

**Evaluating the commercial viability of a northern outback
Queensland meat processing facility**

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Executive Summary

Introduction

This study has been commissioned by the Queensland Department of Employment, Economic Development and Innovation (DEEDI) with funding assistance from the Australian government, and supported by a management group comprising representatives from the producer group Northbeef, Mount Isa to Townsville Economic Zone Inc (MITEZ) and Gulf Savannah Development (GSD). This report constitutes Stage 1 of the overall study.

The scope of the study was to conduct a preliminary investigation into the viability of a new meat processing facility in northern outback Queensland and to analyse and compare alternative potential locations within the study zone. In the absence of a regional abattoir, slaughter ready cattle from this region are transported long distances to coastal and SE Queensland abattoirs. High associated costs place the local beef industry at a global competitive disadvantage. Recent volatility in the live export trade has also negatively affected the outlook for regional producers. A local abattoir would potentially improve the trading position of regional producers.

Stage 2 of the study, should it proceed, is envisaged to develop a form of prospectus or investment platform to be issued by the Queensland government (in partnership with Commonwealth and local agencies) to attract investor interest in such a development.

Background

Northern Queensland cattle production is oriented towards breeding. Many corporate pastoral companies and larger private producers have a semi-integrated supply chain involving multiple properties from the north to the south of the state, where most processing capacity is concentrated.

The cattle herd in the study area is a conservatively estimated 3.4 million, based on recent ABS survey figures. Assuming a turnoff rate of 30%, approximately 1 million cattle leave properties in this region each year. Of this number, about 100,000 are exported live, 213,000 are taken direct to slaughter while the remaining 700,000 are presumably transferred to other properties for finishing.

An estimated 21% of cattle turnoff from northern outback Queensland is slaughter-ready. Of the 213,000 annual slaughter number in 2009 and 2010, 75% were destined for coastal abattoirs between Townsville and the Rockhampton area, with the remaining 25% driven the longer distance to abattoirs in SE Queensland (NLIS data 2009 and 2010). It is assumed that cattle movements of this type generally occur from the region in most years.

Regional producers bear substantial live cattle transport costs and carcass shrink losses resulting in significantly reduced net returns. In some cases, cattle are left to die on the property rather than transported at a loss for slaughter.

There is some potential for developing finishing operations in some areas within the region in support of a local abattoir. The proposed development of irrigation areas on the Flinders and Gilbert Rivers enhances this opportunity.

The prime efficiency driver for a local abattoir is the difference between the cost of transporting live animals versus freight of processed product in refrigerated containers. The high cost of shrink losses, tick line treatments, and regulations governing truck driver fatigue and animal welfare contribute to this differential. Reducing live transport distances in a supply chain are an important means to reduce costs faced by producers in selling their cattle into the global meat markets. Reduced live transport distances also enhance meat quality and the possibility of producers qualifying for Meat Standards Australia (MSA) premiums.

Viability of a North West Queensland Processor

There is no shortage of processing capacity in the Queensland beef cattle industry, with around 4 million head of capacity available to handle an annual ‘kill’ of about 3.3 million head. For many producers in northern outback Queensland however, this processing capacity is arguably too distant from production areas and cattle prices net of transport and shrink costs do not generate sufficient returns.

There is evidence of a shift in the global market for beef consumption, with demand stagnating in traditional northern hemisphere markets (such as the US, Europe and Japan), and growing rapidly in parts of Asia and the Middle East. Northern Australia is in an excellent position to capitalise on this trend, and new supply chain options will become increasingly viable in coming decades. The potential for the future success of a local processor is therefore greater than at any time in the past 20 to 30 years.

The establishment of a new abattoir in northwest Queensland drawing slaughter ready cattle from adjacent areas would significantly reduce live transport and shrink costs currently borne by producers, and would improve the supply chain efficiency for cattle in this area.

Comparative Cost Analysis

Analysis of NLIS data on slaughter turn-off numbers for the study region was used to model the supply chain costs that could be expected from the operation of a local abattoir, versus the current lowest cost supply chain option currently available to producers. The analysis compares the property to market supply chain cost for cattle in all shires within the region, using a hypothetical new abattoir located in a range of 10 centres throughout the region.

Modelled supply chain costs for each shire are compared with those for the least cost supply chain using existing processors, to derive an estimate of potential slaughter cattle catchment for each potential abattoir location. The overall supply chain saving is then expressed as an annual total, and as a figure per head of catchment cattle.

A summary of the potential catchment numbers and estimated value generated by a new facility in each location appears below:

Max Potential Cattle Supply	Potential Abattoir Location									
	Charters Towers	Hughenden	Richmond	Julia Creek	Cloncurry	Mt Isa	Normanton	Winton	Longreach	Georgetown
Based on comparison with:										
All currently used abattoirs	236,706	167,902	139,687	116,766	96,666	96,116	83,932	167,352	167,352	65,084
Townsville only	167,902	167,352	139,687	116,766	116,766	69,705	47,653	167,352	128,977	40,480
Rockhampton only	225,526	246,176	225,526	134,462	133,264	124,891	103,168	191,049	182,777	130,607
Brisbane only	273,841	273,841	273,841	246,176	246,176	246,176	134,360	273,841	273,841	225,526
Least cost	119,586	139,687	119,037	96,116	96,116	69,705	47,653	167,352	128,977	40,480
Total Financial Benefit (K pa)	\$2,073	\$3,462	\$3,233	\$3,497	\$3,950	\$2,687	\$1,498	\$4,077	\$3,348	\$1,151
Benefit/Head	\$17.33	\$24.78	\$27.16	\$36.38	\$41.10	\$38.55	\$31.45	\$24.36	\$25.96	\$28.44

Based on this analysis, an abattoir located in the Cloncurry area would offer the greatest benefit per head at \$41.10. This location could be expected to attract in the order of 96,000 slaughter ready cattle per year based on existing regional turnoff rates. This throughput is the minimum required to support an operationally efficient abattoir with sufficient scale to be productive and cost efficient. Other sites, especially Winton offer significant modelled benefits in terms of value and cattle supply. However, when a range of other practical factors such as road access, labour availability, service availability and market proximity are taken into account, the Cloncurry area appears to be the prime, practical candidate for location of a facility.

The Cloncurry area enjoys the following advantages:

- Good major road access to all northwest Queensland and eastern Northern Territory production areas, all triple road train approved.
- Relative proximity to future potential export locations at Townsville and Darwin
- Reasonable population and public services, and within 120 km of Mount Isa with 30,000 population and more expansive public and social amenities.
- Significant labour catchment.
- Water, power and suitable land available. Fuel available either tanker LPG or tanker CNG ex Mount Isa pipeline.
- Suitable finishing areas and future irrigated fodder production areas nearby.
- Located in tick infected area hence no producer tick clearance costs.

The model cannot predict pricing behaviour by a new abattoir operator or its competitors, however it is likely that the benefits would be shared between the processor and producers. The new operator would need to set prices to attract a steady supply of cattle while generating a return on the substantial capital involved. Producers could expect to see somewhat reduced cattle grid prices but improved net returns through savings in livestock transport costs, shrink losses and MSA premiums.

The model suggests that of the \$41 per head estimated supply chain cost saving, approximately 40%-60% would be retained by the processor in the form of a reduced grid price versus the coastal and southern processors. This reduced price must cover the additional expenses of operating in a remote location as well as provide a return on the invested funds. The remaining 40%-60% would be the average benefit to producers in the form of increased net return (grid price net of transport, shrink and MSA). This benefit will not be evenly distributed across the catchment with producers located very close to the abattoir receiving a more substantial benefit, while producers near the “break even arc” located some 400-500 km towards the existing processors would see only a marginal net benefit. Producers would also benefit from greater proximity to the processor, and a consequently stronger relationship.

Challenges

There is excess processing capacity in Queensland at present, although it is not all located in the most appropriate or efficient locations from a producer standpoint. Any new abattoir will, at least in the short term, result in a small reduction in throughput at all Queensland abattoirs, with Townsville being most affected.

Operating costs for a Cloncurry area abattoir would be greater than for a coastal or south Queensland operation. This is due to the additional costs of operating in a remote location including the cost of freight of consumables to site, cost of skilled labour, higher energy costs and lack of scale compared with existing operations. Operating cost and therefore business earnings are very sensitive to variations in exchange rate, seasonality, drought, cattle available for purchase, products marketed and business model used. A new abattoir for northern outback Queensland would be likely to generate improved net return outcomes for local producers, but could only expect to generate a marginal return on its investment.

Any potential abattoir site would need to be at least five kilometres from any town and at least one kilometre from any residence or sensitive odour receptor. In addition, the site should be located a sufficient distance away from any mine site (whether active or shutdown), to avoid the perception of being “tainted”. Other factors such as proximity to services, road access and suitable land for irrigation using effluent will also affect location.

Seasonality will affect a Cloncurry area abattoir more than existing abattoirs. Historically, turnoff of slaughter ready cattle from the GSD and MITEZ shires is minimal during December to February, with stronger turnoff March to October. The development of a northern outback Queensland abattoir would provide incentives for changes in producer practices including providing all-weather load-out facilities and improved fodder production to reduce the seasonal supply shortfall.

Recruiting suitably skilled labour for a northwest Queensland abattoir will be challenging. The population of the area is relatively low and the mining and resources industries compete for skilled labour. The nomination of the Cloncurry area as a suitable location enables the abattoir to draw from Mount Isa, some 120 km away, the biggest population centre (at approximately 30,000 residents) in the northwest of the state. An abattoir offers an alternative employment opportunity for many local people unable to find suitable work in the mining sector.

Potential to Change Producer Behaviour

Producers would have the incentive to change their practices to maximize returns. These changes could include:

- Retaining cattle on finishing properties near the new abattoir and not sending them south ‘out of economic range’.
- Use of better properties with finishing potential exclusively for finishing young cattle from the breeder-only properties in the far north.
- Expansion of wet season supply capability (use of fodder and all-weather load-out) to capitalise on wet season premium prices.
- Improved breeds and genetics to take advantage of MSA quality premiums and improve productivity.
- Use of local irrigated fodder to improve slaughter weight for age.

All of these changes would develop over time, with the increased number of cattle ready for slaughter and increased carcass weight being to the advantage of both the new abattoir and producers.