round as well as the reasons they provided for their judgements. Thus, participants are encouraged to revise their earlier answers in light of the replies of other members of the group. It is believed that during this process the range of the answers will decrease and the group will converge towards the "correct" answer.

In 2008, MAF completed a Delphi survey of New Zealand's sheep meat and beef sector. This study was modelled on a similar study that identified strategic issues for Finnish agriculture (Rikkonen et al, 2006; Rikkonen, 2005). The Delphi method was chosen as a means for drawing on the collective knowledge and expertise of practitioners in and experts on the sheep meat and beef sector. It was seen as a method of looking beyond the immediate circumstances of the industry to identify medium- and long-term views of the sector.

The New Zealand study consisted of three stages. In February 2008, open interviews were conducted with a small expert panel. The expert panel was identified using the snowball technique, where respondents were asked to suggest candidates, who in turn were asked to suggest candidates. Eleven individuals from a short list were selected to cover the different aspects of the sector. Responses to questions were sought in open interviews that typically lasted an hour. The results of these interviews were aggregated and were used to inform the first survey questionnaire.

In June 2008, the first questionnaire was distributed to a much larger panel of experts. The Delphi panel consisted of 120 individuals drawn primarily from the snowball list. Again efforts were made to achieve balance and representation across the sheep meat and beef sector. This questionnaire focused on identifying significant change factors for the sector and an assessment of desired and likely changes over the next 10 to 15 years. It also sought respondents' views on challenges and opportunities and the state of the sector. This survey was distributed in June 2008. Figure A1 shows the composition of respondents to the first survey.

FIGURE A1: COMPOSITION OF RESPONDENTS TO FIRST SURVEY

In July 2008, a second survey was distributed. The second survey sought responses to other change factors identified by respondents in the first survey, together with an assessment of the likely magnitude of change. This survey also sought to validate the importance of the factors, as identified in the first survey.

The intention of the research was not to gain a statistically robust representative view of the meat sector as a whole, but rather an overview of respondents' informed opinions.

Although the Delphi survey sought to look 10 to 15 years ahead, the results of this survey, like any survey, are inextricably linked to the present time and current sector conditions. This is something to be aware of when analysing the results.

8 APPENDIX B: DELPHI DISCUSSION ON STRATEGICALLY IMPORTANT FACTORS

DESIRABILITY AND CONFIDENCE

In the first survey, respondents were asked to identify their desired future changes in these factors, that is, what they would like to see happen. Respondents were also asked to identify the change that they expected to see happen, that is, what is most likely.

A measure was then made of the difference between desired and expected change. A small difference indicates that the expected change is desired. A large difference indicates that the expected change is substantially different from the desired change.

Respondents were also asked how confident they were that the expected changes would occur. They were very sure of their answers in some factors, and less so in others.

FIGURE B1: RELATIVE STRATEGIC IMPORTANCE MATRIX

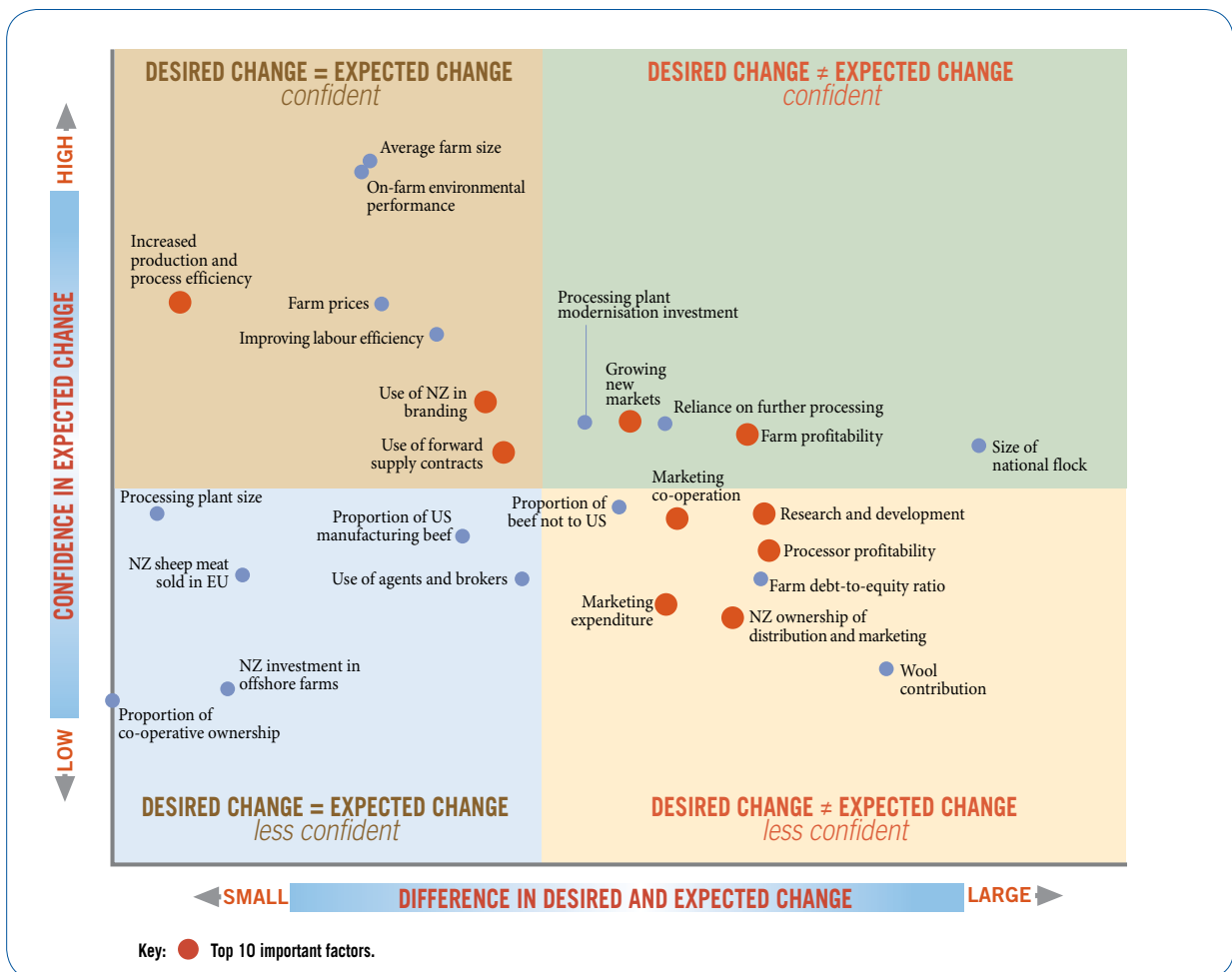


Figure B1 classifies the factors of strategic importance depending on:

- › difference between desired and expected change;
- › confidence in the expected change.

The top 10 most important factors as identified in the second Delphi survey are discussed below.

DESIRED CHANGE = EXPECTED CHANGE (CONFIDENT): Factors with high confidence in the expected change and whose expected change is widely agreed to be desirable can be seen as predictable (although by no means certain).

USE OF FORWARD SUPPLY CONTRACTS

- › Most respondents considered that forward supply contracts would be used to procure at least 20 to 40 percent of stock.
- › Half considered at least 40 to 60 percent of stock would be procured by way of forward contracts.

Respondents clearly identified that unattractive contract prices were the main barrier to farmer uptake of procurement contracts, with a farmer preference for spot markets as the second most important factor.

THE USE OF “NEW ZEALAND” IN BRANDING

- › Most respondents saw the use of New Zealand in branding as desirable.
- › There was moderate confidence that there would be an increased use of New Zealand in branding.

Some noted that New Zealand is synonymous with high product attributes. Some experts, however, considered that generic branding devalued individual brands and played to a lowest common denominator quality standard. Others identified that “the New Zealand story” is largely unknown in Asia.

When asked to quantify total lamb sales by “dominant brand type”, the majority of respondents considered that less than 20 percent of lamb would be sold with only a generic “New Zealand lamb” brand. Use of supermarket house brands were seen to be the most dominant brand type, although a “New Zealand lamb” brand could also be incorporated into supermarkets’ own branding.

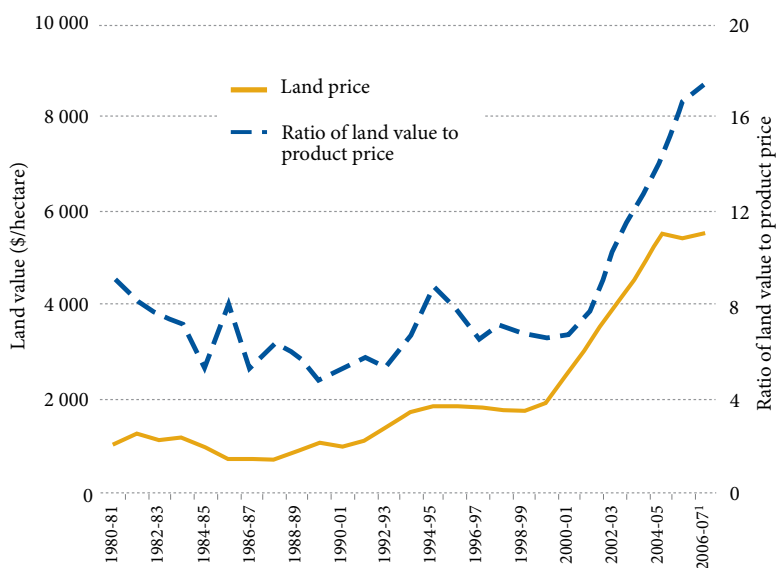
RELIANCE ON PRODUCER AND PROCESSOR EFFICIENCY

Respondents generally agreed that both producers and processors would continue to rely on becoming more efficient to help sustain the sector.

They were also confident that efficiency gains would be important; possibly reflecting the sector's historical ability to achieve efficiency gains. It is important to note that over the last 20 years the industry has moved to a higher cost structure. Figure B2 shows the increase in land price over the last 25 years and the ratio of land price to product price. This suggests that land value has appreciated ahead of rises in product prices. While improved efficiencies will no doubt be required to help redress this situation, it could be argued that with a higher cost base the sector will also need to focus on improving product value.

DESIRED CHANGE = EXPECTED CHANGE (LESS CONFIDENT): Expected change is desirable, although there is not a high degree of confidence that this change will occur. While these factors could reasonably be ignored in any high-level analysis, they could have a wildcard impact should they eventuate and accordingly should not be completely discarded.

FIGURE B2: NOMINAL LAND VALUE PER HECTARE AND RATIO OF LAND PRICE TO PRODUCT PRICE (LAMB)



Source: Meat & Wool New Zealand Economic Service.

Note

¹ 2006/07 are projected figures.

None of the top 10 factors of strategic importance were identified as having low confidence in the change and low variability of the likely and desired outcomes.

DESIRED CHANGE ≠ EXPECTED CHANGE (CONFIDENT): These are factors with high confidence in the expected change, but whose expected change is considered to be undesirable – that is, there is a large difference between the change that respondents’ desire and the change they expect. These factors have high strategic significance, requiring some sort of action to address.

SHEEP AND BEEF FARM PROFITABILITY

- › Most respondents considered farm profits would increase but not by as much as desired.
- › Over two-thirds considered annual profits would be at least somewhat consistent.
- › Respondents identified that the most important drivers for improved farm profitability are likely to be:
 - higher global meat prices;
 - higher prices paid for New Zealand meat compared with international competitors;
 - improvements in on-farm efficiency.

As mentioned above, and discussed in the scenario section, profitability is particularly linked with changes in other factors of strategic importance.

- › Respondents generally considered that returns from wool were important in lifting farm profitability.
- › They were not confident in the likelihood that wool would actually contribute to improved fortunes.

RELIANCE ON GROWING NEW MARKETS

- › Nearly all respondents considered generating and growing new markets desirable.
- › Three-quarters thought that this was likely.

The predicted proportion of sheep meat exports by value suggests future increases in market share to the Middle East/North Africa and to China (and potentially Russia and India). It is predicted that exports to the EU and to a lesser extent North America will reduce. The reduction in the proportion of sheep meat exports to the EU is relatively uncertain. No significant changes in market share are expected for beef exports. These views are broadly consistent with some of the broad trends in population, income growth and forecast global demand identified later in this report.

DESIRED CHANGE ≠ EXPECTED CHANGE (LESS CONFIDENT): The expected change in these factors is considered undesirable. However there is lower confidence that this expected change will occur. This indicates that there is more room to “change the future” and thus achieve a more desirable outcome.

INVESTMENT IN RESEARCH AND DEVELOPMENT

- › Nearly all respondents wanted an increase in the level of research and development in the sector.
- › Two-thirds of respondents thought this increase would occur and the other one-third considered there would be no change.

PROCESSING COMPANIES' PROFITABILITY

- › Most respondents wanted meat processor profitability to improve over the next 10 to 15 years.
- › Three-quarters of respondents believed profits would increase by at least 10 to 25 percent.
- › Respondents did not consider this likely increase in profitability was sufficient nor were they confident that it would occur.

Respondents were asked to identify the most important reasons that would likely contribute to processing companies' improved profitability. They overwhelmingly identified co-ordination/ co operation throughout the value chain and industry rationalisation and/or consolidation. The third most important reason was investment in developing new market and/or products.

LEVEL OF CO-OPERATION IN MARKETING

- › Most respondents wanted increased co-operation between New Zealand companies in international marketing.
- › Only two-thirds of respondents thought that this is likely, and confidence in the outcome was low.
- › Around 80 percent of respondents considered that at least 10 to 20 percent of New Zealand sheep meat exports will be marketed co-operatively.
- › Only one-third considered that at least 20 to 30 percent will be marketed this way.

At present only lamb sold into North America is marketed in co-operation between companies, and this market represents less than 6 percent of total New Zealand lamb volume sold. Therefore, there may be some incremental move towards more co-operation in marketing. However developments like

major industry consolidation may preclude this from occurring in any significant way. The level of co-operation in marketing may also be linked to the use of “New Zealand” in branding, as co-operation between New Zealand companies in marketing may be focused around a “common story”.

MARKETING EXPENDITURE AS A PROPORTION OF TOTAL EXPENDITURE

- › Around half of respondents considered that the sheep and beef sector’s marketing expenditure as a proportion of total expenditure would increase over the next 10 to 15 years.
- › 40 percent thought it would stay the same.

While investment in developing new markets was seen as important for the industry’s fortunes, investing in developing traditional markets was not considered as being a major driver for profitability.

NEW ZEALAND OWNERSHIP OF DISTRIBUTION AND MARKETING NETWORKS

- › Most respondents wanted New Zealand to have greater ownership and control of distribution and marketing.
- › Only half considered that this was likely to happen.

Some experts noted that one large company had recently sold its British further processing and distribution plant, and that the sector was suffering from lack of commitment by trading intermediaries. Half of respondents considered that at least 40 to 60 percent of New Zealand exported meat would be distributed by New Zealand owned distribution and marketing networks and firms. We are unaware of what the current percentage is.

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