

Analysis of the financial/ economical impact on country towns when a central western Queensland grazing property converts from a wool sheep production system to a beef cattle production system.

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Both the number of sheep properties and the size of sheep flocks in Queensland has fallen dramatically in recent years. In many cases, the decision to reduce sheep numbers or to stop grazing sheep altogether has been due to the impact or threat of wild dog predation. This paper quantifies some of the financial impacts on the neighbouring local community when a Queensland grazing property changes from a sheep (wool) grazing enterprise to a cattle enterprise of comparable size. Results from this paper will assist in understanding the significant economic impact that wild dog predation has on rural communities and the importance of government and community based approach to managing the wild dog issue.

Key Findings

A grazing property that changes from running a 10,000 DSE¹ (dry sheep equivalent) sheep flock to a cattle enterprise of comparable size would expect the following:

- A reduction of \$58,500 per annum in wages paid to casual staff that come onto the property during the year. Assuming an average full-time wage of \$46,000² per annum, this equates to a lost opportunity in employment of approximately 1.27 full-time persons per annum.
- A decrease in the number of days that casual staff is employed from approximately 206 man days to 30 man days. Assuming 200 working days per annum, this suggests the loss of almost one full years work for farm workers such as shearers, contract musters, shed staff, etc from the local town³. A significant loss of skill and experience from the industry occurs as these workers exit the industry, the lost value of which is unmeasurable.
- The loss of every 10,000 DSE wool sheep flock from a district can potentially mean the loss of 1-1.3 families from that community.
- Sales of merchandise and chemicals by local rural agencies would fall by approximately by \$11,000 per annum for every 10,000 DSE property that converts from sheep to cattle.
- Total agency income (merchandise sales plus livestock and wool sale commissions) would expect to fall by \$16,500, from \$34,000 to \$17,500.
- In any conversion from sheep to cattle, MLA⁴ stands to gain levy income of \$1,700 and AWI⁵ & AWEX⁶ stands to lose by \$6,000.
- Expenditure on direct freight would increase by approximately \$7,700 per annum.

¹ DSE refers to Dry Sheep Equivalent, a rating system that allows comparison of grazing pressure and pasture demand between different classes and types of livestock i.e. wethers versus lactating ewes versus 300kg steers.

² Australian Bureau of Statics, 2008

³ The disparity between the man-years of employment as calculated by income or by time is a result of the higher income per day earned by staff in shearing and crutching teams as compared with that earned by other farm labourers.

⁴ MLA (Meat & Livestock Australia)

⁵ AWI (Australian Wool Innovation)

⁶ AWEX (Australian Wool Exchange)

Background

The Queensland sheep flock has fallen from 14 million in the 1980's to less than 4 million in 2007-2008. There are various reasons offered by graziers for no longer running a wool sheep enterprise or for reducing sheep numbers on their western Queensland property including:

- Perceived low financial returns from wool.
- Perceived improved profitability of cattle enterprises.
- Emergence of new farming enterprises such as goats, prime lamb, dual purpose sheep and cropping, which offer either diversification or perceived greater financial return.
- Impact or threat of wild dog predation. Sheep producers who have been affected by wild dogs particularly in the western more arid areas of the state believe that there are few alternatives other than converting their business to cattle or beef production.

In addition to anecdotal evidence, results from a recent survey conducted at field days held by the DPI and AWI's Leading Sheep Program in October 2008 indicated wild dog predation as a significant issue for producers. The producer responses included statements that the risk or impact of wild dog predation had in some cases led several people to sell their properties. Other responses stated that producers were compelled to significantly reduce flock numbers and/or alter the management of their sheep flocks to accommodate the risk or impact of wild dog attacks.

Methodology

Gross margin budgets were constructed for a typical wool sheep and a typical cattle enterprise in central western Queensland. Only the costs directly involved in the conduct of the particular enterprise were analysed. A comparison of all direct costs for the two livestock enterprises was made against a set of major cost headings. All costs are GST inclusive.

- Direct wages and salaries costs including all on-costs.
- AWI levies.
- MLA levies.
- Expenditure attributed to the purchase of merchandise and chemicals i.e. wool packs, NLIS tags, HGP, vaccines etc.
- Livestock sales commissions.
- Wool sale commission.
- Direct freight costs.
- Supplement costs.

The sheep enterprise is a self-replacing merino (wool) sheep flock producing 20.5u wool. Wethers are retained to 4.5 y.o. and all ewe progeny are retained to 5-6 y.o. Lambing percentages average 70%. Current wool prices were used to calculate the expected AWI wool tax costs, etc.

The cattle enterprise is a self-replacing cattle herd with heifers joined to calve down as 3 y.o., steers are sold at 12months old as 320kg store steers. A calving percentage of 85% is assumed. An average trucking distance to the point of sale is 400km and trucking costs average \$1.85/deck/km. Current cattle prices were used to calculate the expected selling commissions. The cattle system joins 630 cows per year.

All bulls and rams are purchased into the enterprises on a private basis.

DSE ratings for all livestock are based on standard industry methodologies as per various state Department of Agriculture Agfacts.

A detailed analysis of profitability of sheep versus cattle enterprises was not conducted due to beef and wool price volatility and the scope of this paper.

Overhead costs were not taken into consideration and are assumed to be similar for both enterprises. Particular overhead cost items such as Repairs & Maintenance - Plant & Infrastructure may be different but are assumed to be equal in this paper. No consideration has been given to the impact from changes in purchases of different enterprise infrastructure requirements i.e. the use of ring lock versus barb wire in fences, sheep troughs versus cattle troughs, etc.

Both enterprises are managed by one full – time property manager. The wages of the property manager are assumed to be the same in both businesses. The manager's wage was treated as an overhead cost for the purpose of this analysis.

There would be variation between actual central western Queensland sheep and cattle enterprises and the sheep and cattle enterprises modelled in this paper. The enterprises used in this paper have been drawn from the author's knowledge and experience in enterprise analysis and benchmarking as well as his experience as a sheep and cattle producer at Barcaldine in central western Queensland.

Assumptions

A normal production year is assumed and stocking rates reflected the long term carrying capacity of the property. The same number of DSE are run in each system. Stock numbers were static between the start and end of the financial year analysed. The costs of the conversion process from sheep to cattle are not included nor considered.

Casual staff are required in the sheep enterprise for shearing, crutching and contract mulesing/lamb-marking. Four men are required to mules 1000 lambs per day. Each shearer shears on average 155 sheep per day and crutches 800 sheep per day. A contract musterer is also used to assist management with all mustering and a range of other activities. Sheep preg-testing and drenching are not carried out.

All wage and salary costs are current as of information available on the Agforce website or based on current local contractor rates.

Livestock selling brokerage is assumed to be 5.0% of gross sale value for both sheep and cattle.

The cattle enterprise budgets \$7,500 (3 men + horses for 10 days @ \$250) whilst the sheep enterprise budgets \$6,660 (1 man for 37 days @ \$180) for contract mustering.

All sheep are sold on-farm but cattle are trucked 400km to a local selling centre. All wool is freighted to Brisbane at \$17/bale. Dry-lick and other supplements are freighted into the property at a cost of \$90/tonne.

Discussion

Through the development of the enterprise models and the associated assumptions, this paper provides reasonable evidence for consideration in any debate about the financial and local economic impact of converting a central western Queensland grazing property from a wool production system to a beef cattle production system.

Employment and Income:

Of considerable importance for any rural community is the impact of fewer employment opportunities for local residents. The majority of casual and contract labour employed by sheep enterprises, including shearers, shearing teams, musterers and other casual farm labourers, are sourced from neighbouring local towns. Regardless of the reason for enterprise conversion, any shift from sheep to cattle would lead to a significant fall in demand from the local community for labour and the opportunities for employment.

Any reduction in the demand for local labour would have a multiplier effect on the demand for local services (supermarket, post office, chemist, health care, hardware, hotels, motels, rural agents etc.) and infrastructure (roads, rail, hospitals, etc.). The large reduction in sheep numbers from properties across many of the traditional sheep districts in Queensland has resulted in significant impacts in these communities. Based on the numbers provided in this paper then through the loss of every 10,000 DSE sheep flock you would expect the loss of approximately 1.0-1.3 families from the local community.

In many cases, properties converted to cattle are supervised or managed with a 'cowboy' or caretaker manager. In these cases, individuals are paid as caretakers and not as full-time farm managers on salaries of approximately \$25,000pa, whilst full-time property managers receive an annual salary of approximately \$48,000. The use of caretaker management would further reduce the amount of money being spent in the local community due to the lower wages that caretaker managers are paid.

Cattle properties, particularly those that are owned by companies and larger family businesses often have their own mustering and yard work contractors. In many cases, these contractors are often not from the local community but operate on a fly-in, fly-out basis returning to other localities once the on-farm cattle work is done. This also reduces the amount of money that flows into some local communities, although the majority of these contractors are expected to reside in a rural community.

No value is placed on the loss of skills and experience as former sheep industry employees exit the sheep and wool industry. Several anecdotal comments made by various wool managers is that whilst casual workers staff can be found, that they lack the skills required and require far higher levels of training and supervision.

Enterprise Profitability

There is little or no quality benchmark information that examines the profitability of various farm enterprises such as sheep or cattle in the western regions of Queensland. Over the past twenty years, cattle enterprises have often performed below sheep enterprises when compared on a profitability per DSE, per AE (adult equivalent) or per Ha basis. This statement is based on historical benchmarking datasets that are in the public domain (although most of these reliable datasets are from southern service providers). If cattle enterprises are actually less profitable than wool sheep, then there is a further hidden impact on rural communities as the reduction in economic surplus of the business would result in less money flowing into rural communities.

Impact on Rural Stock Agents:

Rural stock agents derive less income from their district when producers convert their enterprises from wool sheep to cattle. This paper quantifies the impact on rural stock agencies as sheep are replaced by cattle. As rural stock agencies are another important small business in the local community, perhaps the impact highlighted in this paper, reflects what happens to other businesses in the same towns.

In many cases, beef producers are able to negotiate the sale of their cattle outside the normal process with agents, i.e. sales of cattle direct to works. In these cases, the commissions earned from cattle sales by stock agencies would be less than what is reflected in this paper. Whilst sheep producers also have a capacity to sell sheep directly, wool producers are generally unable to avoid paying their brokerage from wool sales.

Other

Local sale-yards are an important local business centre for several rural shire councils in Queensland. In this analysis, the cattle system would generate sale yard fees of approximately \$5,000, assuming all cattle are sold through sale-yards. Whilst this income is not to be sneezed at, it should be reflected upon in the light of the less obvious impact on the whole community if less sheep are run in the district.