

## **A SUPPLY CHAIN APPROACH TO THE DEVELOPMENT OF A MEAT GOAT INDUSTRY**

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### **SUMMARY**

The Victorian goat meat industry is a significant contributor to export earnings, which is derived largely from the harvest of feral goats. The potential for exports of farmed goat meat into Asian product markets is being developed in a supply chain approach with producers, processors, exporters and Asian importers. Producers have been networked in four locations to improve supply capability and participate in production and economic benchmarking. In the absence of an existing market for premium farmed goat meat, a larger group of producers are cooperating with a marketer to develop a niche market in the Asian food service sector. This presents a challenge to the group in developing commercial relationships and playing a role in the marketing of their goat meat.

*Keywords:* goat, goat meat, market development

### **INTRODUCTION**

Australian goat meat production is currently valued at approximately \$20 million per annum, with considerable opportunities for expansion. Australia is the world's leading exporter of goat meat, with most meat originating from captured wild (feral) goats.

Victoria exports over \$11 million of goat meat (Australian Bureau of Statistics 2001). The vast majority is from feral goats transported from interstate. There are no reliable statistics on numbers of farmed goats in Victoria, with official figures given as only 9,045 head (ABS 1999). More than six abattoirs process goats on a regular basis for domestic and export markets. In 1999 the Agribusiness unit of DNRE identified goat meat as an industry that had potentially large export markets (Anon. 1999).

Farmed goat meat holds considerable potential for Victorian producers but the industry is currently restricted by lack of supply and little differentiation from feral goats. The Australian Goat Industry recognises that "the continuing development of the goat meat industry is dependant on providing continuity of supply, improved carcase quality, increased numbers of goats farmed for meat, forward contracts and marketing alliances." (Meat and Livestock Australia 2000).

Practical problems have restricted the growth of meat goat farming in Victoria. Regular public auction systems for goats do not operate in the state, often relegating goats to trading between farmers of like interests, resulting in the 'hobby farm' tag. Despite interest in farming goats for meat since the late 1970's little change has occurred in the Victorian goat meat industry (Ebbott and Morey 1983). While there are low volume domestic markets for milk-fed kid (capretto, 4-7 kg dressed weight), they are seasonal and often a bi-product of the goat fibre industry. Fibre breed societies dominate the industry and genetic improvement for meat production is largely undeveloped.

Export markets for heavier carcasses (12-16 kg dressed weight both skin-on and skin-off), are dominated by feral goats with no identifiable quality trait other than weight. Farmed goats are included in consignments but occupy no identifiable niche of their own.

The result has been an extremely fragmented industry. Farmers often lacked knowledge of buyers, abattoirs play a minimal role in industry development, and exporters provide limited market information back along the supply chain.

There are a number of potential markets for higher value goat meat products, which need further investigation, including Taiwan, Malaysia, USA and food service markets in wealthier Asian markets such as Singapore and Hong Kong. Markets need to be explored and developed for skins and co-products (such as offal) to add value to the industry, thereby improving returns to producers and processors.

The Department of Natural Resources and Environment had undertaken little work on meat goats and had not focussed on integrating the supply chain until a specific initiative was developed to address these needs. 'Naturally Victorian', a State Government initiative, is providing funding to develop an integrated supply chain approach to developing the farmed goat meat industry.

This project aims to develop an organised supply of goat meat from farmed goats rather than from the continual harvesting of a wild (and depleting) resource that is significantly affected by harvesting pressures and reduced carcass quality through disease, poor nutrition or long periods of transport.

A 'supply chain' consists of those individuals or entities, which are an essential component of a 'route to market' for, farmed goat meat. Communication between supply chain members is vital, particularly the feedback of market signals to producers.

Anticipated outcomes for the project can be summarised as:

1. The development of sustainable goat meat exports, thereby increasing the value of goat meat exports from Victoria and;
2. The development of a competitive market-driven, sustainable meat goat industry, with farmers in major producing regions clearly dedicated and focussed on working with processors to meet the needs of the market.

## **MATERIALS AND METHODS**

### *Awareness phase and identifying industry needs*

Awareness seminars were initially conducted in 1999 and 2000 across the state. The seminars introduced goat husbandry, farm profitability, market information and introduced networks, buyers and abattoirs. This culminated in a Goat Meat Industry Forum with 150 industry stakeholders held in Melbourne in June 2000. The key needs and issues of the industry were identified as:

1. Coordination and development of the industry at regional and/or state level, including inputs from industry and government.
2. Increase supply of consistent quality product, including animals for slaughter and availability of breeding stock at commercial prices.
3. Research and development: financial analysis to determine the profitability of goat farming, production systems, animal husbandry and management, and the extension of this information to industry (for fibre and meat sectors) and, the development of markets for bigger carcass products.
4. Industry co-ordination: need for an agreed direction for the entire industry. And a Representative peak body.
5. Networks (regional and/or state) between growers, marketers, processors and government to improve flow of information and to facilitate better relationships.
6. New players in the industry lack access to capital.
7. Marketing and promotion, including by-product marketing to add value to the entire animal, and promotion of farmed not feral goat products.
8. Education of the public to change perceptions about the product, and of mainstream farmers about the benefits of goats, and of goat producers to improve consistency of supply.
9. Information for industry: market requirements/specifications, suitable pasture species, location constraints

### *Industry owned project development and producer groups*

Development of a managed supply chain was seen as the most appropriate approach to addressing the majority of the industry's needs identified in the forum.

The project team identified farmers, processors (abattoirs), exporters and importers as the most critical links in the supply chain to get a premium goat meat product from paddock to plate.

The initial steps undertaken by the project team to identify and engage these supply chain members were:

- I. Call for an expression of interest from growers willing to be involved.
- II. Call for an expression of interest from processors.
- III. Commission Meat and Livestock Australia to undertake market research to identify Asian customers seeking premium cuts of farmed goat meat.

The expression of interest for producers targeted commercially-focussed farmers with at least 300 breeding does. Most activities were initially focussed on the producers. Project team facilitators adopted a workshop approach in four geographical regions: Maffra, Benalla, Swan Hill and Ballarat, chosen for their proximity to the goat farmers participating in the project.

Realising that many growers were inexperienced and that technical and husbandry skills were still needed, project facilitators delivered technical information within the framework of meeting market specifications, thereby improving the farmers' supply capability. The project team communicated regularly with stakeholders, particularly with the Goat Consultative Committee of the Victorian Farmers' Federation. This committee was used as an industry steering group.

## **RESULTS**

### *Producer groups*

Up to November 30<sup>th</sup> 2001, four workshops were held in each location with average attendances of 6 at Maffra, 15 at Benalla and 12 at both Swan Hill and Ballarat. An initial audit of production potential established that the grower network had over 12,000 breeding does, which represents about 70% of the Victorian industry. The initial seminar was focussed on explaining the project and developing a cohesive network of growers committed to working together. Topics presented at the following three workshops were focussed on technical issues such as internal parasite control, grazing management and reproduction, all of which impact greatly on the supply capability of the industry. There was also a focused marketing session.

Production (Ferrier and McGregor 2002) and economic benchmarking were undertaken with the producer groups to give them confidence in expanding their goat enterprise and to provide further information on the economics of the industry. This information can also be used to assist other farmers to make more informed decisions about diversifying into goat meat production.

The market research undertaken for this project could only produce information about the existing markets for the commodity goat meat (feral) product currently being exported. The information supplied by Meat and Livestock Australia about existing market trends was of limited value because there is no existing market that differentiates a value-added premium farmed goat meat product. The challenge for the project team was to take steps to establish a new market, utilising the skills of an experienced marketer. Information was provided by Meat and Livestock Australia, who had begun undertaking initial market testing for another potential supplier interstate. This information provided a useful basis for starting the next steps in developing the supply chain.

The direct involvement of an abattoir was delayed until potential customers were identified, as establishing their product specifications was seen as an essential first stage in the development of this chain. This information from the marketplace is what producers need to respond to in their production systems. The definition of markets would also influence the project team's decision as to which abattoir would be the most suitable partner in this supply chain, as each premises has different export licenses and processing capabilities. Communication about the progress of the project continued with the interested abattoirs throughout this time.

Development of a product market continued to be a challenge. The potential solution appeared to be for the producers to establish a joint business arrangement with an experienced marketer who had the ability to promote farmed goat meat to specific niche export markets. In December 2001, a targeted

group of commercial-scale producers, with over 500 breeding does, met with an interested export marketer, to examine the opportunity of developing food service markets in South-East and North Asia. This was done with the view to undertaking an in-market promotion in Singapore early in 2002.

## **DISCUSSION**

The development of a supply chain approach with an underdeveloped industry is a difficult task, especially given that the immediate focus of many producers has been to improve their management skills and increase production. Definition of market specifications outside the capretto market has also been a challenge as this has predominantly been an export market reliant on meat from feral goats.

The identification of needs and issues resulting from the industry forum demonstrated a dependency on government and industry bodies to support and develop the industry, and to take a lead role in the coordination and education of producers. The supply chain approach has promoted a more independent industry that is prepared to take a lead role in marketing and to commit to working with other chain partners. Total acceptance of this approach has yet to be realised as the larger commercial-sized producers are set to move past the 'farm gate' and play a role in establishing a niche product market.

Identifying a suitable market is still an important step in the project, as is the involvement of a committed processor. The ability of all chain partners to work together to supply a market is a major challenge for the remaining two years of the project. Managing these commercial partnerships and maintaining a high degree of transparency throughout the chain is a crucial success factor required for the success of this approach. Workshops with the grower networks will continue into 2002, with abattoir visits and feedback on market specifications for farmed goat meat in Asia a strong possibility.

Development of a supply chain project for farmed goat meat to Asia has been an evolving process. Information gathered throughout the first year of operation has significantly changed the path to successfully achieving the objective.

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