Case Study – Lamb Value Chain

A national initiative

PIRSA is now working with the stakeholders to improve the lamb value chain via:

• Disseminating the findings from the two case studies.

• Stronger linkage with industry research group Meat and Livestock Australia.

• Implementing changes across the entire lamb category.

• Utilising the study findings to identify areas to enhance improvement, collaboration and investment.

• Utilising existing research and development for eating quality.

The Lamb Value Chain Case Study recommended further research and development in post-farm gate chains (retailers and processors) to achieve these productivity gains for lamb.

The National Lamb Value Chain Project, which commenced in 2008, involved six state primary industries departments, the Department of Agriculture, Food and Fisheries, CSIRO and Meat and Livestock Australia.

The SA Lamb Value Chain Case Study incorporates the teachings of South Australia's 14th Thinker in Residence, food marketing expert Professor Andrew Fearne, Director of the Centre for Supply Chain Research at Kent University, England.

During his 2008 residency, Professor Fearne collectively challenged farmers, processors and retailers to consider themselves as part of the same value chain where each partner in that chain creates more value to the original product in the eye of the consumer.

Professor Fearne's four factors for success are: strategic alignment, information flow, trust and commitment along the value chain but most of all – consumer insights.

In a bid to improve agricultural profitability and productivity, Professor Fearne also challenged government to support the development of value chains across all industries.

For further information please contact
Justin Ross, General Manager,
Market Research and Development, PIRSA

p   +61 8 8226 8157

e   justin.ross@sa.gov.au

w   www.pir.sa.gov.au

A value chain reaction

The South Australian Lamb Value Chain Case Study was one of two research projects flowing from the National Lamb Value Chain Project, which set out in 2008 to examine whether productivity improvements can be achieved using a value chain approach.

Primary Industries and Resources SA (PIRSA) led a study of a domestic retail chain – and the Victorian Department of Primary Industries led a study of an export retail chain – both used the Sustainable Value Chain Analysis methodology developed by Bonney & co[1] which was endorsed by the Primary Industries Ministerial Council's Industries Development Committee.

Both case studies brought together large retailers, major meat processors and local producers in the lamb sector.

The methodology included consumer research, a life cycle analysis of carbon emissions and the amount of water consumed in the supply of fresh lamb to a large retailer in Australia and California. The value chain analysis investigated the physical flow of lamb along the chain to the consumer, the nature of relationships between chain participants and the flow, or lack of, flow, of information along the chain.

The main improvement findings from the analysis revolved around the variable quality of lamb supplied to retail and the lack of information flow along the chain.

Inconsistencies also showed in variability of supply to farm and saleyards and the need for risk mitigation for productivity improvements.

This value chain analysis creates new possibilities for supply and production chain efficiencies and delivery of innovative ideas and sustainable solutions.

It provides the chain with an increased understanding of the eating quality attributes valued by lamb consumers.

The main issues encountered by the Victorian and South Australian project teams were:

• Identifying an appropriate existing chain that was willing to participate in the study.

• Convincing the chain captain to drive the process.

• Developing a process that would protect the individual commercial interests of each participant while, at the same time, being able to release sufficient information that could be shared with the chain partners.

[1]Bonney L, Clark R, Collins R, Dent B and Fearne A 2009, Sustainable Value Chain Analysis: An agri-food chain diagnosis, unpublished.

Government of South Australia
Primary Industries and Resources SA

Case Study – Lamb Value Chain

The PIRSA team targeted a significant SA lamb chain to produce meaningful findings and outcomes.

Extensive groundwork and research was required to get the major domestic retailer and meat processor on board, including high-level negotiations involving Meat and Livestock Australia and other key industry players.

Interviews were carried out with all players in the chain – from primary producers, livestock agents and buyers through to the processor, the retail head office and individual supermarket, and shoppers – to understand the various relationships and flow of materials and information along the chain.

A high level of trust, supported by non-disclosure agreements, helped to balance commercial interests with a desire to share knowledge and to seek improvements for all participants.

The findings have been shared with the chain "champion", other chain participants and funding partners, such as State and Commonwealth Government agencies.

What the SA study found – consumers are king

The SA Lamb Value Chain Case Study combined extensive consumer research with sustainable value chain analysis to make a number of recommendations to the industry.

The focus on consumer behaviour sought to gain a deeper understanding of what drives the demand for lamb.

The consumer insight was achieved via qualitative and quantitative research, including 95 in-store interviews in key consumer brackets, four focus group sessions and online responses from almost 1,000 shoppers in three cities (Adelaide, Melbourne and Brisbane).

The questionnaire covered three areas – fresh lamb purchasing behaviour, importance of product attributes, and potential improvements to the fresh lamb offer at the retailer.

One of the key findings from the research was that while fresh lamb's quality is highly regarded by shoppers, it generally remains on the special occasion shopping list.

Lamb is not a destination category in the meat counter; however it retains a traditional place on the shopping list.

Lamb is becoming more expensive and not considered an every day purchase. However even with lower prices consumers will not buy more if quality is seen to drop.

Lamb is perceived as different to other fresh meat. Its distinctive taste, value for money and special occasion image were found to be the most common reasons to choose lamb in preference to other meats.

"A value chain is when all parts of a supply chain work collaboratively to create competitive advantage and increased consumer value through product and process innovation and improved environmental management."

SA case study findings – food for thought

The consumer feedback supported the following recommendations:

▶ Consumer research should be used to refine the finished product and packaged lamb options which would in turn encourage more frequent purchases of fresh lamb.

▶ Individual supermarkets should be given the opportunity to explore fresh lamb promotions, particularly around seasonal supply cycles and local consumer eating patterns. This could steer more timely responses to consumer demands – and avoid delays with promotions run from head office or a central administration.

▶ Further consumer research and accompanying promotions should support new product development.

▶ Clear and common measures of quality should be established to assist producers and retailers to maintain customer trust and satisfaction with lamb as a fresh meat category.

▶ More formal sales contracts and marketing agreements can assist producers and retailers to meet and exceed quality expectations and consumer satisfaction.

▶ Freer exchange of consumer information – from customers and processors to stock agents and producers – has the potential to increase lamb sales and frequency of purchase.

Environmental considerations – from paddock to plate

CSIRO researchers were commissioned to analyse the carbon and water footprint of the two lamb chains.

The basis for analysis, or the SA Life Cycle Assessment, is one kilogram of seasonal fresh lamb cuts at the point of retail sale in Adelaide.

The major participants were surveyed with the major upstream (i.e. farming, finishing and transportation) and downstream processes (distribution, retailing, household storage, cooking and waste disposal). The analysis also measured inputs such as electricity, fuel, and wastes.

Livestock methane emissions account for almost three quarters of the total carbon footprint which means any major gains in this area will need to address the problem of methane emissions from animals.

The lamb handled at the large processor in the SA study produced 19.5kg CO_2 emissions per kilogram, based on 25% of the lambs being produced by a specialised finisher and 75% being finished on farm.

The carbon footprint of the SA and Victorian lamb case studies compares favourably with similar studies in New Zealand.

The water footprint of the SA lamb cuts was 35 litres H_2O per kilogram – or the equivalent of 35 litres of direct water consumption for every 1kg of lamb cuts (similar to many Australian grown cereals).