

Chapter 9

Wool industry: constraints and opportunities

Some 70% of Australia's tropically-based sheep flock is in the semi-arid to arid zone (< 500 mm annual rainfall). Not surprisingly, production and profitability is strongly dominated by the seasonal and annual variation in rainfall (refer Figures 3. 33 and 5. 20). Further, the extensive nature of most wool producing enterprises imposes a hard realism on any technology or management opportunities that may be available or feasibly adopted.

Industry situation

The two most significant events influencing the wool industry during the early 1990's have been the removal of the floor price for wool in February 1991, and an extended period of drought. This has provided an impetus for a restructuring of the wool industry in the tropics to increase its competitiveness and future viability.

Two issues are recognised as important:

- The need and potential for a change in the dependence on wool as the major income source through diversification into alternative and complementary enterprises; and
- An imperative for change in the management of wool production through the restructuring of properties and enterprises, with concurrent improvements in the efficiency and sustainability of production.

Potential for diversification

There are a number of possibilities for reducing economic uncertainty, some directly associated with pastoralism, others more indirectly involving regional development initiatives. These are first briefly raised to give a broader perspective before focusing on more industry related issues. Possibilities include:

- A more formal and integrated approach to management, harvesting and control of native herbivores (especially kangaroos) and feral animals together with domestic livestock. Kangaroos and domestic livestock compete at various times for the scarce forage resource. Although kangaroos are difficult to manage, because of their mobility, integrated systems may well be achievable if district or regional systems for the management and harvesting of kangaroos (and other native and feral animals) are combined with domestic stock production managed at the property level.
- A closer integration of cattle and sheep production.
- Greater control and management of stock water leading to better and more even utilisation of forages. The current artesian bore capping program should make a major contribution here.
- An expanding tourism industry with increasing interest being shown in experiencing the 'out-back' property lifestyle.
- A developing horticultural industry based on ornamental native plants and flowers.
- An opportunity to develop a bush food or 'bush tucker' industry.
- Employment of graziers as custodians or managers of the arid rangelands for heritage, biodiversity and recreational purpose.

Sustainability of the rangelands

A broader enterprise base for wool producers, through diversification options, will assist in providing better long-term economic sustainability as well as reducing the short-term need for higher stocking rates, thereby contributing to ecological sustainability.

There is substantial evidence that consumption by sheep of between 15 to 25% of pasture production is the optimum for the sustainable utilisation of native pastures. However, some producers are going well beyond this level due to their need to generate a positive cash-flow.

Ecologically, there is a need to reduce the total grazing pressure on native pastures. Many current holdings cannot run sufficient numbers of sheep to ensure producer viability at recommended carrying capacities, particularly when non-domestic animals (unmanaged feral and native fauna) place additional pressure on the land. To achieve long-term sustainability there needs to be management and control of the total grazing pressure on properties and, in some areas such as the Mulga lands, there is a need for restructuring of the total holding size to ensure that living areas are appropriate.

Woody tree and shrub invasion is an important factor reducing the stock carrying capacity of the native pastures. The woody species include native species (e.g. turkey bush and false sandalwood (*Eremophila* spp.)), and hop bush (*Dodonaea* spp.) and introduced species (e.g. prickly acacia (*Acacia nilotica*) and mesquite (*Prosopis* spp.)). Effective control measures are available for these species but economic control is not feasible. Vigilance will be vital in the future to ensure no new invasive species are introduced into the rangelands.

Wool industry restructuring

The Queensland industry is a relatively small component (normally about 10%) of the Australian wool industry. Additionally, Queensland wool is predominantly medium range (20-24 micron) apparel wool, thus not capturing the price premiums available to producers of finer wool (18-21 micron). The medium wools are also the area subject to the greatest fluctuations in overseas demand and Queensland producers have little influence over this situation.

While only a small proportion of Queensland's wool can be marketed to capture premiums for fine wool, there are lesser determinants of price which can be targeted by all producers to maximise their return. Major opportunities for the Queensland industry lie in **wool quality improvement** and the **reduction of production and marketing costs**.

Wool quality

Any improvements in the quality of wool, such as improved fibre diameter, tensile strength, and reduction of dirt, vegetable matter, chemical residues and bale contaminants, can lead to better prices for individual producers. Although this is an issue which affects all sectors of the industry, the environmental extremes regularly experienced by the Queensland industry exacerbates the impact.

In addition to the potential price benefits for producers from enhanced quality, the current average level of quality has drawn significant criticism from processors. Thus an increase in the quality of wool will, in the long term, be beneficial to the overall level and sustainability of demand for Queensland wool.

Production and marketing costs

The production and marketing costs of wool, relative to competing textiles, are high. To remain competitive, wool producers must increase the efficiency of their operation to ensure that they can viably produce a high quality product at competitive price levels.

Specialist wool producers in Queensland can capitalise on both of the above issues provided a more timely and accurate flow of market information can be achieved to allow them to adjust production strategies. Balanced against this are the difficulties associated with geographical isolation, large property size, and the relatively low grazing density; any refinement of management practices is less cost effective than for the more intensive enterprises common in other parts of Australia. The development of effective market information, collection and distribution networks and the training of wool growers to use such information is highly desirable.

Initiatives to improve quality control must be developed with the industry and provided in forms acceptable to it, so ensuring their acceptance and use. A vital component of such a program is feedback on where quality problems arise in the production and processing chain, how they can be fixed, and the monetary returns from fixing them.

Improvements will only be made where those involved are aware of the impact of their actions and the resultant benefits from changing them. Because of the length of the wool pipeline, it is not easy for market signals to be efficiently transmitted. It is important that those in a position to see the impact of differential quality on price have sufficient incentive to relay this information to those in a position to improve the quality.

A final step in the improvement of wool quality would be the establishment of export standards for wool. This will require major commitments by wool producers, brokers and buyers to self-regulated commercial schemes which improve processor confidence.

Wool market demand

Whilst a relatively stable demand for wool existed there was little urgency in better defining consumer demand. The recent market crises and wool stockpiling has changed this and strongly highlighted the need to actively generate the demand.

The share of wool on the world textile market has shown a significant decline. To react effectively to this change the perspective that must be taken is one that presents wool as a competitive textile. To take this approach it is important that the industry effectively targets its product. Factors which should be considered are:

- there is likely to be an increasing demand for finer wool, thus fibre diameter will remain an overwhelming factor in the determination of price
- style is significant for processing and price
- staple length and strength have a significant influence on processing and price
- crimp and colour are most important in the fine range
- fibre diameter variation, significant in determining the *hairiness* of wool, is likely to be of secondary importance in processing
- pigmented fibres are a problem, particularly for some end-users in this area.

The conclusion from recent research would suggest that a major future priority should be on quality, in particular, reduced fibre diameter. Obviously this is difficult to achieve. However, it is likely that in the future greater premiums will be paid for this.

While the general profile of wool production in Queensland is similar to that observed in other States, Queensland differs in several aspects. These can be generalised to the occurrence of extremes. Wool production is undoubtedly carried out under conditions of more extreme heat with the availability of water being a major determinant of the distribution of the industry.