

Sailing Ahead

The Australian Livestock Export Trade

A report for



By Annabelle Coppin

2008 Nuffield Scholar

August 2009

Nuffield Australia Project No 0811



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Foreword

I hear and I forget. I see and I remember. I do and I understand.

Confucius

Chinese philosopher and reformer (551 BC - 479 BC)

When I applied for my Nuffield scholarship, I sought to step off the family property and travel abroad to personally investigate the future of what our family business and livelihood is so heavily reliant on - breeding and supplying live animals to the world for food.

We are not only cattle producers, we are food producers, and with Australia's social and geographical advantages I'm committed to producing food not only for my country but for the rest of the world.

In fact, our family provides, on average, more than 2 million beef meals per year. I'm proud of this and sure most people would be. I have also discovered some would be disgusted by this achievement.

That's the beauty of being an Australian; we have the choice and position to have such opinions. But I can't help but assume the priorities of society change with the comfort of a full stomach and a wet throat. My experience of 16 countries, more than 100 flights and 12 months of diverse travel has given me the opportunity to build a very solid foundation of knowledge. It has also highlighted ongoing opportunities in the Australian agricultural industry to allow it to continue to be one of the world's leading food suppliers.

The scholarship began when a dynamic group of food producers of wheat, cheese, oysters, wine grapes, apples, celery, milk, sheep and, importantly beef, set off on a prearranged, six-week 'global focus' world tour, taking in countries including New Zealand, Ireland, France, the United States, China and the Philippines.

We participated in a diverse range of farm tours across the globe. Farms visited ranged from 10,000 head grain-fed dairies in Texas to one of the most efficient grass operations in New Zealand, from Maryland oyster and crab operations to New Zealand mussel farms and mountain cattle enterprises. We saw French tomatoes, strawberries, cut flowers and carrots, witnessed extremes of wheat yields between France and Oklahoma and perhaps similarities in their pig industries. We inspected Chinese peanuts and French chooks, Irish horses and Chinese lobsters. Not to mention rice and more rice - the food bowl commodity of the world.

We also moved beyond farming tours to learn about US Congress, New Zealand environmental law and European environmental compensation issues. We visited Chinese schools as well as super glue, tarpaulin and mag wheel factories, attended the international Nuffield conference in Ireland, viewed the very popular dog racing in Kilkenny, banks, the Somme battlefields and most importantly for me, we drove right past the Robinson helicopter factory in Los Angeles.

Indonesia and Sabar were next on the agenda. With the assistance of many helpful industry members, I spent time in abattoirs, feedlots, supermarkets, local markets and breeding cattle operations throughout Java, Sumatra and Sabar.

There are always good and bad experiences, especially in northern Sumatra where, tragically, our car hit a beautiful lady on her scooter in a small village and she died soon afterwards. My heart still goes out to the driver, her husband and family.

I also spent time in the Middle East region, including Bahrain, Oman, Dubai, Qatar, Kuwait, Egypt and Jordan, which gave me a small but important taste of the livestock industry as well as the everyday life, culture, values and, importantly, food in these regions.

I was genuinely overwhelmed by the welcoming and kind nature of people in these countries. Many will walk up to you and ask your name, where you are from and welcome you to their country. They seem to care about your general safety and quality of stay in their country, I will now always make the effort to reflect this gesture on my own precious soils. Despite being the Middle East region, countries in the Gulf also have vast differences in their histories, livestock operations, markets, consumer demographics, livelihoods and cultures.

I was introduced to an astronomical number of colorful, inspirational characters and business operations. I managed to trot, and for a very short time canter, on a camel around the pyramids and to visit the Cairo museum. Floating in the Dead Sea in Jordan and discovering Petra were also part of my small number of tourist days. These experiences were highlights of my tour as I was moved by what the human race was doing 5000 years ago, making my time on earth seem very short. We definitely get too hung up on the small things in life.

I met Princess Alia Hussein of Jordan in her home/palace. (I did manage to polish my boots but seemed to have misplaced my lipstick at the time). A leader of Animals Australia was also in attendance. It was a very interesting evening and, besides sipping on tea and eating

dates, it gave me the important opportunity to reason the views opposing the Australian live export trade.

I also experienced the three days leading up to the Festival of the Sacrifice (Eid Al Adha). During this period, Muslims purchase a live animal for a home slaughter and give the meat to the poor during Eid (similar to our Christmas period). Quite often, the whole family will arrive at the feedlot to select their sheep. This is a special occasion to observe and would also be a valuable experience for others in our society which is so far removed from the food chain.

This period of hearing five prayers called daily from the mosque and practicing my very poor Arabic came to an end when I flew to the United Kingdom for a two-week visit. The highlight was heading to Shropshire and meeting retired farmer and cheese maker Jill Hutchinson Smith, one of the first female Nuffield scholars in the world. She is more than 80-years-old and has attended every local fox hunt in the last forty years. They dressed me in the mandatory coat, jodhpurs and jacket and I headed off with a sherry under my belt and in the English saddle of a brilliant horse. I must say ditches and hedges can be disconcerting in their size and the English mud soft and sticky.

My scholarship has given me the opportunity to witness global agriculture and world trends. Following such experiences we often seek to predict our future influences and directions, which is natural for people continually searching for answers. However, I now believe all major issues affecting global agriculture are usually based on the basic factor of supply and demand, which is influenced mainly by climate, diseases, politics and the economy.

There are hot issues in the industry which are dependent on the globe and its influences at the time. These issues change regularly and seem to drive the roller coaster of outcomes we experience in agriculture. We only have to look back over the last 24 months to witness the excitement of the lucrative biofuel industry finally filling farmers' pockets, to a rapid acceleration of farm inputs costs, the carbon farming and carbon reduction scheme, the global food crisis, climate change, water scarcity and, don't worry, I haven't forgotten it, the global economic crisis. These are all hot issues in agriculture which automatically steer our direction in a short period of time.

I'm excited about the future of Australian agriculture. The industry has built up many advantages over its global counterparts and there have been many times during my travels

when this has hit home. Overall, feeding the South-East Asian, Middle Eastern and African population excites me far more than supplying the developed western world. In particular, as an Australian livestock producer, supplying animals to these people means complementing our advantages of having enough grass and space for animals to efficiently breed, by supplying fresh, safe meat to people who value it in their life and culture. This outcome must be achieved in conjunction with a comfortable profit and a consistent demand. With this I have a mission, my learning journey is under way and the future is an ongoing adventure.

Acknowledgments

All of my Sponsors have raised my career in Australian Agriculture to a new and exciting level. Your commitment provides the opportunity for the passionate Australians to continue to contribute towards a sustainable, innovative and importantly profitable Australian agricultural industry.



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CBH is 'Linking Growers to Customers' and is controlled by over 5,500 grower-shareholders, through out Western Australian grain belt.



Outback Trees of Australia is a successful, passionate family company with over 16 years experience specialising in native plant landscaping for a remote area/mine village throughout Western Australia.



The Connellan Airways Trust was established by the E J Connellan, a Territorian pastoralist and aviator. This trust is primarily focused on encouraging the advancement of knowledge of younger people, living in remote parts of outback Australia.



Thank you to all the support from both **Livecorp and Meat & Livestock Australia**. Particularly to Cameron Hall who's astute vision and passion for the industry ensures to involve young

Australians. Peter & Sharon Dundon who made me apart of their home in the Middle East and who have both been inspiring and supportive of my path over the years. To Jason Hatchett for taking me under his wing in Indonesia, to Geoffrey Beere for his mountain of knowledge in Jordan and the Sydney crew: Allister, Michael, Chloe, Blaire and Yvette for your support through out my scholarship. Also Mel, Richard, Maria and Nacio in Egypt for their warm welcome, brilliant barbeques and suburb ancient tours.

- To Nuffield Australia for deciding to grant me the opportunity, particularly the extra support from Jim Geltch and John Foss
- To John Cox, Tim Darcy and Jane Grieve for your encouragement and backing
- To my lifelong friends formed on our Global Focus Tour, our debates stimulating, content diverse and most of all memories invaluable

- To the tour leaders and all involved with the organisation and input of our Global Focus Tour
- To every person who assisted and guided me through this experience, some can be found in the appendices of this report, there many who are not (including all the entertaining taxi drivers), I hope I can repay the favours
- To all candidates who suffered my company when I was completing this report
- To my brother Lance and Aunt Pauline
- To Lara Jensen who gave me the support and confidence to apply for the scholarship
- Thank you to my parents Lang and Ann, it is your savvy risk taking success and gutsy, hard work that gave my invaluable upbringing and countless opportunities so far in my life.

Executive Summary

Background

This report is for producers, policy makers and others with an interest in critical issues that affect the Australian livestock export industry. It is particularly targeted at those that have the potential to influence the strategic direction of the trade and subsequently the supply sustainability of Australian fresh meat internationally.

The aim of this study was for a livestock producer to investigate the supply chain of the Australian live export industry beyond the Australian farm gate. Initial goals were to determine the trade's significance and contribution to Australia's livestock industry; define the drivers of global demand for live animals and investigate the influence of Australian live sheep and cattle exports upon net global animal welfare. These findings would assist in steering the future direction of Australian livestock exports.

This investigation could not have been achieved without the producer physically stepping off their property and travelling abroad to develop a first-hand appreciation of each critical factor along the supply chain.

Key Findings

The most important finding of this study is that despite expanding global economies and urbanisation, there will always be international demand for Australian live animals. This is because the three clear market sectors of frozen, chilled and fresh meat which present strong and unique selling points. These sectors mostly complement one another in developing red meat demand for Australia's export markets. Australian livestock also support the logistical, social and political demands of importing countries who seek vital food security for their people.

The activities and vision of various interest groups to terminate the live trade ignores the social and economic welfare of the thousands of people involved in the supply chain. They also discount the Australian livestock industry's future contribution to the nation's economy and social responsibility to food security in Australia's export destinations. A pivotal factor in the trade's future is for the Australian industry to lead by example with a consistent message that the supply of any Australian livestock is dependent upon acceptable and solid livestock welfare practices being applied and embraced in destination markets. This approach will raise

the level of awareness of animal welfare which also contributes to raising net global animal welfare standards.

There are a number of important recommendations that flow from this report for Government and industry if we are to maintain a vibrant and viable live export industry for Australia. A critical one of these is that the Australian livestock industry should continue to support the Livestock Export Program (LEP) which is addressing community, Government and industry concerns of animal welfare. This includes the program's promotional program in Australia, quality control on vessels and continual improvements to livestock welfare overseas.

The full range of findings and recommendations are set out in the final chapter of the report.

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Introduction

It could be said I embarked on the scholarship with biased opinions supporting the live export trade, having already become part of a sometimes controversial trade. To a degree, this claim may be correct. But I believe my mind was sufficiently open to face the reality of what I was to investigate and the principle that we could adapt if there is the need to change

Distance usually prevents Australian producers involved in the Livestock export trade a full appreciation of all fundamentals steering the future direction of their industry and individual businesses. The following report aims to assist in this challenge by highlighting the trade's general influence on the Australian livestock industry. Defining the drivers of global demand for live animals and the influence the Australian live sheep and cattle exports has on the outcomes of global livestock welfare assists in all interested stakeholders in visualising the future direction of Australian livestock exports.

The Australian livestock export industry

Brief Industry Overview

The Australian livestock export market contributes \$1.8 billion annually to Australia's gross domestic product (GDP), employs more than 12,000 people and pays about \$987 million in wages and salaries¹. Australia's live animals reach more than 30 destinations around the world² by either sea or air, supplying many diverse markets with stock including cattle for dairy and breeding, goats, deer and camels. About 90 per cent³ of the market is dominated by sheep and cattle providing meat for South-East Asia and the Middle East. This report will focus on these enterprises. South-East Asia, primarily Indonesia, dominated (more than 70 per cent of total exports) cattle exports in 2008. Kuwait was the biggest market for Australia's live sheep, followed closely by Saudi Arabia and Oman.

¹ Australian Livestock Export Corporation Limited, 2007-2008 Annual Report, pp. 9.

² Hassal & Associates Australia, The Live Export Industry- Value, Outlook and Contribution to the Economy. Meat and Livestock Australia, July 2006.

³ Personal Communication, Michael Finucan, Meat and Livestock Australia, Sydney, February 2009.



Figure 1; Australia's Primary Supply pattern for Cattle & Sheep. Data: Meat and Livestock Australia 2008.

Figure 1 illustrates the distribution of Australian meat processing units and ports for the sheep and cattle industry. It also shows the locations of many former abattoirs, particularly in northern Australia. Currently, two Australian red meat processors account for about 32 per cent of all red meat production, and 25 processors for about 80 per cent of production, across Australia. There are a total of 51 plant sites across the country⁴. Ports for sheep and cattle are more evenly dispersed across Australia than the processing units which are heavily clustered in the south-eastern corner of the country, which is mainly due to supply chain logistics.

History of livestock export market

The animal export trade for horses, cattle, sheep and goats is not a new, miraculous industry. In fact, the Australian livestock industry would not have started without the animal export industry, which has operated for more than a century.

- Horses were the first animals exported from Australia when they were sent to India for military and civilian use as early as the 1820s.⁵ In 1874, staff veterinary surgeon and

⁴ 'Top 25 red meat processors', Meat and Livestock Industry Journal Supplement, September 2008, pp. 1-14.

⁵ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia. Pp.9.

remount agent W Thacker reported: “One of the major faults of Australian horses exported to India was they bucked badly.”⁶

- In 1877, Sydney pastoralists were being advised of “the immense advantages of establishing cattle and horse stations in the territory for the supply of Java, where cattle were to be fetching 40 pounds per head.”⁷ In 1884 “Fisher and Lyons sent their first trial shipment of mixed cattle to Hong Kong, Batavia and Singapore aboard the steamship Catterthun.”⁸
- The first recorded live sheep exports were to Africa, the Pacific Islands, New Zealand, Indonesia and the Philippines in 1903.⁹

The countries of import and the number of Australian animals exported have varied over the years. But the size of Australia’s animal export industry grew significantly from the early 1970s for both sheep and cattle, dominated by Middle Eastern imports for sheep and South-East Asian cattle imports.

It is also important to note the supply of Australian chilled and frozen meats is not a new, profound industry that has replaced the live export trade. Meat trading has been established and a significant contributor to the Australian economy for hundreds of years. The first freezing works in the world were invented in Darling Harbour in 1861. The first frozen meat was sent from Sydney to London in November, 1879. It arrived 64 days later and was described to be “in a perfectly sound state, frozen quite hard.” This meat fetched high prices in the United Kingdom market. Even chilled shipments were sent as early as 1894 and again in the 1930s. But at the time, chilled shipments were deemed financially unviable and the technology was mostly abandoned until it was proven and took off in the 1950s.¹⁰

⁶ Mckaren. G, Big Mobs, 2000.

⁷ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia.

⁸Forrest. P &S, Old Sid; The Life and Times of Sid Parker, Darwin, June 2000.

⁹ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia. Pp. 8.

¹⁰ Harrison, G. 1963, A Century in the Meat Trade, 1863-1963, Hazell Watson & Viney Limited, England, Pp. 26-28.

The livestock export industry's influence on Australia's livestock industry

The live sheep and cattle export trade, and the meat industry in the Australian livestock sector, have interacted since early last century. What is debatable is the extent of the live trade's influence on Australian livestock and if the trade has impacted positively or negatively on the industry over the long term.

Passionate opinions have long surrounded the live export and processing sectors in Australia.

One side of the argument claims the live trade complements the Australian livestock industry by providing healthy competition in domestic market returns for farmers and adding further value beyond the front gate in Australia. If the trade closed, these advantages would be lost and the Australian livestock industry would be devalued.

The other end of the debate claims the live export industry trade costs Australian jobs and devalues the country's livestock industry through its unhealthy competition, and it would be better for the industry and Australia to shut the doors on the trade.

*"The livestock export industry contributes 11,060 jobs and value added (direct and indirect) of \$830 million."*¹¹

Warwick & Associates, July 2007 (for Meat and Livestock Australia.)

"The live export trade could be costing Australia around \$1.7 billion in lost GDP, around \$280 million in household income, and around 12,000 jobs"

SG Heilbron, April, 2000 (for the Australian Meat Processor Corporation Limited)

Australia's sheep and cattle industry before the influence of the livestock export trade.

To analyse the interaction between and influence of the live export trade on the Australian livestock industry, it is important to trace its history, developments and pivotal turning points relating to both cattle and sheep.

The Northern Beef Industry

The northern Australian cattle industry supplies more than 80 per cent of all live cattle exports.¹² It is therefore most influenced by the live export market and will be the major focus of the cattle section of this report.

¹¹ Warwick Yates & Assoc, Assessing the Value of the Livestock Export Industry to Regional Australia, Meat & Livestock Australia, July 2007. Pp 120.

¹² The Australian Live Cattle Trade, Abare, 2007. Pp.2.

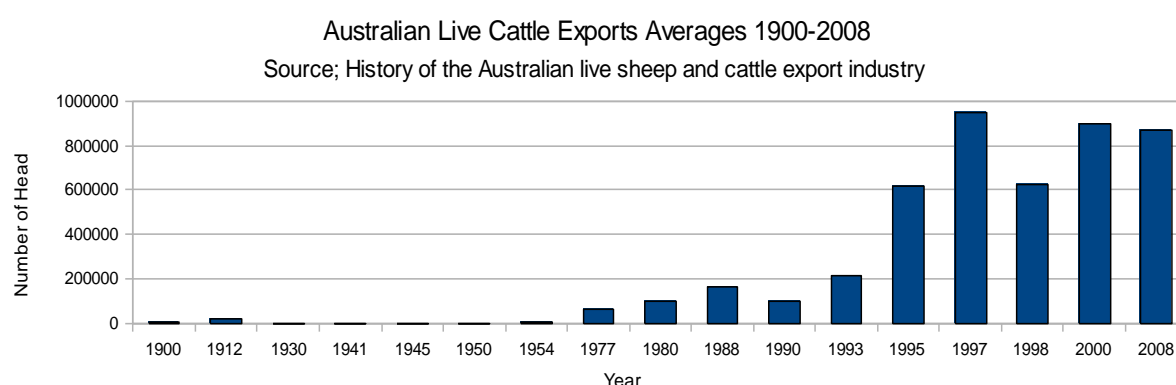
Covering 145.5 million hectares of land and supporting over 14 million head of cattle and 20 thousand agricultural businesses¹³, the northern Australian cattle industry has, over the last century, developed and adjusted to become a successful, reliable industry of significant value to the Australian economy and many Australian livelihoods.

“Total factor productivity for northern beef properties grew on average by 3.6 per cent a year over the period 1988-89 to 2001-02. In contrast, there was relatively little productivity growth for southern Australian beef properties. High productivity growth coincided with major developments in the northern beef industry, including the emergence of the live cattle export trade”.¹⁴

The northern Australian cattle industry can generally be described as boasting adequate standards of infrastructure, producing a competitive beef product from Bos Indicus-infused cattle on specialist properties and being a major supplier to the live export market.

However, this was not always the case. Although the first official recording of live cattle exported for sale from Australia was in the late 1880s with a shipment to Hong Kong, Java and Singapore, live cattle exports only began substantially in the 1990s in to Malaysia, the Philippines and Indonesia.

Figure 2



To illustrate the rapid transformation of the northern beef industry after the live cattle trade became influential, the early days must first be covered.

The early northern days

“With rare exceptions, beef cattle raising in north Australia was not a profitable enterprise over the first half of the century. Beef prices in the domestic market were almost uniformly

¹³ ABS Agricultural Census, 2005.

¹⁴ The Australian Live Cattle Trade, ABARE, 2007. Pp.9.

*low, production being mostly surplus to Australian demand. From the 1890s onwards, northern cattlemen became increasingly dependent upon export outlets for their marketable cattle”*¹⁵

The entrepreneurship and stories from this early period are highly admirable and contributed substantially to Australia’s history and culture. However, there were hardships, poor returns and many failures before a viable beef system was developed. Pastoral land had to be established, suitable cattle breeds identified and markets created.

Pastoral leases opened in 1863 in the Northern Territory and in the 1880s in the Kimberley and Pilbara regions of Western Australia. Excited and cashed-up speculators invested vigorously in the new ventures described by explorer Stuart McDougall as being in a region with “*abundant water and pasture and, north of the Roper, suitable for growth of any and every thing*”. The area was therefore “*to become one of the brightest gems in the British Crown.*”¹⁶.

However, it was not long before the land was more commonly known for its “*harsh environment and lack of available markets*”¹⁷ and “*it would be safe to assume that the only ones that made any gain out of the Territory pastoral lands over the period of 1870-1900 were speculators. Efforts to establish the pastoral industry in the Territory were mostly failures.*”¹⁸

*“It was interesting to note that at the beginning of his cattle empire Syd Kidman was making more of a profit out of breeding horses on his pastoral properties and shipping them live to India for their army”*¹⁹ Mike Back 2009.

The pastoral industry’s key challenge was its lack of profitability and therefore minimal investment back in to the enterprises to improve productivity. This challenge was due mainly to:

- A lack of suitable markets to complement the management system required for a suitable cattle industry in the northern environment.

¹⁵ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 10.

¹⁶ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 19.

¹⁷ Duncan. R, The Northern Territory Pastoral Industry 1863-1910, Melbourne University Press, 1967, pg 4.

¹⁸ Report of the Royal Commission on the Northern Territory, S.A.P.P, No. 19 of 1895.

¹⁹ Personal Communication, Back. Mike. Cattle Veterinarian, Melville, February 2009.

- Difficulties adapting and developing management and production systems which suited the northern environment for a profitable and sustainable future
- The lack of general and scientific knowledge and resources to adapt to the practices suitable for the rangeland environment and to identify the most suitable type of cattle to market
- The lack of credit available to new ventures and infrastructure development in the region²⁰
- The general isolation of the remote northern regions from the rest of Australia's population
- Poor beef quality consistency due to 80 per cent of all rain falling in four months of the year.

“Low prices for cattle up to the outbreak of World War II did not encourage cattlemen to invest in structural improvements essential to increase production. Nor was sufficient credit available”²¹ Isolation from markets was also a challenge as *“carcass quality progressively diminished according to the distance cattle had to be walked to railhead or meat work”* and *“cattle prices were insufficient to bear the higher cost of movement by motor transport”²²*

Major market events and dynamics before the live cattle market boom

The Australian government attempted to solve the challenges to the early northern cattle industry many times during the twentieth century through taxation, production support and the development of marketing outlets.

These measures included the construction of a public meatworks in Wyndham in 1919. This facility operated for the seasonal kill from May to September, with the average turnover averaging 30,000 head of cattle. During its 45 years of public ownership, the meatworks operated at a loss and was eventually sold in to private ownership in 1966.

The Darwin meatworks operated from 1917 to 1921, it did re open after this era before closing in the early 1960s.²³

²⁰ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 1.

²¹ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 12.

²² Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 12.

²³ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 48.

Many cattle were also driven from the Kimberleys and Northern Territory in to the Queensland and New South Wales markets. The primary market for Kimberley cattle was live shipments to Fremantle for the Perth domestic market. There were also some shipments in to South-East Asia and Africa. Numbers of these live cattle exports grew in the first decade of the twentieth century, with Hong Kong being the major market. However, much of the world was supplied with small numbers, with these markets including Africa, India, New Guinea, Europe, Russia and South America. The period from the 1930s to 1950s saw very few cattle exported live.

During World War II, these shipments became challenging and a private abattoir, supported by government funding, began operating in Broome in 1942. During this period, other cattle were walked to Katherine, with all meat supplied to the army.

In 1949, the famous ‘Airbeef’ campaign began whereby cattle were slaughtered on Glenroy Station in the Kimberley, before being chilled and flown to the Wyndham works and Derby for exports and freezing.

Some districts in the north were better situated than others in their ability to get cattle to markets. The Queensland gulf and channel country was closer than other districts to export and domestic outlets on the east coast. The Alice Springs district had access to a train and could service the Adelaide domestic market. Other cattle-producing areas in the Kimberley’s, Pilbara and Northern Territory were the most challenged in their isolation to markets.

In 1948, a fifteen-year contract was initiated by the Australian government under which the United Kingdom purchased all exportable beef surpluses. The aim of the contract was to give Australian meat exporters a fairer deal when dealing with the UK market, which previously had significant buying power over Australian traders. The contract continued to be an important foundation for the *“development of northern beef and was in fact Australia’s most important outlet for surplus beef up to 1959.”*²⁴.

The fortunes of the north Australian beef industry began to brighten slightly during this period.

²⁴ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 64.

Beef returns for producers from the establishment of the cattle industry through to the end of World War II were dismal, and it would be safe to assume that without the continued government support of the northern region, its beef industry could have been abandoned.

Pivotal turning points for the development of live exports for cattle

A series of important events occurred before the live cattle market developed fully in the 1990s:

1. The 1960s boom in global demand for beef led to record cattle numbers in Australia
2. United States beef market health regulations forced many abattoirs across Australia to close their doors
3. The economic downturn in the 1970s led to a drop in global beef demand
4. The closure of most northern abattoirs after the Brucellosis and Tuberculosis Eradication Scheme (BTEC) program in northern Australia
5. Economic growth in South-East Asia put pressure on the capacity of the local herd to supply that market's increasing demand for beef.

A lift in the 1960s

For a brief period in the 1960s, hopes were lifted for Australian's northern beef industry and global demand for beef began to grow.

An outbreak of Foot and Mouth disease in the UK in 1967 also benefited Australian beef exports.²⁵ Australian beef exports more than doubled from 1963 to 1969²⁶. This was mainly due to the meat agreement with the UK and the development of the US lean beef market in 1959.

The Broome, Derby and Wyndham meatworks were improved in this time to conform to stringent US Department of Agriculture (USDA) hygiene regulations. Facilities also opened at Katherine and Darwin, with the combined capability of killing 60,000 head per year. Prior to the Katherine and Darwin meatworks opening, there was no export killing capacity in the NT, meaning cattle from the territory were sent to South Australia, Queensland and Wyndham for slaughter.

²⁵ Personal Communication, Laurie Jensen, WA pastoralist, March 2009.

²⁶ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 115

Production efficiencies in the north may have also lifted slightly due to an increasing trend of improvements to stock watering facilities, fencing, stockyards, and buildings by mainly US investors. These investors bought large tracts of land, particularly in the NT, excited by the prospect of supplying beef to the US beef market and the general economic boom at this time²⁷.

After just six years of the US sourcing Australian beef in earnest, Australia was supplying almost half of US beef imports and that country was taking nearly 80 per cent of Australia's exports.

The US health regulations and 1970s bust

By the mid-1970s, Australian cattle numbers had risen to 34 million head, with predictions of numbers reaching 39 million by the end of the decade. At this time there was increased industry concern that Australian slaughtering, chilling and freezing facilities could not handle the increasing cattle numbers.²⁸

Although there were, and still are, extreme benefits in the Australian beef industry being a major supplier to the US beef market, it was evident, even in record export years, that the trade had not solved profitability and viability challenges in the northern beef industry.

*“Despite the favourable climate for massive private investment in beef industry development, and the buoyant economic outlook for Australian beef export, increases in both cattle numbers and turn-off have been merely marginal”*²⁹ JH Kelly describing the northern beef industry in 1971.

A report released by ABARE in 1966 specifically highlighted the ever-continuing challenge of profitability in the northern beef industry. A lack of market accessibility was still an issue due to *“all properties relying on the production of natural grasses and the fact that 90 per cent of their rain fell in the four-month wet season, consequently there is no local market for disposing younger beasts in store condition”*. As a result, herd productivity was not continually improving. *“The suggested lack of influence of investment upon turn-off does not startle them (producers) in investment of fencing and water”*³⁰.

²⁷ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 94

²⁸ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia. Pp.205.

²⁹ Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 94.

³⁰ Westerman. P, The Kimberly Cattle Industry, Bureau of Ag Economics, Canberra, 1966. Pp.213.

Therefore, even with the lift in beef demand from the US market later in the century, the industry still faced two major questions in the 1970s;

1. Was it feasible to keep running cattle at such a low carrying capacity?
2. Was the industry sustainable due to the low cattle prices available to producers?

There were also some significant US trade issues pivotal to the northern beef industry's swing towards the supply of the live trade market. By the end of the 1970s, small exports of live cattle began to gradually rise at a more consistent level, primarily to South-East Asia, with some cattle sent to Peru, Venezuela, Mexico and the Middle East region³¹.

Specifications for Australian beef exported to the US had always been set for the low-value, manufacturing market, with higher value primal cuts forbidden. It was evident that, even if the northern region had the environmental conditions to support higher quality beef, limited demand would have restricted the industry's ability to reap the extra rewards.

In 1969, Stanbroke partner and Mutual Provident Society chairman Vincent Fairfax identified these US trade issues as a challenge to the future of the Australian beef industry. He encouraged the Australian government to give more consideration to the problems. Shortly afterwards, four out of the five meatworks in northern Australia had their export licenses withdrawn due to their "inability to fulfil obligations under the meat board diversification scheme in Australia"³².

Most participants in the northern cattle industry did not have the capacity or resources in pastoral land and natural pastures, or diversification ability, to consistently finish cattle to fulfil these regulations.

By September 1970, the 27th meatworks in Australia had closed due to the new USDA health regulations imposed on abattoirs. Just one month later, Broome, Derby, Wyndham, Darwin and Katherine also lost their licenses. Many of these enterprises, a number of which had been government-supported for most of the century, had only just begun treading water due to the

³¹ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia. Pp. 8.

³² Kelly. JH, Beef in Northern Australia, National Library of Australia, 1971, Pp. 118

recently increased demand from the US beef market. Now the US market had been lost due to specifications not meeting US health standards.

In 1973, the problem of an over-supply of Australian cattle was made worse by high feed prices and a drop in global beef demand caused by the global economic downturn, causing beef prices to crash. Any prospect of the northern beef industry's fortunes recovering on the back of the US beef market were further quashed when prices dropped to levels not seen since the 1950s.

The Brucellosis and Tuberculosis Eradication Scheme

Another turning point for the northern cattle industry was the Brucellosis and Tuberculosis Eradication Scheme (BTEC) that operated in the 1980s across northern Australia. The program's aim of national freedom from brucellosis and tuberculosis diseases in cattle, was to increase and maintain market access of global beef markets.

*“While other factors such as seasons and markets are of upmost importance in the overall performance of a pastoral company, the spin-offs from BTEC played a major role in increasing profits for cattle companies.”*³³

The scheme provided extra cash flow to producers as compensation for slaughtered herds, and therefore the ability to improve infrastructure and genetics on-property. It provided access to resources for cleaner musters to eradicate feral herds. Management practices were changed, including the infusion of Bos Indicus cattle into the predominately shorthorn herd of the time. While some areas of the north were more positively influenced by the scheme than others, it generally resulted in accelerated property improvement practices.

The increased slaughter numbers brought about by the government-supported BTEC scheme enabled a rapid increase in cattle throughput in the north and many of the northern abattoirs re-opened in this period³⁴.

However, as BTEC began to slow, processing units that had managed to survive the 1970s slump were hit by another round of closures in the 1980s.

³³ Lehane. R, Beating the Odds, CSIRO publishing. Collingwood, 1996, Pp. 232.

³⁴ Personal communication, Ross Ainsworth, March 2009.

Closure dates of the main northern abattoirs³⁵:

Wyndham: Export beef plant closed June 1985.

Derby: Export beef plant closed before 1980 ; domestic beef plant closed November 1980.

Broome: Export beef plant closed October 1983; Broome Meat Supply closed May 1986.

Katherine: The Katherine abattoir has not been active for the past decade.

South-East Asia and rapid growth in the 1990s

In 1983, Sir William Gunn presented a report stating the development of the live export market was imperative for the sustainability of the northern beef industry. This was because small domestic markets and the industry relied on the US manufacturing market for 60 per cent of their exports. Also, there were not enough cattle in the region for the current processing facilities to survive without further producer subsidies.

At this time, small but more consistent live exports of breeder cattle began, particularly to Malaysia. It was the start of a rapidly increasing trend in the next decade. In just ten years from the mid-1980s, the northern beef industry moved into more sophisticated breeding management, BTEC had implemented a Brahman-infused herd and was beginning to supply the South East Asian feeder market.

In the late 1960s, Indonesia's General Soeharto began to restore and encourage western capital. Political stability in South-East Asia brought forth a period of economic expansion, referred to by the World Bank as the 'East Asian Miracle', right up until the Asian financial crisis in 1997. The economic expansion in South-East Asia was supported mainly through the region's increased commodity outputs of steel, cement, aluminium, some food, cigarettes, plywood, pulp, paper and textiles. An increased global oil price in the 1970s also encouraged increased expansion through South-East Asia's oil and gas exports.³⁶ Malaysia and the Philippines experienced an overall strengthening of their economies which continued until the Asian economic crisis.

During this time of economic expansion, food security and self-sufficiency became increasingly important to South-East Asian governments. In the early 1990s this was

³⁵ Western Australian Meat Industry Authority, May 2009.

³⁶ <http://eh.net/encyclopedia/article/touwen.indonesia>

demonstrated in Malaysia and the Philippines. Their economies were strengthening and populations growing³⁷.

As a result, South East Asia's demand for red meat increased and, with local beef populations in the region declining, authorities encouraged the further development of feedlots and live trade imports of feeder cattle from Australia.

This led to rapidly increasing demand for cattle in South-East Asia in the early 1990s. The export of Australian breeder cattle to the region heralded the beginning of government transmigration programs in South East Asia aiming to boost the local herd's capacity to supply the population in to the future. However, over time the feeder industry grew more rapidly than the breeder program due to the availability of large numbers of these cattle, as well as the efficiencies of large breeding herds and advanced management in northern Australian beef herds.

Indonesia, apart from the period during the Asian economic crisis, has dominated demand for Australian live cattle. A record number of Australian cattle exports to Indonesia was achieved in 2008.

The Australian sheep industry

The most significant differentiation between the Australian sheep industry and the northern cattle industry was the sheep industry's focus primarily on the supply of wool, rather than meat, to the world. For much of the last century, wool was Australia's biggest export commodity and a major driver of the economy. As a result, the global wool price, and therefore producer profitability, was generally the principal driver of industry trends. In the simple terms of supply and demand, during a wool price slump, sheep sales and slaughters increased, and the reverse occurred in the upward price cycles.

These wool cycles have proven to be a challenge, with erratic sheep numbers challenging abattoir capacity in Australia. Erratic and recurring flooding of the domestic sheep market has occurred, followed by price slumps for the sheep producer.

³⁷ ABARE, Live Animal Exports a profile of the Australian industry, February 2008, pp.11.

This was the case even in the 1800s when exporting sheep meat instead of wool in the down times was abandoned simply because of the general lack of profitability. *“When wool slumped, millions of sheep went to the boiling works around Sydney every single year: the price they fetched was the value of their tallow that could be extracted from the carcass”*³⁸ Tallow was the only exportable product after wool at the time.

Pivotal turning points for the developments of the live exports for sheep

Two pivotal events occurred in the sheep industry to allow the development of live exports:

1. The major downturn in profitability in the Australian wool industry, leading to an over-supply of sheep available for the meat processing industry.
2. The oil boom in the 1970s, leading to an increase in demand for live sheep in the Middle East region.

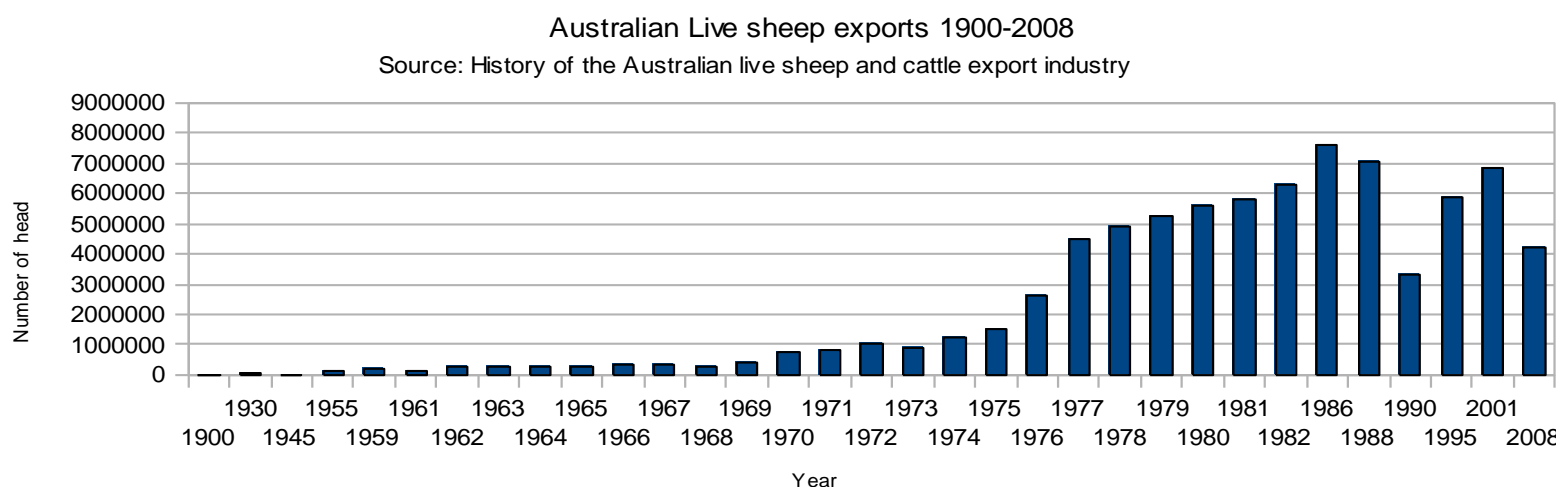


Figure 3

As illustrated in figure 3, above, live sheep export numbers were not significant until the late 1970s, with a rapid acceleration in to the 1980s.

However, live sheep had been exported from Australia since the turn of the twentieth century. Australian live sheep were exported from that time to most regions of the world including Africa, the Pacific Islands, New Zealand, Malaysia, India, United Kingdom, Europe, South and North America, China, Algeria, Korea and Russia³⁹.

³⁸ Harrison, G. 1963, *A Century in the Meat Trade, 1863-1963*, Hazell Watson & Viney Limited, England, Pp. 21.

³⁹ Trevor M Johnston, 2003, *A history of the Australian live sheep and cattle export industry 1814-2003*, Australia. Pp. 32.

The first official shipment to the Middle East was in 1960 to Kuwait via the *MV Alondra*⁴⁰. Before this, small numbers of sheep were exported to Malaysia and Singapore. Although the Malaysian and Singaporean markets had “*proven a source of reasonable profit for exporting firms, and has assisted pastoralists in the disposal of surplus stock*”, it never established fully due to the lack of demand for mutton as “*only Indian coolies from British India consume mutton. Chinese will not touch mutton. Malays will not buy mutton (fish and vegies). Europeans will not buy mutton*”⁴¹.

Australia's backbone crushed

By 1970, major changes in the dynamics of wool began to accelerate. At the time, Australia had a record number of more than 180 million sheep.

Wool returns were becoming highly fickle, with declining wool prices followed by a rapid influx of sheep to slaughter, leading to a decline in sheep prices.

In response, the Australian Wool Corporation in 1972 established a floor in the reserve price for wool, with the intention being to guarantee Australian growers a return price for their produce. The system included the purchase of all wool not reaching the minimum reserve price at the common auctions. Wool was then sold later for higher prices. This concept may have given wool growers hope for a continued strong future in the industry.

Despite the scheme, black coal, wheat, alumina and iron ore had overtaken wool as Australia's major source of export income by 1972. Wool was no longer Australia's economic backbone.

The end of the Cold War meant the Union of Soviet Socialist Republics no longer demanded high quantities of Australia's wool. Soon afterwards, the wool market collapsed. There was a chronic over-supply of wool in Australia. The stockpile reached 4.75 million bales and the reserve price lifted from 350 cents to 850 cents per kilogram. Subsequently, the reserve price scheme was suspended⁴² and the consequence of a rapid over-supply of sheep available to market followed.

⁴⁰ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia. Pp. 80.

⁴¹ The Royal Commission, Notes of Evidence Volumes 1-2, Pp. 642-660.

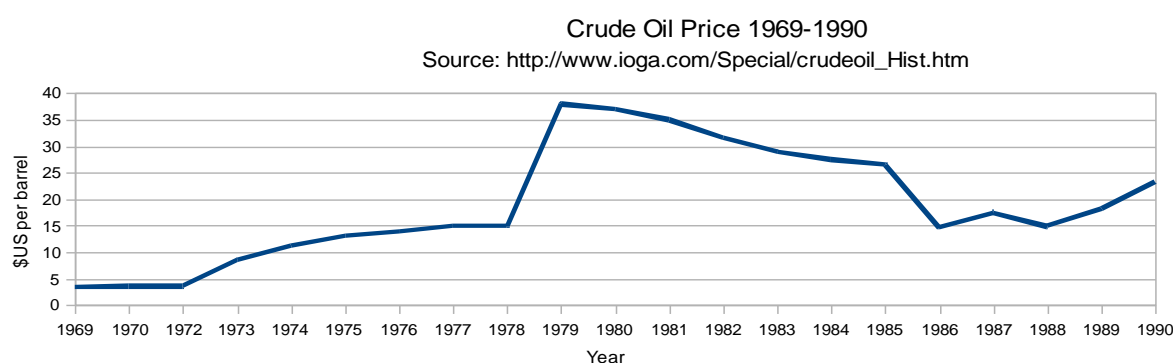
⁴² <http://www.woolproducers.com.au/about-wool/history>

*“Before the live trade got serious, you had two common options with your sheep in the downturns of wool, that was try and sell them in the domestic market flood where the processing costs were more than the farmers were getting for their sheep, or the most common option, shoot them”*⁴³ Sheep producer of the 1970s.

Pathetically low returns for Australian sheep farmers, due to oversupply and ongoing striking of abattoir workers, led farmers and exporters to look beyond the Australian processing sector to prevent the decimation of the sheep industry.

The oil boom and demand for red meat consumption in the Middle East

Figure 4



In the early 1970s, the Texas Rail Road Commission set a ‘pro ration’ of oil to 100 per cent, meaning Texas oil producers were no longer regulated by oil production levels. This led to the balance of power controlling the global crude oil price shifting from the US to the decade-old Organisation of Petroleum Exporting Countries (OPEC) in the Middle East region.

This was also the period of the Arab Oil Embargo and in just six months, oil prices had quadrupled. Immigration levels in to the Middle East, particularly by labourers, rose by 30 per cent⁴⁴. The immigrants, as well as the locals, were traditional sheep meat eaters. Local incomes per capita rose and local governments were under pressure to supply affordable, quality meat to the workforce. This led to subsidies on fresh meat, with the intention of making it affordable and available, particularly for the labour population⁴⁵.

Increasing incomes also triggered meat - predominately chicken, beef and sheep - consumption per capita in Saudi Arabia by 410 per cent, Kuwait by 192 per cent, 133 per cent

⁴³ Personal Communication, Back. Mike. Cattle Veterinarian and former sheep farmer, Melville, February 2009.

⁴⁴ Bureau of Agricultural Economics, Australian Live Sheep, Occasional Paper 81, Canberra, 1983. Pp.19.

⁴⁵ www.wtrg.com/prices.htm

in Libya and 77 per cent in Iran⁴⁶. On average, meat consumption doubled across the region in a ten-year period.

The ability of the small local herds to supply this increasing demand was limited by environmental constraints. Although Middle Eastern countries were buying sheep from Turkey, Afghanistan, Romania, Bulgaria, Sudan, Somalia and Ethiopia, this was not enough to meet the region's rapidly increasing demand for meat, and the governments of importing countries were enthusiastic to source more meat⁴⁷. By the mid-1980s, Australia was supplying an estimated 40 per cent of the live sheep market to the Middle East region⁴⁸. The live sheep export industry peaked at 7.1 million head in the 1980s. It was during the 1980s that many industry participants, particularly in the meat processing industry, claimed the development of the live export trade had devastated the Australian sheep industry.

Live sheep and cattle exports' overall influence on the processing industry

"The Australian Meat Industry Employees Union (AMIEU) has opposed the live export trade for many years due to its role in the closure of abattoirs throughout regional Australia. The AMIEU claims that over the last 20 years some 150 meat processing plants have closed - with the loss of up to 40 000 jobs - which is directly attributable to the live export trade. The closure of abattoirs has occurred due to inadequate supplies of sheep and cattle and because of competition for animals" Animals Australia.

Two significant issues from the 1970s triggering these disputes are still active today. These issues bring in to question whether the commencement of the live export trade has directly influenced the Australian abattoir industry in the past 30 years:

1. Fluctuating wool and beef returns for Australian farmers during the 1970s and 1980s led to an increased oscillation of sheep and cattle numbers available to the processing industry.
2. A correlation between employment in abattoirs, sheep and cattle throughput, led to extreme increases in employment numbers followed by sharp falls when Australian sheep and cattle herd numbers decreased.

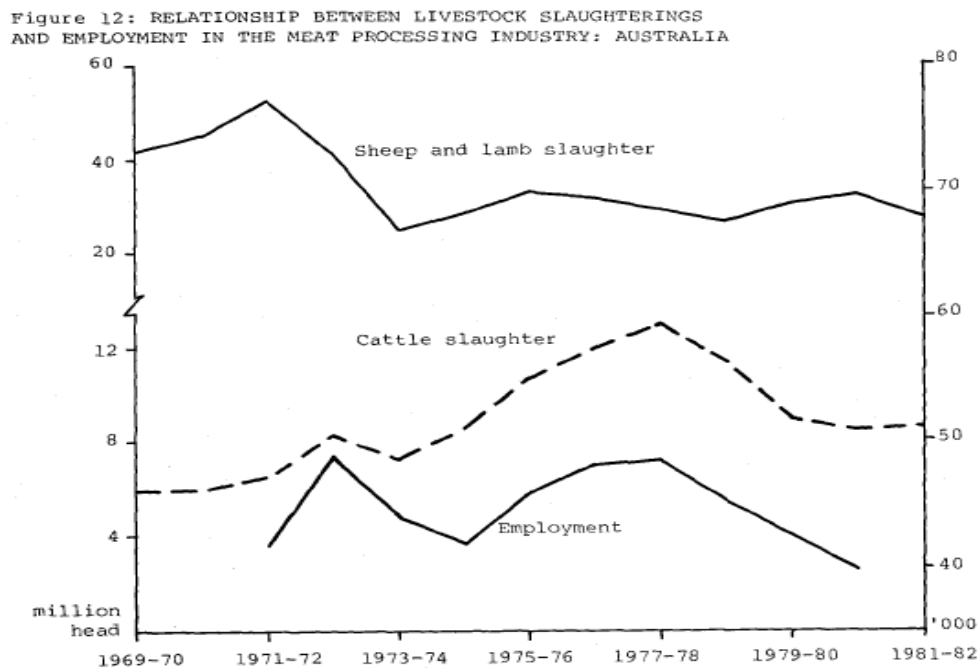
The results of these events are illustrated in figure 5.

⁴⁶ Bureau of Agricultural Economics, Australian Live Sheep, Occasional Paper 81, Canberra, 1983. Pp.16.

⁴⁷ Trevor M Johnston, 2003, A history of the Australian live sheep and cattle export industry 1814-2003, Australia.

⁴⁸ Bureau of Agricultural Economics, Australian Live Sheep, Occasional Paper 81, Canberra, 1983. Pp.17.

Figure 5; Correlation of Australia livestock supply & the processing industry employment levels. Source: Bureau of Agricultural Economics 1983.



Reason for the rapid decline of employment in abattoirs after the 1974 period

As shown in figure 5, sheep slaughter numbers dropped in 1974 from more than 27 million head, to just over 12 million in twelve months.⁴⁹ In addition, a high peak in wool prices meant producers were less likely to cull sheep, especially after making it through the 1973 drought⁵⁰. There were 954 000⁵¹ head of sheep exported live from Australia in 1974 while 20 million head of sheep were slaughtered that year in the country.

This evidence makes clear that the wool crash and drought in the first half of the 1970s had far more influence on sheep slaughter numbers than insubstantial sheep exports at the time.

Abattoir employment levels after 1974

The Australian cattle herd had reached a record level by the mid-1970s and slaughter numbers had risen mainly in response to the booming US market.

⁴⁹ Greeves. G, The Structure and Demography of the Australian Sheep Flock, 1983. Pp 193.

⁵⁰ Bureau of Agricultural Economics, Australian Live Sheep, Occasional Paper 81, Canberra, 1983. Pp.45

⁵¹ Greeves. G, The Structure and Demography of the Australian Sheep Flock, 1983. Pp 193

The rise in abattoir throughput in this period was followed by a rapid decline in employment, influenced more by a decline in the beef industry than sheep. In 1983, an ABARE report stated:

*“The problems in the meat processing industry, which have been intensified over the past six years, have been associated mostly with the declining cattle kills rather than declining sheep kills.”*⁵² and *“the impact of the live trade did not close plants but rather were a factor”*

The development of the live export industry for sheep did not commence until the 1970s and was not significant until the 1980s. The live export industry for cattle did not start in earnest until the early 1990s. This indicates the major cause of the abattoir industry’s overhaul, and loss of 40,000 jobs from the industry, was more directly attributable to the rapid decline of cattle and sheep numbers in Australia. The decline in stock numbers was due to a bust in the beef and wool market, rather than the influence of the live export industry.

This bust period was followed by the closure of plants owned and supported by Australian governments, and the imposition of increasing hygiene standards⁵³, globalisation and internationalism. With economies of scale increasingly important, smaller works closed and bigger plants expanded.

A recent report issued by IBIS Consulting claims the Australian meat processing industry has been in long-term decline due ‘*overcapacity and inefficient plants*’ and provides a reputable overview of the industry’s challenges, including the following issues⁵⁴;

1. Difficulties in industrial relations
2. Slow growth in domestic demand for meat
3. Trade restrictions facing exports
4. Growth in the live trade
5. Low growth in herd and stock numbers and low rates of return.

The live exports direct industry value

A universally accepted study issued for Meat and Livestock Australia in 2007 (By Warwick Yates and Associates) clearly quantifies the direct contribution of the livestock export industry to producers and economies in regions highly reliant on the livestock export trade.

⁵² Bureau of Agricultural Economics, Australian Live Sheep, Occasional Paper 81, Canberra, 1983. Pp.47

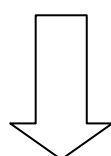
⁵³ Heilbron.S, Impact of the Live Animal Trade Sector on the Australian Meat Processing Industry, April 2000. Pp.30.

⁵⁴ <http://www.democrats.org.au/speeches/index.htm?>

The study concludes that across these five regional areas *“the livestock export industry contributes 11,060 FTE jobs and value added (direct and indirect) of \$830 million⁵⁵”*.

The report also covers extensively the issue of trade cessation and likely logistical and economic outcomes in the short (1 year), medium (5 years) and long-term (10 years).

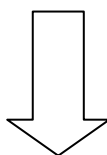
The 1st Year



\$-783 million (GRP)

5806 jobs

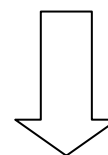
The 5th Year



\$-954 million (GRP)

4719 jobs

The 10th Year



\$-783 million (GRP)

3779 jobs

If the livestock export industry was lost, the cost would be \$2.3 billion over 10 years. Further details of each region are summarised in the table below.

Estimates of the GRP and employment impacts of trade cessation

Table 1 Source; Meat and Livestock Australia 2007⁵⁶

	Region						Total
	Northern WA Cattle	NT Cattle	Queensland Cattle	Southern WA Sheep	Southern WA Cattle	Victorian Dairy Cattle	
Year 1 of cessation							
GRP (\$m)	-109	-126	-215	-449	-61	-171	-1,131
Employment (FTE)	-388	-538	-221	-3,614	-392	-653	-5,806
Year 5 of cessation							
GRP (\$m)	-110	-106	-200	-325	-32	-181	-954
Employment (FTE)	-502	-491	-176	-2,714	-164	-673	-4,719
Year 10 of cessation							
GRP (\$m)	-48	-93	-185	-266	-13	-177	-783
Employment (FTE)	-185	-461	-131	-2,292	-49	-662	-3,779

⁵⁵ Warwick Yates & Assoc, Assessing the Value of the Livestock Export Industry to Regional Australia, Meat and Livestock Australia, July 2007.Pp 120.

⁵⁶ Warwick Yates and Assoc, Assessing the Value of the Livestock Export Industry to Regional Australia, Meat & Livestock Australia, July 2007.Pp 120.

This estimated loss in value attributed to the cessation of live exports is often challenged with the assertion that the direct benefit in value-adding a carcass post-farm gate is not realised when these animals are slaughtered offshore. *“The alleged ‘benefits’ however have to be evaluated against the serious cost to Australia of trade distortions imposed on Australia’s meat industry by explicit “beggar thy neighbour” policies of foreign governments⁵⁷”*

This concept supports the notion that the live export industry actually costs the industry “around 12,000 jobs” and therefore “around \$1.7 billion in lost GDP.”

It must also be considered that although there would be a rise in the direct value of the meat processing sector, this would be outweighed by the heavy loss in value caused to the livestock industry by livestock rapidly flooding the market, and price depression caused by out-of-specification cattle and sheep hitting domestic markets.

At least 30 separate businesses are involved in an animal before it leaves Australia⁵⁸, which adds further value to urban and regional sectors. It would be incorrect to assume all these people would still be supported if the live export trade did not exist.

This evidence also suggests that if the live trade ceased, all Australian sheep and cattle producers would be affected through a drop in domestic cattle and sheep prices. While some producers would be hit harder than others, the general outcome would be total devastation for businesses caused by the loss of their major market and a sharp increase in transport costs to shift stock.

The opposing view claims there would in fact be no oversupply in the market place, as the industry would handle and adapt to the extra average of 4 million head of sheep and just under 1 million head of cattle per annum. There would also be no competition from live animals in countries currently receiving them and they could automatically be substituted in the market place as a chilled or frozen product. However, evidence from the history of the livestock industry and current overseas market dynamics disprove this theory and instead suggest a negative outcome for the Australian livestock producer.

⁵⁷ Heilbron. S, Impact of the Live Animal Trade Sector on The Australian Meat Processing Industry, April 2000. Pp. 24.

⁵⁸ Hassal and Associates Australia, The Live Export Industry- Value, Outlook and Contribution to the Economy. Meat and Livestock Australia, July 2006, Pp. 16.

Summary of the livestock export industry's influence on Australia's livestock industry

- “*There is no doubt that the live trade development made the northern beef industry*⁵⁹”
- The Australian sheep industry originally derived from the profits of the wool industry, it was not until the global wool market crashed that the industry set out to find alternative profits.
- The influence of the live cattle export industry was not evident until the early 1990s. The vast majority of cattle abattoirs in the north were closed before this period.
- The influence of the live sheep export industry was not evident until the 1980s, a rapid loss of jobs in the Australian processing industry and industry rationalisation began before this in the 1970s.
- With the support of this evidence, it is clear the live export industry is therefore merely complementing the Australian livestock industry through a dynamic of alternative market avenues and the stimulation of healthy competition on Australia's shores.

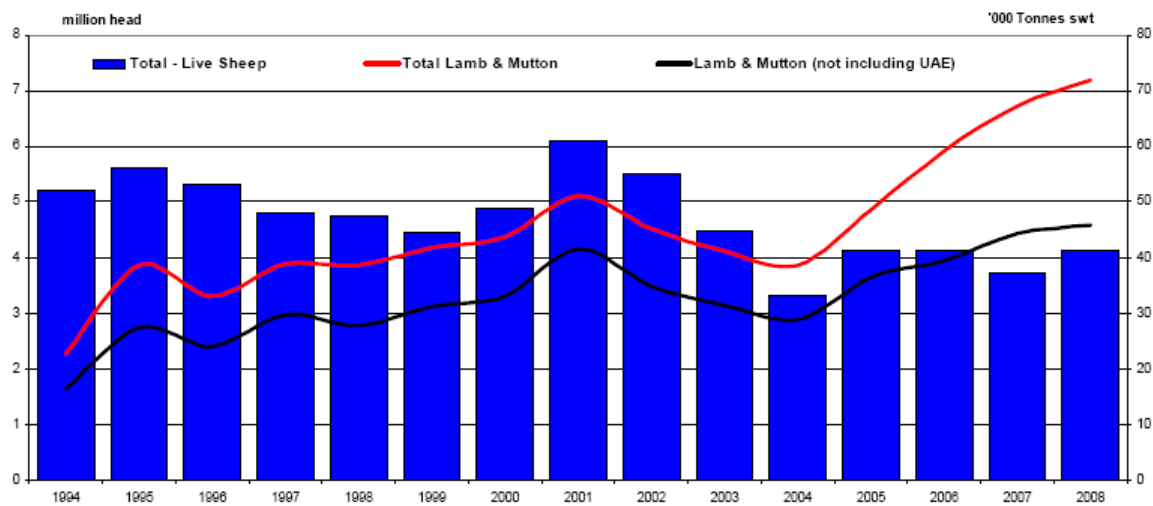
The future global food demand for live animals

One major issue for the Nuffield scholarship whilst travelling through South-East Asia and the Middle East region was to investigate the future viability of our family business, and that of industry counterparts, in specialising in animals to supply live to the overseas market.

The expansion of global economies, urbanisation and increased population growth in the Middle East and South-East Asia has initiated conflicting opinions as to whether these changing dynamics will boost or reduce future demand for Australian live sheep and cattle supplying the meat market.

Many suggest these changes will merely boost the demand for live animals. After all, strengthening economies largely sparked the commencement of the live export industry. But another theory suggests that “*over time, as the market has modernised, tastes have become more westernised, marketing and distribution channels have become more sophisticated, and*

⁵⁹ Personal Communication, Phil Holmes (Holmes and Sackett), March 2009.



*refrigeration infrastructure has improved, the meat made from live sheep is inherently likely to have come in closer competition with imported chilled and frozen meat product, including that supplied from Australia”*⁶⁰ Heilbron, SG for the Australian Meat Processor Corporation Limited

Fresh, frozen and chilled meat interaction in the market place

The dynamics of demand, and the interaction and differences between fresh, frozen and chilled red meats are essential factors in appropriately assessing the present and future direction of the Australian live export trade.

Fresh red meat from a live animal slaughtered on home ground is often the most popular product for Middle Eastern and South-East Asian consumers. But due to certain conveniences, consumer demographics and, importantly, price advantages, chilled and frozen Australian red meat imports can often override the preference for fresh meat.

Figure 6; Live, Frozen and Chilled Sheep Imports Middle East Region. Source: Meat and Livestock Australia 2008.

Specialty and substitution in the market place

The three market sectors of frozen, chilled and fresh meat all have characteristics presenting exclusive selling points. In most cases the products are supplied through simple specialist paths within the value chain, usually because the products’ particular attributes complement a specific consumer requirement, demand or need.

⁶⁰ Heilbron, SG. 2000, ‘Impact of the live animal export sector on the Australian meat processing industry’, prepared for the Australian Meat Processor Corporation Limited, pp. 38.

But price competitiveness can often prove dominant in these specialty paths, making them so elastic that at all at times the three meat categories can be substituted for one another within the supply chain matrix.

Figure 7; Typical Market Distribution for Australian Frozen, Chilled and Live animal Meat in Middle East and South-East Asian importing countries.

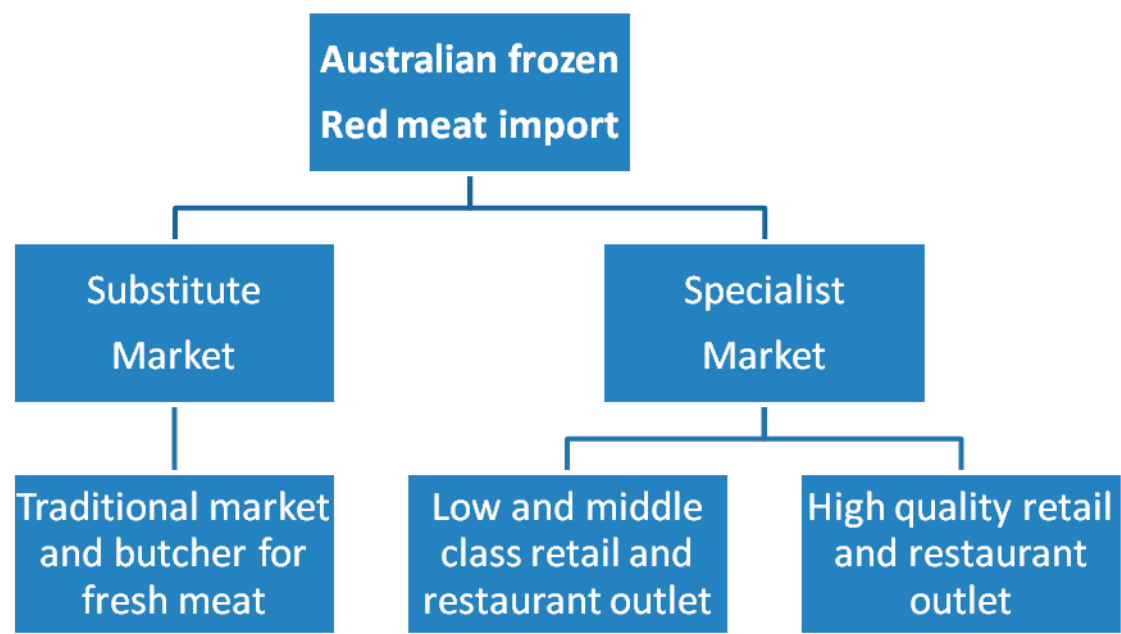


Figure 7 illustrates the most typical pathways in the market place for Australian frozen red meat imports into the Middle East and South East Asian regions. Frozen meat products have a wide range of attributes which enable them to fulfil demand for the high quality, high value market as well as the high quantity and low value markets for retail and catering outlets.

To complicate the matter, Australian frozen red meat products can at times be used as a substitute for fresh meat in traditional market outlets. In this case, it is thawed by traders as whole carcasses or individual retail cuts and sold as local fresh meat. This method is rarely successful unless the thawed product is combined with fresh meat at the point of sale, making it more difficult for consumers to recognise the difference.

This is one reason why Indonesian consumers in traditional markets are often observed to touch the meat before purchase, checking for any signs of cooling or loss of moisture. In this instance, the quality of the meat is automatically downgraded. But at times, with significant price sensitivity in the market, price can over-ride the preference for warm, freshly slaughtered meat.

Figure 8 Typical Market Distribution for Australian Chilled Red Meat in Middle East and South-East Asian importing countries.

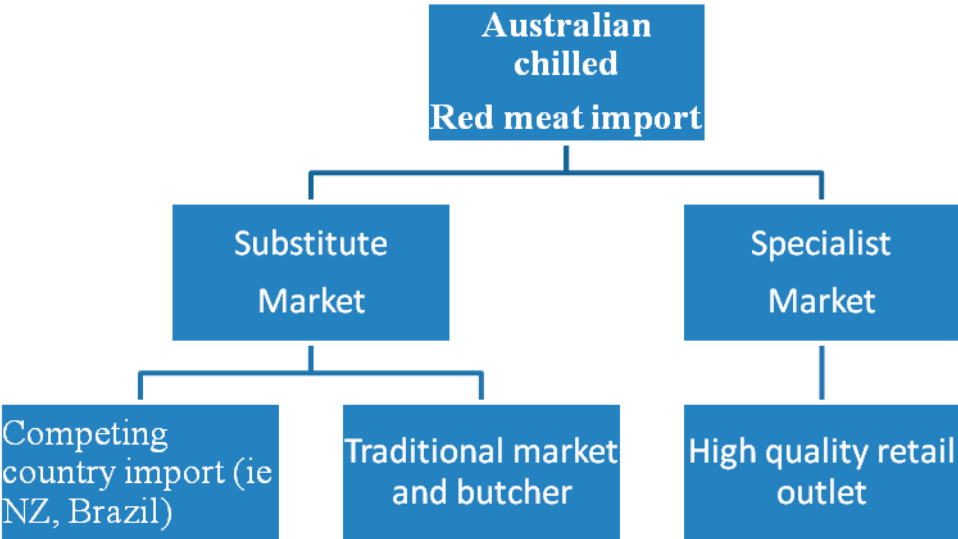
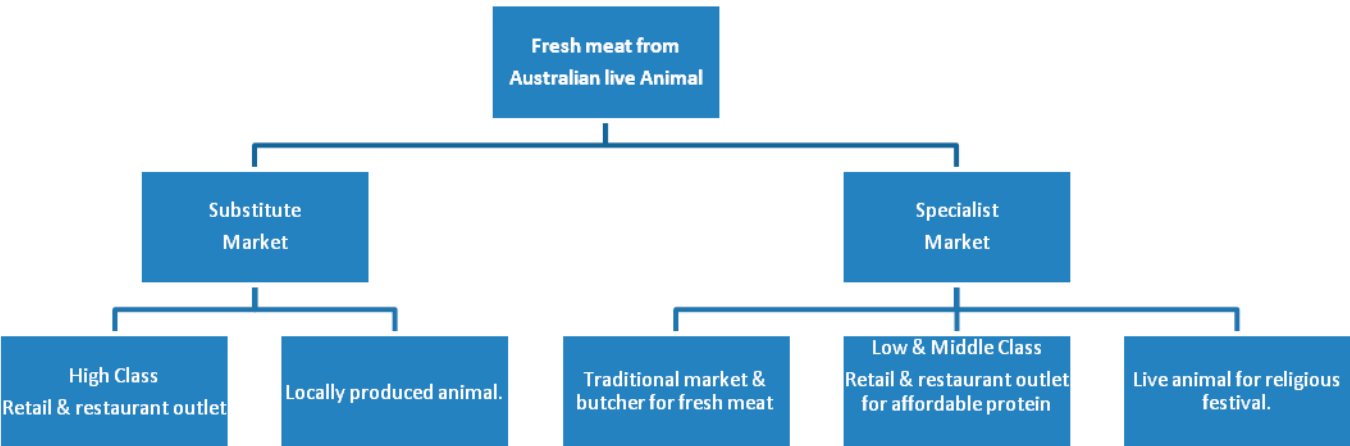


Figure 8 reveals that Australian chilled meat is typically found as individual cuts in a vacuum-packed product for the high quality, high value market. Whole chilled carcasses can, however, be flown in to substitute the fresh carcass market. They can also be sold as substitutes for another popular importing country’s produce if the price margin and demand are deemed suitable.

Figure 9 Typical Market Distribution for meat from Australian live animal in Middle East and South-East Asian importing countries.



As seen in figure 9, the meat from a live Australian imported animal is most commonly bought by consumers demanding a fresh, quality product. The animal is typically slaughtered on the same day and purchased in a local souk or butcher outlet. Australian meat is also sought by the price-sensitive consumer as an affordable, safe protein option. This meat is sourced from the traditional souks, butcher outlets, low class retail outlets and small restaurants. There is also a demand for the direct purchase of live animals particularly in the Muslim festivals.

Meat from live animals could on rare occasions, due to significant margin advantages, be substituted in markets as a high quality imported product from Australia or any reputable importer. These margins could be strengthened particularly in countries where locally slaughtered meat is subsidised by the government or has clear value-adding advantages.

The meat could also be sold as the local breed of sheep or cattle to fetch a higher premium from some consumers. This is why it is common to find the head or tail of the animal with the carcass to prove its origin.

Fresh, chilled and frozen meat complementing the Australian red meat market

Although substitution can at times complicate the role and interaction of the three Australian red meat categories, they more commonly complement their different selling points in the market-place. The following examples support this theory and challenge the assumption that once these particular countries meet a certain wealth status, fresh meat will no longer be in demand.

“ I buy my sheep meat in the supermarket and once a week when I have the time and the money I go to souk or market and buy the nice fresh meat” Abdo, Egyptian taxi driver, Kuwait City⁶¹

This is an example where a middle class consumer is using the specialties of different markets to meet his personal requirements. The fresh meat market is the luxury and the cheaper frozen option a necessity. He values the flavour in the fresh meat, but time and money do not allow him to purchase this meat at all times, making it essential for a lower quality frozen meat product to be available to fulfil his needs.

⁶¹ Personal communication, Abdo, taxi driver, Kuwait City, March 2009.

“This meat in the supermarket is very good quality. It is from Australia where the cows are from the green grass and it is very soft meat. Once a week on my day of not working and we have guests I come shopping and buy this special meat myself. During the week my maid she buys the meat in the local market for my family”

Middle-aged Indonesian woman. Whole Foods Supermarket, Jakarta ⁶².

This is totally different scenario, where an upper class Indonesian woman values the high quality, high value chilled beef import from Australia. She does not have time to access this meat for regular consumption and it would not be socially acceptable for her maid to shop in such a privileged area. Therefore, even very rich people access meat from traditional markets selling cheap, fresh beef.

“The usual Omani prefers fresh meat and is ready to pay the higher price for it. In fact, most of the frozen meat imported in Oman is for the restaurants and catering companies which cook them and sell them as fresh” Naveed local resident and importer in Oman, November 2008 .⁶³

The influence of a more western demographic is demonstrated in the increasing quantities of chilled and frozen imports in to the United Arab Emirates, as shown in figure 8. This is due mainly to an influx of western expatriates, who have moved to the region in the recent technology boom, demanding a product to which they are accustomed.

Scenarios observed personally in these markets prove that while substitution does exist, the advantages of having all three Australian products available in the market place overrides the opinion that fresh meat could be eliminated. Attempts to substitute Australian fresh meat's unique attributes and advantages would more likely be achieved through accessing live animals from another country.

“In the Middle East you have both the qualitative and the quantitative markets that are both growing. The Muslims give special preference for freshly slaughtered and generally the Arabs perceive freshly slaughtered meat to be more tasty and better than frozen or chilled meat. This is why it is the quality market. Even though the Middle East looks more or less the

⁶² Personal communication, Indonesian middle-aged, upper class woman, Jakarta, October 2008.

⁶³ Personal communication, Naveed Ahmad, Muscat, Oman, November 2008 .

same from the outside, there are huge differences in the local lifestyle and thinking of the people, and even though frozen and chilled products will also grow, our people will always ask for the fresh meat from the live animal as well. This is why I choose to import live, chilled and frozen products for my clients.” Naveed local resident and importer in Oman, November 2008.

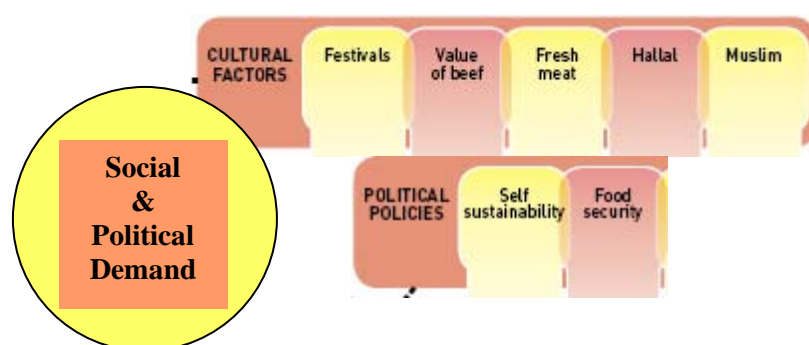
The cultural and political demand for live animals

“Seek first to understand, and then to be understood.” Stephen Covey

Understanding the complexities why particular countries demand live animals will help predict the future for the Australian livestock industry. The diagram provided in the appendices of this report outlining driving demands for Australian live cattle to Indonesia aims to describe the major factors influencing trade outcomes. It importantly shows Australian supply logistics, as well as the economics, social needs and political issues of the importing country are the issues most influencing this demand.

The importance of protein assurance and the need for live animals are heavily influenced by cultural and political demands. It is a complex issue not fully appreciated without leaving Australian shores to develop a feeling for the cultural and political complexities involved with food security.

Figure 10 Social and political demand for live animals for Middle East and South-East Asia.



Cultural factors involved in the supply of live animals to Australia’s live trade partners are influenced by the value and importance of freshness in red meat, and the Muslim religion. The political issues are based on the pressure for civil calm resulting from food security, and the merit of self-sustainability.

The role of the Muslim religion in the demand for live cattle and sheep

There are about 240 million people in Indonesia and another 115 million people across the 12 countries in the Middle East region. All these countries, apart from Israel, which is Jewish and demands kosher meat, are dominated by a Muslim population averaging 90 per cent. The Muslims are divided into two main branches - Sunnis (80-90 per cent of Muslims) and Shiites⁶⁴.

The influence of the Muslim faith, including the requirement of strict hallal, as well as general cultural differences, are major reasons why meat from a live animal is perceived to be different from frozen and chilled imports.

The demand for animals with '*cloven hooves and that chew their cud*' is lifted significantly through the main Muslim festival periods. The difference in demand between sheep and cattle is based mainly on the environment and history of the particular importing country.

Tradition and climate are the driving factors behind countries demanding predominately sheep or cattle. Overall, sheep are the most popular animal for consumption in the Middle East. They are the traditional nomadic herd in the dry desert lands. Sheep are kept by shepherds and moved daily for grazing. Their ability to graze small amounts and high roughage material, and live in dry conditions, began the tradition of sheep consumption in the region.

South-East Asia, Palestine, Egypt and Libya have for many years imported significant cattle numbers. With access to irrigation and arable lands, people in these countries have been more accustomed to keeping working animals, predominately buffaloes. Therefore, the customs involving beef consumption have developed to a greater degree compared with other countries in the region.⁶⁵ Israel, where kosher food and premises meet the requirements of Jewish law, is also a major beef consumer.⁶⁶

Traditionally, Muslim people are expected to slaughter animals themselves or at least oversee the slaughtering process. The significance of sheep in religious sacrifices symbolise God having mercy on Abraham and replacing his son with a ram. A cow can also represent the sacrifice and compensates for seven people. There is an expectation of slaughtering high quality animals, based heavily on visual aspects. The meat is then divided into three shares.

⁶⁴ Clarke, M. *Islam for Dummies*, Wiley Publishing, Indiana, 2003.

⁶⁵ Personal communication, Richard Leach, Sokna Beef, Egypt, Nov 2008

The larger portion of the meat is given to the poor and the rest is cooked for the family, relatives and neighbours⁶⁷.

This practice is not just restricted to festivals. With a cultural emphasis on strong family values, common gatherings and the absence of alcohol, the value of food origin and preparation is exacerbated

“On any occasions like buying a new car, a wedding, a birth of a baby or just a party, it is a custom for the hosts to give the most tasty and fresh meat for the guests. You must find a healthy, good-looking sheep and watch the blood drain from its body and then invite many guests to celebrate the great occasion.” Mohamed Salem, young Kuwait resident, November 2008.⁶⁸

Whilst the hallal status of Australian export plants is highly reputable and plays a significant role in supplying meat to the global Muslim population, this does not compensate fully for the demand of a live animal.

“No matter how many hallal certificates you show to them, they are not ready to believe it. This is where live animals come in, because they have more faith in the local slaughtering system rather than the one in Australia.” Naveed, local resident and importer, November, 2008⁶⁹.

Another significant reason for the Muslim preference for live animals is the important role fresh meat plays in the societies of importing countries.

Role of fresh red meat

A preference for very fresh meat is an important factor in the Muslim demand for live animals. Perceptions of freshness in importing countries differ from those in Australia and are an important reason why whole and pure foods are highly valued in Muslim countries.

The typical Australian consumer would usually associate fresh meat with anything not frozen. The meat could well have been aged in the cold chain system for more than two weeks before being eaten. ‘Fresh’ in the Middle East and South-East Asia is more closely connected to the

⁶⁶ <http://en.wikipedia.org/wiki/Haji>

⁶⁸ Personal communication, Mohamed Salem, Kuwait City, November 2008.⁶⁸

⁶⁹ Personal communication, Naveed Ahmad, local resident and importer, Sultanate of Oman, November, 2008.

time of slaughter, flavour and texture of meat. For meat to be considered fresh, it has to be slaughtered within a day of purchase, have a strong flavour and still hold a degree of tenderness.

Importing countries' expectations of fresh red meat are more comparable with Australian perceptions of freshness in seafood, bread, fruit and vegetables. The degree of freshness in these products in Australia is associated with an appreciation of fish being caught, bread being baked, or fruit and vegetables being harvested on the day of purchase. The perception of freshness is associated with a highly flavoured, crisp and firmly textured product.

Fresh meat and time of processing

Consumers in the Middle East and South-East Asia also differ from Australians in the importance they place on food origins. They care more about how, where and therefore when an animal is processed, exacerbating their demand for fresh meat.

In Indonesia, freshness is commonly measured simply by meat warmth. Consumers in traditional markets are often observed to touch the meat, and if there is any sign of a loss of warmth, it is automatically downgraded in quality. This practice derives from the fact that most of Indonesia's 241 million people still do not have access to refrigeration, requiring them to consume meat directly after purchase. However, the practice is now a tradition, with even very wealthy Indonesians visiting traditional wet markets in their spare time, or sending maids to these markets so they can have the luxury of consuming meat slaughtered within hours of purchase.

Although refrigeration is more widely available throughout the Middle East than in Indonesia, public slaughterhouses are common, enabling the consumer to take their purchased live animal to a place where they can observe the animal being slaughtered and dictate preferences in processing the carcass. This practice is most popular on weekends, when large families meet for barbeques.

“On Saturday we have barbeque with all our family in Kuwait. We buy this live sheep and take to public slaughterhouse. This way I can choose my own sheep and check it is healthy on the inside. Also, because the main slaughterhouse does not work on Fridays, this means the

meat from butcher would have been in their fridge for a whole day - it would not be as fresh and tasty.” Mohamed, local Kuwait resident.

Compared with the average Australian, Muslims are far less emotional and more aware about the realities of animals being slaughtered. Hallal requirements encourage people to pay special attention to slaughtering methods and from a young age children are exposed to the processes the animal will go through before it is eaten by their family. This is another factor encouraging the Muslim interest and connection with meat freshness and time of slaughter.

Middle Eastern barbeques usually involve slow cooking techniques, allowing a more thorough breakdown of connective tissues than at most Australian barbeques, assisting in meat tenderness. Indonesians commonly eat beef in a ‘backso’ where the meat is ground and rolled in to balls, or boiled in to soups and stew-style meals, eliminating the need for the meat aging process favoured in Australia.

The effects of freezing on flavour

There is strong evidence that *“freezing-related protein changes can account for the differences in their ability to bind taste and volatile compounds, thus modifying flavour,”*⁷⁰ meaning the flavour of red meat softens after freezing. Anyone who has consumed meat before it has entered rigor mortis would agree that it has a more distinct and stronger flavour. *“Often many people in Bahrain will buy a whole fresh carcass, barbeque some that night and then freeze the rest. They still perceive this meat to be fresher and better meat than buying frozen meat from the butcher or supermarket”* Shaheed Hussein, Bahrain Resident.⁷¹

The flying in of whole, chilled halal carcasses to supply the market-place within the day of slaughter is currently available in some countries, and to a degree, a reputable solution to fulfil the demand for fresh meat, while avoiding the live shipping component. As mentioned earlier, this practice already takes place in some markets in the Middle East region. But political and logistical factors limit its growth.

The influence of live animals on food security and self-sustainability

“No man can be a patriot on an empty stomach.” William Cowper Brann

⁷⁰ Yiu H. Hui, Handbook of food science, technology, and engineering, CRC, 2006.

⁷¹ Personal communication, Shaheed Hussein, Head of Central Abattoir, Kingdom of Bahrain, November 2008.

“Happy and calm people make a politician’s job easy and governments in this region equate access to fresh meat, sugar and oil with civil calm.” Politician in the Middle East region, March 2009.

With increasing complexities caused by the global food crisis, the issues of food security and self-sustainability are never far from the top priorities of global leaders. This is particularly relevant in countries with a skyrocketing population and environment not capable of physically supporting the amount of food required to meet demand. This scenario is the case for the Middle East and South-East Asian region.

A leader facing such pressures would prioritise trade outcomes which best complement their requirements. The security of having thousands of sheep or cattle guaranteed for their people’s food, whilst adding value through the creation of jobs, would be far more appealing than an agreement with an Australian processing company endeavouring to deliver a certain number of fresh carcasses to their country every morning.

The supply chain diagram provided in this reports appendix illustrates the value chain and many stakeholders involved with the importation of live Australian animals once they reach the countries’ shores. It also shows that it is not only the meat from the carcass, but the hide, blood, hooves, head and even gut fill, which are utilised by the importing country. This is a clear indication that these live animals not only provide food security for one of the most valued food staples, but add value and create multiple jobs in the importing country.

Self-sustainability for the importing countries was a key objective in the early development stages of the export of live cattle to South-East Asia, and is still a priority. However, with such close access to the north Australian beef breeding herd, sourcing the feeder market and adding further value to feeder cattle is currently the preferred outcome in supplying beef to Indonesia in particular.

“Securities of food supplies and maintenance of reasonable prices to consumers are important objectives of most governments of the region. Price ceilings on meat are maintained by the provisional subsidies and other means. Emphasis is also given on live sheep imports, although subsidies also apply to air freighted chilled meat imports in some countries. There are no significant subsidies on frozen meat imports. These subsidies are intended to benefit the indigenous population and act to increase demand for fresh sheep meat”

Heilbron, SG. 2000

In rational terms, there are many similarities between the product suitability and quality of a chilled Australian carcass delivered by air within the day of slaughter, and the fresh, chilled carcass from an imported live animal. Apart from cultural perceptions, the greatest difference between the two products lies in political pressure prioritising food security and value-adding in the importing country. These factors strongly indicate there will always be a demand for the supply of live animals to the many nations without the capacity to produce livestock themselves.

Australia's livestock industry is currently a leader in meeting this demand in terms of its logistical systems and quantity. However, certain countries have the foreseeable capacity to overtake Australia's dominance if importing countries decided to favour other suppliers, or indeed if Australia decided it would no longer be part of the global livestock food industry.

Global livestock welfare and Australian live sheep and cattle exports

As a livestock producer and regular supplier to the live export market, I have personally faced issues surrounding the acceptability of being part of this trade, particularly regarding livestock welfare standards for my animals through the supply chain.

The extremes of highly acceptable and appalling livestock welfare practices are found around the world irrespective of a country's economic and cultural status. Australia's involvement with the live export industry indicates all stakeholders will face increased pressure to justify their welfare practices into the future. One of the greatest challenges will be to set measurable, scientific and practical standards for livestock welfare that are internationally accepted by all stakeholders with interests in livestock.

Indices of animal welfare are commonly subjective and influenced by emotion and, at times, ignorance. Even under guidelines set by the World Organisation for Animal Health (OIE), standards are elastic and can be stretched in different directions. The acceptability of a certain subjective handling practice depends on the person making the judgment. The OIE standards

are largely qualitative in nature and dependent upon interpretation. They do however provide an international guide and are likely to be the best to apply in developing countries that have limited standards of their own.

Many Australian stakeholders supporting the livestock export industry have similar ideologies to the people who oppose the Australian live export industry. Both parties value the need for acceptable welfare standards for animals all over the world. Core differences exist in applying viable solutions to solve the main welfare issues, which usually revolve around transport, handling and slaughter. Solutions are often influenced by strong attitudes surrounding the types of food that are morally acceptable for Australia to supply to the rest of the world. At the extreme end, one group is totally opposed to the consumption of any meat products at all and actively campaigns to influence others to be the same⁷².

Many of the handling and welfare practices experienced by Australian livestock in overseas countries are similar to those experienced by animals remaining on Australian soil. To most people, this would mean overall standards are very acceptable. But certain practices experienced by exported animals are deemed totally unacceptable by stakeholders in the Australian livestock export industry, and there is a need for change in these areas.

One solution to challenges within the Australian livestock export industry supply chain would be to totally remove the risk of breaching any livestock standard and simply ban the trade. Another would be to clearly set a solid, acceptable standard of livestock welfare and work to improve the areas of concern and then maintain these levels.

The most common solution of completely ceasing the trade is put forward by individuals with no intention or need to provide countries with the choice of food they demand. It is also commonly based on the presumption that people will never change any of their unacceptable practices and subsequently the Australian livestock industry should have the option to supply these markets removed by the Federal Government. Unfortunately, many people around the world supporting an end to the trade have no genuine interest in the human welfare of the various stakeholder groups involved with the Australian livestock industry. Social considerations are not a priority and commercial interests are claimed to underpin unacceptable practices that would be regulated more heavily on home soil. Affected

⁷² Singer. Peter, *Animal Liberation*, Harper Collins, New York, 2002.

stakeholder groups include families involved in agriculture and extend through the entire chain to consumers in destination countries.

The second solution is to strengthen the Australian livestock industry's involvement and links with importing countries and to work together to improve animal welfare standards. This approach is supported by those passionate about the future of Australia's livestock industry. Their vision is that most people will, with persistence and suitable guidance, make changes to achieve a more positive welfare outcome whilst consumers continue to be supplied with their food of choice.

There are other solutions between these two extremes. Some suggest it is unnecessary or impossible for Australia to be involved in improvements to livestock welfare in importing countries, and have no desire to follow the fate of livestock once they leave Australian shores. Others have undecided opinions and are even ignorant of welfare concerns.

Australia's influence on animal welfare practices in the live export supply chain

Australian producers and live exporters support the jointly funded MLA/LiveCorp Livestock Export Program (LEP), which initiates and promotes animal welfare practices and efficiencies in the whole live export supply chain, including markets in the Middle East and South-East Asia. Projects undertaken by the LEP are funded either entirely by Australian industry or by jointly funded initiatives with the Australian Federal government⁷³.

Changes initiated by Australia's live export industry to improve animal welfare practices throughout the live export supply chain, including practices in countries receiving animals, aim to improve all livestock practices irrespective of an animal's origin. As a result, these changes result in solid improvements to global livestock welfare. Despite the existence of clear milestones marking the influence of such programs in importing countries, controversy continues as to whether it is enough to justify continued support and growth of the live export industry.

In Australia

The LEP begins its activities in Australia with a positive awareness campaign for the Australian public aiming to balance information, particularly regarding the welfare conditions

⁷³ Personal communication, Peter Dundon, Manager, Livestock Services, Middle East. Nov 2008.

of animals in the supply chain and the importance of the trade for Australian livestock stakeholders.

This program employs a dedicated communication person that focuses upon promotion of the live export trade's importance to Australia's livestock industry, and achievements in the improvement of global livestock welfare. The program also supports a group of live export spokespeople who aim to tell their side of the story in being part of the livestock export trade.

The voyage

The LEP proactively pursues constant improvements to welfare standards in transporting the animal by air and sea, achieved through intensive research and development programs.

Despite these milestones, challenges continue due to perceptions of poor livestock welfare on vessels. This is partly because assessments of these conditions are highly variable depending on the individual making the judgement, as well as the historic image still surrounding the trade's beginnings and acknowledged challenges in animal welfare conditions in that initial period.

Standards for Australian vessels are now designed to provide appropriate and acceptable conditions for livestock. The conditions are equal to and, in some circumstances, better than those in livestock production scenarios in Australia. Livestock have access to feed and water at all times, ventilation systems allow for clear, cool air and the area is fully shaded. The ship is divided into small holding pens with scientifically determined limitations on the amount of stock held in each of these areas. The largely stringent and astute management systems of Australian stock people, and often veterinarians, sailing with the animals focus up on maintaining animal welfare during this period.

This perspective of conditions is from an experienced stockperson whose focus centres mainly on livestock welfare. The continuing challenge is that any person totally opposed to animals being kept in intensive, or indeed any type of livestock production system, would probably take the opposite and extreme view to the stockperson's perspective.

Extreme views also surround solutions to the risks involved in transporting animals by sea and air. Certain models would prove that any transport by sea or air holds a greater degree of risk compared with land transport in Australia. Examples of risks include weather extremes, trade

disputes and infrastructure breakdowns causing mortalities to exceed Australian regulatory standards⁷⁴. Therefore, one view is that, even if typical operating conditions are proven acceptable, live exports should not occur due to the inherent risks of breaching livestock welfare standards.

The current industry solution to these risks is similar to the Australian aviation or mining industry's method of dealing with safety. Their acknowledged risk is reduced through the continued development of incident reporting, systematic management plans, investigation and strict regulation to reduce the incidence of unacceptable conditions or tragedy in these industries. Despite these measures, aviation disasters and deaths on mine sites still occur. Similarly, it would be naive to claim the transportation sector of the live export industry could entirely prevent breaches of all animal welfare conditions. However, the solution to managing these incidents is not to simply to close all facets of the industries. These three industries are socially and economically important and significantly contribute in a moral manner to Australia's prosperity. As with aviation and mining, improved management strategies and standards along with higher levels of risk reduction will be achieved as the live trade matures.

Opinions are also divided over the 99 per cent success rate of sheep and cattle on Australian vessels reaching their destination⁷⁵. One view is that, when the mortality rate of less than 0.3 per cent for cattle and 0.9 per cent⁷⁶ for sheep is benchmarked against other global livestock production performances, the rate is an outstanding credit to the industry and solid evidence of the highly acceptable conditions for livestock exported under Australian regulations.

The opposing view is that this success rate is irrelevant as live exports cause the deaths of thousands of livestock annually which could have been avoided if they were not sent on the voyage.

Although the success rate in 2006 was 99.1 per cent for sheep and 99.82 per cent for cattle⁷⁷, more than 36,000 sheep and 1,000 cattle died on Australian vessels that year. This perspective would initially shock any person irrespective of their involvement in the trade, which demonstrates how powerful the latter method of quotation is in portraying these

⁷⁴ Regulatory standards are governed by the Australian Government.

⁷⁵ Meat and Livestock Australia, A Year in Review 2008, Australian Livestock Industry.

⁷⁶ LiveCorp 2009

⁷⁷ <http://www.liveexportcare.com.au/GetTheFacts/CaringForExports/>

statistics in an emotional and dramatic light. It would be similar to stating that 137,900 Australians died in 2007, instead of saying the population's standardized death rate was just 0.6 per cent⁷⁸, meaning that 99.3 per cent of all Australians lived.

The relevance of comparing Australia's export success rate to a common benchmark of a 3 per cent mortality rate on Australian farms is also often disputed. This dispute relates to the fact that Australian regulations ensure only exceptionally fit and healthy livestock are exported and, if they had stayed on Australian shores, they would be unlikely to have a 3 per cent mortality rate. Therefore, there are claims this measurement of Australia's export success rate is flawed.

Those disputing this measurement of the export success rate do not take into consideration the alternative supply chain these livestock would pass through if they were not sent on a livestock vessel. In reality, the vast majority of these animals would have to be value-added in an Australian production supply chain before meeting market specifications for the processing industry. This supply chain would also lead to a mortality and carcass condemnation rate which could be similar or sometimes higher than the export mortality rate. The death of animals forced to be held in the Australian production system during droughts or natural disasters must also be considered. Also, if the live export market did not exist, the producer response would be directly related to the reduced price, meaning national sheep and cattle numbers would be significantly reduced. This would jeopardize the interests of all stakeholders in the industry.

A responsible future in livestock shipping depends on the sector maintaining current systems for acceptable conditions and striving for improvements whilst transparently communicating with all people with interests involved with the value chain.

In overseas markets

One of the major objectives of Australia's continued involvement in overseas markets is to lift standards for infrastructure and livestock handling through transport, handling and processing procedures so they comply with standards prescribed by the OIE.

As in other parts of the world, incidences of unacceptable livestock practices occur in these importing countries, including car boot sales, poor processing and livestock handling

⁷⁸ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/3302.0>

techniques. Many people wrongly assume these highly unacceptable practices are experienced by most livestock. Market knowledge shows these unacceptable practices are very isolated incidents when treated as a proportion of the handling of all livestock. Nonetheless, it is still a critical issue that the Australian export industry is, contrary to the opinions of some people; addressing seriously. Priorities have been identified by the Australian livestock industry and changes to infrastructure, livestock handling and management systems are being implemented.

Examples of infrastructure projects already completed include upgraded unloading facilities at ports and improvements to livestock trucks, ramps and facilities to improve animal welfare to the point of slaughter.

Official livestock handling and management courses are conducted for stockmen, veterinarians, feedlot workers and port staff. The principles of the message relayed in these courses is for people to handle livestock without animals being tied, isolated, dragged, hit or yelled at, as well as to increase general awareness of the importance of animal welfare. Australian livestock specialists and veterinarians also support their stakeholders in systems management, including the introduction of critical control points and animal production faculties at universities such as in nutrition and animal health.

The LEP assessment uses a benchmark, based largely on OIE and Australian animal welfare codes of practice, to assess and determine adequate welfare standards throughout the market supply chain. Generally, Australia's best practice standards in animal welfare and handling are similarly sought in countries of import. The international standard however is the OIE and the countries that Australia exports to are signatories to the OIE.

The program to improve global livestock welfare is at times portrayed to the Australian audience as merely promoting a false caring image of those involved with the live trade. Detractors of the trade suggest the most powerful solution to improving global animal welfare standards would be simply to refuse to supply the markets with our animals.

This view is based heavily on the assumption that importing countries will not change any of the practices deemed unacceptable by the Australian livestock industry and supplying them with animals reinforces a message that these practices are acceptable. There is also a belief

that this program is unjustifiable as even one incident of these particular practices should be not be tolerated, even if there were strong signals for change in the future.

Practical evidence suggests the program's presence has resulted in change and many stakeholders involved with the process express willingness to learn about more suitable livestock welfare standards. The adage that 'you don't know what you don't know' has largely applied in third world destination countries in relation to unacceptable welfare practices. People simply weren't aware of low stress handling techniques and welfare priorities are not yet as developed as in western countries. This is rapidly changing and they are now in the process of being exposed to new standards and practices and animal welfare is now well and truly on their radar.

The greatest challenges for the live export trade are tackling the mountains of bureaucracy involved with the livestock industry in importing countries. Private and public organizations in these countries commonly hold the biggest key to achieving change for better outcomes. Commonly, the bureaucracy problems are worse in bigger organizations. Certain stakeholders without external influence and vision, do not at times correlate core areas such as animal welfare and profitability. Subsequently welfare as a priority can be lower than it should be.

Nevertheless, the common human instinct, except in isolated cases, is to show compassion for an animal's welfare. This is particularly relevant to people physically in contact with animals through their day-to-day work. In most cases, these people have never had the opportunity to see practices in a different light and are generally very grateful for suggested solutions and the program's assistance in improving animal welfare. The job becomes easier for them mentally and physically and they make the change to achieve a better animal welfare outcome.

The Muslim religion also firmly endorses the importance of animal welfare and has guidelines in the Quran very similar to that of the OIE. The influence of religion offers a strong opportunity to improve animal welfare practices, particularly in Islamic countries. The whole essence of Halal treatment of animals is to be kind to them.

This does not mean changes to practices are achieved quickly and simply. A change in habit for anyone, regardless of their background, religion or values, can be one of the greatest challenges, even when promoted as being for the greater good. Change is commonly

associated with a shift out of one's comfort zone and this is an area that most do not like to leave. Positive changes should be supported by all those associated with the trade and the changes must be solid and reliable. But it must also be accepted that this commitment will take time, and with strong messages will spiral forward.

The LEP's initiatives, achievements and future vision clearly demonstrate its strong commitment to change and promoting awareness for more efficient and suitable livestock welfare standards. There is a clear need for the industry to keep improving the identified areas of unacceptable animal welfare practices so the standards of importing countries can be lifted to higher and consistent levels.

A pivotal factor in the trade's future is for the Australian industry to lead by example with a consistent message that the supply of any Australian livestock is dependent upon acceptable and solid livestock welfare practices being applied and embraced in destination markets. This approach will raise the level of awareness of animal welfare which also contribute to raising global livestock welfare standards.

Messages for Australian livestock industry to sail ahead

Changing livestock supply patterns and increased global demand for fresh protein have been major triggers for the growth of the Australian livestock export market now so important for Australian livestock producers.

Indicators suggest demand for livestock in the global market place will continue. The position determined by Australian livestock stakeholders will have more influence in clarifying the trade's future direction.

The driving demands for Australian sheep and cattle are no exception from those involved in other commodity cycles and include supply, price, and social and political factors. Australian livestock producers have limited control over these issues and therefore it is critical for them to position their individual businesses to thrive in the up cycles whilst sustaining themselves in the down cycles.

Strengthening communication and feedback systems between all stakeholders in the livestock export supply chain will allow stakeholders to position themselves to smooth out many of the challenges in product specifications and supply patterns.

The Australian export industry has rarely escaped controversy from the Australian processing sector and animal interest groups. The Australian processing sector makes the flawed claim that live exports are the foremost reason for challenges they face including industry rationalization and efficiency pressures. History proves these challenges of industrial relations; compliance and global competition were prevalent before the Australian live export industry became influential. The processing industry will always be the backbone of the Australian red meat industry. It is critical that, like all leading businesses, the processing industry concentrates on strategically positioning itself to survive increasing global and efficiency pressures.

There is legitimacy behind some of the pressure from animal interests groups in response to isolated but unacceptable animal welfare practices in the live export supply chain. Changes, even for the better, do not usually eventuate in any human culture without pressure. However, the solution put forward by these groups in response to any of these challenges is to simply ban the live export trade. This is a vision which does not appreciate the thousands of livelihoods involved in the supply chain or the Australian livestock industry's future contribution to the nation's economy and responsibility to supply the global market place with food it demands and requires.

Banishing Australian livestock will not magically improve animal welfare and slaughter practices as there is no evidence to support the claim that stopping live exports will have any positive influence on attitudinal change towards global animal welfare.

The solution proposed by animal interest groups is connected to the ideology: *'To avoid criticism do nothing, say nothing, be nothing'*⁷⁹. Australia's livestock export industry is an obvious target for these groups but their broader strategy also questions the country's entire animal production industry.

⁷⁹ [Elbert Hubbard](#). *US author. (1856 - 1915).*

This leads to decisions surrounding the future direction of the Australian agricultural and food industry. There is no doubt the cessation of live exports would depress livestock returns and cause the sheep and cattle industries to shrink. This effect would be greater in certain geographical regions of Australia where enterprises were built on the development of the live export market.

This would lead to a domino effect in the entire livestock industry supply chain including the processing sector. Added to this would be animal interest groups also targeting welfare practices within Australia. It can be assumed that, apart from certain niche production units strategically positioned in parts of Australia, the Australian livestock industry would no longer be a key contributor in supplying the global market place with any red meat product.

Lateral thinking would suggest some producers could, to a degree, substitute their current livestock enterprise with another agricultural commodity. This would only be viable in certain geographical regions and their future sustainability of these producers would be threatened due to the reduction in enterprise flexibility. In other regions such as the northern Australian rangelands, the current resourceful and successful livestock industry would no doubt be scaled down and in some cases become insolvent. For thousands of Australian families this scenario would mean the total devastation of their career, passion, history and livelihood. For some other people outside the livestock industry this outcome would be insignificant and, for some, a victory.

This is because certain players would rather see Australian livestock reduced to minimal numbers or even totally abolished. The concept of no livestock in a mixed agricultural enterprise, a national park replacing the current Australian rangeland industry, or even ending all livestock production in Australia, would be well received by some people.

Livestock stakeholders passionate about their future contribution to the industry and all people directly or indirectly involved with live exports must embrace responsible, scientifically acceptable and profitable benchmarks for animal welfare. All Australians must acknowledge the contribution of this industry not only to their dinner tables, but those throughout the world. The Australian public must put trust in the Australian livestock industry and move forward to continue to responsibly supply the world with safe, wholesome red meat in the form of live exports, or frozen or chilled products.

Key findings

- The live export industry contributes to the overall viability of the Australian livestock industry by providing alternative market options and stimulating healthy competition for livestock in Australia.
- The vast majority of cattle abattoirs in northern Australia were closed before the live cattle export industry began in earnest in the early 1990s. The influence of the live sheep export industry increased in significance in the 1980s. Rationalisation of the Australian processing industry and the associated rapid loss of meat processing jobs began earlier in the 1970s.
- It is commonly accepted that the restructuring of Australia's abattoir industry and loss of thousands of jobs was largely attributable to the rapid decline of cattle and sheep numbers in Australia as opposed to the emergence of livestock exports.
- The driving demands for Australian sheep and cattle are similar to those involved in other commodity cycles and include supply, price, social and political factors.
- Despite expanding global economies and urbanisation, there will always be international demand for Australian live animals. This is because the three clear market sectors of frozen, chilled and fresh meat present strong and unique selling points. These sectors mostly complement one another in meeting red meat demand in Australia's export markets.
- The activities and vision of various interest groups to terminate the live trade ignores the social and economic welfare of tens of thousands of people involved in the supply chain. They also discount the Australian livestock industry's future contribution to the nation's economy and social responsibility to food security in Australia's export destinations.
- A pivotal factor in the trade's future is for the Australian industry to lead by example with a consistent message that the supply of any Australian livestock is dependent upon acceptable and solid livestock welfare practices being applied and embraced in destination markets. This approach will raise the level of awareness of animal welfare which also contributes to raising net global animal welfare standards.

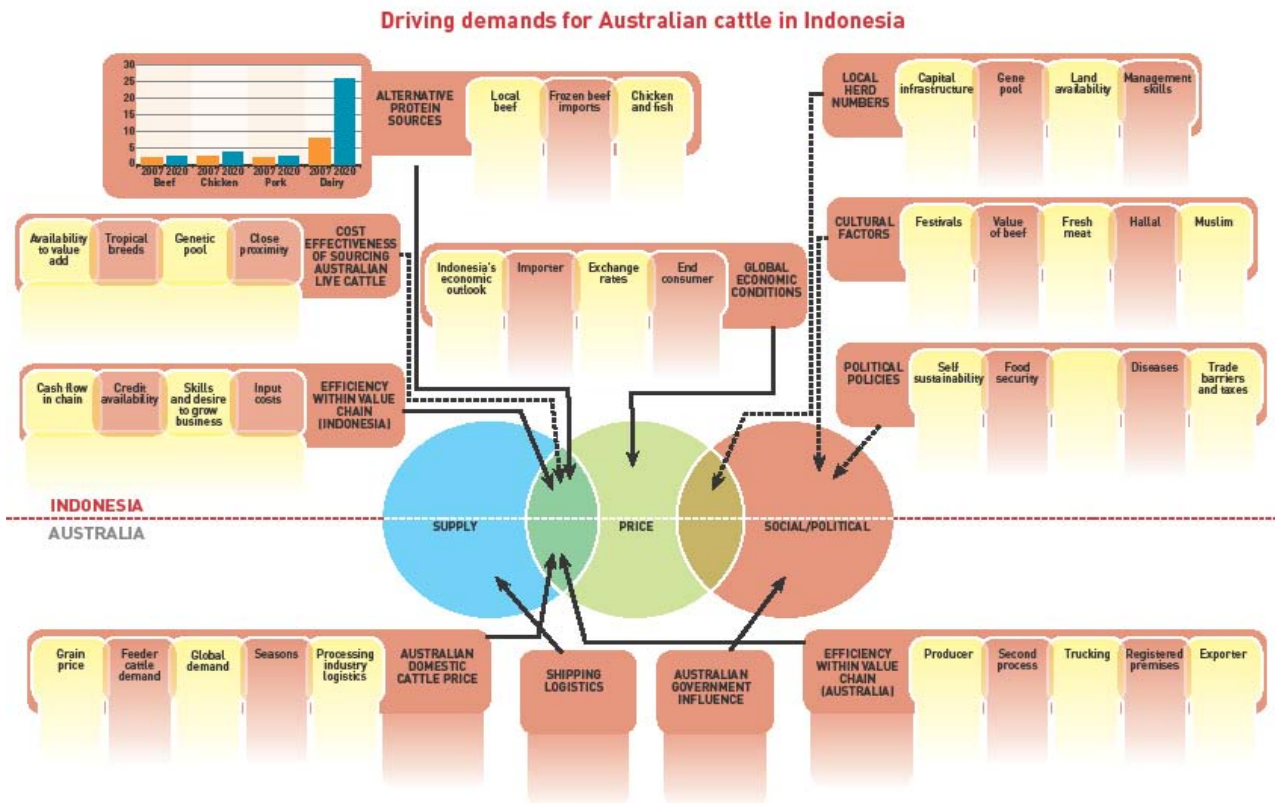
Recommendations

- The Australian livestock industry should continue to support the Livestock Export Program (LEP) which is addressing community, Government and industry concerns of animal welfare. This includes the program's promotional program in Australia, quality control on vessels and continual improvements to livestock welfare overseas.

- Australian livestock stakeholders have significant influence in determining the trade's future direction. In order to motivate a more responsive industry, there is a need for greater appreciation all factors affecting their livestock through the entire supply chain.
- Australian livestock producers presently have limited control over global commodity drivers and therefore it is critical for them to position their individual businesses to thrive in the up-cycles whilst viably sustaining themselves in the down-cycles.
- Strengthening communication and feedback systems between all stakeholders in the livestock export supply chain will allow stakeholders to position themselves to smooth out many of the challenges relating to product specifications and supply patterns. This would particularly assist in the future security of supply from Australian livestock producers which is currently a major issue and challenge.
- All Australian livestock producers should embrace quantifiable, scientific benchmarks and guidelines for livestock welfare to ensure the ongoing sustainability of their industry.
- The Australian processing sector sustains and facilitates the viability of the red meat supply chain. It is critical that this industry concentrates on strategically positioning itself to survive increasing global efficiency pressures. This would includes strategic planning for processing facilities in northern Australia.
- The Australian community should place trust and confidence in the Australian livestock industry and support its continued commitment to responsibly supply the world with safe, wholesome, disease free fresh meat in the form of livestock exports. Overall Australia's fresh meats complement frozen and meat products in overseas markets and do so with both moral and commercial confidence.

Flowcharts

1. The driving demands for Australian cattle in Indonesia diagram



2. A Definition of the driving demands for Australian cattle in Indonesia diagram

How to read the diagram

This diagram identifies the major areas driving Indonesian demand for Australian cattle;

- The three dominant factors driving demand are shown in the centre of the diagram: supply, price and social/political factors.
- The supporting diagrams aim to show the major issues influencing supply, price and social/political factors in Australia and Indonesia.
- The direction of the arrows from these supporting diagrams indicates the particular influence of supply, price and social/political factors on demand.

All subheadings found in the diagram definitions are generally interlinked with the matrix of issues influencing driving demands for cattle to Indonesia. The aim of this diagram is to illustrate there is no single factor influencing demand. Studying the *Australian Cattle to Indonesia Value Chain* will also assist in understanding the content of the diagram.

Supporting diagram definitions

Australian sector

Australian domestic cattle price

The greater the demand for Australian cattle, the higher the price. Australian domestic cattle prices can influence the viability of the value-adding process and competitiveness of beef protein in Indonesia.

Grain price

This is highly influenced by the global commodity market. It influences the Australian cattle price through its effect on margins in the domestic feeder industry and therefore demand.

Feeder cattle demand

This is related to supplying both the domestic and beef export markets (for example, Japan and Korea). It is heavily influenced by global demand and grain prices.

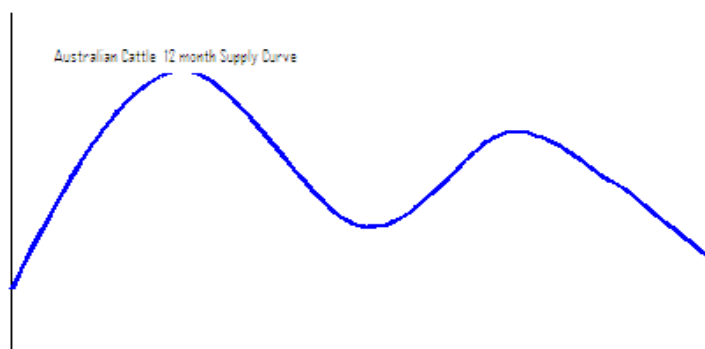
Global demand

This is particularly relevant for US, Japanese and Korean beef exports. It is highly influenced by trade barriers, disease and national economies.

Seasons

Annual northern Australian seasonal rainfall (October to April) slows supply logistics. Drought increases the availability of stock with suitable specifications. This applies particularly to the northern beef zone and Queensland.

The chart below illustrates a typical supply pattern of Australian cattle to Indonesia. The pattern is typically influenced by Australian seasons.



Processing industry logistics

This influences livestock throughput, general efficiencies, Australian beef global supply and the overall demand for cattle throughout Australia.

Shipping logistics

This is currently a major influence on the livestock export sector. The demand for livestock vessels currently outstrips supply. Shipping logistics are influenced by the rationalisation of shipping companies, increased regulation of Australian shipping standards, global demand for livestock and the most economical voyages available to the company. Shipping logistics are also influenced by global commodity outlooks and oil prices.

Australian government influence

This includes regulation and support programs for the industry.

Australian governments are responsible to their electorates, with public pressure and regulations heavily influencing trade supply. Issues include increasing regulation, compliance costs and pressures from animal rights/welfare groups and the meat processing industry.

Government support systems for the trade (trade policy, research and improvement funding, as well as logistic and infrastructure support) are a positive influence on trade logistics

Efficiency within the value chain in Australia

All of the following sectors affect efficiency in the value chain and, ultimately, the cost of beef production. This cost will not only influence the end price, but cash flow and the potential for expansion and change within the supply chain.

Beef producers

Beef producers can drive their costs of production and therefore margins (rarely could producers simply raise the price for their product). Reducing production costs can give producers more scope to expand herd numbers and invest in infrastructure or genetics. This improves efficiency and increases the availability of cattle to Indonesia. Producers can be consolidated or fragmented in supply systems.

2nd Process

This could include producers operating a second property within a vertically integrated system, or running a feedlot for value adding. The second process might also include selling livestock - through sale yards or an agent - to another producer before animals are supplied to the exporter.

Trucking

Trucking is an essential link in the value chain in Australia. The supply of cattle and efficiencies in the Australian system are highly dependent on trucks. Trucking viability is influenced by input costs, labour availability and the general demand for freight transport in Australia.

Registered premises

These are compulsory under export regulations and usually privately owned. Cattle are assembled then inspected under all Australian Quarantine and Inspection Service (AQIS) standards. The efficiency of management, fees and general logistics are a major influence on animal performance in the rest of the value chain.

Exporters

Exporters have a major influence on sourcing and maintaining the demand for cattle in Indonesia. They are often integrated with producers and/ or importers. The viability of exporters is essential for increasing the demand for Australian cattle.

Indonesia

The live cattle trade is supplying more beef to Indonesia due to the inability of local cattle to meet demand. Limited information is available on the Indonesian beef industry, but it appears the herd is rapidly dropping below 11 million head. The following issues are influencing the direction of the Indonesian beef industry.

Efficiency within value chain (in Indonesia)

The efficiency within the Indonesian value chain will influence demand through the general competitiveness of beef and overall quantities available to the end user.

Input costs

The input costs of all value chain members are influenced by management decisions as well as global trends. Examples include rations, transport, labour, water, manufacturing and marketing costs.

Skills and desire to grow the business

The fundamentals include all value chain members' ability and desire for change and innovation in their business to increase margins and efficiencies.

Credit availability

This limitation of driving demand was demonstrated in the 1997 Asian economic crisis, particularly between the importer, exporter and nervous banker.

Cash flow within chain

Cash drives business margins and therefore the overall demand for the beef product, not just the end consumer.

Examples could include;

-A feedlotter who has increased their efficiency and cash flow having the scope to expand their feedlot capacity. This in turn increases demand for Australian cattle. The feedlotter is supplying a trader demanding more numbers but unable to source enough to expand themselves.

-A trader's cost of manufacture decreasing after improving their abattoir facilities. This gives them the cash flow to buy more cattle from the feedlotter and supply more beef outlets in Indonesia where demand outstrips supply.

-A butcher's cash flow increasing, allowing them to buy more beef from the trader. This enables the butcher to expand their business facilities, improve beef presentation and quality, and supply a market demanding more beef.

Cost effectiveness of sourcing Australian cattle

Strong feeding margins are essential for growing demand for Australian cattle to Indonesia.

Close proximity

Australia's major competitive edge is its close geographical proximity to neighbouring countries.

Genetic pool

Indonesia's cattle industry can access a range of superior genetics to cross with its own breeds for enhanced performance.

Tropical breeds

Australia's Bos Indicus cattle adapt to Indonesia's tropical environment for efficient production.

Ability to value-add

The profitability of importers adding value to Australian cattle through body condition, weight and meat quality is a major driving factor of demand.

Due to the advantage of lower feed and labour costs, value-adding to cattle in Indonesia can often mean a margin four times greater than value-adding in Australia.

Alternative protein sources

Beef is deemed to be the superior protein source in Indonesia. An increase in wealth is usually correlated with an increase in beef consumption per capita. However, other sources of protein exist with an equal or price competitive status.

Chicken and fish

The availability and price of chicken and fish in the market place is a trigger for the amount of meat demanded from Australian cattle. The supply and price of chicken and fish are influenced by global stocks and local production factors.

Frozen meat imports

Frozen meat imports are usually chosen over fresh meat from Australian cattle due to price competitiveness. Indonesian quarantine restrictions on countries of origin also limit the supply of fresh meat to predominantly Australia, New Zealand and the US.

Local cattle

The availability of fresh meat from local cattle influences the amount of fresh meat demanded from Australian cattle.

Local herd numbers

The live cattle trade from Australia is bolstering the supply of beef to Indonesia due to the inability of local cattle numbers to fulfill demand. Therefore, the local cattle herd will in future have a major influence on the demand for live cattle to Indonesia. There is limited information about where this industry is positioned, although it appears the local herd is rapidly decreasing to fewer than 11 million head.

Capital infrastructure

Includes suitable farming land, infrastructure to handle and breed cattle effectively and the financial services to allow local beef producers to improve and increase in size.

Gene pool

There are limited genetic and breeding sources and facilities available for the local Indonesian breeds

Land availability

Urbanisation, particularly in the 1970s and 1980s, has been a significant trend in Indonesia. Indonesia has a population of more than 240 million people and an urbanisation rate above 3 per cent, yet its land

mass is 1,826,440 sq km . Land availability for breeding cattle units continues to decrease due to competition from more lucrative cash crops and building construction.

Management skills

Facilities and traditions surrounding breeding herds limit the innovation and training of people involved with traditional breeding herds.

Cultural factors

The direction and strength of the traditional Indonesian culture is another critical factor in current and future demands for live cattle to Indonesia. The culture is influenced by demographics and the Muslim religion.

Festivals

Festival periods are focused heavily on food and particularly fresh beef for reasons of celebration, tradition, history and discipline. With most Indonesians being Muslim, festival times can increase the demand for fresh beef due to requirements of beef consumption as well as a lack of competition from pork products. Traditionally, people are expected to slaughter animals themselves or at least oversee the slaughtering process. A cow can represent the sacrifice of God having mercy on Abraham and replacing his son with a ram, and compensates for seven people.

Fresh meat

Warm meat is the most important criteria for the traditional Indonesian consumer in identifying fresh and quality meat. Providing fresh meat means ensuring it is available to the consumer on the day of slaughter and is therefore processed locally. This cultural demand is heavily influenced by the lack of access to adequate refrigeration, requiring meat to be consumed on the day of purchase. Consumers also appreciate the unique flavour of meat from locally fed cattle before rigor mortis has set in.

Hallal and Muslim

The Muslim religion requires animals to be slaughtered under hallal conditions specified in the Koran. Local Muslim Indonesian consumers appreciate the meat from an animal slaughtered locally by their own people.

Political policies

Everyone has heard of the growing world food shortage and, for countries such as Indonesia that are not self-sufficient, food security is becoming the top priority for federal policies.

These policies can have positive and negative influences on the demand for live cattle from Australia.

Self-sustainability

As the global food bank tightens and urbanisation increases, there is increasing pressure on the Indonesian government to achieve self-sustainability. The strategy of value-adding as well as sourcing breeding stocks from Australian cattle was and still proves one of Indonesia's greatest drivers of demand.

Food security

This issue is closely linked with the issue of self-sustainability. Fresh meat is an essential ingredient of the Indonesian culture and indeed its nutritional core. The security gained from live animals value-added in feedlots holds far greater significance than a contract or agreement for the supply of imported chilled meat.

Diseases

Diseases directly and indirectly related to Indonesia and Australia affect driving demands. Diseases such as bird flu present in other global protein sources can also influence demand.

Australia's Foot and Mouth disease-free status is a positive influence given Brazil, Uruguay and India are officially blocked by disease trade barriers. These barriers are in place to protect the Indonesian herd from disease outbreaks and to help the government achieve its aim of eventually being self-sufficient.

Trade barriers and taxes

All barriers and taxes either benefit or directly compete with the efficiency of live cattle imports.

Import taxes are at times applied to live cattle imports, affecting importers' cash flow and therefore ability to source cattle or increase feedlot capacities. When import taxes are lifted there is a direct correlation of increased demand.

Global economic conditions

Indonesia is a highly price-sensitive market.

End consumer

Beef consumption in Indonesia is highly sensitive to price. Any rise in people's disposable income results in a corresponding increase in demand for beef. To drive demand, the end consumer must have the cash to source this superior protein.

Exchange rates

Exchange rates between the Indonesian rupiah and the Australian and US dollar are a critical component in the affordability of importing, feeding and trading Australian live cattle.

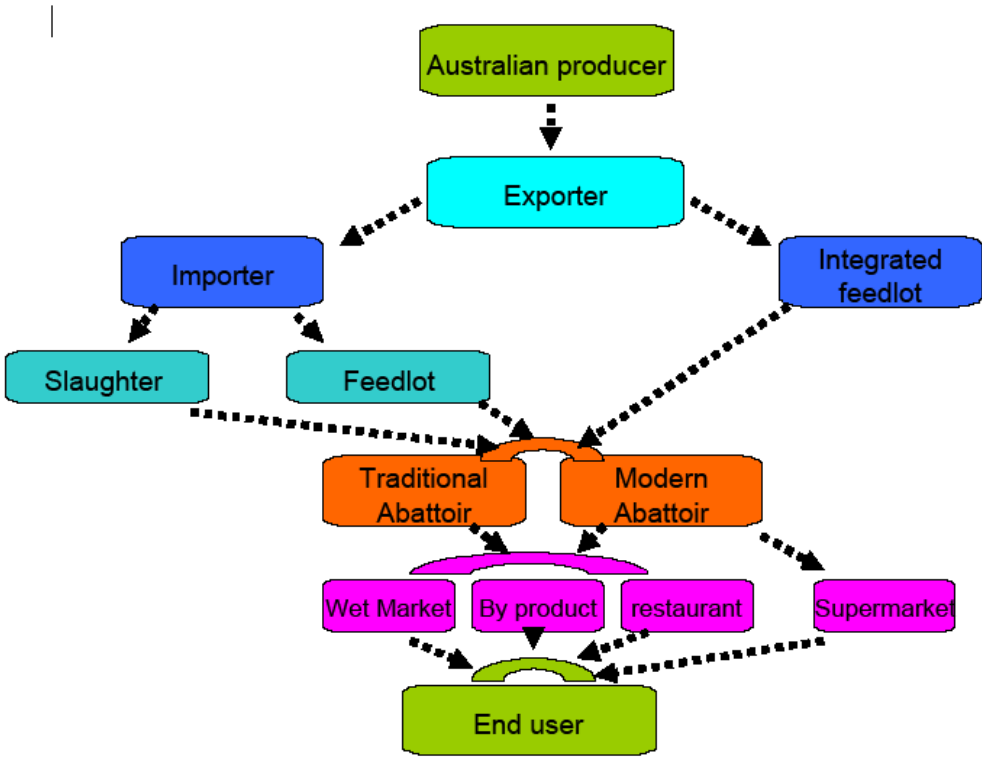
Importer

Economic conditions for the importer are highly influenced by global economic conditions. Profitable margins in the importing process usually trigger the demand for Australian cattle in Indonesia.

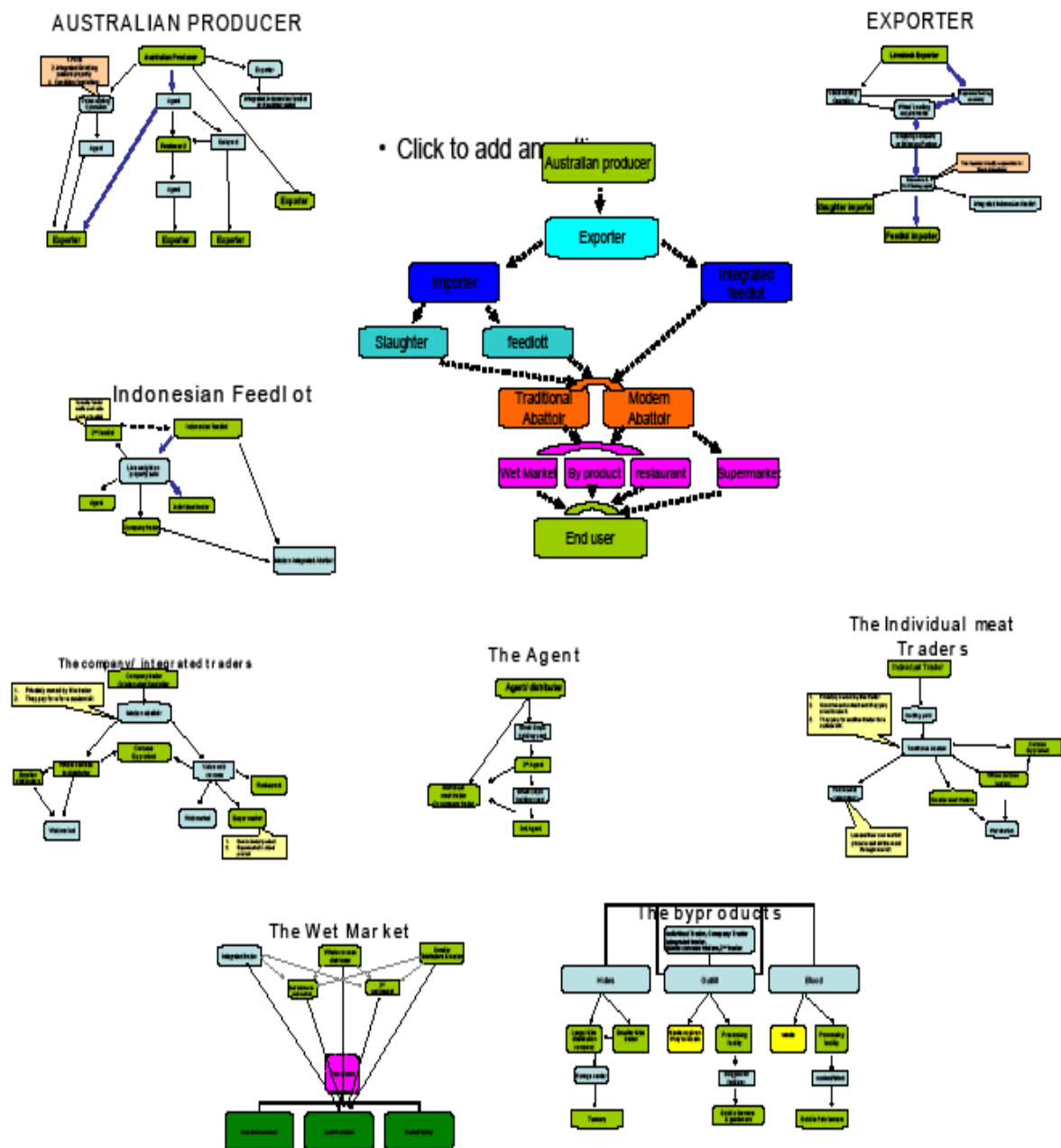
Indonesia’s economic outlook

The strength of the Indonesia’s economy is pivotal in driving demands from all members of the Indonesian value chain, from the importer to end consumer.

3. Australia Cattle to Indonesia Supply Chain flow chart summary

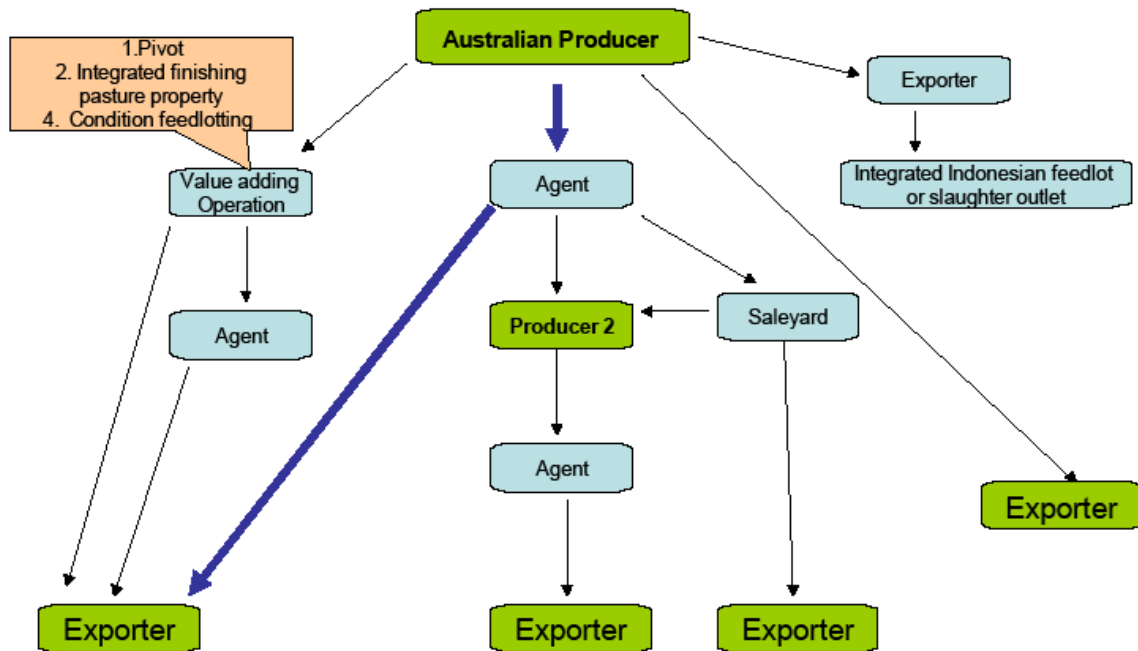


4. Value Chain Australia to Indonesia Summary



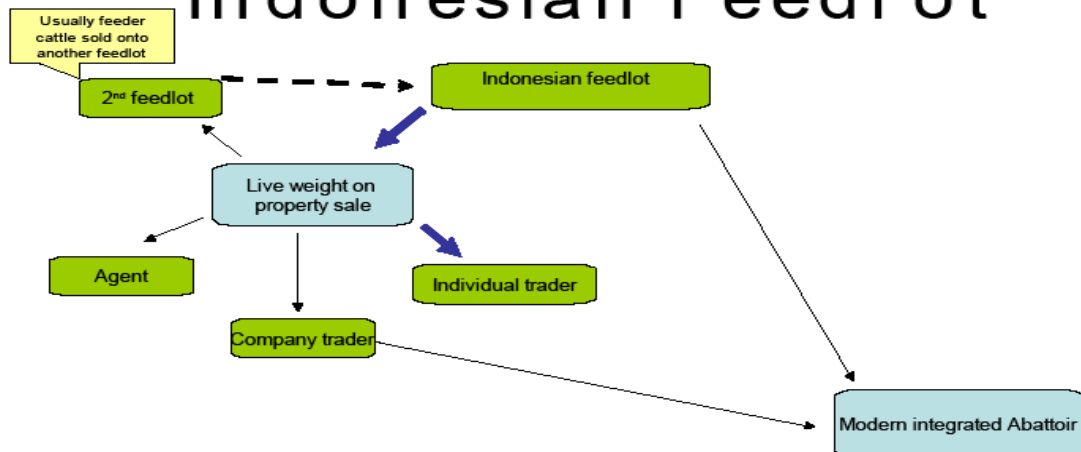
5. Australia Cattle Producer to Exporter flow chart

AUSTRALIAN PRODUCER

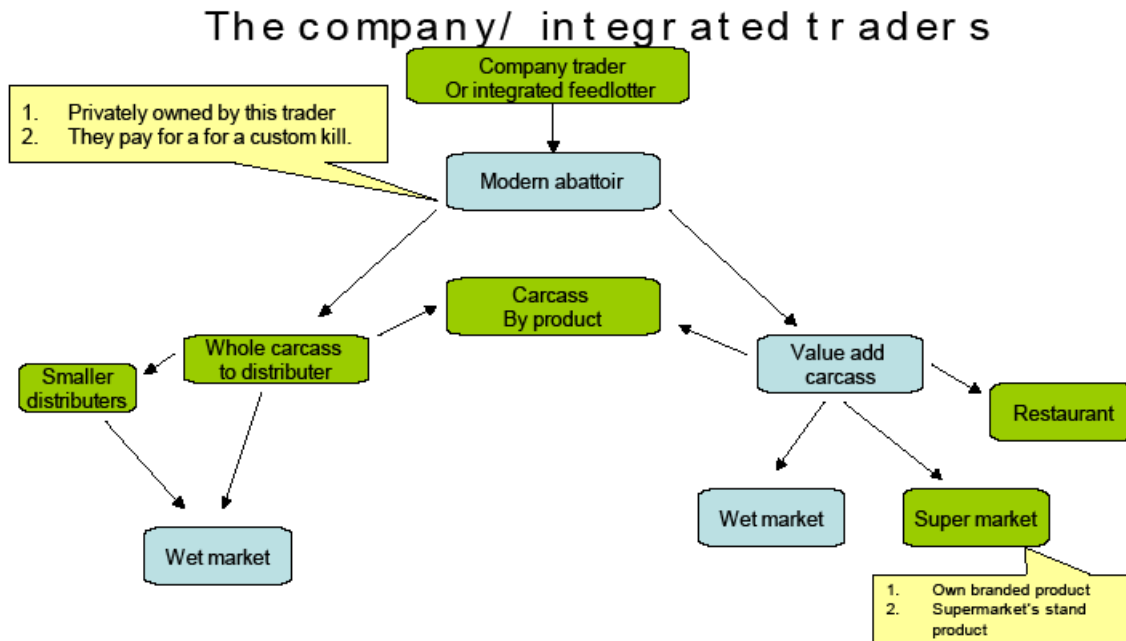


6. Indonesian Feedlot to Market Supply Chain flow chart

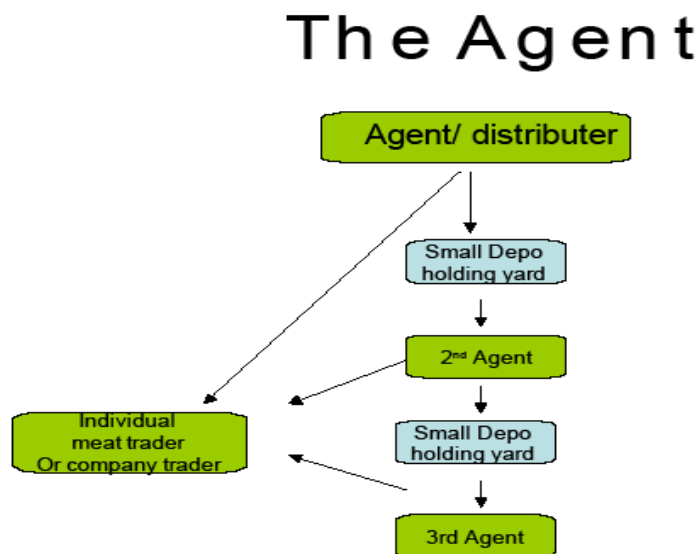
Indonesian Feedlot



7. The Integrated Indonesian Feedlot to Modern Abattoir flow chart

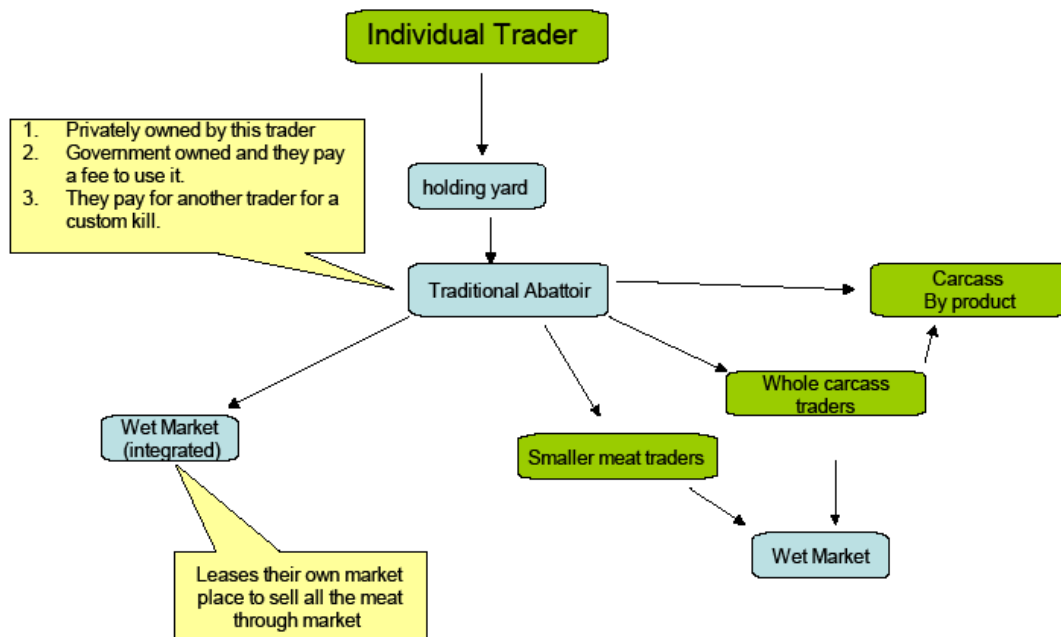


8. The Indonesian agent to Meat Trader Supply Chain flow Chart



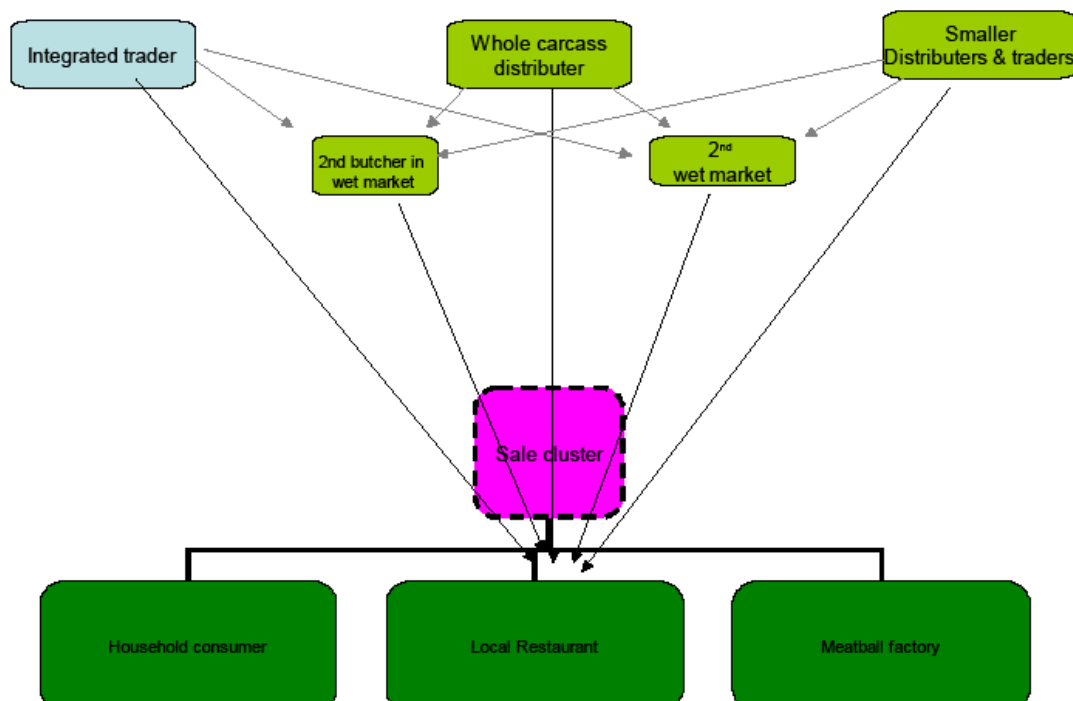
9. The individual Indonesia meat traders to markets Chart

The Individual meat Traders

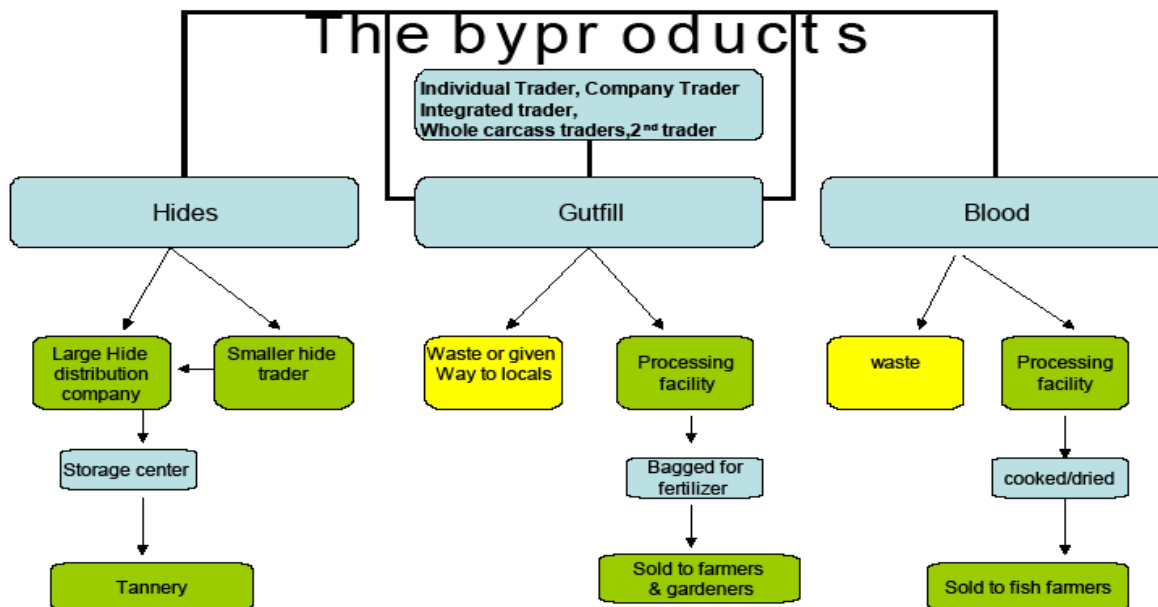


10. The wet markets to Indonesian consumer Supply Chain flow Chart

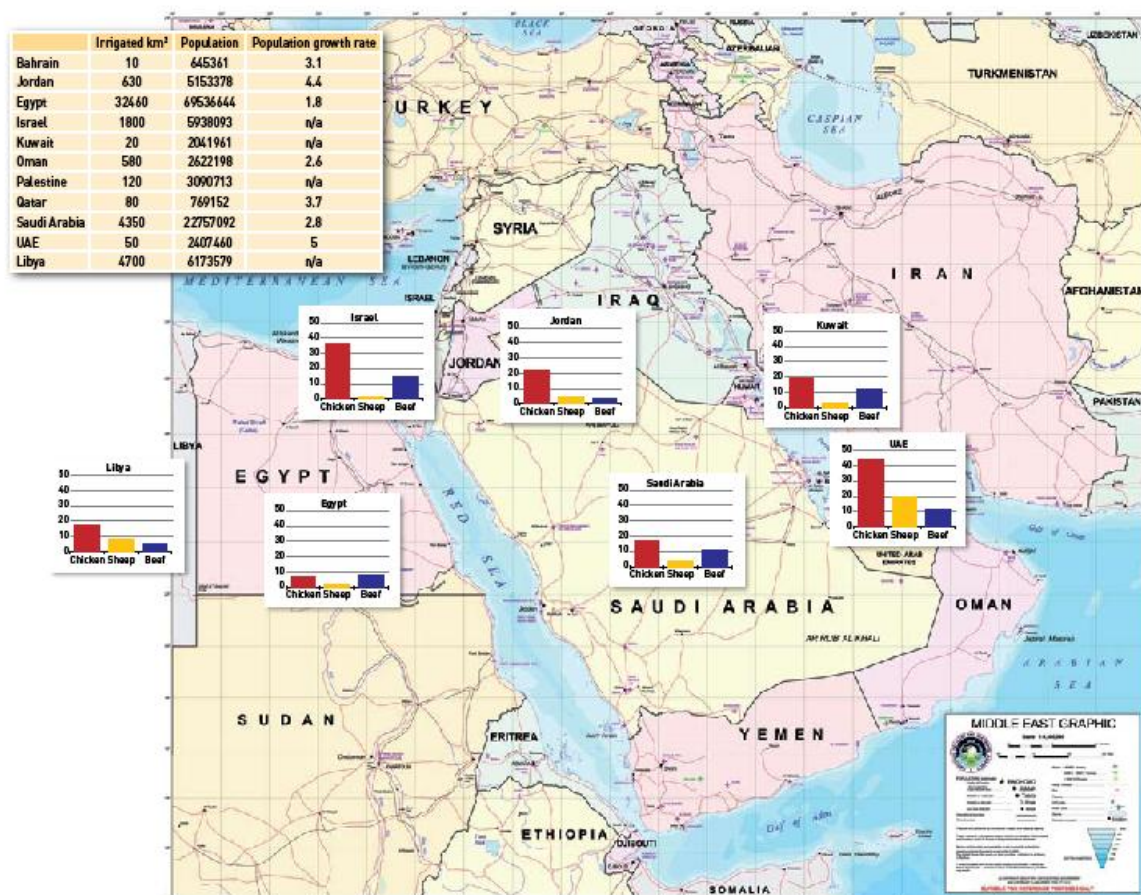
The Wet Market



11. The By products Supply Chain flow Chart

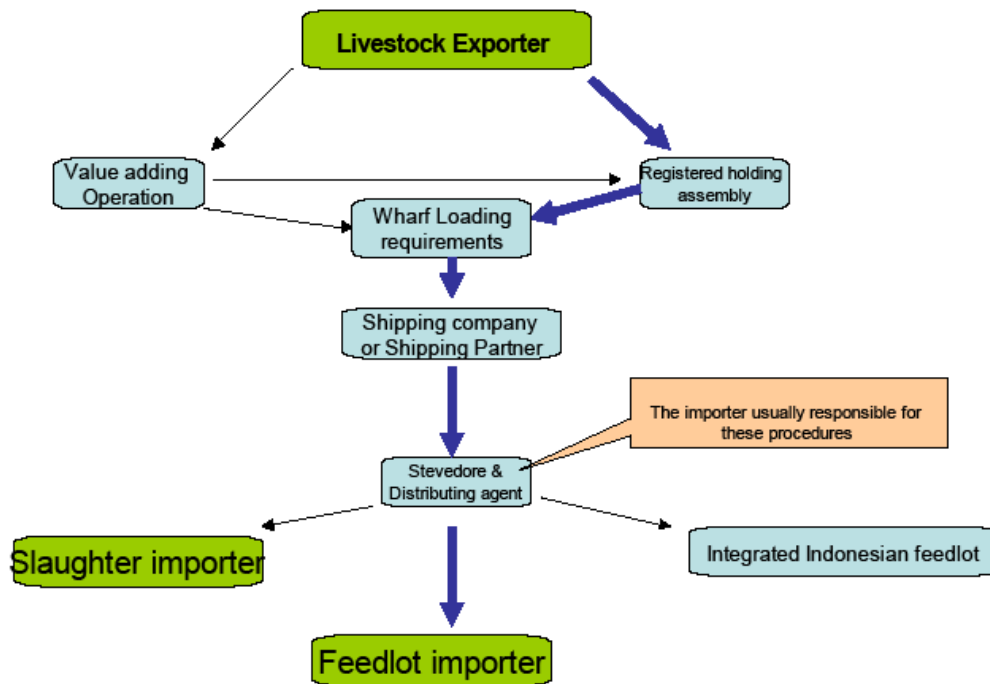


12. Middle East map of major importing countries of Australian livestock



13. The Australian Exporter to Indonesia flowchart

EXPORTER



Plain English Compendium Summary

Project Title: Sailing Ahead	
Nuffield Australia Project No.:0811 Scholar: Organisation: Phone: Email:	Annabelle Coppin West Australian Beef and Livestock Services 0428956692 Annabelle.coppin@gmail.com
Objectives	To investigate the supply chain of the Australian live export industry beyond the Australian farm gate. To determine the trade's significance and contribution to Australia's livestock industry and define the drivers of global demand for live animals and investigate the influence of Australian live sheep and cattle exports upon net global animal welfare.
Background	As a livestock producer I wanted to be able to explore, examine and personally develop a sharp understanding of the marketing chain beyond our front gate to bring about a marked improvement in our whole of chain competitiveness and viability of the livestock export trade. I felt isolated from the rest of the value chain and desired to be able to predict the future direction and demands for the market and direction. My approach of this study was to look at the whole of market perspective which would look at present day requirements and what was likely to be the needs in the future.
Research	Travel was conducted over a 12 month period with the individual study conducted throughout the livestock export value chain from vessels, feedlots, abattoirs and the numerous market outlets in; Indonesia, Malaysia, Kuwait, Jordan, Egypt, Bahrain, Oman, Qatar and the UAE.
Outcomes	<p>Despite expanding global economies and urbanization, there will a continued international demand for Australian live animals. This is because the three clear market sectors of frozen, chilled and fresh meat present strong and unique selling points. The livestock market also supports the logistical, social and political demands of importing countries who seek food security and civil calm. The driving demands for these livestock are largely: supply, price, social and political factors.</p> <p>The restructuring of Australia's processing industry over the past 30 years is largely attributable to the livestock numbers in Australia as apposed to the development of livestock export markets and it is evident that the livestock export market merely compliments the dynamic of the Australian livestock industry.</p> <p>A pivotal factor in the trade's future is for the Australian industry to continue to lead by example with a consistent message that the supply of any Australian livestock is dependent upon acceptable and solid livestock welfare practices being applied and embraced in destination markets. This approach will raise the level of awareness of animal welfare which also contributes to raising net global animal welfare standards.</p>
Implications	<p>Australian livestock stakeholders have significant influence in determining the trade's future direction. However they currently have limited control over global commodity drivers and therefore need to position their individual businesses to thrive in the up-cycles whilst viably sustaining themselves in the down-cycles.</p> <p>The Australian livestock industry should continue to support the Livestock Export Program (LEP) which is addressing community, Government and industry concerns of animal welfare.</p> <p>Communication and feedback systems should be strengthened between all stakeholders in the livestock export supply chain and all Australian livestock producers should embrace quantifiable, scientific benchmarks and guidelines for livestock welfare to ensure the ongoing sustainability of their industry.</p> <p>The Australian community should place trust and confidence in the Australian livestock industry and support its continued commitment to responsibly supply the world with safe, wholesome, disease free fresh meat in the form of livestock exports.</p>