liveexport

Developing Market Outlook Reports

Cattle and Sheep/Goats

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Prepared by:	**Richard Koch**
	ProFarmer
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Abstract

Access to accurate, independent and timely market intelligence is vitally important to assist producers to both maximise profitability in the short to medium term and to plan for the future.

MLA and LiveCorp currently collect and disseminate information (export statistics and prices) on the livestock export sector to producers. The market outlook reports detailed in this report look to build on this by further analysing the current market environment, providing insight into how the market environment may change in the short to medium term and forecasting changes in key variables and industry benchmarks.

To facilitate this development, linkages and networks have been established and developed with participants throughout the value chain to assist in building a balanced picture of price, supply and demand factors. A proto-type market report/forecasting service was developed and disseminated across industry for comment. Based on industry feedback and comment this was further refined and pilot reports for cattle and sheep/goats were then developed.

Executive Summary

The study was commissioned by MLA/LiveCorp to provide access to accurate, independent and timely market intelligence to assist producers servicing the live export market to both; maximise profitability in the short to medium term, and to plan for the future.

The key industry drivers in each market were identified and a process for forecasting changes in these drivers was developed. It was found that the drivers were common across most markets and that after regulatory and animal health issues the major consideration driving live export volumes was the landed cost of livestock in each destination. A landed cost forecasting model has been developed which will be a key tool in forecasting live export volumes (see in Methodology section page 5).

The key drivers were found to be:

- Economic conditions and exchange rate movements in importing countries,
- Live export and slaughter prices in Australia and importing countries,
- Market throughput and forward supply,
- Market demand,
- Shipping capacity/costs,
- Competition from the Australian processing industry,
- Exchange rates,
- Government policies,
- Feedlot capacity/utilisation, feeding costs and in and out cattle prices,
- Wet market and overseas supermarket supplies and prices,
- Competition from other countries, livestock and protein sources,
- Religious and cultural events.

A report template for the cattle and sheep/goats export industries was developed to assist the communication of this information to the live export sector. Information sources were established and key contacts with industry participants were established to assist with the forecasting. The market forecasting service looks to identify movements in export volumes, market specifications, live cattle export prices and key currencies over the medium term (one year forward).

The industry will benefit from having a regular report that is focussed on analysing and understanding key industry drivers. This report can be used as a vehicle to better understand industry shaping factors and the flow-on impacts to the wider industry. As part of the ongoing delivery of these reports improved information networks will be developed with linkages to all parts of the value chain. The market forecasting service will allow industry discussion of key events and will serve to improve industry understanding.

Although the market forecasting service is aimed primarily at providing better information flows to primary producers, the service will be useful to all industry participants.

Contents

1 Background – Industry Need

Over the next decade the live export industry faces a number of challenges from both internal and external factors from animal health issues to the interplay between the processing sector and the live export market, competition from emerging exporters such as Brazil and Uruguay and regulatory issues. It is expected that the volatile nature of demand for livestock exports will continue. While the eastern states of Australia have particularly dominant processing sectors that can help to absorb the impact of fluctuations in demand for live exports, the WA and NT livestock sectors have become highly reliant on the live export sector.

Access to accurate, independent and timely market intelligence is vitally important to assist producers in these areas to both maximise profitability in the short to medium term and to plan for the future.

MLA and LiveCorp currently collect and disseminate information (export statistics and prices) on the livestock export sector to producers. The service looks to build on this by further analysing the current market environment, providing insight into how the market environment may change in the short to medium term.

To facilitate this linkages and networks have been established and developed with participants throughout the value chain to assist in building a balanced picture of price, supply and demand factors.

2 Project Objectives

The objectives of this consulting project were to:

1. Formulate a service to produce periodic live export market outlook reports across all destinations for Australian cattle, sheep and goats. The model will incorporate the components, information needs and resources required for a working proto-type.
2. Pilot the model service and adapt the model so that it can become an ongoing and valuable service to industry.

3 Methodology

The project initiation and design phase involved the following tasks:

- Project start-up meeting with MLA/LiveCorp to finalise the proposed approach and source relevant industry contacts, literature and data;
- Collect, collate and review background literature.

The next phase of the study involved an analysis of existing data and industry consultation to ensure an understanding of key demand and supply determinants, future trends and other emerging industry issues that may affect future livestock export volumes. As the part of this study the following tasks were undertaken:

- Formulate comprehensive a State of the Industry report that, for each major and emerging market, identified key demand and supply determinants, future trends and other emerging industry issues that may affect future livestock export volumes.

- Circulate this report to industry and invite comment to ensure a consistent understanding of the key industry drivers for each market.

From these reports a prototype market forecasting service was formulated that detailed the structure of the report and included information to be collected and reported. Industry comment was invited on the report framework, data collection mechanisms and forecast methodology. Industry comments were reviewed with MLA and the report framework and data collection mechanisms were adjusted accordingly. The report framework, data collection mechanisms and forecast methodology were agreed with industry.

With the structure of the report agreed, pilot reports were developed for each industry. These reports were formulated using a combination of existing and newly implemented data sources. The reports were circulated widely and further industry comment was invited.

To assist in estimating futures volumes a landed cost forecasting model was developed. Given the volatility inherent in some of the forecast variables, the model includes a mix of objective and subjective components.

The landed cost model:
{(MLA live export indicator applicable to forecast market c/kg lw) X (expected price trend) X (monthly 5yr avg seasonal factor) + (fixed non-livestock costs + [variable non-livestock costs X expected changes)]} X {[(local currency per $US) X (expected trend)] x {[($A per $US) X (expected trend)]}

The main subjective component of the model relates to expected future trends. For livestock cost variables, price trends will be determined after discussion with the forecasting committee, industry experts and other forecasting bodies e.g. ABARE.

Expected future price trends for some of the non-livestock variables can be gleaned from futures markets applying to these variables. For example a key component of non-livestock landed costs is ocean freight costs (around 40%). A leading indicator of ocean freight rates are crude oil prices. To gauge expected movements in these costs we apply the futures curve for crude oil to the variable component of non-cattle landed costs. The fixed cost component will be reviewed from time to time to ensure that these remain accurate.

For future currency movements the forecaster will take an average of published forecasts from major Australian banks.

Some smoothing of monthly movements in livestock indicators based on seasonal factors may occur when seasonal factors diverge from normal or due to expected supply/demand shocks e.g. changes regarding US north Asian market access.

<u>Indonesian Example</u>

Cattle cost component

- At the start of January the MLA live cattle export indicator ex Darwin for Indonesian steers stood at $1.70c/kg lw.
- Throughout the year we expect cattle prices to trend downwards by around 1% per month.
- Seasonal factor for January is 0.97

Therefore the cattle cost component of the landed cost indicator for January is 1.70*(1-0.01)*.97 = $1.63c/kg lw. This may be adjusted if seasonal conditions are expected to diverge from normal or if there are any supply/demand shocks expected during the period.

Non-cattle cost component

- Non-cattle landed cost component is estimated at 50c/kg lw
- 40% of non-cattle landed costs are variable (mainly transport costs)
- Throughout the year we expected transport cost trends to be related to trends in crude oil prices (the crude oil futures curve suggests that oil prices will be steady through January before increasing
- Apply expected change to the variable component [(50c/kg*0.6)]+[(50c/kg*0.4)]*1.00=0.50c/kg lw

Therefore the non-cattle landed cost component is expected to remain at 50c/kg lw in January before increasing after that.

Total landed cattle cost forecast in Ac/kg = landed cattle cost forecast + non-cattle cost forecast = $A2.13/kg

Convert to Rp/kg

- Forecast expected movements in $Rp per $US. $Rp per US = 5,600 and is expected to appreciate through the year at a rate of 0.25% per month
- Forecast expected movements in $A per $US. $A per $US = .78 and is expected to appreciate by 0.5% per month
- Forecast $Rp per $A by $Rp per $US X $A per $US. Current rate $Rp per $A = 7,180 but is expected to appreciate to 6,700 over the year.

Convert landed cattle cost Ac/kg to local currency

- Multiply $Ac/kg by $Rp per $A
- Landed cost indicator for January is expected to be $A2.13/kg X 7,180Rp = $15,290 Rp/kg

A similar process is followed for each month for each major market. Trends in landed cost indicators should be a leading indicator of seasonally adjusted trends in live export volumes.

4 Results and Discussion

The project has achieved its aim of developing a pilot report template for an industry market forecasting service. The State of the Industry reports for cattle and sheep/goats are included as Appendices 1 and 2, and the pilot cattle and sheep/goat outlook reports are included as Appendices 3 and 4.

Data availability and access to key industry personnel will be critical success factors in the next phase of this project when the pilot market report service commences in early 2007. One of the problems encountered during the development phase of these reports was gaining timely access to industry participants.

To assist in ensuring that the report remains relevant to industry it is suggested that a formal process of industry consultation is developed and maintained. It is proposed that key industry

personnel are selected to participate in a quarterly industry meeting or teleconference to discuss draft forecasts and key industry drivers/trends. Committee members are to be nominated by industry.

The committee will:

- Review previous quarterly forecasts against actual results,
- Identify reasons for divergence and assess ways of improving forecasting accuracy,
- Discuss opportunities for the further report development,
- Answer feedback on previous reports.

Further work is necessary to develop data collection systems. The MLA Market Information and Analysis team currently collect a range of data relating to key live export markets. The data collection mechanisms developed by the project consulting team need to be expanded and further developed to ensure that they provide accurate market signals and facilitate the forecasting of key variables. Working closely with the MLA team into the future will be essential.

5 Success in Achieving Objectives

The project has been successful in achieving industry consensus on the prototype for an industry market forecasting service. In the development of this prototype the project team has developed a broad knowledge of the working of the live export trade and established a network of industry contacts to assist in sourcing and analysing key industry data.

One of the main issues in relation to the live export forecasting service is the lack of available primary information on which to base forecasts. The industry is relatively small and concentrated and the primary market destinations for live exports do not have well developed market information services. Over time the service will need to work with industry to develop and refine data collection systems.

6 Impact on Meat and Livestock Industry

The key impact on the meat and livestock industry will be to convey a deeper understanding of the impact of changes in the key drivers on live export volumes and values. A focus on market forecasting across the live export industry will assist in the development and refinement of data collection systems.

7 Conclusions and Recommendations

The market forecasting service will become a valuable industry resource. To ensure that the service remains relevant and valued by industry participants, it will need to be continually developed and refined. Further input from all sectors of the value chain will be required to hone forecasts and provide a consistent flow of information back to all industry participants.

It is recommended that MLA/LiveCorp adopt the reports in their current form and commence a 12-month trial of the service to gauge relevance and usefulness to the industry.

It is recommended that any ongoing service is supported by a formal quarterly forecasting committee structure. The committee should be comprised of industry participants across various sectors interested in participating and working to develop a viable forecasting service.

Further work is necessary to develop data collection systems. The MLA Market Information and Analysis team currently collect a range of data relating to key live export markets. These data collection mechanisms need to be expanded and further developed to ensure that they provide accurate market signals and facilitate the forecasting of key variables.

For example the Project Team will work with MLA to improve the collection of wholesale market information across key livestock markets. This information needs to be expanded to include wet markets and collection mechanisms need to be improved to ensure the collection of accurate and regular data.

8 Appendices

8.1 State of the Industry Report for Cattle

Development of A Livestock Export Market Reporting Service

Key Demand and Supply Influences in the Live Cattle Export Industry

Profarmer Australia Pty Ltd.

Quin Consulting and Analysis

Table of Contents

List of Figures

List of Tables

Executive Summary

Underpinning recent increases in global demand for meat protein has been an increase in total GDP and GDP per capita across many importing countries, particularly across the Asian region.

Australian live cattle exports are valued at approximately US$225 million in a +US$15 billion beef export trade equating to an approximate 1.66% market share of the global beef import demand market, a close substitutable product.

Improved economic growth and increasing per capita incomes has generated demand for beef in excess of the ability of inefficient local herds to supply. Underpinning demand for Australian live cattle vis-à-vis beef imports is the preference for fresh meat, the predominant wet market distribution system, religious beliefs and customs, and policies supporting the development of a feedlot and beef processing sector. In some markets imported cattle genetics are used to infuse with local cattle to improve the quality of the local herd. Australia exported approximately 560,000 cattle in 2005. Exports of live cattle have averaged around 800,000 head per annum over the past decade.

Live cattle exports from Australia by destination are historically extremely volatile. The live cattle market has traditionally been reliant on developing countries with their characteristic volatility in regulatory standards, economic growth and demand patterns.

The Australian cattle export sector's reliance on Indonesia has increased, while traditional markets such as Egypt, Malaysia and the Philippines have experienced considerable pressures from both regulatory and economic factors. This and the strength of southern Queensland feeder cattle markets has severely curtailed export activity out of eastern states.

The landed price of Australian cattle in local currency terms is a key sensitivity for export volumes. The major components influencing the landed price is the price of Australian feeder cattle and the exchange rate against the $A. Although Asian currencies have appreciated against the $A since the currency crisis, disease issues (BSE and FMD) have altered international trade patterns, increasing demand for Australian beef from high priced pacific rim markets and substantially increasing the cost of Australian feeder cattle.

This has affected the economics of importing Australian live cattle in countries outside of the Pacific Rim. This situation remains fluid with Japan restating the ban on imports of beef from North America and a large number of countries banning imports of fresh Brazilian beef after a recent series of FMB outbreaks. The ban on US imports will ensure strong competition for Australian cattle from southern QLD feeder cattle markets.

The live cattle and beef export markets are not fully deregulated. In addition to trade protection measures such as duties, the sector operates within a framework of regulation. Many of these regulatory restrictions on trade have resulted from disease considerations.

Another disease factor that operates to affect the Australian Live cattle trade is the importing countries FMD status. In markets such as Indonesia which maintains a ban on imports from FMD affected countries, the price of beef trades at a higher value, which makes it economic to import and feed Australian live cattle. In contrast countries such as Philippines and Malaysia

allow beef imports from FMD affected countries (Indian buffalo and Brazilian beef) with the impact of lowering beef prices and making it uneconomic to import and feed Australian cattle.

Apart from local cattle, Australian live cattle imports competes with Indian buffalo, and beef from south America as well as other sources of protein, pork, poultry and seafood. The wholesale price of Australian beef compared to these alternatives is an important factor in determining demand for Australian live cattle.

In some cases this regulatory framework exceeds the importance of landed cost based economic factors. For instance, in some live cattle import markets the regulatory framework dictates whether an exporting country can even enter into trade, thus in these circumstances relative landed costs of product become irrelevant for the banned export country.

Two factors outside of the price of Australian feeder cattle and exchange rates which could have an increasing influence on landed cost economics are increasingly stringent export regulations and the cost of sea freight. Export standards have been progressively tightened in response to animal welfare incidents and general community concerns, however, provided these remain reasonable and practical they are not seen as having a major impact of the capacity of the industry to export.

Because live cattle are a lower value added product, freight rates as a component of unit costs combined with commonly one way freight shipments, result in freight movements having a significant effect on product competitiveness. It is therefore likely that freight rate increases as a result of rises in fuel costs have a larger proportional influence on the live cattle trade than on the close substitute processed beef and other competing proteins.

Producers in northern Western Australia and Queensland, and the Northern Territory have primarily due to freight costs, limited finishing ability, and a decline in processing capacity become increasingly reliant on the live cattle export trade. To an extent the live cattle market currently experiences a degree of captured supply from the Australian north.

By virtue of its ban on imports of beef from FMD affected countries, the wholesale price of beef in Indonesia is maintained at a level that supports the import and feeding of Australian cattle. While this ban is maintained Australian cattle import volumes should rise with increases in per capita income levels subject to fluctuations in the landed cost of Australian cattle.

Subject to a risk assessment, Indonesia is likely to recognise OIE FMD regional freedom for Argentina and will allow imports from south of the 42nd parallel – the area within Argentina that is recognised by the OIE as free without vaccination. To compete Argentina would need to land beef in Indonesia at below the wholesale price of Australian beef in Indonesia.

If Indonesia were to relax the ban on product from FMD affected countries, and lower value product entered from India or Brazil it would seriously constrain Australian live cattle imports (as is the case in the Philippines). The devastating impact that this would have on the local Indonesian cattle industry and employment within the beef sector would mean that this course of action is unlikely.

In 2001 China began to significantly increase imports of Australian dairy heifers. Imports were aided on the demand side by rapidly increasing Chinese milk product consumption, the absence of competitors due to import bans. On the supply side, low Australian milk prices and strong competition following deregulation in the Australian dairy industry increased cattle supply.

In 2004 China accounted for 11.6% of Australian cattle exports, after Indonesia with a 56% market share. The Chinese Government is actively pursuing strategies to lift beef and dairy production, particularly targeted at export markets, and to improve growing consumer concerns in regard to food safety issues. Ultimately the success of these programs will determine import requirements for beef and live cattle in the future. In the interim it is likely that Australia will remain the beneficiary of increased demand for dairy cattle from China.

Philippines was a significant importer of Australian cattle in the late 1990s and in 2000. During this period, strong rates of economic growth stimulated rates of beef consumption that were in excess of the ability of the local cattle herd to supply. This and the availability of cheap livestock from Australia prompted investment in the Philippine feedlot capacity. At the prevailing price relativities beef produced from Australia live cattle was preferred to Indian buffalo and Brazilian beef.

However, a trade dispute between the Philippines and Australia, over the exports of tropical fruit has triggered radical changes in import licensing rules, standards and procedures which has significantly impeded meat and meat product imports. Administrative Order No. 16 imposes strict meat import regulations which local importers find very prohibitive.

Imports of live cattle have been particularly affected as a result of instruction to the Bureau of Animal Industry (BAI) from Department of Agriculture Secretary Edgardo Angara to design an import reduction scheme for Australian cattle. The Department of Agriculture insists that a ban on live cattle importation does not exist and the move has been a voluntary decision of local cattle raisers to reduce their importation from Australia.

Since 2000 live cattle exports from Australia have been in steady decline. For the 2005 year to date, exports of cattle have slipped to around half the level of 2004. While the initial decline in numbers may have been trade related, the high cost of Australian cattle and intense competition

from Indian Buffalo and Brazilian beef have meant that feedlotting cattle in Philippines is uneconomic.

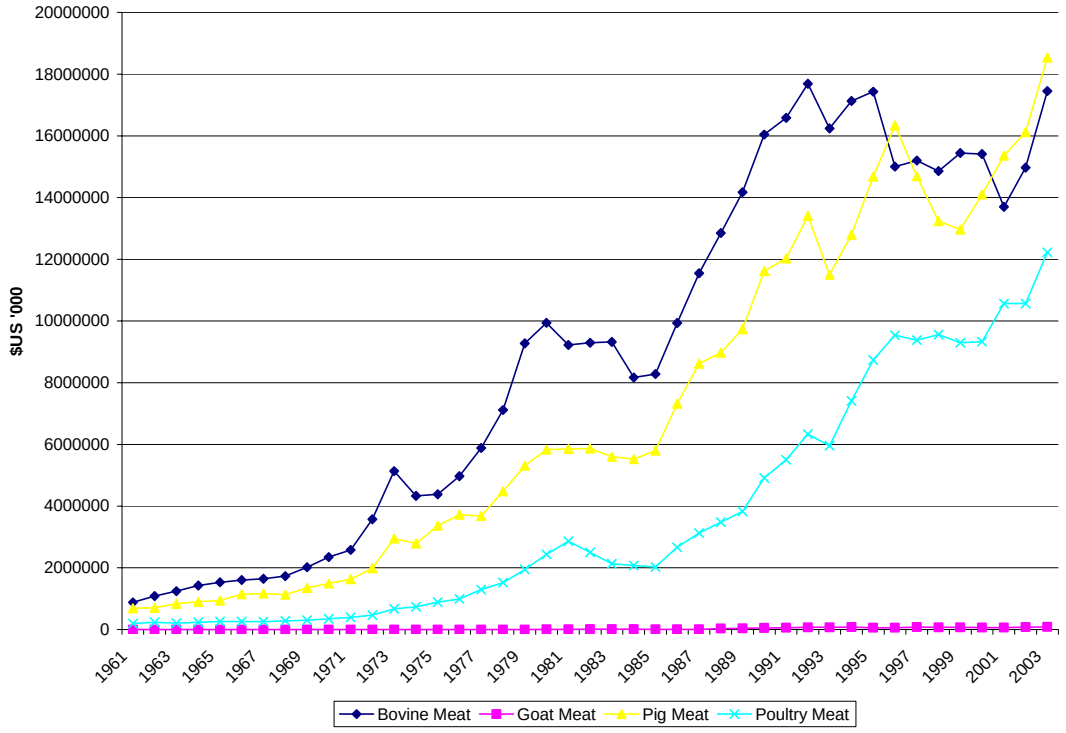
Primary Supply And Demand Influences

Livestock Trade in Context of the Global Meat Industry

Underpinning global demand for meat protein is an increase in total GDP, and GDP per capita across many importing countries.

The graph below demonstrates this long term rising value trend in meat imports. The significant effect of BSE and Foot and Mouth Disease (FMD) on total beef import values can be seen through the 1990s. Following this decline in total beef imports, the value of demand has partly recovered as US and European negotiators work to re-enter traditional markets, cattle prices remain strong, and consumer consumption rebounds.

Figure 1 - Global Meat Import Trends



The development of a number of trade agreements has aided the global distribution of live cattle and beef. This has included continuing agreements between the European Community, the 1989 US Canada Free Trade Agreement (CFTA), and the1994 North American Free Trade Agreement (NAFTA). These agreements have in recent years been pressured due to regulatory constrains imposed by BSE and FMD.

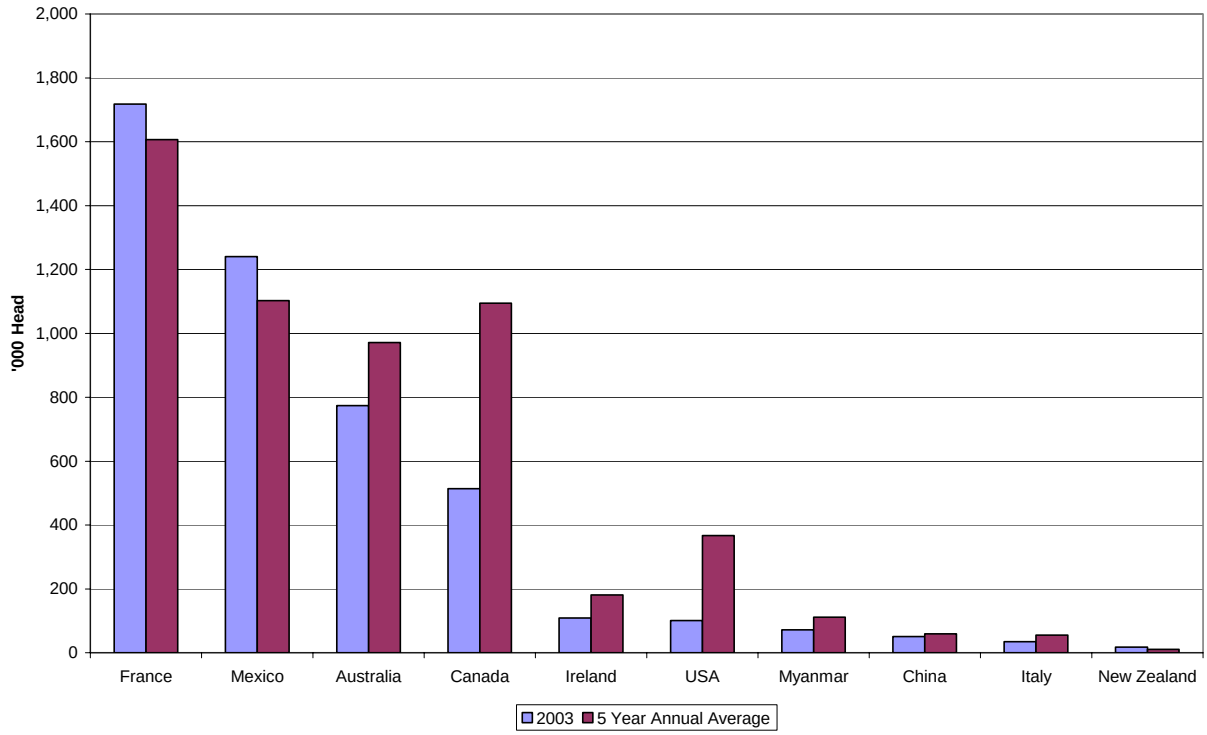
Despite these challenges, influences on total meat import demand and subsequent alterations in trade patterns for beef and live cattle are likely to slowly re-adjust towards more traditional trade flows. However, disease and regulatory influences, in addition to economic considerations will remain significant drivers of world import demand.

The Australian live cattle export trade is unusual in that the majority of global inter-country cattle trade has traditionally taken place across land borders. Australian exporters face additional challenges in regard to regulation, shipping costs and animal husbandry due to live sea transport requirements.

Global beef imports are approximately 3.75 times the value of global live cattle imports. Given that the major live cattle exporters of France, Mexico and Canada are primarily engaged in cross-land boarder trade, by sea distributed cattle make up a relatively small percentage of cattle shipments and total beef import market value. Currently, Australian live cattle exports are valued at approximately US$225 million in a +US$15 billion beef export trade. This equates to an approximate 1.66% market share of the global beef import demand market, a close

substitutable product. Allowing for in-country produced beef the share of live cattle exported product in total beef consumption is very small.

Figure 2 - Major Live Cattle Exporters



Key Points:

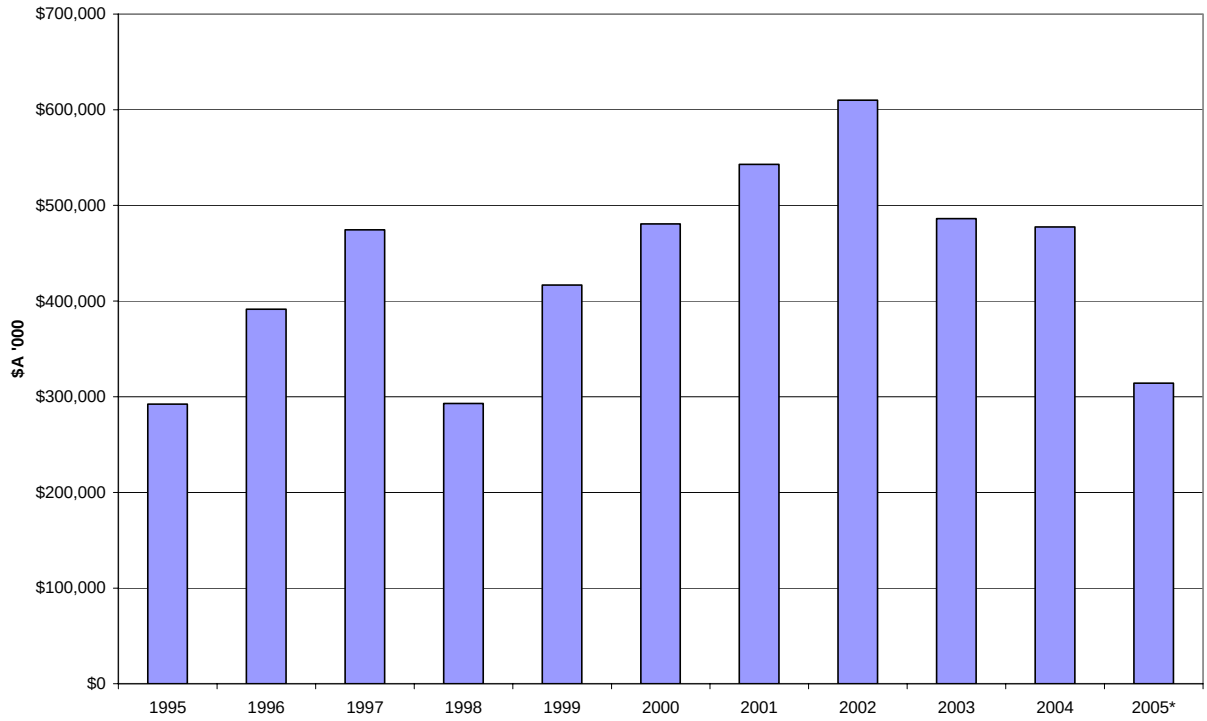
- **Over the long term global beef demand is rising with GDP per capita increases.**
- **Following beef import demand declines over the last decade due to BSE, import values are recovering.**
- **Disease and regulatory issues have a significant effect on market structure and economics.**
- **Live cattle exports make up only a small percentage of total beef supply, with imported beef and local in-country produced beef close substitutes.**

Livestock Trade in Context of the Global Meat Industry

Live cattle exports from Australia by destination are historically extremely volatile. The Australian cattle export sector's reliance on Indonesia has remained, while traditional markets such as Egypt, Malaysia and the Philippines have experienced considerable pressures from both regulatory and economic factors.

The live cattle market has traditionally been reliant on developing countries with their characteristic volatility in regulatory standards, economic growth and demand patterns.

Table 1 - Australian Live Cattle Exports by Value



However, an interesting characteristic of the Australia live cattle export industry is in fact the relative limited volatility in total exports when compared to the extreme volatility in country components making up this whole. For example, during the Indonesian currency crisis and cattle import downturn the industry managed to maintain exports at satisfactory levels turning to Libya, the rising Egyptian market, and maintaining the Philippines market.

It is extremely difficult to determine just how inter-changeable live cattle markets are given the dynamic forces of pricing combined with regulatory requirements. It is an industry that would appear on the surface not to have readily inter-changeable markets, however, this has generally not been the case in the past in practice.

Regulatory and other factors aside, and given strong competition from local and imported beef and buffalo, demand for live cattle is probably price elastic, despite the preference for fresh meat.

Price discounting below a certain point, relative to competitive product, may result in a disproportionate increase in demand. Alternatively, price increases above a certain relative point may result in a disproportionate fall in demand.

In addition, government decisions can be triggered by shifts in price competitiveness, causing sharp declines in demand.

The trend towards extreme price elasticity of demand is a common characteristic of commodity products distributed in low income market sectors.

It is also possible that this characteristic of the live cattle sector is aided in some markets by the relatively small market percentage held by live imports, as opposed to total beef, and in-country production. The relatively low live export cattle market share, relative to the global beef and in-country trade would be likely to aid market switching abilities. On a country specific basis for example, it is estimated that 80% of Malaysian beef requirements are met by imported buffalo meat. Combined with beef imports, live cattle therefore make up a relatively small share of the total market.

This ability to switch markets also exists for some Australian regional produces, both within export markets and between beef processors into the domestic and export beef trade. From an interstate perspective Western Australia's percentage share of the Philippines market has historically been approximately 14%, low relative to the Northern Territory and Queensland. It is likely that Queensland producers are better positioned to switch product into the large east coast processing market and out of markets such as the Philippines if better returns can be found in the processing sector or regulatory constraints impact on export trade.

Thus, the ability of importing countries to quickly switch between imported cattle, domestically produced cattle or imported beef, and Australian producers to switch between live exports or processing options is a significant dynamic of sections of the live cattle export sector. These market sensitivities would likely reinforce price elasticity of both demand and supply.

However, this ability to switch supply options by importing countries, or distribution options by Australian producers is not universal across all importing countries, or all production regions in Australia.

It is also possible that the appearance of inter-market switching ease has been the result of lucky circumstance. For example the Asian crisis coincided with favourable conditions for cattle importing into Libya and Egypt. Also, the latest fall in live cattle exports has coincided with extraordinary demand for beef in key Pacific Basin Markets and hence, has provided profitable options for cattle producers to switch from live export cattle to the store trade. If so, producers in the north of Western Australia and the Northern Territory, with fewer alternative market distribution options, would appear to be facing considerable market risk, especially given the current significant reliance on the Indonesian market.

The Indonesian market is presently somewhat protected from competition due to FMD import bans. However, competitors such as India are working to address this issue.

Key Points

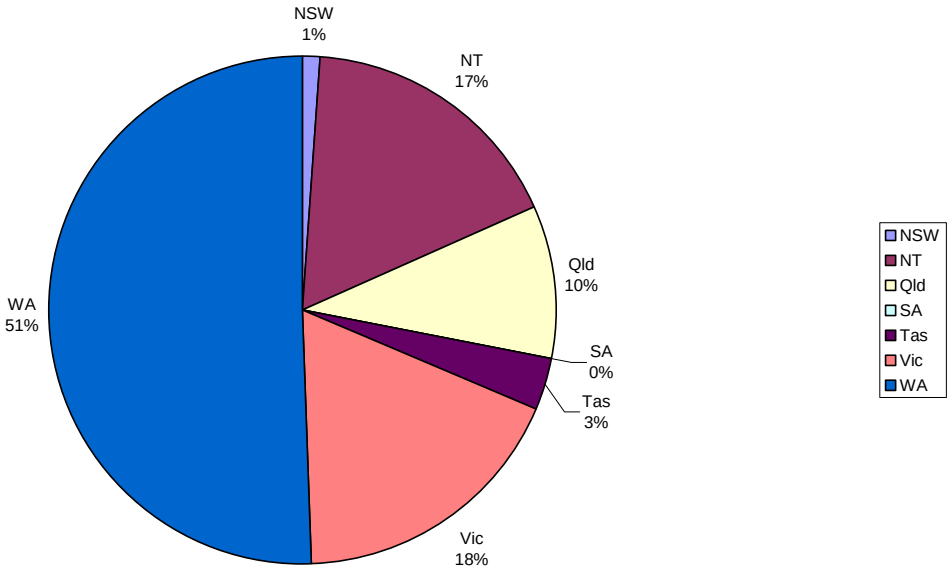
- **Historically, the value of Australian live cattle exports on a country by country basis has been very volatile.**
- **The summed total of Australian live cattle exports is proportionally less volatile through time than the country components of the trade. This may indicate in part the ability to quickly switch between export country destinations, resulting in a balancing effect on total trade volumes.**
- **Live cattle export demand and supply appears to be significantly price elastic.**
- **It is likely that price elasticity of demand, combined with small market share against substitute products (eg. imported beef, in-country domestically produced beef) are contributing factors (not the only factors) to country demand volatility.**
- **Price elasticity of supply is heightened by the ability of some Australian producers to switch between export and other markets.**
- **The ability of Australian producers to switch between live, domestic and export beef markets is not evenly distributed. Thus, producers face differing risk exposure levels to the live trade based significantly on production location.**

State Based Live Cattle Export Analysis

Western Australia has maintained its position as Australia's largest live cattle exporter, followed closely by the Northern Territory. State figures are somewhat influenced by cross boarder travel of cattle.

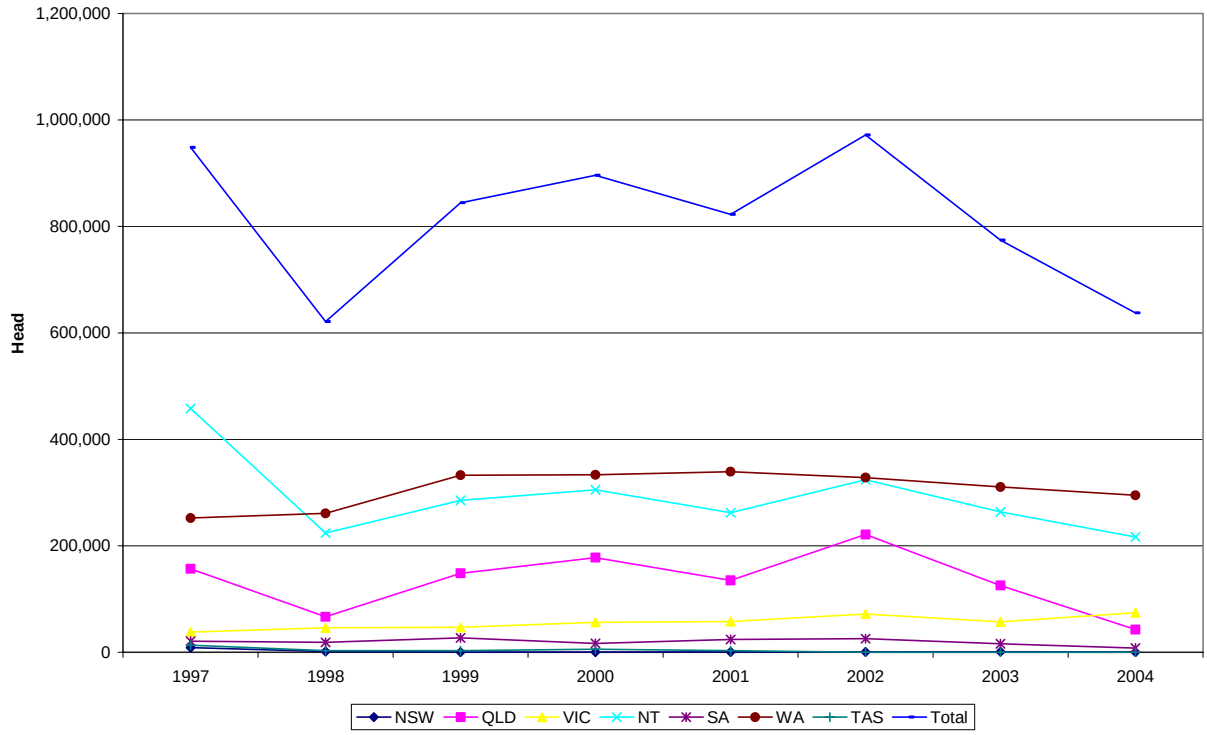
Australia exported approximately 637 000 cattle in 2004 (2003 - 774 248 head, 2002 - 971 880 head). Average cattle exports over an eight year period were 814 468 head per annum.

Figure 3 - Live Cattle Export Market Share by State - 10 year average



Historically, Western Australia has experienced competitive advantage and therefore market share benefits relative to other Australian exporters into Jordan, Kuwait, Malaysia, Libya and Egypt. The state has tended to share approximately 50% of the Indonesian market with the Northern Territory (this figure is approximate due to east/west transport of cattle through the port of Darwin).

Figure 4 - Annual Live Cattle Exports by State

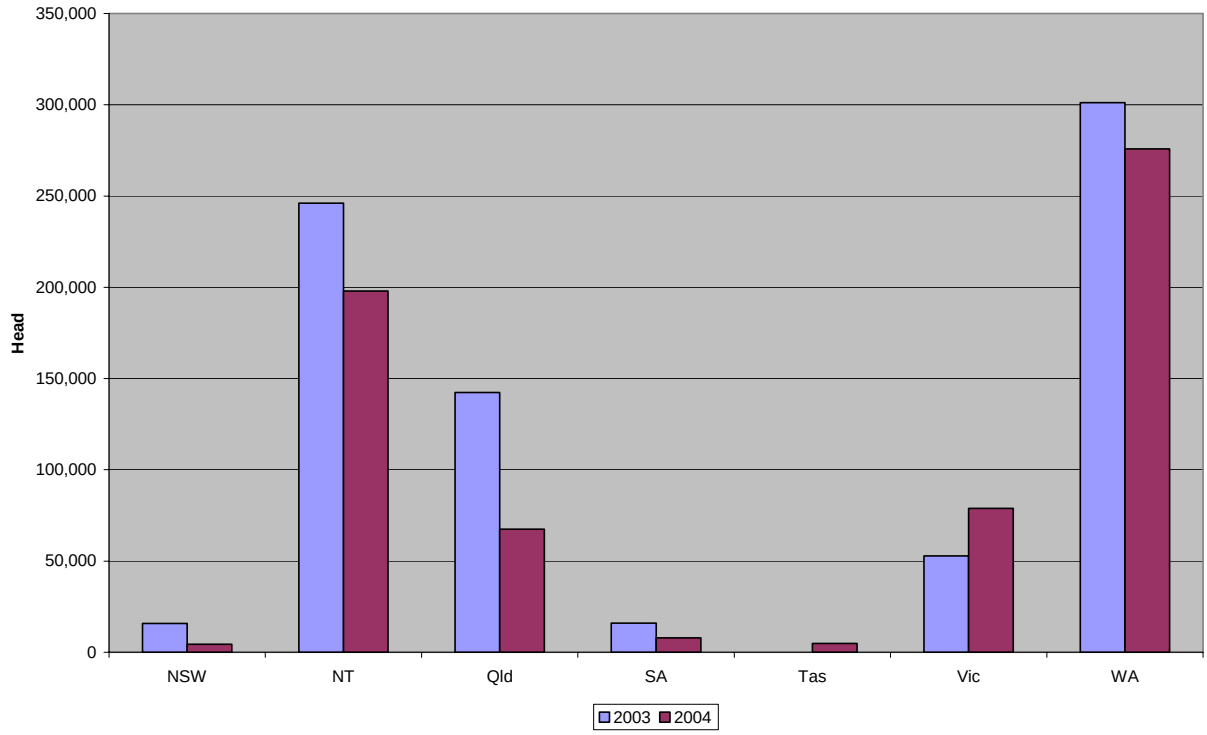


Queensland and New South Wales have tended to hold dominant positions in the Philippines, Israel, Japan, and the Brunei market.

Despite reductions in live cattle exports to Malaysia, Libya and Egypt, Western Australia has tended to maintain export levels, as has the Northern Territory to a lesser extent, thanks mainly to strength in the Indonesian market.

Following the reduction of the Philippines market and loss of the Libyan and Egyptian markets, the northern Western Australian and Northern Territory cattle sectors have significant reliance on the Indonesian market. This market has held up strongly in recent years, however competitor efforts to reduce FMD barriers to entry may in future create increased competitive pressures.

Figure 5 - Cattle Exports by State 2003 vs 2004



The above graph demonstrates the impact of the reduced exports to the Philippines, on Queensland live cattle exports and significant increase in Dairy cattle exports to China and Mexico out of Victoria.

Key Points:

- **Western Australia and the Northern Territory are the main live cattle exporters.**
- **Export country destinations are not evenly distributed in volume terms across Australian production regions. Based on freight advantages, cattle type demanded, and availability, regions have tended to target specific offshore markets.**
- **With significant reliance on the Philippines market Queensland live cattle exports have reduced significantly following the decline in this export market.**
- **Victorian cattle exports have increased following demand increases out of China for dairy cattle.**

Price and Currency Factors

Australian export processing demand has been boosted following the finding of BSE in the US in 2003, and that country's subsequent exclusion from markets such as Japan and South Korea. Australian beef exports have in part replaced US product in these higher value beef markets.

This has in certain regional areas of Australia enabled fatteners, lot feeders and processors to out bid live cattle export buyers. This change in purchasing power is the opposite to the strong purchasing power experienced by the live trade during the cattle export boom of earlier periods.

Despite the loss of export markets, US cattle prices have remained buoyant aided by strong consumer demand (the protein/carbohydrate dietary shift) and a cyclical downturn in beef production (the US cattle cycle). This market strength has also benefited Australian beef exports into the US.

Strong export and domestic demand, coupled with drought-reduced cattle populations, has resulted in strong Australian cattle prices.

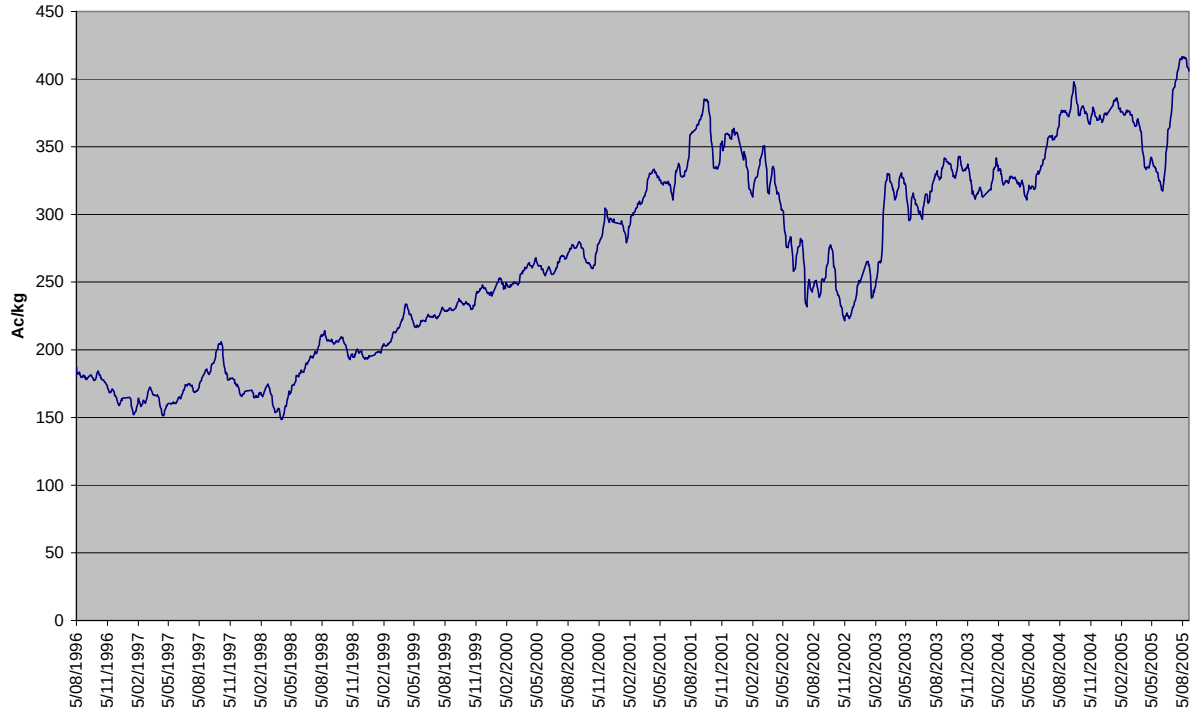
The US is successfully are re-negotiating entry for beef and cattle particularly from younger stock. Assuming continued market re-entry by the US, it is possible that pricing pressures on Australian cattle will increase in the future.

Europe, has recently changed from a net exporter to a net importer of beef and has just announced an end to export subsidies on live cattle exports, so are unlikely to pose competition much future competition in Australia's key live cattle markets.

Key price influencing factors will include:

- The extent of re-entry into traditional markets by the, US and Canada;
- Possible access of Argentine beef into the US from 2007;
- The extent of currency appreciation in South America influencing the competitive position of their export beef;
- Continued production capacity expansion in Brazil;
- Industry growth and FMD area freedom negotiation by India and possible buffalo imports into Indonesia;
- A possible shift in Australian processor purchasing power;
- Management and ownership effects on northern cattle supply;
- Australian drought and supply effects;
- Continued regulatory and disease influences; and,
- The extent of increases in Australia's US and EU beef quota. (The US Beef quota currently stands at 378 214 tonnes and is due to increase bi-annually from 2007 to 2022 as part of the Australia - US Free Trade Agreement. The current EU quota is 7000 tonnes with little chance of an increase (although this may be a concession of the current round of trade negotiations).

Table 2 - Australian Feeder Cattle Prices



Demand for beef combined with a shortage of supply has resulted in strong beef prices. From an Australian exporting perspective the appreciation in the dollar primarily due to strengthening commodity prices has not significantly dampened beef export demand. This situation has certainly been assisted by Australia's status as free from BSE and FMD.

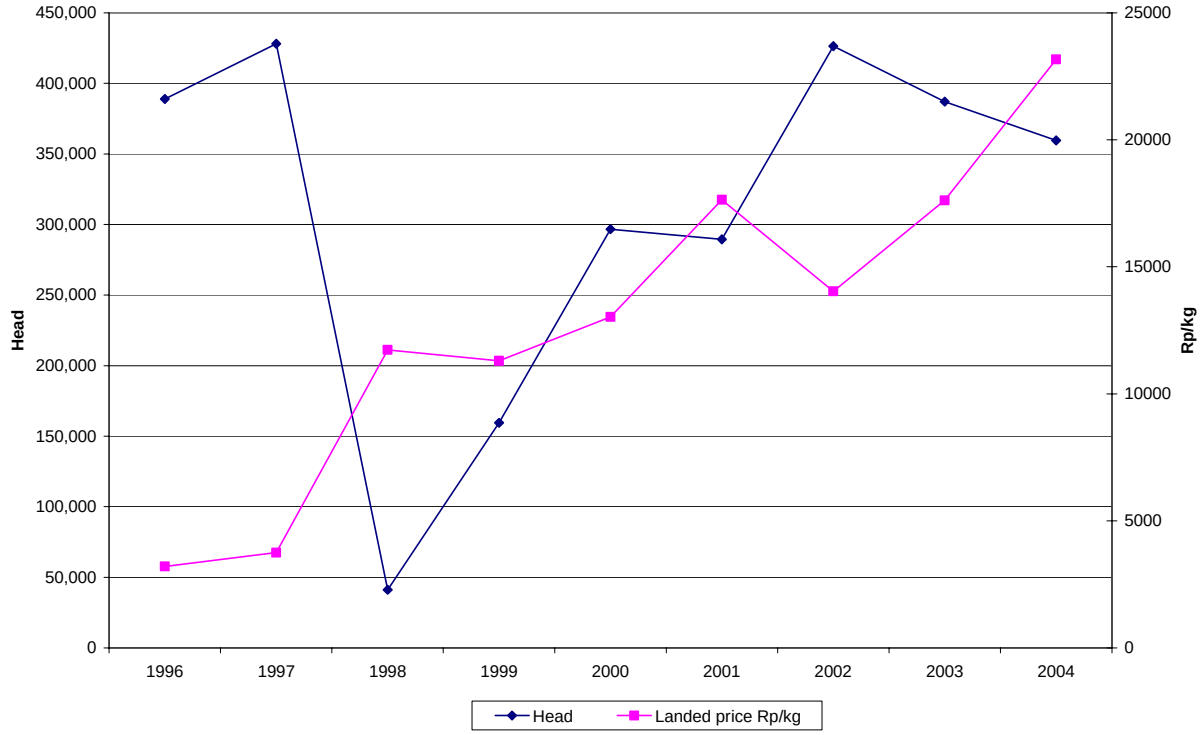
The live cattle export market has been pressured by the combination of rising cattle prices, Australian currency appreciation, or importing country depreciation and to an extent rises in freight rates.

The large majority of Australia's live export trade is with developing nations. Due to the developing nature of these economies, economic variables tend to be significantly more volatile than in developed nations. Exchange rates invariably become the mechanism by which these economies adjust to the internal and external environment. As a result, exchange rates of developed economies are highly volatile, particularly in periods of economic instability.

The Asian currency crisis and the devaluation of the Egyptian pound are two examples of where exchange rate movements have had a particular effect on the live export trade.

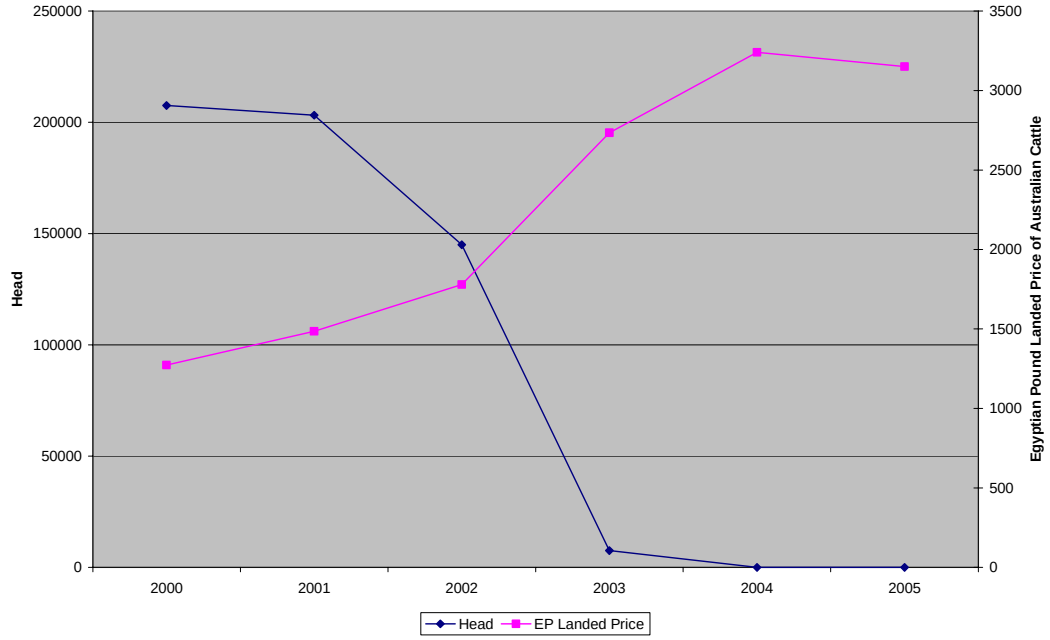
The devaluation of the Indonesian Rupiah and Philippine Peso in 1999 increased the cost of Australian cattle in local currency terms, virtually bringing the trade to a halt. The trade was also particularly affected throughout this time by the inability of local exporters to obtain export insurance and for local importers to obtain letters of credit.

Figure 6 - Rupiah Landed Price of Australian Cattle vs Indonesian Cattle Exports



The influence of currency was also a strong contributing force in regard to the loss of the Egyptian market. In June 2001 the Australian Dollar was worth approximately 2 Egyptian Pounds. By January 2004 the Egyptian Pound had fallen to 4.5 to the Australian Dollar, resulting in Australian imported cattle being unable to compete with domestically produced Egyptian cattle.

Figure 7 - Egyptian Pound Landed Price of Australian Cattle vs Cattle Exports



The above graph demonstrates the landed price of Australian cattle in Egyptian Pounds against Australian cattle imports. The graph demonstrates pricing points at which demand for Australian live cattle declines.

Similar effects were also seen during the Asian economic crisis.

Most live cattle export trade is conducted in $US terms and most of the countries that we trade with have currencies that are heavily influenced by the $US (either through currency pegs or central exchange rate management). Therefore an appreciation of the $A/$US generally results in a depreciation in these currencies against the $A, making our imports more expensive.

Most bank economists are currently forecasting the $A to depreciate against the $A which may help to increase the affordability of Australian cattle and our competitiveness against locally produced proteins.

Key Points:

- **Australian cattle prices have remained buoyant due to BSE and FMD regulatory factors, cattle supply cyclical influences and strong demand.**
- **The rise in the Australian dollar has likely influenced beef demand to a lesser extent than the price sensitive live export cattle markets.**
- **Exchange rate movements in currencies against the Australian dollar have had a significant impact on the value of Australian live cattle exports.**

Emerging Competitor Trends

Australian live cattle exports are increasingly being challenged by frozen, chilled and canned bovine products exported into traditional Asian and Middle Eastern markets by India and Brazil. These products are competitively priced and sell primarily into the lower end of the beef market.

Australian live cattle would generally, however be considered to be a fresher product when sold through wet markets and may thus hold some differentiated market share within certain specific sectors.

It is important to understand that in many live cattle importing markets, Australian live cattle does not only compete on a cost basis against other live cattle exporters, beef and buffalo imports, but also against import country domestically produced beef. The price of import country domestically produced beef, for example as seen in the Egyptian market, is commonly a close substitute product for imported cattle, buffalo and beef.

Indian Buffalo

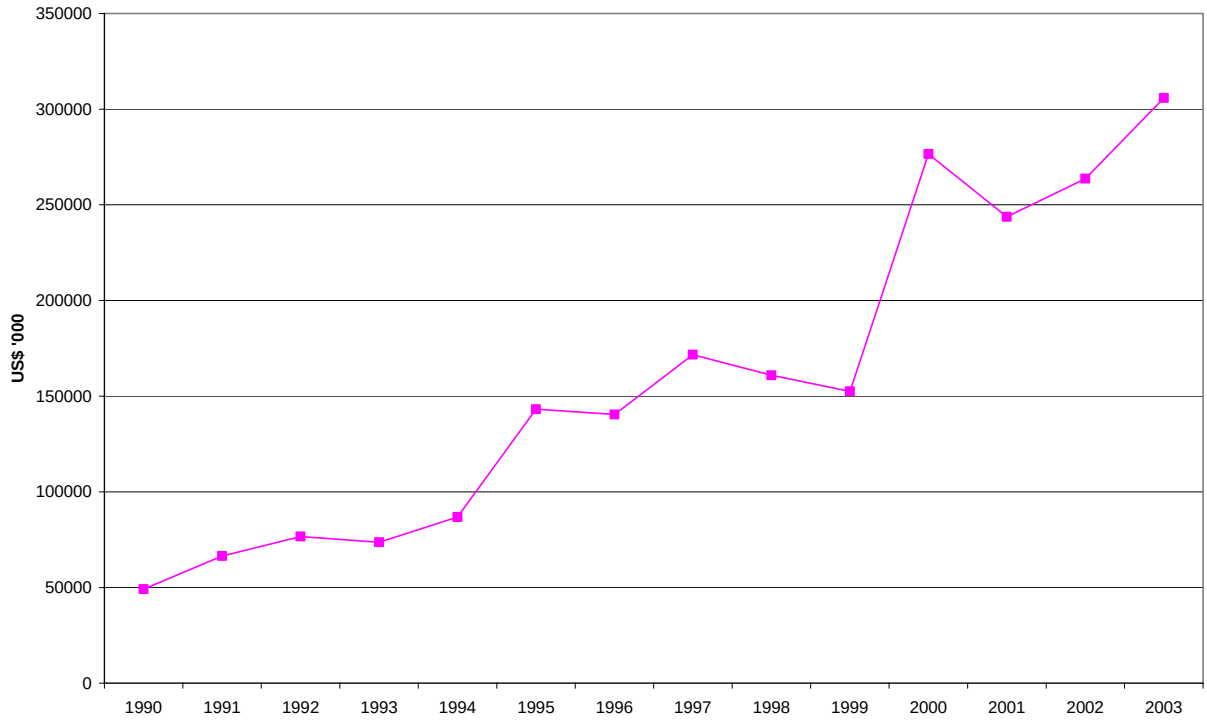
India's cattle population is estimated at 330 million head. With buffalo accounting for approximately 51% of the cattle population. Indian domestic beef demand is low due to religious and cultural influences. This provides the country with considerable scope to increase exports from a competitive production and processing base.

Indian beef exports, primarily buffalo, are forecast to reach 625 000 tonnes in 2005, responding to increased market demand and improved industry management and facilities. The country currently has nine export oriented processing plants with a total annual capacity of 850 000 tonnes. These plants have either HACCP or ISO 9000 standards. Three additional plants are forecast to come on line lifting capacity by a further 150 000 tonnes.

India is also improving beef finishing abilities with investment in feedlot operations.

The Indian Government is working to create three FMD free zones across five states where export oriented meat processing plants are currently located.

Figure 8 - Indian Buffalo Exports By Value



Primary current, or returning, buffalo meat export markets include Malaysia, the Philippines, UAE, West Africa, Saudi Arabia, Iran, Jordan, Kuwait, Iraq and Egypt. Current future target markets are Indonesia, Russia and South Africa, however FMD status is presently hampering development efforts.

If the Indian Government is successful in its development of FMD free states or zones, Indian buffalo could become a significant influence in the Indonesian market, the primary market for Australian live cattle.

Brazil

Brazil has a primarily grass fed cattle heard of 175 million head. The country has increased beef exports rapidly following improvements in pasture productivity, currency devaluation, disease control measures, aggressive marketing and changing demand patterns as a result of BSE and FMD.

Brazilian beef exports are forecast to reach 1.6 million tonnes in 2005, making the country the world's largest beef exporter in volume terms. In 2001 only 11% of Brazilian beef production was exported. This share is forecast to climb to 21% in 2006, or 1.8 million tonnes. Approximately 60% of Brazilian beef exports are in the form of canned products.

The Brazilian Real has strengthened against the US dollar from approximately 3.5 to the Dollar in 2002, to current levels of 1.65 Real to the Dollar. The strengthening Real may reduce the competitive position of beef on world markets, however effective FMD control combined with expanding production is likely to continue to see Brazil play a leading role in global beef exports.

Argentina

Argentine beef is likely to emerge as a competitive threat in the medium term in Indonesia. Argentina is regarded as FMD free with vaccination in the zone north of the 42° parallel and in the zone south of the 42° parallel is deemed FMD free without vaccination. It is only a matter of time until Argentina makes application to export fresh and frozen beef into FMD free countries such as US and Indonesia. If the US decides to allow imports of fresh and frozen Argentine beef, entry into Indonesia may quickly follow.

Uruguay

Uruguay has emerged as a competitive supplier of dairy cattle into China following a significant devaluation of the Peso. However, the capacity of the Uruguayan industry is limited by the number of available dairy cattle.

Domestic Beef

Indonesia and the Philippines both have significant local cattle herds which compete with beef derived from Australian live cattle.

Indonesia's cattle herd has stabilized at between 10-12 million head. The Indonesian cattle breeding and cattle raising sector is characterized by low levels of productivity and small almost subsistence herd sizes, especially in remote rural areas. It is unlikely that the Indonesia domestic herd will be able to meet increased levels of beef consumption and Indonesia is likely to turn to increased live cattle imports of beef imports to satisfy this need.

The Philippine cattle herd is relatively small at around 6-7 million head with numbers relatively stagnant. Around 60% of annual beef consumption is sourced from local cattle, however, this proportion is falling as local production cannot keep pace with increased beef demand. Although the majority of growth in beef imports is derived from South American and Indian buffalo.

Pork, Poultry Seafood

Amongst the most intense competition facing Australian live cattle in its key markets is competition from other protein sources. Unlike western diets where red meat consumption comprises the majority of total beef consumption, the Asian diet has traditionally been predominantly white meat. This no doubt has something to do with the relative price competitiveness of white meat against red meat in countries where food expenditure is a significant part of total household expenditure.

While the proportion of food expenditure is falling with rises as total household expenditure rises, it is still relatively high and as a result, the price competitiveness of alternative protein sources is key in any consumption decision. White meat is produced locally, using mainly locally produced livestock and feed additives and therefore carries a significant advantage over imported produced. Changes in price differentials against beef will therefore impact on the amount of beef produced vis-à-vis alternative proteins.

Key Points:

- **Competition is increasing in the Australian live cattle export market.**
- **This competition exists from other live cattle exporters, beef exporters, buffalo exporters and import country domestically produced beef.**
- **Significant competitive threats are seen from Brazil, India and Argentina and a lesser extent Uruguay**

Regulatory Requirements

The live cattle and beef export markets are not fully deregulated. In addition to trade protection measures such as duties, the sector operates within a framework of regulation. Many of these regulatory restrictions on trade have resulted from disease considerations.

The regulatory aspects of the industry can act to:

- Effectively ban a country from exporting beef or live cattle to another country. Such as is the case currently with US and EU beef exports to some traditional importing countries due to BSE.
- Create market gaps for unaffected countries to capitalise on. For example, the increase in Australian beef exports to traditional US markets such as Japan.

In some cases this regulatory framework exceeds the importance of landed cost based economic factors. For instance, in some live cattle import markets the regulatory framework dictates whether an exporting country can even enter into trade, thus in these circumstances relative landed costs of product become irrelevant for the banned export country. Additionally, changes in regulations can be the cause of major market volatility, as barriers are erected, removed or altered.

A ban on export supply does however, influence competitive positions for those with access to the market. It may for instance make some export suppliers cost competitive where previously they were not.

Thus, a linkage between regulation and landed competitive product cost exists. This regulatory framework and its influence on trade patterns is an important part of the live cattle export market. In many cases it holds the potential to override free market comparative cost considerations and influencing supplier competitive abilities.

Landed cost considerations can therefore not be assessed in terms of sustained competitive advantage and threat assessment without significant consideration being placed on regulatory factors and their potential for alteration. The balance of regulatory influences against landed cost competitive considerations will of course vary from market to market.

In regard to close product substitutes, from an importing country's perspective the decision to import live cattle is primarily based on three key considerations:

- Regulatory requirements in regard to access to imported cattle, beef or buffalo.
- The relative in country landed cost of imported cattle against domestic in-country produced cattle;
- The relative in country landed cost of imported cattle against the landed cost of fresh/frozen beef or buffalo.

Key Points:

- **Regulatory factors, particularly in regard to disease provide a framework for the live export trade and influences market structure.**
- **In some circumstances this regulatory structure will override landed cost considerations, and alter relative comparative advantage of products.**
- **Correct market forecasting structures will take into account both regulatory structure, its potential for change, and its impact on relative comparative advantage.**
- **The interplay between regulation and landed cost competitive considerations will vary significantly between different export markets.**

Disease Influences - Internal and External

Disease outbreaks and related trade restrictions have played an increasingly important role in the cattle industry. World beef markets have traditionally been divided into disease restricted - primarily due to foot-and-mouth disease (FMD) - and disease-free countries. Today, beef markets have being fragmented further into Bovine Spongiform Encephalopathy (BSE) countries, minimal-risk BSE countries, and BSE-free countries.

BSE initially began to influence trade following the origination of the disease in meat and bone meal in the United Kingdom in 1984. This meat and bone meal was exported to many countries throughout the world, where some of the product was used as cattle feed. Restrictions were subsequently placed on exporters of European beef.

Following the 2003 finding of BSE in the US, the country received bans on trade into many traditional beef markets including Japan, Korea, and Taiwan. The finding of BSE in Canada also resulted in restricted trade for that country.

Restrictions on trade have acted to change the flow of animal products as countries adjusted to markets redefined by disease status.

In 2004, the US and Canadian beef faced complete bans in major overseas markets, while beef and cattle imports and exports continued among the North America Free Trade Agreement (NAFTA) countries (Canada, Mexico, and the United States) under a variety of restrictions.

Despite the influence of BSE on international trade, prices remained buoyant due to a combination of reduced supply due to the US beef cycle, and strong global and US domestic demand.

The impact of this was to make Australia beef processors more competitive against Australia's live cattle market, indirectly resulting in increases in the landed cost of Australian cattle and subsequently reduced live exports.

The US and EU are slowly negotiating access back into their traditional markets with present negotiations concentrating on cattle identification and lifting restrictions on beef from younger cattle. It is possible that this trend will gradually see increased pressure back on Australian beef processors, however this is likely to be a long-term process coinciding with a forecast increase in beef supply in the US following cyclical herd rebuilding in coming years.

In the meat substitute trade, outbreaks of Avian Influenza have influenced poultry markets in recent years. The influence of this disease both on the supply and price of substitute product, and wider economic effects is difficult to forecast.

Key Points:

- **Much of the global live cattle and beef export market structure has been dictated by BSE and FMD status.**
- **The impact of BSE has created meat export opportunities for BSE free countries such as Australia in premium markets that were previously serviced by BSE affected countries, reducing cattle availability for exporting live.**
- **The present regulatory advantage in meat markets is expected to decline in future as the US, Canada negotiate access for younger beef and cattle into traditional markets.**
- **While BSE and FMD free, Australia is nonetheless host to a wide range of cattle diseases with the potential to influence cattle trade economics.**

Production Distribution Alternatives

Cattle producers in Australia face differing distribution and market alternatives. Northern cattle can move across the top end for live distribution through ports such as Darwin, while a range of differentials determine the economic ability of producers to transport cattle south into the export or domestic meat markets.

Broadly, supply areas can be placed into two groups:

- Primarily because of distance to processing and finishing alternatives and rangeland production systems, suppliers in the north of Western Australia (particularly the Pilbara and Kimberley), the Northern Territory, and to a lesser extent northern Queensland are significantly reliant on the live cattle market. In general, rangeland producers have found it difficult to economically finish cattle to a consistent standard for domestic and export markets without moving cattle closer to controlled feed and grain production areas. For some producers this is not usually economically viable because of transport costs.
- Depending on market price, cattle type, season, and transport costs producers further south face increased market options for their stock. Southern Queensland, the South West, Wheatbelt and Midlands of Western Australia, New South Wales, South Australian, Tasmanian and Victorian producers are able to sell into the domestic or export processing markets.

There is no clear line dividing northern live export cattle production areas from southern fattening areas. Except in extraordinary years where southern markets maintain a 20-30c/kg lw advantage (transport costs to southern fattening areas) to northern markets, the majority of cattle from north of Western Australia (particularly the Pilbara and Kimberley), the Northern Territory, and to a lesser extent northern Queensland would be normally destined for live export.

The procurement of cattle for live trade pushes further down into central and Queensland where the live export trade is relatively profitable (eg. in years when live export markets were booming and beef markets were depressed 1995-1997) and recedes north and westwards when the meat is more profitable (eg. in 2004 and 2005).

Northern producers tend to face a higher production risk profile, due to a combination of lack of market diversification options and rangeland climatic fluctuations.

In contrast with the eastern states cattle sector, the Western Australian cattle sector is primarily focused towards the live cattle trade and beef production targeted at the domestic market. Despite rising Western Australian beef exports in recent years, the state contributes less than 3% of the total value of Australian beef exports.

Cattle processing capacity in Western Australia has declined. Since 1979/80 in excess of 35 cattle processors, 10 with export capacity, have closed. This has been partly offset by some domestic processors obtaining limited rights to export. The primary factors in this trend include:

- The introduction of the Australian Code of Practice for Construction and Equipment of Abattoirs;
- East coast and external beef producers with better economies of scale;
- Historic relative competitiveness of store cattle (store cattle prices in Western Australia are historically higher than east coast prices);
- Seasonal influences in the north resulting in under utilisation of capital (Domestic plants are less influenced by seasonal factors due to grain feeding of cattle in late summer, autumn and early winter, and more consistent demand);
- Production and processing inefficiencies and management;
- Brucellosis and Tuberculosis Eradication Programs (Kimberly) reducing cattle numbers;
- Access to labour due to such factors as the mining sectors ability to pay higher rates; and,
- Historic live cattle sector demand reducing the competitive ability of processors to bid for product.

In the south of Western Australia processing capacity is presently not limiting the ability of the beef export sector to expand, with estimates that existing plants could process up to 40 000 additional cattle per month. However, the industry's ability to profitably compete directly into the export market is limited.

Key Points:

- **Cattle producing regions are not evenly reliant on the live cattle export sector.**
- **Northern Australian producers have greater exposure to the live cattle export sector. Many of these producers are essentially locked into the live cattle sector, providing a supply base for the industry.**
- **Western Australia's small beef exporting sector, and reduced regional processor access in the north increases producer exposure to the live cattle export market, particularly, relative to many east coast cattle producers with enhanced cattle distribution options.**
- **Despite closures over the last two decades, Western Australia has adequate processing capacity. Provided there is sufficient price incentive southern producers will provide increased volumes of cattle into the processing sector and away from the live trade. This is an option many northern producers do not have.**

Trade Barriers

There are generally fewer and lower tariff barriers for live cattle (but more non-tariff barriers, i.e. disease controls) than exist for the beef trade. Changes in beef tariffs could therefore alter the competitiveness of live cattle imports and result in a loss of share to beef imports.

While the average effective import tariff rates on red meat (beef, sheepmeat, goat meat and offal) and live animals (cattle, sheep and goats) from Australia entering ASEAN have fallen over the last decade, there are still significant tariff barriers (some exceeding 40%) impacting the competitiveness of our products.

In addition, a number of other challenges (non-tariff barriers) remain when servicing the ASEAN markets. In particular, equity and transparency regarding sanitary and phytosanitary standards and other technical trade access matters are a key concern.

Apart from on-going efforts through the WTO to unilaterally reduce tariff and non-tariff barriers on global trade in meat and livestock, the Australian government has recently initiated discussions aimed at establishing an Australia-ASEAN-NZ FTA.

The prospects of an FTA delivering ongoing market access improvements in ten Southeast Asian Nations (Brunei Darussalam, Myanmar [Burma], Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam) would significantly advance our trade potential.

Key Points:

- **Despite efforts to reduce tariffs significant barriers continue to exist.**
- **On-going trade discussions are likely to continue to see reduced levels of tariff protection in future. However, significant non-tariff barriers will remain.**

Animal Welfare

Since it began the Australian live export trade has been the centre of an intense and persistent campaign by the animal welfare lobby protesting against the live shipment of animals. The Cormo Express incident that led to unacceptable welfare and mortality outcomes attracted widespread criticism of the trade within Australia and internationally.

In response to this the Minister for Agriculture Fisheries and Forestry announced a review into the livestock export industry in response to concerns about animal welfare.

This review examined:

- The adequacy of welfare model codes of practice;
- The adequacy of regulatory arrangements;
- The types of livestock suitable for export;
- Supervision of voyages to ensure accurate reporting; and
- The factors that contributed to excess mortalities on the Cormo Express.

The review made the following recommendations:

1. The development of a national standard for livestock exports
2. The Government should be solely responsible for issuing export licenses and a compulsory levy be established to find research and development activities
3. The criteria for approval of export licenses should be explicit in the legislation
4. 'Third party' veterinarians accountable to AQIS must be contracted to oversee shipments and ensure license conditions are adhered to.
5. A suitably qualified veterinarian must be on board all livestock export ships where the journey takes over 10 days
6. Must be a continuation of investment in R&D
7. A quarantine holding facility in the Middle East must be established and a MOU to govern the Saudi trade must be established.
8. A national response system should be established to manage any future livestock export emergency

This review brought the end of industry self-regulation. These recommendations have now been implemented and while they have led to a more robust and sustainable regulatory structure they have also significantly increased the cost of live exporting. Costs have also increased both directly and indirectly in terms of additional administrative requirements for live exports.

Australian livestock export markets are extremely price sensitive and exporters have been unable to pass on the increased regulatory costs to customers and as a result margins have fallen. This is particularly the case in countries where Australian exports compete against livestock coming from countries that do not have such stringent export regulations.

Over time, the increased cost of compliance following an adjustment period should lead to a consolidation in the number of live export licensees, a fall in competition and the restoration of margins.

The recent complaint lodged by Animals Australia with the WA Department of Local Government and Regional Development, who administer the WA Animal Welfare Act (2002) highlights the increasing personal risk posed to industry participants by the animal welfare lobby.

This and uncertainty to the trade posed by the continued and ongoing protests of the animal welfare lobby will also increase the risk return expected by participants and investors in this industry.

Key Points:

- **Animal welfare issues remain a significant threat to the on-going economic viability of the live cattle trade.**
- **Increasing risks exist for participants in the industry. These risks need to be balanced against an improvement in returns, however this is not always possible given present price pressures.**
- **There is potential for industry consolidation due to animal welfare cost increases and heightened risk of industry participation.**
- **While recent additional regulation of the trade has added to compliance costs and reduced margins, in the longer term they may serve to make the trade more sustainable and less volatile**

Shipping Influences and Freight Rates

Access to Shipping

The shipping of live cattle requires specialist carriers. Changes to shipping regulations in addition to requirements for improved animal welfare is placing pressure on shipping access to several markets. Some vessels are expected to become obsolete or require upgrading following the introduction of new maritime regulations in 2007.

Economic costs have also led some carriers to exit the live cattle shipping market. At the same time however, there is an expectation that other carriers will enter the market.

Changes in capacity influence freight rates and shipping access, especially during peak demand periods. Live cattle vessels are expensive to run primarily because of the limited opportunities for return loading. Thus many vessels run empty on the return voyage increasing per head shipping costs and reducing the relative competitive position of the trade against substitute processed product.

Freight Rates and Export Destination

Differentials in sea freight rates have two primary influences on trade structure:

Relative Australian production location competitive advantage into different export markets is created. For example Western Australia has a freight rate and time advantage into the Middle East; and,

Movements in freight rates can have a significant influence on the relative competitiveness of Australian cattle in some markets.

Because live cattle are a lower value added product, freight rates as a component of unit costs combined with commonly one way freight shipments, result in freight movements having a significant effect on product competitiveness. It is therefore likely that freight rate increases as a result of rises in fuel costs have a larger proportional influence on the live cattle trade than on the close substitute processed beef.

Key Points:

- **The distribution of Australian cattle between export markets is partly influenced by sea freight differentials influencing comparative advantage.**
- **Live cattle exports are likely to be more significantly influenced by freight rate changes than higher value substitute products.**

Supply Side Constraints

A number of broad land use factors are influencing the production of cattle for the live market.

These include:

Government Legislative Restrictions - Land Use

State Government restrictions on freehold and leasehold land for agricultural production. Includes, for example, environmental protection factors such as restrictions on clearing, and land use restrictions due to urban encroachment.

Economic - Alternative Use

In northern Australia (NT, north-west WA, WA Pilbara and far northern QLD) there are few land use alternatives to the live cattle export industry with the major alternative being breeding for southern cattle fattening operations. In areas outside of these, the live export industry competes directly with alternate agricultural pursuits with land use being determined by:

- Breeding & fattening for beef production
- The relative profitability of grain and sheep meat production;
- The reduction in profitability of wool production; and,

In Western Australia an increase in land values in the south west of the state, as production shifts to intensive agricultural land uses such as wine and complementary activities such as tourism.

Land Ownership - Alternative Use

Within cattle production zones there are three primary land ownership influences outside primary cattle production objectives. These ownership interests can reduce supply capacity due to differing land use objectives and management considerations:

The purchase of leasehold land by the Department of Conservation and Land Management (CALM).

The purchase of land by Aboriginal groups and the Indigenous Land Corporation on behalf of Aboriginal Groups.

The purchase by mining companies of leasehold and freehold land in prospective or mining regions. The mining industry has purchased significant leasehold land within the Pilbara, Wiluna, Leonora and Kalgoorlie areas. Freehold land purchases are also significant in the south west of Western Australia.

For instance, these groups presently own approximately 20% of the total Western Australian Leasehold area. To a significant extent these parties are influencing both the base production capacity and management of northern cattle production areas. Additionally, mining companies such as Alcoa are significant cattle producers in the south West of Western Australia.

Government purchases reduce land access, mining companies continue to produce cattle on leasehold and private land to a significant extent, however cattle production may be reduced in some areas, and Aboriginal groups are presently experiencing management difficulties. This is acting to significantly reduce the total cattle production base particularly in the Kimberly and Northern Territory.

For instance in the Kimberly region of Western Australia 32% of leases are Aboriginal controlled. Turnoff numbers from these leases have dropped an average of 50 percent with present estimates of 14 455 head turnoff, or 10% of regional total turnoff from an estimated 24% of total regional land capacity.

Within the Kimberly two thirds of Aboriginal stations (19 leases) have herds of less than 3 000 cattle, considered an economically viable level. These stations face potential for economic collapse.

The ability of northern produces to significantly expand herd numbers and therefore product available to the live trade is limited by rangeland carrying capacity, seasonality of pasture growth and the high incidence of droughts over the past two decades (1993-96, 1998/99 and 2002-2005).

Key Points:

- **The live cattle production base particularly in Western Australia and the Northern Territory is significantly influenced by land owners who do not have cattle production as their primary reason for land control.**
- **These factors are acting to influence the production base and thus total regional cattle supply.**
- **Rangeland production systems are regulated by carrying capacity. Thus the ability to expand supply past a certain maximum point is not possible.**
- **Many stations are currently under producing and thus management and ownership objectives are becoming an increasing influence on total cattle supply.**

Primary Live Cattle Supply And Demand Influences Summary

The above overview analysis highlighted a series of key factors currently influencing the Australian live cattle export sector. It is designed to act as a background framework for decision making in regard to factors currently impacting upon the structural dynamics of the sector. The following table further summarises these factors and highlights others to be addressed within the specific country analysis sectors of this report.

Table 3 - Live Cattle Key Drivers

DEMAND DRIVERS	SUPPLY DRIVERS
Australian cattle price against substitute product. For example, in-country cattle and beef import costs.	Relative returns of production alternatives.
Exchange rate differentials. Particularly Australian Dollar against importing country currency.	Domestic and international disease influences.
Regulatory and disease issues impacting on trade flows.	Australian interplay between beef prices and live prices.
A rise in global GDP and GDP per capita is underlying an increase in protein consumption.	Climatic and seasonal conditions.
Individual country GDP and GDP per capita growth rates.	Cattle cycle
Increased market access achieved under global trade agreements contributed to a gain in animal product trade over the past decade.	Processor competition for cattle.
Fresh product preference.	Feed grain prices influencing processor option returns.
Religious and seasonal cycles.	Access to shipping.
Government restrictions on trade flows. For example, duty rates.	Animal welfare regulations.
Competition from Brazil and Indian buffalo increasing supply in the low to middle per capita sector of the market.	Production base access and regulation.
Substitute product disease issues.	Female herd liquidation.
Herd upgrading. For example, China dairy.	Regional carrying capacity.
Co-product demand - hides, offal etc.	Management skills and ownership objectives.
Differing sea freight rates to export destinations influences Australian regional export demand.	Price pressures in the Australian dairy sector.
Freight and on costs.	
Importing country production conditions eg. Drought.	
Australian cattle type.	
Trend towards higher protein diets in the US maintaining demand.	

9 Demand and Supply Influences in Individual Live Export Markets

9.1 Indonesia

9.1.1 History of the trade

Until the financial crisis in 1997, steadily increasing per capita incomes and strong population growth were driving a rapid increase in beef consumption from a low base. During the first half of the 1990s the growth in beef demand outstripped the capacity of Indonesia's falling cattle herd to supply.

Indonesia's cattle herd has stabilized at between 10-12 million head. The Indonesian cattle breeding and cattle raising sector is characterized by low levels of productivity and small almost subsistence herd sizes, especially in remote rural areas.

To meet increased levels of beef consumption Indonesia resorted to imports of live cattle for subsequent fattening and slaughter and to imports of frozen boxed beef.

Tariffs on imports were set to assist both local producers and to encourage feedlotting: there were no tariffs on imported breeder cattle, a 10% tariff on imported live feeder cattle and a 35% tariff on frozen beef.

Throughout this time live cattle imports benefited from government policies to encourage live cattle imports and modernize Indonesia's beef production sector. This saw considerable investment in large scale company feedlots and in the associated infrastructure such as yards, loading and unloading infrastructure and processing facilities (Source: Hadi et al, 2002, pg 10).

The massive devaluation of the Rupiah and the associated financial crisis that followed had a devastating effect on Indonesia's beef industry. Importing cattle became uneconomic and feedlots were laid idle virtually eliminating around 25% of Indonesia's beef supply. The Rupiah price of local cattle subsequently surged and prompted slaughter of scarce local breeding stocks (Source: Hadi et al, pg 10).

One policy response to the crisis was to reduce tariffs; the levy on imported feeder cattle fell to zero and the tariff on beef was reduced to 5%.

As the Indonesian economy recovered and per capita levels of GDP increased, beef consumption began to rise again. To supplement beef production from its' local herd live cattle imports resumed and by 2002 had been restored to pre-crisis levels. However, since that time cattle imports have moderated as the increased cost of feeder cattle from Australia and another depreciation in the Rupiah has tightened feedlot margins. Over the past couple of year cattle imports have eased to 360,000 head (down from peak levels of 430,000 head in 2002).

According to feedlot operators, the break-even exchange rate for live cattle imports is 10,000Rp per $US (7,500Rp per $A). If the cattle prices exceed this level it is not profitable to feedlot imported cattle.

Table 4 - Australian Exports of Live Cattle and Beef to Indonesia

Year	Beef Exports (Tonnes, sw)	Live Cattle Exports ('000 head)
1995	10,401	228,422
1996	16,615	388,974
1997	24,332	428,077
1998	1,663	41,174
1999	11,583	159,548
2000	13,092	296,653
2001	9,587	289,525
2002	14,515	426,458
2003	12,994	387,160
2004	7,127	358,638

Source: MLA

9.1.2 Meat Consumption

Average annual per capita consumption of meat in Indonesia is approximately 20kg/head. Consumption is dominated by fish (12kg/head) and poultry (4kg/head) where rates of consumption have grown significantly over the past decade. Per head consumption of beef remains very low at around 2kg/head annually (in comparison north Asian nations consume around 5 times more beef than in Indonesia).

Table 5 - Per Capita Meat Consumption

Year	Beef	Sheep	Pork	Poultry	Fish	Total
1990	1.75	0.51	0.69	2.70	7.87	13.53
1991	1.76	0.59	0.61	3.10	8.19	14.25
1992	1.93	0.59	0.74	3.43	8.25	14.93
1993	2.14	0.60	0.90	3.73	8.80	16.17
1994	2.05	0.53	0.96	4.28	9.67	17.49
1995	1.89	0.49	0.91	4.57	9.47	17.33
1996	2.13	0.51	0.96	4.83	9.74	18.18
1997	2.18	0.54	0.73	4.50	9.87	17.83
1998	1.97	0.40	0.68	3.03	9.34	15.42
1999	1.78	0.37	0.80	2.97	9.91	15.83
2000	2.08	0.40	0.84	3.51	10.95	17.78
2001	1.99	0.42	0.77	4.04	12.09	19.32
2002	*2*	*0.45*	*0.8*	*4.1*	*12.2*	*19.55*
2003	*2.1*	*0.45*	*0.8*	*4.2*	*12.4*	*19.95*
2004	*2.2*	*0.45*	*0.8*	*4.3*	*12.6*	*20.35*
2005	*2.3*	*0.45*	*0.8*	*4.4*	*12.8*	*20.75*

Source: CIE GMI model

A major constraint to increased levels of beef consumption in Indonesia is affordability or the relative affordability of beef vis-a-vis alternative proteins for consumers with very low discretionary spending budgets. In Indonesia beef retails at around three times the cost of fish and twice the cost of poultry, making it only a very occasional meal choice for lower to middle incomes earners.

Levels of poultry consumption were severe affected in the late 1990s by the combined impact of the weak Rupiah and the high international corn prices. However, international feed grain prices have since eased, improving affordability and allowing increased levels of consumption. This provides another illustration of the sensitivity of meat consumption to price changes.

Beef consumption levels continue to be repressed by the lack of domestic supply and high cost of feeder cattle from Australia, making beef a relatively expensive protein source.

9.1.3 Beef Market Structure

Indonesia consumed a total of 370kt of beef, largely supplied by its' domestic cattle industry (280kt) but supplemented through beef derived from imported cattle (60kt) and beef imports (30kt).

The large majority of local beef and beef derived from Australian cattle is sold through the wet market system. The remainder, around 10-20% is distributed through supermarkets (mainly ex-patriots) food service or the processing sector. One factor supporting live cattle imports in the Indonesian market is the lack of refrigeration and the perception that fresh beef is a superior product.

Table 4.1.3 Indonesian Beef Supply by Source (kt)

Year	Native Cattle	Imported Cattle	Imported Beef	Total Supply
1995	261.5	50.5	7.3	319.3
1996	268	79.2	15.8	363
1997	266.5	87.2	23.3	377
1998	320.8	21.8	8.8	351.4
1999	280.9	27.9	10.5	319.3
2000	276.9	63.0	26.9	366.8

Source: CIE GMI model

Meat derived from Australian cattle is sold on the wet market and is differentiated from beef derived from local cattle. There is a preference for local cattle based on the harder carcass and lower fat content of native cattle that makes this beef more suitable for meatballs (Source: Hadi et al, 2002, pg 51). There is country of origin labeling through the supermarket sector, however, most supermarket shoppers are indifferent as to whether the beef is from local cattle or imported beef.

In Indonesia frozen meat imports are used for meat ball production and have met with strong price competition from illegal Indian buffalo meat. The high price of Australian chilled beef has seen some retailers move towards local produced beef while the recent re-entry of US beef has displaced Australian beef in Japanese restaurants, five star hotel chains and US franchised restaurants. As a consequence Australian beef exports to Indonesia contracted by 45% to 7,127 tonnes in 2004 (Source: MLA).

9.1.4 Feedlot Sector

Feedlot operations commenced in 1990 when the Indonesian government allowed and encouraged feeder cattle imports from Australia.

Imported cattle are favoured because large numbers can be more easily sourced and transported at relatively low cost. Domestic cattle would need to be sourced from many small landholders making it difficult to accumulate large numbers of relatively consistent cattle and necessitating high accumulation and transport costs. In comparison to local cattle which gain between (0.5-0.8kg/head per day) imported cattle have higher average weight gains (1.1-1.4kg/head per day).

Cattle are transported from Australia to Lampung on ships with carrying capacities ranging from 600 to 4000 head.

Table 4.1.4 Feedlot Economics

	$US/kg	Rp/kg	Total Cost
Landed cost (400kg lw)	1.50	14,700	5,880,000
Handling cost		400	160,000
Quarantine		10	4,000
Transport & Insurance		100	27,500
Feed cost (10kg per day for 100 days)		2,450	980,000
Labour		1,000	400,000
Processing	Offset by offal revenue		
Total Cost (550kg)		13,570	
Wholesale price	$US2.50/kg	24,500	
Margin			

Rp per $US = 9,800

From the table above the landed cattle price, feed cost and the wholesale price of beef are the major sensitivities. As these are also the imported components, the sensitivity of these factors is heightened with any volatility in the Rupiah.

The high price of beef in Indonesian saw feedlot capacity utilization at near capacity in the lead-up to Ramadan and prompted fears that the Indonesian government may relax its' zero tolerance on BSE/FMD and encourage imports from India and South America (Source: Livecorp).

The Great Giant Livestock Company (GGLC) and PT Santori are examples of feedlot companies operating in the Lampung province of Indonesia. The GGLC is a subsidiary of the Great Giant Pineapple Company and utilizes waste pineapple pulp to feed cattle. PT Santori mixes its' own feed and changes rations depending on cost and availability of mostly imported feedstuffs.
(Source: Hadi et al, 2002, pg 36).

9.1.5 Processing Sector

In contrast to Australia where there is a well established refrigerated distribution system, the processing sector in Indonesia is geared around supplying smaller quantities of fresh beef to the predominantly wet market distribution system.

To facilitate and control the slaughtering of cattle, the Indonesian government has provided slaughterhouses in every province. Slaughterhouses are classified according to size; type A (>100 head per day), type B (50-100 head per day) and type C/D (5-10 head per day). In 2000, there were 5 type A units, 35 type B units and 724 type C units.

Given the decline in Indonesian domestic cattle numbers, processing sector capacity in Indonesia is likely to be increasingly underutilized unless there is a further expansion in live cattle imports.

Furthermore the sub-scale nature and smaller levels of capital expenditure required to operate a processing facility in Indonesia, combined with abundant sources of cheap labour is a major factor supporting the live trade vis-à-vis beef imports.

The processing sector is also an important source of employment, which underlies some of the policies supporting the live cattle trade in Indonesia.

9.1.6 Disease Controls/Government Policies/Regulatory Environment

A crucial factor under pinning the viability of Australian live cattle imports into Indonesia is the continuation of the ban on fresh beef imports from FMD affected areas. Although it recognises regionalization (whereby imports are allowed from certain FMD free regions within a country affected by FMD) Indonesia is one of the few South East Asian countries that does not allow fresh and frozen product from South America or India.

Unlike many other Asian nations that accept product from India and South America, the ban on FMD product allows beef to trade at higher values (closer to Pacific Rim values) than in other Asian nations. Some FMD product illegally enters Indonesia, lowering beef prices and reducing feedlot margins.

The maintenance and enforcement of Indonesia's ban on FMD is crucial in under pinning volumes of Australian live cattle volumes to Indonesia. The ban on FMD imports through its' support of the domestic Indonesia cattle industry and feedlot sector indirectly supports Government employment initiatives. The maintenance of a domestic industry provides employment opportunities throughout the Indonesian cattle raising, feedlotting and processing sectors. Most importantly it provides a source of employment in rural and remote areas where employment opportunities are extremely scarce.

As an example of this in 1990, the Indonesian Government introduced a business partnership between feedlot and smallholder breeders. Feedlots which have financial and management resources, provide cattle, feed and technical assistance to smallholders and repurchase these cattle at the prevailing market rate (Source: Hadi et al, 2002, pg 29).

The Indonesians are coming under increasing pressure from the Indian government to allow Indian buffalo imports. At this stage the importance of the domestic beef industry as a source of employment, particularly in rural areas, has seen the Indonesian Government sternly resist approaches from the India Government.

The Director General of Livestock Services (DGLS) has all but confirmed that meat imports will be allowed from Argentina in 2006. Subject to a risk assessment, Indonesia is likely to recognise OIE FMD regional freedom for Argentina and will allow imports from south of the 42nd parallel – the area within Argentina that is recognised by the OIE as free without vaccination.

9.1.7 Seasonality

The increasing dominance of the Indonesian trade and its' reliance on cattle from northern Australia means that live cattle exports have increasingly been exported out of northern ports. Furthermore, having an extremely large Muslim population (about 87%), demand will peak around Muslim religious festivals ie. Ramadan.

It is likely that cattle exports will be increasingly influenced by seasonal conditions in northern Australia and around meeting peak end of year demand periods (Ramadan). Peak months for cattle exports will likely be July-October prior to the commencement of the northern wet season.

9.1.8 Landed Cost of Australian Cattle

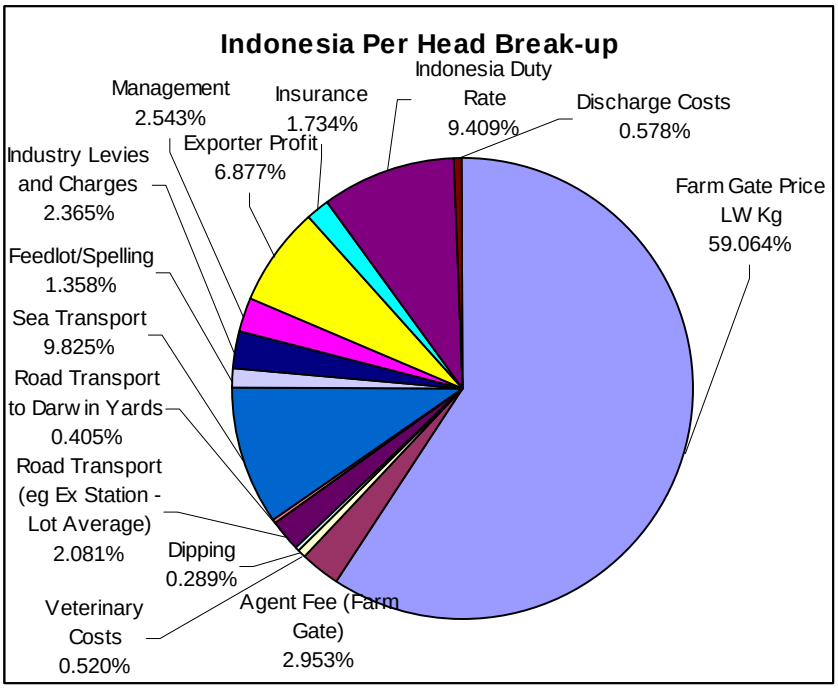
Indonesia feedlot margins are the main driver of demand for Australian live cattle. Feedlot margins are driven by the wholesale price of beef vis-à-vis alternative protein sources. A key variable driving Indonesia feedlot margins is the landed price of Australian cattle – which is responsible for about 80% of the cost of the final product.

The impact of the currency crisis was to increase the cost of Australian cattle beyond the means of the average Indonesian. It became uneconomic to import Australian cattle for feeding because the price beef could be sold for in Indonesia could not sustain the price of cattle. The increased price of beef in pacific rim markets has increased Australian cattle prices, however, since the currency crisis the Rupiah has gained ground against the $A assisting an improvement in feedlot margins and encouraging increased live cattle imports.

9.1.9 Indonesia Per Head Break-up

The pie graph below demonstrates a per head break up of landed cost components. It can act as a visual reference to price sensitivities and therefore possible component influence on import country demand.

Figure 9 - Indonesia Per Head Break-up



The following model shows the cost components that contribute towards the landed price of cattle at Indonesian ports. The price of Australian cattle and the Indonesian exchange rate are the major variables that influence this price.

Table 6 - Landed Cost Model Australian Steers Delivered Indonesian Port

INDONESIAN FEEDER STEERS Ex Darwin		Total Cost
Livestock Costs		
Average Weight (Kg)	350	
Farm Gate Price LW Kg	1.46	511
Agent Fee (Farm Gate)	5%	25.55
Veterinary Costs		
On Station		4.5
Dipping		2.5
Road Transport (eg Ex Station - Lot Average)		
Distance (Km)	400	
Cost per deck/Km	1.8	
No. Head Per Deck	40	18
Feedlot/Spelling		
Days on Feed	2	
Feed Costs Per Day	2	4
Average Daily Wt. Gain	*0.8*	
Ear Tag		0.35
Insurance		6
Electrolytes etc.		1.4
Road Transport to Darwin Yards		
Distance (Km)	70	
Cost per deck/Km	2	
No. Head Per Deck	40	3.5
Industry Levies and Charges		
Cattle Transaction Levy		3.5
Wharf Charges		1.66
Third Party Vet		4
AQIS/On charges		1.8
Ports Charge		2.5
Warfage		4
Receival Yard Fees		1
Weighbridge		2
Management		
Administration		7
Office		15
Sub Total		595
Exporter Profit		
Profit	10%	59.5
Value at Darwin		
FOB		654.5
Sea Transport		
Freight Per Head		85
Insurance		
Insurance Per Head		15
Sub Total		754.5
Indonesia Alongside Ship Costs		
Indonesia Duty Rate	10%	75.45
Discharge Costs		5
FAS Main Indonesian Port		
Australian Dollars		**834.95**
US Dollars	**0.75**	**626.2125**
RMB	**7373**	**6156086.35**

9.1.10 Economic Assessment

Two important factors driving Indonesia beef consumption are the rate of economic growth and the level of the Indonesian exchange rate (which affects the price of beef derived from imported product). The following analysis looks at recent trends and the outlook for these key factors.

Indonesia is ranked 4th in the world in terms of population with 238 million people with a population growth rate of 1.3, higher than world average of 1%.

Indonesia is characterized among the lower middle-income countries of the world. According to World Bank estimates, 17 % of Indonesia's population lives below national poverty line and Indonesia is ranked 111 in 177 countries of the world in terms of human development index.

Total gross national income in 2003 was $US208 billion. Per capita income was $US810, however, in terms of purchasing power parity Indonesia's per capita GNI was $3,210 in 2003.

Table 7 - Major Economic Indicators

	2001	2002	2003	2004	2005f	2006f
Population (million)	208	211	214	216		
GDP ($USb)	164	200	239	257		
Per capita GDP ($US)	787	948	1,116	1,191		
GDP (% change)	3.8	4.4	4.9	5.1	5.8	5.8
Interest rates	14	16	13	8		
Inflation	11.5	11.8	6.8	6.1	8.2	6.5
Currency Units (Rp per $US)	10,261	9,311	8,577	8,939		
Fiscal balance/GDP (%)	-2.4	-1.5	-1.7	-1.1		
Current account/GDP (%)	4.2	3.9	3.4	1.1	2.1	1.5
Foreign Debt/ GNI (%)	98	79	68			
Unemployment (%)	8.1	9.1	9.9			

Source: World Bank & Asian Development Bank

The growth rate of GDP was 5.1% in 2004 on the back of a strong increase in private consumption and is forecast to increase to in the period 2006-2007.

Indonesia's labour force growth rate of 1.2% in last six years was close to that of the other East Asia-pacific countries average. The unemployment rate rose to from 9.1% to 9.6% in 2005. A major challenge for the Indonesian economy over the medium term is job creation as an additional 2 million job seekers enter the labour market each year.

Inflation averaged 6.1% in 2004, the lowest in 4 years, allowing the central bank to reduce interest rates in 2004.

Despite higher spending on fuel subsidies (a common practice across Asia) the fiscal deficit was contained at 1.1% of GDP. In 2005 the Indonesia government implemented measures to reduce the fiscal impact of high fuel subsidies, to date the government has been able to manage the political fallout from these measures.

Indonesia has a market-based economy in which the government plays a significant role. It owns more than 164 state-owned enterprises and administers prices on several basic goods, including fuel, rice, and electricity.

Indonesia, the only Asian member of the Organization of Petroleum Exporting Countries (OPEC), ranks 15th among world oil producers, with about 2.4% of world production. The state owns all oil and mineral rights in the aftermath of the financial and economic crisis that began in mid-1997, the government took custody of a significant portion of private sector assets through acquisition of non-performing bank loans and corporate assets through the debt restructuring process.

The key economic sectors in Indonesia are agriculture & mining, manufacturing and services. Agriculture has historically been the dominant activity in terms of both employment and output. The country has a vast range of mineral resources, which have been exploited rapidly over the past three decades, enabling the mining sector to make an important contribution to the balance of payments. The manufacturing sector began a rapid expansion in the mid-1980s, and in 1991 the share of manufacturing in GDP exceeded that of the agricultural sector for the first time.

The manufacturing accounted for 43.6% of total output and the services sector has contributed to 39.9% of GDP and employed more than one-third of the working population. Share of three sectors in labour force are agriculture 45%, industry 16% and services 39% (Source: Asian Development Bank).

Indonesia's economic outlook looks promising in 2005. Economic growth accelerated to about 5.1% in 2004 and is expected accelerate further in 2005. The GDP per capita has reached pre-crisis levels. Growth is driven primarily by domestic consumption, which accounts for roughly 75% of Indonesia's gross domestic product

Problems that continue to put a drag on growth include low foreign investment levels due to the uncertain legal and regulatory environment and other governance issues. It is estimated that Indonesia requires upward of $70b in capital investment for key infrastructure projects over the period 2005-2009.

While external debt is at a manageable level, the economy is still vulnerable to sudden changes in investor confidence that may lead to capital outflows and sudden currency depreciation. Confidence may suffer if higher fuel prices, security problems or regional disputes generate social unrest.

Until these problems are addressed the Indonesian economy will be highly susceptible to external economic shocks. The financial problems that swept into Indonesia in late 1997 illustrate the volatility of economic conditions. The effects of the financial and economic crisis were severe. In 1998, real GDP contracted by an estimated 13.7, inflation rose to 77% and the currency depreciated considerably to Rp 17,000/$US from around Rp 2,400/$US in 1997.

9.1.11 Key Demand and Supply Drivers

Table 8 - Summary of key demand and supply drivers

Demand	Supply
Indonesia cattle herd numbers stabilisation.	"Trapped" supply base from northern Australia.
Indonesian currency risk.	Cattle type.
Committed investment in feedlots.	Australian state supply sourcing is influenced by sea freight differentials and access to cattle.
Disease risk - local and Indonesian.	
Australia is benefiting from the absence of FMD Indian Buffalo. (Some illegal trade).	
Landed cattle price against substitutes. Eg. Fish	
The import feeder cattle market is presently limited by domestic cattle prices and domestic beef demand.	
Preference for fresh beef.	
Competition from US beef.	
Ease of lot accumulation from Australia relative to the local market.	

9.2 China

9.2.1 History of the trade

China has historically been a sporadic buyer of cattle for breeding purposes. To improve domestic breeds, China began to introduce foreign cattle in 1910.

In 2001 the country began to significantly increase imports of Australian dairy heifers. Imports were aided on the demand side by rapidly increasing Chinese milk product consumption (est. 2004 rise in consumption 14%), the absence of competitors due to import bans, and government targeting of the industry for expansion. On the supply side, low Australian milk prices and strong competition following deregulation in the Australian dairy industry increased cattle supply.

In 2004 China accounted for 11.6% of Australian cattle exports, after Indonesia with a 56% market share. Exports to China are mainly Holstein and Jersey heifers. Victoria was the main beneficiary of increased dairy heifer demand in China significantly lifting its cattle exports.

Chinese investment in cattle genetic improvement is presently directed towards the dairy sector, this being more profitable than the beef cattle sector.

Chinese demand for Australian dairy cattle was pressured in 2005 by lower priced cattle from Uruguay. This price pressure was driven by exchange rate differentials (2002) A$1 = 7 UN Peso, (2005) A$1 = 19 UN Peso). Additionally, a reduction in the supply of cattle following a rise in Australian milk prices limited trade. Australian and Uruguay dairy cows in milk or dry number approximately 2 million (61% in Victoria) and 440 000 respectively.

Australian dairy cattle exports have benefited from the BSE derived ban on live cattle imports from Canada, the US and Europe. Re-entry, particularly of Canada, would place pressure on Australian dairy cattle demand.

The Chinese Government is actively pursuing strategies to lift beef and dairy production, particularly targeted at export markets, and to improve growing consumer concerns in regard to food safety issues. Ultimately the success of these programs will determine import requirements for beef and live cattle in the future.

9.2.2 Beef Industry Background

China’s overall beef self-sufficiency is approximately 99.5 percent. Prior to 1985, the Chinese Government tightly controlled the distribution of beef. Liberalisation and Government development efforts, coupled with strong consumer trends towards increased beef consumption, have seen rapid development in the industry.

According to the Chinese Ministry of Agriculture (MOA) 14.5 million small family farms raise beef cattle in China, accounting for 83 percent of total cattle output with annual processing of less than 50 head.

Approximately, 900 farms in China are considered large-sized with annual processing of 500-1000 head, accounting for 1.6 percent of total production.

Based on MOA statistics, China’s beef production is approximately 6.6 million tonnes (estimated 7.6 million tonnes in 2006) with an annual processing rate of approximately 47.2 million beef and dairy cattle. Beef's share of total meat production is currently approximately 10%.

The MOA estimates there are a total of 181 million cattle in China, however others estimate considerably lower numbers. Cattle bred specifically for beef are estimated at 59.4 million, with production estimated to be increasing at 6% per annum. Demand is increasing at a faster rate than production pushing import levels, particularly at the top end of the market.

Poor Chinese beef cattle genetics result in lower carcass weights than the world benchmark level, although carcass weights are increasing, rising from 83kg/head in 1980 to 142kg/head in 2005.

There are over 20 million buffaloes in China, the second largest population in the world. Buffaloes are mainly used for transport and farming. Rapid mechanisation of farming is expected to see buffalo numbers decline.

In an effort to develop the beef industry, China's (MOA) initiated a strategic, "Beef Advantageous Development Area Program" for the period 2003-2007. The two target development areas are China's Central Plain and the Northeast, the traditional center of China's livestock industry. The Government will attempt to shift the marketing focus of these areas to higher quality beef production in order to gradually substitute imported beef and increase exports of high value beef.

Limiting factors in China for the expansion of the beef industry currently include access to grass, grain and forage resources, breeding stock quality, water, energy, holding, and transport resources.

As the high value end of the market for beef expands in China increasing demand is expected for imported breeding cattle to upgrade herd quality. At current prices and exchange rates the import of Australian cattle for feedlot beef production and subsequent processing faces economic challenges. However, growth at the high value end of the beef market may offer opportunities in future.

9.2.3 Dairy Industry

From a very low base China's dairy industry has expanded rapidly over the last 20 years to achieve annual sales of A$4 billion. Traditionally, Chinese consumers are not big consumers of dairy products, however this is starting to change in urban areas.

Chinese dairy consumption per capita is estimated at 18Kg (Urban) and 7Kg (China average) per year, far below the world average of 105Kg. Average Chinese milk consumption is in the range of 4 - 5 litres per annum.

There are approximately 7 million dairy cattle in China producing more than 160 billion litres of milk and 1.6 million tonnes of dairy products per year.

Approximately, half of the national herd are pure dairy cattle, such as Holstein. The remaining cows are Chinese cross-breeds. Most small scale farmers cannot afford to purchase even a locally-bred Holstein cross, which costs between RMB1500-2000 (A$250-333).

China's production and distribution of milk products is still in the development stages. It is estimated that between 70-80% of raw milk production is produced by small household farms, with three to five cows each. Combined, household farms carry about 4.5 million dairy cows. Collective and state-owned farms, with approximately 200 cows per farm, contribute between 10-20% of total milk production. There is an increasing number of privately owned dairies, with around 100 cows per farm, however their present volume of total production is low.

Imported whole-fat milk powder (WFP), skim milk powder (SMP) and other dairy products serve as an important supplement to China's domestic raw milk supply. The EU, New Zealand, Australia and the

US are significant suppliers of dairy products to China. Tariff rates on imported dairy products have dropped following China's entry into the WTO to approximately 10%, from previous levels of 25 - 50%.

The growing number of larger privately owned dairies, combined with the need to upgrade bred quality will likely underpin demand for imported dairy cattle. Australia will continue to play a part in this process, however current market share will be challenged with the potential return of currently banned countries and low exchange rate countries. Supply is likely to continue to be a problem for Australian exporters of dairy heifers.

9.2.4 Meat Consumption

Total Chinese meat consumption is expanding rapidly driven by increasing GDP per capita. Chinese per capita meat consumption is estimated at 39Kg per annum, up from 0.27Kg in 1980. It is important to note that these figures can vary greatly between locations. Rural consumption levels are closer to 20Kg per annum.

Beef's share of total meat consumption has increased from 2% in 1980, to 12.7% in 2005 (4.95Kg per person). During this period the consumption of pork decreased significantly from 94% in 1980, to 60% in 2005. Poultry and mutton consumption is estimated at 19% and 5% respectively.

Historically, raising hogs was the predominant livestock industry in China due to Government programs that encouraged pork consumption. This skewed consumption towards pork, however, as incomes rise, Chinese consumers are seeking to diversify diets. As a result it is expected that beef consumption will continue to expand, primarily at the expense of pork. Many Chinese people consider beef to be a lower in fat, healthier product than pork.

The outlook for beef consumption is for increased per capita income to continue to drive consumption, particularly in urban centers, and continued diversification away from traditional meats. However, duck and chicken are expected to hold and grow market share respectively.

9.2.5 Beef Market Structure

China's beef market is typified by growing levels of imported product filling the shortfall in domestic production as overall meat consumption, particularly at the premium end of the market rises.

There are three kinds of wholesale markets in China, live cattle specialised wholesale markets, beef specialised wholesale markets, and combined wholesale markets. There are approximately, 30 live cattle specialised wholesale markets located in major cattle production regions, and over 3 000 combined wholesale markets selling beef and other agricultural products.

The mass market accounts for nearly 90% of beef processed in China. This product is sold as fresh, low value, undifferentiated beef primarily through wet markets, morning markets and movable carts.
Beef distribution tends to be split with lower quality beef targeted at domestic consumption through wet markets, and imported beef through supermarkets, hotels and restaurants.

The dominance of small producers and processors makes for a complex Chinese beef distribution structure. Most beef sold in China is not inspected or graded and product is often not differentiated. However, Chinese consumers are becoming more discriminating about food safety and health issues, and this is driving Chinese authorities towards increased meat inspections and improved standards at processors and in retail outlets. Though inconsistencies remain, this is placing increased pressure on some small operators.

The price of wet market beef is currently RMB 10 - 15/Kg ($A1.66 - 2.5/Kg). Profit to small processors is in the region of RMB 0.32/Kg (A$0.053/Kg). Tight margins are resulting in industry restructuring efforts.

The middle market for beef cuts, commonly sold through state stores and supermarkets with higher health standards, commands prices approximately RMD 6/Kg (A$1.00) above wet market prices.

The premium end of the market distributes health certified beef through restaurants, supermarkets, and hotels. This beef can command prices of RMB 150/Kg (A$25.00). The majority of this product is imported through major ports such as Shanghai and Hong Kong.

There are many unofficial entry points for imported beef, however these have reduced in recent years following a crackdown by authorities and a reduction in beef tariffs following entry into the WTO making smuggling less attractive. The movement of previously smuggled product into official figures does however, tend to overstate the recent rise in total beef import demand in China.

Chinese beef is exported to neighbouring countries like Russia, Macao, Japan and into the Middle East. In recent years exports have been in decline as distribution has focused on strong domestic demand.

9.2.6 Chinese Feedlot Sector

China's feedlot industry is currently underdeveloped. Presently, price differentials for domestic fattened cattle sold into the local Chinese market are minimal. This is primarily because of undifferentiated product distribution, and Chinese methods of preparing and cooking beef.

Most improved cattle are fed on straw and crop residues, which have limited nutrition values. Traditionally, cattle feeding has been focused on backyard raising, however feedlots offer the potential to raise beef quality, consistency and safety.

Both access to, and the price of feed grains, are limitations to growth in cattle feedlotting in China. Feed grain prices are close to world market prices reducing feedlot economics for domestically targeted beef in the lower and middle market. The future of grain feeding in China will ultimately depend on productivity improvements in the Chinese industry.

There is some scope for feedlot development. For example, where production may be integrated with a processing operation targeting the export market.

Currently, feeder cattle can be purchased in China for approximately RMD 6/Kg (A$1.00/Kg). Fed cattle in China have a market price of approximately RMD 8/Kg (A$1.33/Kg) well below the world average, and Australian cattle delivered export prices.

China has 9 FMD free zones. Authorities within some of these zones are assessing integrated feedlot operations associated with bull dairy calves, feed/fodder and ethanol plants.

9.2.7 Processing Sector

China's beef processing sector is dominated by small family concerns processing limited cattle numbers for primarily next day distribution through wet markets. This processing structure has become a cause for health concerns and the threat of disease spread.

Prior to market reforms beef in China came mainly from cull cattle. A state network distributed almost all of this production among the Muslim (mainly Hui) community.

In the 1980s market-oriented reforms resulted in restrictions on the processing of cattle being removed and specialised beef production developed. Many households became involved in the processing of small numbers of cattle and the sale of beef and offal. Some of these household processors are concentrated in specialised cattle processing villages (often Muslim) located near large urban areas. These small establishments compete with the larger state and country processors.

Modern health certified processing establishments are being developed and some existing plants upgraded. The intention of these upgrades is to target higher value markets in China, Japan and Korea. The China National Foodstuffs Group Co. (CNFGC, former General Food Companies) has set up a number of processors in provincial and prefectural regions to satisfy increasing beef demand. The size of CNFGC processors varies from approximately 10,000 cattle per year to 100,000 cattle per year.

However, modern processors are the exception with the Chinese Meat Association estimating that of 2,500 large processors only 15 are considered modern with substantial mechanisation.

Large scale processors are currently economically pressured due to local suppliers not distributing cattle to the plants because of distance, the low cost of individual household processing with easy access, and regulatory implementation being haphazardly applied.

9.2.8 Disease Controls

The US and Canada were banned in 2003 from exporting beef and live cattle into China following the finding of BSE in those countries. The US has historically held 67% of market share of imported beef into China. The EU had been previously banned from exporting to China.

The country is presently shifting imported beef sources to Australia, New Zealand and Brazil. Both the US and Canada are presently lobbying the Chinese Government to re-enter the market.

Official channel cattle import controls are carefully regulated with Australian dairy cattle imports being banned in the past due to diseases such as Red Nose Virus.

The internal production, processing, and distribution structure existing in the Chinese beef and dairy industries makes disease control extremely difficult. This leads authorities to be particularly careful in regard to the introduction of new diseases.

9.2.9 Season Demand

- Chinese festivals are staged according to the lunar calendar. Seasonal festivals influencing meat consumption include:
- Spring Festival, also known as the Chinese New Year. Date: The first day of the year in the lunar calendar. This is usually in late January, or early February. The Spring Festival is the most important festival in China. The celebration usually lasts for weeks.
- Lantern Festival. Date: 15th of the first lunar month.
- Qingming Festival, also known as the Festival of Pure Brightness. Date: 12th of the 3rd lunar month, usually around April 4th or 5th.
- Dragon Boat Festival. Date: 5th day of the 5th lunar month.
- Mid-Autumn Festival, also known as the Moon Festival. Date: 15th day of the 8th lunar month.
- Western Christmas and New Year. Date: 25th December, 1st January. Celebrated along European traditions in Hong Kong.

9.2.10 Economic Assessment

China’s population is currently 1.3 billion, with a growth rate of 0.58% per year (2005 est.). The country is surpassing the US as the largest consumer in the world across a range of product groups. This rapid growth in consumption is being driven by increased GDP per capita, especially in the urban centres. In 2004, China's external trade reached US$1,155 billion, ranked the third in the world economy, increasing from the fourth in 2003.

China’s huge domestic production, rapid economic growth, and recent membership to the WTO has sparked considerable debate in regard to whether the country will become a driving force in export markets, or become a major import destination. While debate reaches differing conclusions, in practice since WTO membership, China has developed as both an importer and exporter of considerable volume depending on the product. For example, since WTO membership beef exports have declined, while imports have increased driven by excess demand at the high quality end of the market.

In the first nine months of 2005, the Chinese economy grew by 9.4%. The Chinese Government has instigated measures to stabilise the economy and moderate economic growth. Reserve deposit ratios

for banks have been raised, cash interest and deposit rates have increased, and limits have been placed on some investment areas. The People's Bank of China's (PBOC) lending rate is 5.58%.

Table 9 - Economic Indicators

	2001	2002	2003	2004	2005	2006
Population (million)	1,276	1,284	1,292	1,300		
GDP ($USb)	1,172	1,267	1,412	1,644		
Per capita GDP ($US)	922	990	1,097	1,269		
GDP (% change)	7.5	8.3	9.5	9.5	9.0	8.2
Fiscal balance (% of GDP)	-3.1	-3.3	-2.8	-1.7	-1.7	-1.5
Inflation (%)	2.7	2.1	2.6	4.2	4.2	4.7
Currency Units (RMB per $US)	8.3	8.3	8.3	8.3		
Current account/GDP	5.8	9.7	9.5	10.5	14	12.1
Recorded unemployment (%)	9.3	9.75	10.1	10	10	10

Source: World Bank and Asian Development Bank

Retail sales of consumer goods grew by 13.3% in 2004, compared with 9.1% in 2003.

The Government is projecting a 12.5% growth in retail sales for 2005. In the first ten months of 2005, retail sales increased by 13%.

Deflationary pressures began to reduce in 2003. The consumer price index increased by 1.2%, mainly due to price rises in food, service items, housing, fuels and utilities. In 2004, a rapid rise in food prices contributed to the continued increase in consumer prices. However, the increase of food prices slowed from a peak of 14.6% in July to 4.9% in December. For 2004 as a whole, the consumer price index on average increased by 3.9%. In the first ten months of 2005, the consumer price index increased by1.9%, with food prices increasing by 3.1%. The government is targeting inflation to be contained below 4% in 2005. Partly due to state-owned enterprise reforms, the urban unemployment rate rose to 4.3% at the end of 2003, and reduced to 4.2% by the end of 2004.

China's foreign exchange reserves reached US$769 billion by the end of September 2005, the second largest after Japan. Foreign debts amounted to US$266.2 billion at end of June 2005 (up 7.5% from the end of 2004).

On the 21st July 2005, China reformed the Renminbi (RMB) exchange rate system by moving to a managed floating exchange basis, with reference to a basket of currencies. The exchange rate of RMB was re-valued to 8.11 per US dollar. The daily trading rate of the US dollar against the RMB is allowed to float within a band of 0.3% around a central parity published daily by the People's Bank of China.

China's rapid growth in GDP per capita is expected to continue to drive consumption within the food sector. In addition to domestic consumption, export growth is significantly reliant on US demand. Given the recent improvement in the Japanese and Asian economies this reliance may ease into the future.

9.2.11 Trade Barriers

Following China's entry into the WTO, tariffs on imported beef and cattle are gradually being reduced. Tariffs on fresh or chilled carcasses were reduced from 40% in 2001, to 35.6% in 2004 (See table below).Tariffs on breeding stock are currently nil to encourage the upgrade of China's dairy and beef cattle herd.

Table 10 - Tariffs on Cattle and Beef

Product	Code	General	MFN	V.A.T. 1/	Effective Rate (mfn+vat)
Cattle, Breeding	0102.1000	0%	0%	13%	13.0%
Cattle, Other	0102.9000	30%	10%	13%	24.3%
Beef, Fresh or chilled Carcass & half-carcass	0201.1000	70%	20%	13%	35.6%
Other cuts with bones	0201.2000	70%	12.0%	13%	26.6%
Other cuts, boneless Beef, Frozen	0201.3000	70%	12.0%	13%	26.6%
Carcass & half-carcass	0202.1000	70%	25%	13%	41.3%
Other cuts with bones	0202.2000	70%	12.0%	13%	26.6%
Other cuts, boneless	0202.3000	70%	12.0%	13%	26.6%

Source: China Customs

9.2.12 Australian Dairy Heifers Delivered Main China Port - Pricing Example

CHINA DAIRY HEIFERS		Total Cost
Livestock Costs		
Average Weight (Kg)	320	
Farm Gate Price LW Kg	1.96	627.2
Agent Fee (Farm Gate)	5%	31.36
Veterinary Costs		
On Farm		4.5
Dipping		2.5
Road Transport (eg Ex Farm - Lot Average)		
Distance (Km)	150	
Cost per deck/Km	1.8	
No. Head Per Deck	40	6.75
Feedlot/Spelling		
Days on Feed	2	
Feed Costs Per Day	2	4
Average Daily Wt. Gain	*0.8*	
Ear Tag		0.35
Insurance		6
Electrolytes etc.		1.4
Road Transport to Portland		
Distance (Km)	200	
Cost per deck/Km	2	
No. Head Per Deck	40	10
Industry Levies and Charges		
Cattle Transaction Levy		3.5
Wharf Charges		1
Third Party Vet		4
AQIS		1.8
Ports Charge		2.5
Warfage		4
Receival Yard Fees		1
Weighbridge		2
Management		
Administration		7
Office		15
Sub Total		735.86
Exporter Profit		
Profit	10%	73.586
Value at Portland		
FOB		809.446
Sea Transport		
Freight Per Head		140
Insurance		
Insurance Per Head		15
Sub Total		964.446
China Alongside Ship Costs		
China Duty Rate (Breeding)	0%	0
Discharge Costs		5
FAS Main China Port		
Australian Dollars		**969.446**
US Dollars	**0.75**	**727.0845**
RMB	**6**	**5816.676**

9.2.13 Key Demand and Supply Drivers

Table 11 - Key Demand and Supply Drivers

Demand	Supply
Rapid growth in GDP per capital is driving dairy and to a lesser extent beef breeding stock demand.	Following improvements in Australian milk prices dairy cattle supply has contracted.
Poor herd quality in the dairy and beef sectors is driving herd improvement programs, responding to growing high end demand.	Australia has experienced import bans from China in the past due to disease issues such as Red Nose virus.
A structural change in consumption away from pork is under way and will continue.	Australian state supply sourcing is influenced by sea freight differentials and access to cattle.
The major growth in dairy and beef demand is in urban centres.	
Australia is benefiting from the absence of US, Canadian, and EU breeder cattle competition, and beef imports.	
Exchange rate differentials. Low exchange rate countries are presently challenging the market.	
The import feeder cattle market is presently limited by low domestic cattle prices, and relatively high feed grain prices.	
Longer-term scope exists for expansion of beef breeding cattle in China driven by the high-end beef market and Government initiatives.	
Increased competition is expected for Australian dairy cattle, however, the import market is forecast to remain buoyant while China improves its dairy cattle quality.	

9.3 Philippines

9.3.1 History of the trade

Philippines was a significant importer of Australian cattle in the late 1990s and in 2000. During this period, strong rates of economic growth stimulated rates of beef consumption that were in excess of the ability of the local cattle herd to supply. This and the availability of cheap livestock from Australia prompted investment in the Philippine feedlot capacity. At the prevailing price relativities beef produced from Australia live cattle was preferred to Indian buffalo and Brazilian beef.

However, a trade dispute between the Philippines and Australia, over the exports of tropical fruit has triggered radical changes in import licensing rules, standards and procedures which has significantly impeded meat and meat product imports. Administrative Order No. 16 imposes strict meat import regulations which local importers find very prohibitive.

Imports of live cattle have been particularly affected as a result of instruction to the Bureau of Animal Industry (BAI) from Department of Agriculture Secretary Edgardo Angara to design an import reduction scheme for Australian cattle. The Department of Agriculture insists that a ban on live cattle importation does not exist and the move has been a voluntary decision of local cattle raisers to reduce their importation from Australia.

Since 2000 live cattle exports from Australia have been in steady decline. For the 2005 year to date, exports of cattle have slipped to around half the level of 2004. While the initial decline in numbers may have been trade related, the high cost of Australian cattle and intense competition from Indian Buffalo and Brazilian beef have meant that feedlotting cattle in Philippines is uneconomic.

The impact of trade restrictions and competitive pressures in this market are apparent when looking at both the level of cattle and beef imports from Australia.

Table 12 - Australian Exports of Live Cattle and Beef to Philippines

Year	Beef Exports (tonnes, sw)	Live Cattle Exports ('000 head)
1995	14,906	209,192
1996	20,493	206,317
1997	26,943	259,702
1998	20,157	215,961
1999	20,369	268,784
2000	14,270	223,773
2001	19,683	97,411
2002	12,854	115,522
2003	8,576	96,106
2004	2,071	46,918
2005 est.		

Source: MLA

9.3.2 Philippines Meat Consumption

Assisted by a recovery in economic growth and an increasing population, Philippines meat consumption has been growing strongly. Apart from seafood, pork is the favoured protein in the Philippines comprising around 50% of total meat consumption. The consumption of pork has been increasing due to increased incomes and increases in the relative price of other protein sources, particularly seafood.

Strong demand coupled with constrained local supplies has seen the Philippines increasingly turn to lower value alternative imported supplies of beef (see table below). Total Philippines beef imports have increased over 25% in the past 5 years while Australian beef exports have declined to negligible levels.

Table 13 - Per Capita Consumption of Meat

(Kg/Head Retail Weight)				
Year	**Beef**	**Pork**	**Poultry**	**Seafood**
1995	1.39	8.95	5.26	22.64
1996	1.64	9.39	5.82	21.65
1997	1.90	9.39	6.04	21.22
1998	1.92	9.75	6.03	18.98
1999	2.38	10.34	6.32	20.97
2000	2.53	10.49	6.58	23.35
2001	2.48	10.76	6.48	23.23
2002	2.7	10.9	7	23.5
2003	2.7	11.1	7.1	23.8
2004	2.8	11.3	7.3	24.2
2005	2.9	11.6	7.5	24.5

Source: CIE GMI Model

Table 14 - Total Consumption of Meat

(Kt Retail Weight)				
Year	**Beef**	**Pork**	**Poultry**	**Seafood**
1995	98	629	370	1591
1996	118	675	419	1556
1997	144	709	456	1603
1998	145	733	453	1420
1999	178	773	472	1560
2000	193	799	502	1778
2001	193	838	505	1808
2002	214	874	562	1826
2003	219	910	586	1844
2004	230	952	614	1862
2005	245	1003	647	1881

Source: CIE GMI Model

9.3.3 Beef Market Structure

Competitively priced Indian Buffalo and Brazilian beef have had a pronounced negative effect on Australia's ability to service the predominantly imported manufacturing beef market (hamburgers, corned beef, hot dogs and other smallgoods) in the Philippines. These alternative and cheaper suppliers have made significant inroads into the manufacturing sector – with Australia's competitive position not being assisted by high cattle prices (Source: MLA)

Looking at imported beef statistics imported beef does not seem to have replaced the reduction in beef availability caused by the downturn in imports of Australian live cattle.

In 2000, prices for Indian buffalo were around $US0.90c/kg lw compared to local cattle valued at $US1.00/kg lw compared with Australian cattle landed in Philippines at $1.50c/kg lw (Source: ????).

With continued economic and political problems in the Philippines, and associated weakness of the Peso, together with the increasing availability of cheap South American beef and Indian Carabeef, the Philippines remains one of the markets least able to withstand the high cost of Australian feeder cattle.

Table 15 - Beef Supply by Source

		('000 tonnes)	
Year	**Native Cattle**	**Imported Cattle**	**Imported Beef**
1995	97.4	84	42
1996	113	83	55
1997	137	104	68
1998	156	86	51
1999	190	108	64
2000	190	89	85
2001	197	39	78
2002	209	46	95
2003	211	38	99
2004	214	19	111
2005	218	8	127

Source: CIE GMI Model

9.3.4 Feedlot Sector

Prior to unofficial restrictions being imposed on Australian live cattle imports, the Philippines had a vibrant feedlot sector. With the reduction in available Australian live cattle imports, feedlot utilization across Philippines is currently very low.

Most of the cattle imported this year have been taken by Monterey with a small number going to the Del Monte feedlot. These companies are involved the fruit processing industry and cattle are imported for their value in waste disposal rather than for the commercial value of their beef. These cattle are currently on-sold to other companies involved in the local beef trade (and previously involved in importing and feedlotting cattle) for distribution through their retail outlets. While not in a position to import cattle now, these companies continue to maintain infrastructure and networks which would allow them to import in their own right once the commercial environment improves.

Around 90% of Australian cattle destined for the Philippines are taken by Monterey. Monterey has indicated difficulty in sustaining the cattle import trade given price relativities between beef derived from imported cattle and the price of Indian buffalo and Brazilian beef.

The Philippines local cattle sector is very under developed and in long-term decline. Cattle farms are predominantly backyard type (in 1997 91% were backyard type vs 9% in commercial sector). Average weight gain varies from 0.25-0.6kg/day. The domestic industry is dominated by buffalo which comprise 55% of the total herd (Source: Loculan, 2002)

9.3.5 Processing Sector

The Philippines processing sector ranges from backyard operations to more advanced processing plants. However, approximately 60 - 70% of cattle are processed using traditional methodologies that are not advanced by global standards. An estimated 900 000 cattle and 300 000 buffalo are processed per year (FAO).

9.3.6 Disease Controls/Government Policies/Regulatory Environment

Delays in the processing and approval of fresh tropical fruit exports from the Philippines has triggered a series of radical developments concerning Philippine import regulations on live cattle, meat and meat products.

Philippines allows the import of beef from FMD affected areas. The Philippines government has a regulation that product from India can only be used in the manufacturing sector. However, this frequently finds its way into the retail sector where it competes with beef sourced from Australian cattle.

Tariffs applied to livestock imports range from 1% for breeding cattle to 3% for other cattle. There is a 10% import tariff applied to imports of fresh and frozen beef and 35-45% for processed beef and offal products (Source: Livecorp).

9.3.7 Economic Assessment

The Philippines has an estimated population of 84 million in 2004 with an annual rate of population growth of 2.4% - at the high end for the region.

The human poverty index (HPI), ranks Philippines 35th among 103 developing countries for which the index has been calculated.

Philippines have a workforce of 35.8 million employed in commerce and government 47%, Agriculture 20% and Industry 33%. High rates of unemployment remain the single weakest indicator of a weak economy averaging 11.8% in 2004 up from 11.4% in 2003 with the number of people entering the workforce exceeding the number of jobs created. Like other Asian countries creating jobs is the country's greatest task. The Philippines has over 30 million people under the age of 15, and about 13 million of these are expected to join the workforce over the next 14 years, necessitating 1million new jobs per year just to maintain the current unemployment rate.

The Philippines economy has had a mixed history of growth and development. Over the years, the Philippines has gone from being one of the richest countries in Asia to one of the poorest. Gross Domestic Product (GDP) for 2004 was $US84.2 billion while per capita GDP was $US976. In 2004, the Philippines economy grew by 6.1%. Forecasts are for economic growth to continue in a range around 5-7% over 2005-2007.

The current account surplus widened marginally to 2.4% of GDP. Inflation continues to be a challenge rising to 7.9% in 2004 above the government targets of 4-5% on the back of higher fuel and food prices.

Presently over 80% of government spending is directed towards non discretionary expenses like debt servicing, government salaries and legally mandated revenue transfers to local government units. Mandatory spending is crowding out urgently needed capital outlays and forces to the government to borrow to meet its operational needs. Increased borrowing during 2004 saw credit downgrades by rating agencies in early 2005.

External Debt for the year 2003 was $57.96 billion.

Exchange rates of Philippines pesos (p) per US $1 -54.770 until May 2005.

The Philippines relies heavily on electronics shipments for about two-thirds of export revenues. Outsourcing industry is growing very fast in Philippines. By the end of 2005, it is expected that a majority of top ten U.S call center firms in U.S will operate in Philippines.

Other important sectors include agriculture, manufacturing and mining. The country is well endowed with mineral and thermal energy resources and laws passed in 2000 permitting 100% foreign ownership of Philippines mining companies have encouraged recent growth in this sector.

The Philippine economy continues to juggle extremely limited financial resources while attempting to meet the needs of a rapidly growing population and address intensifying demands for the present administration to deliver on its anti-poverty promises.

The government is pursuing a program of micro-economic reform to improve the efficiency of the economy. Despite occasional challenges to the economy and resistance to pro-liberalization reforms by vested interests, the economy has made considerable progress in restoring macro-economic stability.

However, like many Asian economies significant reform of legal structures will be necessary to promote ongoing investment laying the platform for sustainable growth over the long term. Reflecting weaknesses in intellectual property rights protection, the country remains on the US trade representative's special 301-priority watch list.

Table 16 - Major Economic Indicators

	2001	2002	2003	2004	2005	2006
Population (million)	78.5	80.2	81.8	83.5		
GDP ($USb)	71	76	79	86		
Per capita GDP ($US)	907	957	970	1,036		
GDP (% change)	1.8	4.3	4.7	6.1	4.7	4.8
Fiscal balance (% of GDP)	-4	-5.3	-4.6	-3.9		
Inflation (%)	6.8	3	3.5	6	8.2	7.5
Interest Rates (%)	12.4	8.9	9.5	10.1		
Currency Units (Pesos per $US)	51	51.6	54.2	56		
Current account/GDP	-0.3	0.9	0.1	-0.3		
Unemployment (%)	9.8	10.2	10.1	10.9		

Source: World Bank and Asian Development Bank

9.3.8 Landed price model of Australian cattle Philippines

PHILIPPINES FEEDER STEERS Ex Karumba		Total Cost
Livestock Costs		
Average Weight (Kg)	350	
Farm Gate Price LW Kg	1.7	595
Agent Fee (Farm Gate)	5%	29.75
Veterinary Costs		
On Station		4.5
Dipping		2.5
Road Transport (eg Ex Station - Lot Average)		
Distance (Km)	400	
Cost per deck/Km	1.8	
No. Head Per Deck	40	18
Feedlot/Spelling		
Days on Feed	2	
Feed Costs Per Day	2	4
Average Daily Wt. Gain	*0.8*	
Ear Tag		0.35
Insurance		6
Electrolytes etc.		1.4
Road Transport to Karumba		
Distance (Km)	150	
Cost per deck/Km	2	
No. Head Per Deck	40	7.5
Industry Levies and Charges		
Cattle Transaction Levy		3.5
Wharf Charges		1.5
Third Party Vet		4
AQIS/On charges		1.8
Ports Charge		2.5
Warfage		4
Receival Yard Fees		1.2
Weighbridge		2.5
Management		
Administration		7
Office		15
Sub Total		735
Exporter Profit		
Profit	10%	73.5
Value at Karumba		
FOB		808.5
Sea Transport		
Freight Per Head		100
Insurance		
Insurance Per Head		15
Sub Total		923.5
Philippines Alongside Ship Costs		
Philippines Duty Rate	3%	27.705
Discharge Costs		5
FAS Main Philippines Port		
Australian Dollars		**956.205**
US Dollars	**0.75**	**717.15375**
Peso	**40.45**	**38678.49225**

Table 17 - Key Demand and Supply Driver Summary

Demand	Supply
Growth in GDP per capital is driving imported beef consumption.	East coast switching abilities to move cattle into the domestic and export processing markets based on price.
Unofficial regulatory restraints are limiting cattle trade.	Australian state supply sourcing is influenced by sea freight differentials and access to cattle. The Philippines has historically mainly been a Queensland market.
Lower alternative beef and buffalo import prices, in a very price sensitive market.	
A general rise in meat consumption.	
Poor local industry cattle supply.	
Exchange rate differentials.	
Transport costs.	

9.4 Malaysia

9.4.1 History of Trade

Malaysia has a population of approximately 25 million. The country is generally self-sufficient in non-ruminant meat production, with pork and poultry being the dominant meats produced. Domestic ruminant production has been relatively stable, with Malaysia being approximately 20 -34% self-sufficient in ruminant demand (*FAO*). Beef production has been rising slowly over the last decade. Consumption of beef has increased in recent years, exceeding domestic production growth. Beef demand is satisfied through imports of frozen buffalo from India, beef from countries such as Australian and New Zealand, and live cattle, primarily from Australia and neighbouring Asian countries.

Historically, Malaysia has been a consistent market for live cattle, particularly out of Western Australian. Up until 1996/97, when beef and buffalo import competition and the influence of the Asian economic recession slowed import levels, Malaysia had demonstrated a consistently rising trend in live cattle import demand.

The market recovered following the Asian recession reaching new highs, however since 2003 demand has again come under pressure due primarily to lower cost buffalo meat imports, producer switching and the strength of the Australian dollar.

The Malaysian beef industry relies on small populations of local Kedah-Kelantan cattle and crosses of the local cattle with imported breeds such as Brahman, Hereford, Limousin and Friesian and buffalo of the Swamp and Murrah types *(M. Ariff Omar)*.

Farm size, breeder cattle, management systems and resource availability, such as feed constraints, limit the ability of Malaysia to increase beef production, causing reliance on imported live cattle and particularly imported buffalo meat. Most cattle production is via small family holdings, with limited larger holdings. Some production takes place in conjunction with primary agricultural practices such as palm oil plantations. Palm oil plantations cover 2.8m ha. of Malaysia, with approximately 200 000 cattle reared under this grazing system. Recommended cattle stocking density under palms is one per ha.

The total cattle populations in Malaysia are beef (702 985), dairy (28 499), and buffalo (83 454 -100 000). Per annum beef slaughter numbers are approximately 109 000 *(Dept. of Veterinary Services-Malaysia).*

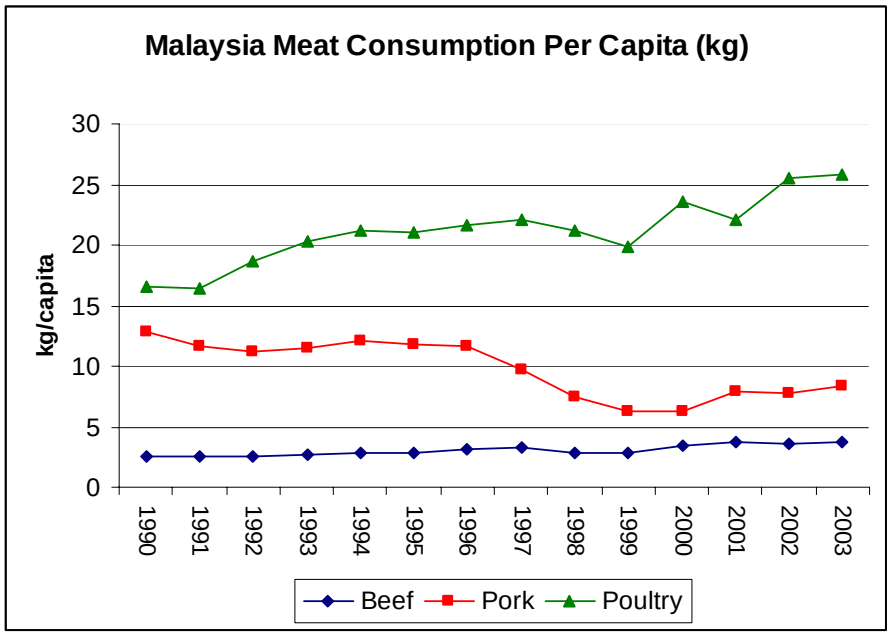
The Malaysian market has a preference for +50% Bos Indicus content for feeder cattle, within the 200 - 350kg weight range (12 - 18 months age). Heavier process cattle of lesser Bos Indicus content is also accepted. Demand also exists for breeder cattle.

9.4.2 Malaysia Meat Consumption

Malaysia has demonstrated meat consumption trends consistent through many Asian countries. This pattern demonstrates a drop in pork consumption with increased consumption of chicken and beef. Meat consumption in Malaysia has also, over the last decade, been influenced by disease and other economic price and supply factors.

9.4.3 Malaysia Meat Consumption Table

Table 18 - Malaysia Meat Consumption Table



9.4.4 Malaysia Meat Consumption Table

Table 19 - Malaysia Meat Consumption Table

Malaysia Consumption of Livestock Products 1990 - 2003						
Year	Beef	Mutton	Pork	Poultry Meat	Chicken /Duck Eggs	Milk
	(M.Ton)	(M.Ton)	(M.Ton)	(`000 M.Ton)	(million)	(mil lit.)
1990	57,424	7,549	179,401	337.26	5,058	569.08
1991	63,832	7,730	179,763	373.33	5,013	837.33
1992	65,467	9,329	190,811	479.69	5,775	803.53
1993	70,115	9,160	195,764	539.02	5,610	738.08
1994	77,699	9,919	213,389	575.77	5,894	546.77
1995	86,039	11,410	209,586	611.81	6,153	878.15
1996	93,066	14,540	208,999	570.07	6,359	674.51
1997	100,228	13,363	217,403	62,588	6,804	727.8
1998	90,484	12,555	195,481	595	6,450	640.94
1999	92,553	13,605.50	146,980	594.56	6,239	754.22
2000	110,593	13,939.00	160,672	635.11	5,727	1,050.16
2001	120,270	15,798.00	186,116	673.11	6,020	1,346.43
2002	124,020	14,674.00	195,471	781.97	6,074	1,268.64
2003	126,840	15,570.00	194,800	854	6,126	1,294.50

Dept. Veterinary Services - Malaysia/Consultant

9.4.5 Beef Market Structure

Slowly rising population levels (approximately 2% per annum) combined with significantly increasing GDP per capita has resulted in increased total beef consumption. Malaysia's production of beef, goat meat and milk has not kept pace with increasing demand resulting in a rising reliance on imports.

This trend is expected to continue despite efforts by the Malaysian Government and agricultural sector to increase production through improved use of resources, better breeding and animal husbandry, and the increased use of palm oil plantation grazing systems. The Malaysian Government has targeted 38 700 Mt of beef to be produced in 2005, and 58 600 Mt by 2010.

Domestic production of buffalo has declined with increased farm mechanisation.

The Malaysian beef market is dominated by buffalo meat imports primarily from India. Estimates place the buffalo market share at up to 80% of the total beef market. Live cattle importers and domestic processors compete with this product, producing what is generally thought of as better quality meat.

As incomes increase in Malaysia it is possible that the demand pattern for beef will slowly shift towards higher quality product. With live cattle occupying the market sector above frozen imported buffalo, and below better quality chilled beef import cuts.

The market has historically been significantly influenced by GDP growth with sensitive disposable income levels influencing meat consumption.

9.4.6 Feedlot Sector

Palm kernel cake is used as a basic ration in the Malaysian cattle and buffalo feedlot sector. Up to 80% of a ration is made up of palm kernel cake providing a live weight gain of 0.6 - 0.8kg per day *(Strategic Livestock Research Center).*

The supply of local Malaysian feeder cattle can be inconsistent, with animals varying in terms of quality, age, weight and breed types. These factors, in addition to cost, influence Malaysian feed lot establishments to import cattle from Australia and close Asian country neighbours, such as Indonesia and Thailand.

Higher cattle prices out of Australia, partly influenced by the Australian dollar, has forced the feedlot sector to look more closely at increasing domestic cattle production. Given the large area under palms it is possible that over the longer-term resources exist to lift domestic production at a faster pace.

9.4.7 Processing Sector

Cattle imports represent approximately 55% of total Malaysian cattle processing numbers. The sector competes closely with imported buffalo and beef from countries such as Brazil, Australia and New Zealand.

The interplay between the landed live price, buffalo and beef import prices and supply variables, significantly influences the viability of the Malaysian processing sector. During periods of strong demand, such as the present, Malaysian domestic cattle supply can be limited, lifting prices and reducing the competitiveness of domestic processors. Like all processors unit costs are significantly influenced by capital utilisation.

Prices for frozen Indian buffalo have risen recently from US$1 000 to US$1 525 per container. Prices are forecast to reach US$1 800 per container by 2006. Despite these prices rises local processors remain under supply pressure.

Local finishing costs such as feed and fodder inputs are also influential in determining the competitive position of the domestic processing sector.

It is a requirement that both domestic and imported beef be processed under Halal practices.

9.4.8 Seasonal Influences

Malaysia is a culturally diverse country with a strong Muslim history. Demand for food is influenced by Muslim and other religious and cultural activities, such as the Christian Christmas and Chinese New Year.

The Malaysian Hari raya fasting and celebration period (early October) is typically a period of higher demand for beef and offal.

9.4.9 Economic Assessment

Malaysia has experienced rapid economic growth and rising GDP per capita since the early 1970s. This growth was largely driven by exports, and as such the Asian economic downturn during the mid 1990s and information technology downturn around the year 2000, significantly influenced economic growth.

According to the World Bank healthy foreign exchange reserves, low inflation, and a small external debt are all strengths that make it unlikely that Malaysia will experience a financial crisis over the near term. The economy remains dependent on continued growth in the US, China, and Japan.

Historically, the Malaysian economy was dependent on agriculture, however today this sector contributes only 7.2% of total GDP. The livestock industry has contributed significantly to the supply of animal protein with the country self-sufficient in poultry meat, eggs and pork. Malaysia is presently not self-sufficient in beef, dairy, sheep and goat meat.

Table 20 - Table Economic Indicators

	2001	2002	2003	2004	2005	2006est
Population (million)	23.8	24.3	24.7	25.2		
GDP ($USb)	87.54	95.15	103.2	118.3	126.1	
Per capita GDP ($US)	3410	3550	3880	4650		
GDP (% change)	0.3	4.4	5.4	7.1	5.1	5.3
Inflation (%)	1.4	1.8	1.2	1.4	2.8	
Currency Units (MYR$ fixed per $US)	3.8	3.8	3.8	3.8	3.8	
Current account/GDP	8.3	8.4	12.9	12.6	13.8	12.1
Recorded unemployment (%)	3.7	3.5	13.4	3.4	3.6	3.6

Source: World Bank and Asian Development Bank

According to the World Bank the Malaysian economy grew by 5.1% in 2005, and is forecast to grow by 5.25-5.5% in 2006, and 5.5-6.0% through to 2008.

9.4.10 Landed price model of Australian cattle Malaysia

MALAYSIAN FEEDER STEERS Ex Darwin		Total Cost
Livestock Costs		
Average Weight (Kg)	250	
Farm Gate Price LW Kg	1.7	425
Agent Fee (Farm Gate)	5%	21.25
Veterinary Costs		
On Station		4.5
Dipping		2.5
Road Transport (eg Ex Station - Lot Average)		
Distance (Km)	400	
Cost per deck/Km	1.8	
No. Head Per Deck	40	18
Feedlot/Spelling		
Days on Feed	2	
Feed Costs Per Day	2	4
Average Daily Wt. Gain	*0.8*	
Ear Tag		0.35
Insurance		6
Electrolytes etc.		1.4
Road Transport Ex Darwin Yards		
Distance (Km)	70	
Cost per deck/Km	2	
No. Head Per Deck	40	3.5
Industry Levies and Charges		
Cattle Transaction Levy		3.5
Wharf Charges		1.66
Third Party Vet		4
AQIS/On charges		1.8
Ports Charge		2.5
Warfage		4
Receival Yard Fees		1
Weighbridge		2
Management		
Administration		7
Office		15
Sub Total		595
Exporter Profit		
Profit	10%	59.5
Value at Darwin		
FOB		654.5
Sea Transport		
Freight Per Head		70
Insurance		
Insurance Per Head		15
Sub Total		739.5
Malaysia Alongside Ship Costs		
Indonesia Duty Rate	0%	0
Discharge Costs		5
FAS Main Malaysian Port		
Australian Dollars		**744.5**
US Dollars	**0.75**	**558.375**
Ringgit	**2.74**	**2039.93**

9.4.11 Malaysia - Key Demand and Supply Drivers

Table 21 - Malaysia - Key Demand and Supply Drivers

Malaysia Key Drivers	
Demand	**Supply**
Growth in GDP per capital is driving imported beef consumption.	East coast switching abilities to move cattle into the domestic and export processing markets based on price.
Demand is heavily influenced by relative cost factors.	Australian state supply sourcing is influenced by sea freight differentials and access to cattle. The Malaysia has historically mainly been a Western Australian market.
Lower alternative beef and buffalo import prices, in a very price sensitive market.	
A general rise in meat consumption.	
Poor local industry cattle supply.	
Exchange rate differentials (part fixed).	
Transport costs.	

9.5 MIDDLE EAST/NORTH AFRICA

9.5.1 History of the Trade

Historically, Islamic countries produced Halal food for both domestic consumption and export to other Islamic countries.

Through the 1970s increasing urban incomes aided by oil money across much of the Middle East and North African region lifted demand for meat. Several governments, such as Saudi Arabia, encouraged producers to increase livestock production, targeting sheep, camel, poultry and dairy.

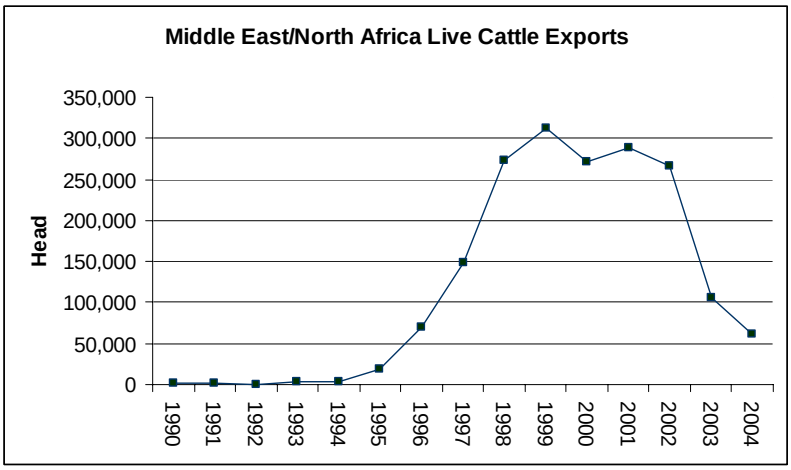
However, native (Beduin) and other larger commercial producers only partially responding to livestock price increases. A substantial increase in imported meat demand resulted.

Increasingly, non-Islamic countries produced meat processed under Halal certification and were able to make inroads into traditional Islamic markets. Across the region a number of commercial feedlots for sheep and cattle were established during the 1980s, however this did not stem a growing requirement for imported meat and animals.

The Middle East and North African live cattle trade out of Australia was sporadic until 1995/96 when the Asian economic downturn saw exporters, pressured for sales, looking more closely at the market. Disease factors limiting competitive pressures, combined with buoyant local currencies acted to aid the trade in later years.

9.5.2 Middle East/North Africa Live Cattle Exports Graph

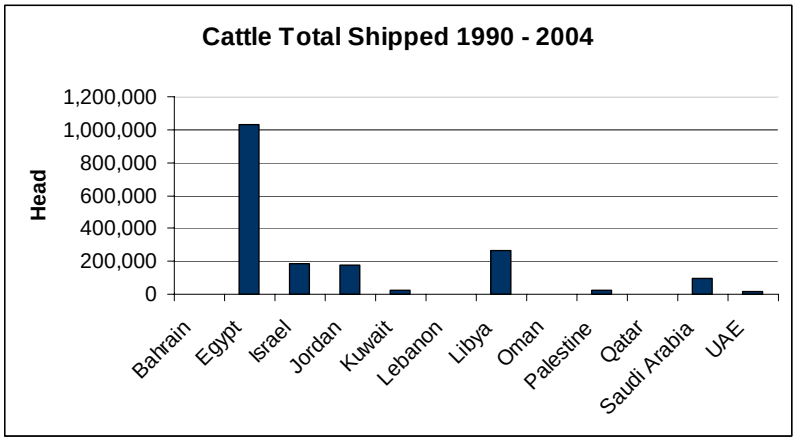
Figure 10 - Middle East/North Africa Live Cattle Exports Graph



An absence of traditional suppliers due to disease combined with strong local currencies lifted demand for live cattle particularly into Libya and Egypt. However, this trend was reversed due to reductions in the strength of the Egyptian Pound, strong Brazilian beef and Indian buffalo pricing pressures, and transport price increases. Strong beef demand coupled with limited supply also resulted in Australian beef producers placing increased product into the processing sector.

9.5.3 Cattle Total Shipped 1990 - 2004

Figure 11 - Cattle Total Shipped 1990 - 2004 Graph



While the market for a period was aided by European BSE bans, the trend towards a reduction in Australian cattle demand remained intact despite significant falls in US beef supply to the region following that countries BSE problems. In 2004 US beef exports to the region dropped in value to US$14.5 million from US$80.5 million the previous year. US beef exports are forecast to recover from 2006 increasing market pressures in the region.

Brazil remains a highly competitive supplier to the region controlling 58% of the market. It is estimated that countries within the Middle East and North African region import approximately 50 - 80% of their total beef requirements. Disease constrains on local production increases are considered substantial.

9.5.4 Cattle Total Shipped 1990 - 2004

Table 22 - Cattle Total Shipped 1990 - 2004 Table

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Bahrain		150									1,875				
Egypt						15,541	52,210	37,539	119,579	240,482	207,551	203,206	145,015	7,583	
Israel							1,485		8,719	8,715	15,837	34,966	47,777	43,213	20,947
Jordan				768		1,132	4,563	2,451	18,128	37,560	40,736	13,186	4,765	23,065	34,154
Kuwait	196	4	223	19			272	296	3,782	1,761	1,724	4,391	5,237	4,081	4,668
Lebanon							721								
Libya				1,280	2,655	1,298	10,007	105,257	120,717	23,115					
Oman	57	98		36	19	44							4	600	450
Palestine											3,116	9,184	4,407	6,075	
Qatar							267	439	507	454	633	354	196	326	202
Saudi Arabia	646							1,100				20,800	54,277	15,969	
UAE	67	603	252	931	311	100	1,061	1,533	1,867	8	2	1,657	3,823	4,687	1,589

9.5.5 Middle East/Northern Africa Meat Consumption

Muslims are prohibited from consuming pork. Beef and poultry products must be certified as Halal and must originate from certified processors following Islamic practices.

Estimates of meat and beef consumption on a per capita basis vary widely across the region. According to the USMEF between 4 - 22kg per capita of beef is consumed, with Saudi Arabian estimates placed at 4kg and Egyptian at 9kg.

Goat, fat tail sheep and chicken meat are the primary sources of animal based protein in the region. Camel meat is mainly consumed during celebrations such as weddings.

In Saudi Arabia the Saudi Ministry of Agriculture estimates that sheep meat accounted for 70 percent of total red meat consumption followed by beef (20 percent) and camel meat (10 percent).

9.5.6 Beef Market Structure

Imported chilled and frozen beef provides the majority of product into the market place. Traditionally live product, approximately 200 000 cattle per annum from France, Ireland and Germany have added to local cattle production.

Brazil has become the dominant supplier into the region due to significant price competitiveness. This dominance has been aided by shipping savings due to charters.

According to the USMEF in the Saudi market a kilo of Brazilian T-bone steak is sold for US$8.79 in local upscale supermarkets compared to $29.07 for T-bone steak from the United States.

Retail Prices of American and Brazilian Chilled Beef at an Upscale Supermarkets Chain in Riyadh (all prices are in U.S. dollars per kilogram) follow.

9.5.7 Beef Market Price Comparison

Table 23 - Beef Market Price Comparison

Country	Strip Loin	Rib Eye	T-Bone Steak	Prime Ribs	Tenderloin
U.S.	9.07	29.07	29.07	26.40	40.00
Brazil	8.79	8.79	--	--	18.40

USMEF

Oil rich countries within the region are experiencing increasingly sophisticated distribution of meat with the introduction of supermarket chains and fast food outlets. Combined with a relatively young population and rising incomes the demand for better quality meat cuts is expanding. The market however, remains significantly segmented across the region due to unequal distribution of oil money, large immigrant workforces, and traditional lifestyles persisting.

9.5.8 Feedlot Sector

The feedlot sector was aided during the 1980/90s in its development by promotion of the livestock sector in countries such as Saudi Arabia. This promotion saw the establishment of larger and more commercially focused feedlot establishments and some market distortion effects.

Local and imported disease control remains a significant challenge in the region.

9.5.9 Processing Sector

It is a requirement that both domestic and imported beef be processed under Halal practices. Processing across the Middle East and North Africa varies in sophistication considerably. It is not unusual for consumers to purchase a single animal that is then slaughtered by the family or by a local slaughter person. This is particularly the case for sheep and goats produced by traditional Beduin methods.

Both processors and feedlot establishments have a tendency to quickly switch between domestically produced and imported cattle depending on price, supply availability, and animal consistency.

9.5.10 Seasonal Influences

Demand for food is significantly influenced by Islamic religious factors. The Islamic year is based on the lunar cycle, consisting of twelve months of 29 or 30 days each, totalling 353 or 354 days. Each new month begins on the sighting of a new moon. Exact dates for activities will therefore vary from year to year.

Islamic holidays and observances include:

- Muharram (Islamic New Year) (April)
- Mawlid Al Nabi (Muhammed's birthday) (June)
- Ramadan begins (Holy month) (November)
- Eid al Fitr (Ramadan ends) (December)
- Eid al Adha (Festival of Sacrifice) (March)

Consumption of meat and meat based products usually decreases significantly during Ramadan due to fasting and during the summer holiday period which starts from the second week of June up to the first week of September.

In Saudi Arabia demand strengthens during the Hajj season as the hotel and retail industry service the 2.5 million Muslim pilgrims who travel to Mecca every year. Foreign pilgrims, accounting for 50 percent of total pilgrims, spend an average of 2 weeks in Mecca, Jeddah and Madina before and after the Hajj rituals.

9.5.11 Economic Assessment

The Middle East and North Africa region has experienced strong growth in recent years, not previously evident since the 1970s. Strong advances in GDP were primarily driven by high oil prices and increased oil production resulting in a drop in the unemployment rate. However, unemployment rates across the region remain at a relatively high 13.4% (*World Bank est.*).

According to the World Bank, a potentially large, negative impact on the broader region from the conflict in Iraq was largely avoided, with an initial downturn in economic activity limited to countries bordering and maintaining strong economic ties with Iraq. Subsequent reconstruction efforts in Iraq are likely to present potentially large economic gains for the region through trade and business activity related to the reconstruction and reintegration effort.

A significant challenge for the region is the creation of jobs for a growing population of young people. This is likely to continue to see significant government expenditure and investment, particularly in countries benefiting from higher oil prices. Additionally the distribution of wealth across the region is highly segmented along political and oil access lines.

The region is expected to see continued economic growth on the back of high oil prices, however remains politically volatile. In addition to Iraq, and the Palestinian conflict, Iran's nuclear strategy remains a potential risk to regional political and economic stability.

Many of the oil producing countries of the region peg their currency to the US dollar. Reductions in the dollar's strength in recent years has acted to lift import prices into these countries. The regional current account surplus average is approximately 12%.

Table 24 - Middle East/North Africa Table Economic Indicators

	2000	2003	2004	2005	2006est
Population (million)	273.7	289.1	294	299	304.67
GDP ($USb)	470	532	600	610.8	621.79
Per capita GDP ($US)	1680	1830	2000	2100	2205
GDP (% change)	3.6	5.2	5.1	4.9	4.3
Unemployment rate (%)	14.9	14.5	14	13.4	13.2

Source: World Bank/Consultant

While oil prices are forecast to continue to underpin economic growth and therefore import beef demand, demand for Australian live cattle will continue to face strong beef price competition, local exchange rate and supply side pressures.

9.5.12 Australian Steers Delivered Main Israel Port - Pricing Example

ISRAEL YOUNG FEEDER STEERS Ex Fremantle		Total Cost
Livestock Costs		
Average Weight (Kg)	280	
Farm Gate Price LW Kg	1.7	476
Agent Fee (Farm Gate)	5%	23.8
Veterinary Costs		
On Farm		4.5
Dipping		2.5
Road Transport (eg Ex Farm - Lot Average)		
Distance (Km)	300	
Cost per deck/Km	1.8	
No. Head Per Deck	40	13.5
Feedlot/Spelling		
Days on Feed	2	
Feed Costs Per Day	4	8
Average Daily Wt. Gain	*0.8*	
Ear Tag		0.35
Insurance		6
Electrolytes etc.		1.4
Road Transport to Fremantle		
Distance (Km)	70	
Cost per deck/Km	2	
No. Head Per Deck	40	3.5
Industry Levies and Charges		
Cattle Transaction Levy		3.5
Wharf Charges		1.66
Third Party Vet		4
AQIS/On charges		1.8
Ports Charge		2
Receival Yard Fees		1
Weighbridge		2
Management		
Administration		7
Office		15
Sub Total		595
Exporter Profit		
Profit	10%	59.5
Value at Fremantle		
FOB		654.5
Sea Transport		
Freight Per Head		150
Insurance		
Insurance Per Head		15
Sub Total		819.5
Israel Alongside Ship Costs		
Israel Duty Rate	0%	0
Discharge Costs		15
FAS Main Israel Port		
Australian Dollars		**834.5**
US Dollars	**0.75**	**625.875**
Shekel	**3.46**	**2887.37**

9.5.13 Middle East and North Africa - Key Demand and Supply Drivers

Table 25 - Middle East and North Africa - Key Demand and Supply Driver

Middle East Key Drivers	
Demand	**Supply**
Growth in GDP per capital is driving imported beef consumption.	Domestic and export beef against live trade prices.
Import country currency exchange rates (some pegged).	Australian state supply sourcing is influenced by sea freight differentials and access to cattle.
Limited local production.	Some markets like Israel require lighter cattle and European breeds.
Religious requirements for fresh killed beef.	
Relative price of imported cattle against imported beef and buffalo.	
Access to foreign currency.	
Freight costs.	
Country political stability/War risk	
Limited supply ex-Europe/US/Canada currently.	

10 Emerging Markets

Presently the global beef cattle sector remains under supply side pressure with much of the global industry rebuilding herds. In such situations exporters will tend to supply markets able to pay higher prices, though will also commonly balance this consideration with the maintenance of supply, where possible, to traditional markets. Thus, price considerations are balanced with the strategic issues of maintaining a presence in markets where comparative competitive advantage has traditionally been experienced during periods of higher supply levels.

Thus, price is not the only determination in the supply of markets and cattle and beef exporters are not purely price chasing. The theory commonly being held that profit maximisation over time will result from the supply of markets where highest comparative competitive advantage exists over the long-term.

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Brunei	9,488	9,639	9,172	8,701	9,119	7,641	5,824	6,528	7,655	17,413	19,094	19,879	22,410	19,796	17,927
Israel							1,485		8,719	8,715	15,837	34,966	47,777	43,213	20,947
Japan	31,503	30,976	21,696	16,613	11,130	10,050	15,481	19,857	17,148	12,362	14,393	17,957	14,028	22,034	18,098
Jordan				768		1,132	4,563	2,451	18,128	37,560	40,736	13,186	4,765	23,065	34,154
Korea												1,338	563	3,364	851
Kuwait	196	4	223	19			272	296	3,782	1,761	1,724	4,391	5,237	4,081	4,668
Mauritius						2,153	3,530	903			750	5,694	2,400	950	1,150
Mexico		5,151	5,876				3,997	6,960	21,106	7,701	9,594	20,541	17,706	2,552	5,633
Palestine											3,116	9,184	4,407	6,075	
Qatar							267	439	507	454	633	354	196	326	202
Saudi Arabia	646							1,100				20,800	54,277	15,969	
UAE	67	603	252	931	311	100	1,061	1,533	1,867	8	2	1,657	3,823	4,687	1,589
Viet Nam										960		900	3,785	4,585	4,010

10.1 Emerging Markets Table

Thus, the desired characteristic of a new emerging market is both the ability to pay higher prices relative to other options, and the long-term maintenance of the market throughout the cattle cycle. A longer-term strategic initiative likely to benefit the Australian live cattle sector is the identification of markets where relative comparative advantage can be maintained throughout the cattle cycle, and the development of promotional and other support in these identified target markets.

A significant challenge for Australian live cattle exporters in the establishment of new markets is the emergence of Brazil as a highly competitive supplier of chilled and frozen beef. The type of cattle exported live from Australia is in some markets a relatively close substitute for Brazilian beef.

While Kuwait, Israel and Mexico have developed as emerging markets in recent years each has arisen due to unique and perhaps shorter-term distortions in traditional beef markets. The re-introduction of Canadian cattle to the US, and US cattle industry export re-establishment may result in enhanced pressure particularly in the Mexican and Israel markets.

10.1.1 Emerging - Key Demand and Supply Drivers

Table 26 - Emerging - Key Demand and Supply Drivers

Emerging Key Drivers	
Demand	**Supply**
Growth in GDP per capital is driving beef consumption.	East coast switching abilities to move cattle into the domestic and export processing markets based on price.
Supply constraints.	Australian state supply sourcing is influenced by sea freight differentials and access to cattle.
Poor local industry cattle supply.	Ability to out bid (short term) and maintain demand through the cattle cycle. Exporter decision-making.
Exchange rate differentials.	
Transport costs.	
Preference for fresh product.	

11 Conclusions

Sea-borne live cattle exports make up a small percentage of the total close substitute product markets; in-country produced beef, imported beef, and imported buffalo. This small market share makes the live cattle market very price sensitive, increases demand volatility, and aids export market switching ability.

Contrary to popular opinion, movements in the Australian dollar price of cattle are a demand driver, though not the primary driver, of export market demand. Over the last 10 years there have been significant periods when the Australian dollar price of cattle and export demand have been positively correlated. That is, a rising cattle price, coincided with rising live cattle exports, and a falling cattle price correlated with falling export numbers. This characteristic is less pronounced over the last three year period.

Similarly, the export demand for Australian cattle over the last 10 years has not been significantly negatively correlated with the value of Australian cattle, when expressed in US dollar value terms. However, again this has been less pronounced over the last three years, when there has been an increased negative correlation.

The determination of this market characteristic is beyond the current introductory section of this report. However, it is possible that when viewed in its total, demand for live cattle maintains a broadly proportional market share relative to its primary competitors of import country locally produced cattle, and imported beef and buffalo. In effect, the proportional demand for Australian cattle, and likewise the market for local in-country, imported beef and buffalo, follows a reasonable correlation with a theoretical global beef price.

Thus, total market share for Australian live cattle will be broadly maintained while close substitute product values move in similar price proportion.

The price sensitivities of demand for live cattle are therefore seen as being a result of the predominantly low income markets that are commonly serviced, and any movement in close substitute prices away from historic proportional values. These influences primarily give the sector its price elasticity of demand.

The primary drivers of Australian live cattle export demand over the last ten years have predominantly been individual importer country factors.

These have included:

- The landed price of Australian cattle when expressed in the import country's currency. While the rise in Trade Weighted value of the Australian Dollar has had some influence on demand, in practice, the primary driver has commonly been substantial currency movements in the currency of the importing country.

  The influence of these import currency devaluations has in the majority of cases far outweighed the Trade Weighted value influences of any appreciation in the Australian dollar.

  This characteristic, coupled with the present economic and political volatility of target countries, enhances the sector's sometimes opportunistic trading approach.

- In-country regulatory factors. These factors have acted to both limit access for Australian cattle, or to limit access for closely competitive products. Of particular note has been the significant change in beef market distribution due to BSE and FMD.

  Analysis would tend to indicate that Australian beef exports have significantly benefited from these influences, while the live cattle market has experienced either neutral or mildly positive effects. The main positive effects are: Chinese dairy cattle demand, Indonesian competitive limitations due to current FMD and BSE bans, and former Middle East market growth aided by the absence of live cattle/beef from the EU and US. However, as previously advised, individual country factors in markets such as Egypt, have tended to override competitive benefits derived from BSE and FMD factors.

Producers in northern Western Australia, Queensland, and the Northern Territory have, due primarily to freight costs, limited finishing ability, and a decline in processing capacity, become increasingly reliant on the live cattle export trade. To an extent the live cattle market currently experiences a degree of captured supply from the Australian north.

Southern producers are significantly better positioned in terms of access to domestic and export beef markets, finishing ability, consistent climatic conditions and to an extent the live market.

11.1 Recommendations and Actions for Part Two of the Project

This report has acted as a preliminary overview of the key demand and supply drivers in the Australian live cattle market. Several key factors are apparent:

1) The price of landed cattle when expressed in the local importing country's currency is a primary driver of demand.

Recommendation:
To determine pricing point sensitivities. Historic import demand on a country basis should be modelled against the landed domestic currency price on a per head basis.

2) Australian live cattle total demand has a tendency to broadly maintain proportional market share against substitutes. That is, there is a tendency for global prices of substitute products to move in unison.

Recommendation:
There is presently insufficient in-market pricing feedback to determine movements away from historic relative competitive positions. Without such feedback market forecasting will be difficult. It is necessary to determine a methodology to access this information for modeling on an on-going basis.

3) Import country GDP growth and currency values are primary drivers of total demand.

Recommendation:
A methodology to monitor import country current and forecast economic performance be determined.

4) Import country regulation is a primary driver of demand relative to substitute products.

Recommendation:
A methodology to monitor import country regulations be determined.

5) Australian producer ability to switch markets is a primary supply issue, influenced by price differentials in alternative markets.

Recommendation:
A methodology to determine the changes in pricing power between the Australian processing sector and the live market.

6) There is a need for more accurate demand and supply forecasting in the live cattle sector and for this information to be quickly distributed to relevant parties.

Recommendation:
A methodology for the timely distribution of information be developed.

12 REFERENCES

Australia-ASEAN-New Zealand Free Trade Agreement, Australian Red Meat and Livestock Industries Position, February 2005, MLA Internal Paper.

A Review of China's Beef Industry and Beef Supply Chain, Jul. 2004, W. Gong, R. Cox.

China, Peoples Republic of, Livestock and Products Semi-Annual, Feb. 2004, USDA Foreign Agricultural Service.

Breeding for Beef Production in Malaysia, 2002, A. Omar, Australian Centre for International Agricultural Research.

Cattle and Sheep Meat Processing Review, Jun. 2005, W. Burggraaf, Department of Agriculture WA.

China, Peoples Republic of, Dairy Products - China's Dairy Industry Overview, Jun. 2003, USDA Foreign Agricultural Service.

Disease-Related Trade Restrictions Shaped Animal Products Markets in 2004 and Stamp Imprints on 2005 Forecasts, 2005, USDA Economic Research Service.

Economic and Social/Community Impacts of the Live Cattle and Processed Beef Export Supply Chains in Queensland, Jun. 200, Macarthur Agribusiness.

Effects of Globalisation and Economic Development on the Asian Livestock Sector, 2003, D. Quirke/ Australian Centre for International Agricultural Research.

Food Safety in Food Security: Case Study: Beef Industry In China, Sept. 2003, International Food Policy Research Institute.

Genetic Evaluation of Beef Production in the Philippines, 2002, D. Loculan, Australian Centre for International Agricultural Research.

Improving Indonesia's Beef Industry, 2002, P.U Hada, Australian Centre for International Agricultural Research.

Israel Agricultural Initiative - Year End Report, 2004, IAI.

Key Development Indicators, 2005, Asian Development Bank

Middle East and Central Asia Department, Regional Economic Outlook, September 2005, International Monetary Fund.

Philippines Livestock and Products Annual, Jul. 2000, USDA Foreign Agricultural Service.

Rising Above The Herd, Nov. 1999, A. Quin, A. Manners.

Review of the Kimberley Indigenous Pastoral Industry, Sept. 2003, B. Quin/The Strategy Centre.

The Live Export Industry: Value, Contribution to the Economy and Outlook, December 2005, Hassall & Associates for MLA.

The Development and Retention of Adequate Processing Capacity for all Meat Species in Western Australia, Sept. 1999, A. Quin, M. Donnelly/AGWEST Trade and Development.

USMEF, USDA and World Bank web sites.

13 APPENDIX

Egypt

Land Area	997,739 sq km
Capital	Cairo
Time Zone	GMT + 2 hours; WST - 6 hours
Currency	Egypt Pound (EGP) = 100 pia stres
Exchange Rate	December 2005 A$ 1 = 4.33 Eg £ US$ 1 = 5.75 Eg £
Business Hours	
Govt	0900-1400
Offices	0800-1700
Banks	0900-1400
Shops	0900-1400
Climate	Hot, dry summers with mild, dry winters and cold nights. Rainfall is negligible except on the coast. In April the hot, dusty Khamsin wind blows from the Sahara.

People

Population (2005)	77.5 m
Growth Rate	1.78%
Languages	Arabic (official), English and French widely understood by educated classes
Religions	Muslim (mostly Sunni) 94%, Coptic Christian and other 6%

Government

Form of Government	Republic
Head of State	President Mohammed Hosni MUBARAK
Head of Government	Prime Minister Ahmed NAZIF

Economic Data

GDP (2004)	US$316.3 billion
GDP Growth	3.8%
GDP per Capita (2004)	US$4,200
Consumer Price Index	9.5%
GDP by Sector	agriculture: 17%; industry: 33%; services: 49.8%
EFIC Country Rating	4 (1 = lowest risk, 7 = highest risk)
Labour Force (2004)	20.71 million - by occupation: agriculture 32%, services, including government 51%, Industry 17%

Unemployment Rate 12%

Trade

Exports (2004)	US$11 billion
Major Exports	Crude oil and petroleum products, cotton yarn, raw cotton, textiles, metal products and chemicals.
Major Export Destinations	Italy, US, UK, Syria, Germany and Spain
Imports (2004)	US$19.21 billion
Major Imports	Machinery and equipment, foodstuffs, chemicals, fertilizers, wood products, durable consumer goods and capital goods.
Major Import Sources	US, Germany, Italy, France, China, UK, Saudi Arabia
Major Ports/Airports	Alexandria, Al Ghardaqah, Aswan, Asyut, Bur Safajah, Damietta, Marsa Matruh, Port Said, Suez and Zeit. Cairo International, 22km northeast of the city at Heliopolis.

Specifications

Previously, British breeds and European types predominated. Market preference has now swung to Bos Indicus types due to their better survival rate and performance.

The market preference is for Bos Indicus without large humps. Bos Indicus crosses are very suitable. Cattle must be castrated male animals only, no more than four teeth erupted (2.25 – 2.5 years), 350 – 500 kgs weight range.

Indonesia

Land Area	1,919,443 sq km
Capital	Jakarta
Time Zone	Indonesia spans three time zones GMT + 7 (West), GMT + 8 (Central), GMT + 9 (East). WST + 1 (West) WST - 1 (East)
Currency	Rupiah (Rp) = 100 sen
Exchange Rate	December 2005 A$ 1 = 7,278.25 Rp US$ 1 = 9,675.70 Rp
Business Hours	Mon to Fri
Govt	0800-1500
Private	0800-1700
Banks	0800-1430
Shops	0900-2100
Climate	Indonesia straddles the equator with regular monsoonal rainy and dry seasons in most locations. Annual rainfall tends to decrease from west to east, and increase as altitude increases. Maximum rainfall areas receive over 3 metres of rain each year. Climate on the islands close to Australia is similar to the Kimberley's. Java and Sumatra have wetter tropical climates. In the wet season flooding can be widespread.

People

Population (2005)	241.97 million
Growth Rate	1.45%
Languages	Official: Bahasa Indonesia Other: English, Dutch, local dialects, the most widely spoken of which is Javanese

Religions	Muslim 87%, Protestant 6%, Roman Catholic 3%, Hindu 2%, Buddhist 1%,other 1%

Government

Form of Government	Republic
Head of State and Head of Government	President Dr Susilo Bambang Yudhoyono

Economy

GDP (2004)	US$827.4 billion
GDP Growth	4.9%
GDP per Capita	US$3,500
Consumer Price Index	6.1%
GDP by Sector	agriculture: 14.6%, industry: 45%, services: 40.4%
EFIC Country Rating 5	(1= lowest risk, 7 = highest risk)
Labour Force	111.5 million - by occupation: agriculture 45%, industry 16%, service 39%
Unemployment Rate	9.2%

Trade

Exports (2004)	US$69.86 billion f.o.b
Major Exports	oil, gas, petroleum and petroleum products, textiles/garments, wood products, electronics, footwear and rubber
Major Export Destinations	Japan, US, Singapore, Republic of Korea, China
Imports (2004)	US$45.07 billion
Major Imports	Manufactures, raw materials, foodstuffs, fuels, chemicals, machinery and equipment
Major Import Sources	Singapore, Japan, China, US, Thailand, South Korea, Australia, Taiwan
Major Ports/Airports	Cilacap, Cirebon, Jakarta, Kupang, , Semarang, Surabaya and Ujungpandang. Banjarmasin, Belawan, Ciwandan, Krueg Geukueh, Palembang, Panjang, Sugai, Pakning, Tanjung Perak and Tanjung Priok The major international airports are Jakarta (CGK) (Soekarno-Hatta) which is 20km northwest of the city and Denpasar (DPS) (Ngurah Rai), 13km south of the city, (the main airport on Bali.).

Specifications

The Indonesian live cattle market preference is for +50% Bos Indicus content and 200 – 350 kgs weight range for feeder cattle. The market prefers Brahman cattle. The cattle must be smooth coats.

Heavier process cattle of all breeds are accepted at specific times of the year. The market will take steers, bulls, heifers and cows. Females should not be pregnant.

Libya

Land Area	1,775,500 sq km
Capital	Tripoli
Time Zone	GMT + 2 hours, WST -6 hours
Currency	Libyan Dinar (LD) = 1000 dirhams
Exchange Rate	December 2005 A$ 1 = 1.056 LD US$ 1 = 1.405 LD
Business Hours	
Govt.	NA
Offices	0700-1400
Banks	0730-1200
Shops	hours vary – mainly market type stalls

Climate	Summers are very hot and dry: winters are mild with cooler evenings. The desert has hot days and cold nights.

People

Population (2005)	5.7 million
Growth Rate	2.33%
Languages	Arabic, Italian, English, all widely understood in the major cities
Religions	Sunni Muslim 97%

Government

Form of Government	Jamahiriya (a state of the masses), governed by the populace through local councils;
Head of State	Revolutionary Leader Col. Muammar GADHAFI
Head of Government	Secretary of the General People's Committee (Premier) Dr Monhammed Shukri GHANERN

Economic Data

GDP (2004)	US$37.48 billion
GDP Growth	4.9%
GDP per Capita (2004)	US$6,700
Consumer Price Index	2.9%
GDP by Sector	agriculture: 8.7%, industry: 45.7%, services: 45.6%
EFIC Country Rating	7 (1 = lowest risk, 7 = highest risk)
Labour Force (1997)	1.6 million - by occupation industry 29%, services 54%, agriculture 17%,

Unemployment Rate	30%

Trade

Exports (2004)	US$18.65 billion
Major Exports	crude oil, refined petroleum products and natural gas
Major Export Destinations	Italy, Germany, Spain, Turkey and France
Imports (2004)	US$7.22 billion
Major Imports	machinery, transport equipment, food, semi-finished goods, consumer products and manufactured goods
Major Import Sources	Italy, Germany, Tunisia, Turkey, UK and Republic of Korea
Major Ports/Airports	Al Khums, Banghazi, Darnah, Marsa al Burayqah, Misratah, Ra's Lanuf, Tobruk, Tripoli, Zuwarah, Zawtyah, As Sidrah and Az Zuwaytinah.

Libya's major international airport is Tripoli International and it is 35km south of the city.

Specifications

The Libyan market has a preference for British or European breeds due to the previous Irish influence.

Cattle must be male animals (steers and bulls), with no more than four teeth erupted (2.25 – 2.5 years), within a weight range of 350 – 500 kg.

There is the possibility that the market will take Bos Indicus crosses in future.

Philippines

Land Area	300,000 sq km
Capital	Manila
Time Zone	GMT + 8, WST
Currency	Philippine Peso (P) = 100 centavos.
Exchange Rate	December 2005 A$ 1 = 40.166 PhP US$ 1 = 53.405 PhP
Business Hours	
Govt	0730-1800
Offices	0800-1700
Banks	0900-1600
Shops	0900-2000
Climate	Tropical climate tempered by constant sea breezes. There are three distinct seasons: rainy season (June to September), cool and dry (October to February), and hot and mainly dry (March to May). Evenings are cooler. Typhoons occasionally occur from June to September

People

Population (2005)	87.857 million
Growth Rate	1.84 %
Languages	Filipino and English
Religions	Roman Catholic 83%, Protestant 9%, Muslim 5%, Buddhist, other 3%

Government

Form of Government	Republic
Head of State and Head of Government	President Gloria Macapagal-Arrayo

Economic Data

GDP (2004)	US$430.6 billion
GDP Growth	5.9 %
GDP per Capita (2004)	US$5,000
Consumer Price Index	5.5 %
GDP by Sector	agriculture: 14.8% industry: 31.9% services: 53.2%
EFIC Country Rating	5 (1 = lowest risk, 6 = highest risk)

Labour Force	35.06 million - by occupation: agriculture 36%, services 48%, industry and commerce 16%
Unemployment Rate	11.7%

Trade

Exports (2004)	US$38.63 billion f.o.b
Major Exports	electronic equipment, machinery and transport equipment, optical instruments, coconut products, fruits and nuts, copper products and chemicals
Major Export Destinations	Japan, US, China, Netherlands, Hong Kong, Singapore
Imports (2004)	US$37.5 billion f.o.b
Major Imports	raw materials, machinery and equipment, fuels, vehicles and vehicle parts, plastic, chemicals, grain and consumer goods.
Major Import Sources:	Japan, US, Singapore, Taiwan, China, Hong Kong, South Korea and Malaysia
Major Ports/Airports	Batangas, Cagayan de Oro, Cebu, Davao, Guimaras Island, Iligan, Iloilo, Jolo, Legaspi, Manila, Masao, Puerto Princesa, San Fernando, Subic Bay, Surigao and Zamboanga. Philippine's major international airport is located at Ninoy Aquino (MNL), 12km Southeast of Manila.

Specifications

The Philippines has a market preference for +50% Bos Indicus content for feeders, within the 240 – 360 kg weight range.

The market prefers Brahman cattle, though will accept short coat Bos Indicus crosses. Heavier weight process cattle are currently accepted, however this is likely to be stopped in future. The market will accept steers, bulls, heifers and cows.

Malaysia

Land Area	329,750 sq km
Capital	Kuala Lumpur
Time Zone	Same
Business Hours	Mon to Fri
Govt	0800-1500
Private	0800-1700
Banks	0800-1430
Shops	0900-2100
Currency	1 Ringgit = 100 sen
Exchange Rate	December 2005 A$ 1 = 2.341 RG US$ 1 = 3.780 RG
Climate	Tropical monsoonal (southwest April to October and northeast November to March) weather.

People

Population (2005)	25.5 million
Growth Rate	1.8%
Languages	Bahasa Melayu (official), English, Chinese dialects (Cantonese, Mandarin, Hokkien, Hakka, Hainan, Foochow), Tamil, Telugu, Malalalam, Panjabi, Thai; note—in addition, in East Malaysia several indigenous languages are spoken, the largest of which are Iban and Kadazan
Religions	Islam 53%, Buddhism 19%

Government

Form of Government	Constitutional monarchy
Head of State	H.M The Yan Di-Pertuan Agong XII Tuanku Syed Sirajuddin ibni Alamarhum Tuanko Syed Putra Samalullai
Head of Government	Prime Minister YAB Dato seri Abdullah bin Ahmad Badawi

Economy

GDP (2004)	US$229.3 billion
GDP Growth	7 %
GDP per Capita (2004)	US$9,700

Consumer Price Index	1.3 %
GDP by Sector	agriculture: 7.2%; industry: 33.6%; services: 59.1%
EFIC Country Rating	2 (1 = lowest risk, 7 = highest risk)
Labour Force (1997)	10.49 million - by occupation: Agriculture 14.5%; Industry; 36% and services 49.5%
Unemployment Rate	3.6%

Trade

Exports (2004)	US$123.5 billion
Major Exports	electronic equipment, petroleum and petroleum products, palm oil, wood and wood products, rubber, textiles and chemicals
Major Export Destinations	US, Singapore, Japan, Hong Kong, UK, Thailand,
Imports (2004)	US$59.3 billion
Major Imports	electronics, machinery, petroleum products, plastics, vehicles, iron, steel and chemicals
Major Import Sources	Japan, US, Singapore, China, Thailand, Indonesia, Taiwan, Germany, South Korea
Major Ports/Airports	Kota Kinabalu, Kuantan, Kuching, Kudat, Lahad Datu, Labuan, Lumut, Miri, Pasir Gudang, Penang, Port Dickinson, Port Kelang, Sandakan, Sibu, Tajong Berhala, Tanjong Kidurong, Tawau, Binulu, Johor, George Town (Penang) and Tanjung Pelepas. Malaysia has four international airports.

Specifications

The Malaysian market has a preference for +50% Bos Indicus content for feeders, within the 200 – 350 kg weight range. Heavier process cattle of lesser Bos Indicus content is also accepted.

The market will take steers, bulls, heifers and cows, with a preference for Brahman cattle.

Jordan

Land Area	97,740 sq km
Capital	Amman
Time Zone	GMT + 2 hours (GMT + 3 from April to September) WST -6 hours
Currency	Dinar (JOD) = fils
Exchange Rate	December 2005 A$ 1 = 0.709 JOD US$ 1 = 0.533 JOD
Business Hours	
Govt	0800-1400
Offices	0800-1900
Banks	0830-1730
Shops	0900-1830
Climate	Hot and dry summers with cool evenings. The Jordan Valley below sea level is warm during winter and extremely hot in summer. Rain falls between November and March, while colder weather conditions occur in December/January.

People

Population (2005)	5.76 million
Growth Rate	2.56%
Languages	Official – Arabic. Other - English widely understood among upper and middle classes
Religions	Sunni Muslim 96%, Christian 4%

Government

Form of Government	Constitutional monarchy
Head of State	King Abdullah II
Head of Government	Prime Minister Dr Marouf Bakhit

Economic Data

GDP (2004)	US$25.5 billion
GDP Growth	5.1 %
GDP per Capita (2004)	US$4,500
Consumer Price Index	3.2%
GDP by Sector	agriculture: 2.4% industry: 26% services: 71.5%
EFIC Country Rating	5 (1 = lowest risk, 7 = highest risk)
Labour Force (2004)	1.41 million by occupation: Agriculture; 5%, Industry; 12.5%, Services; 82.5%
Unemployment rate	15%

Trade

Exports (2004)	US$3.2 billion f.o.b

Major Exports	phosphates, fertilizers, potash, agricultural products, manufactures, clothing, vegetables and pharmaceuticals
Major Export Destinations	US, Iraq, India, Saudi Arabia, Syria, EU, Indonesia
Imports (2004)	US$7.6 billion
Major Imports	crude oil, machinery, transport equipment, food, live animals, manufactured goods and textile fabrics
Major Import Sources	Saudi Arabia, China, Germany, Italy, US
Major Ports/Airports	Jordan's main port is located at Al 'Aqabah
	Jordan's main airport Queen Alia International (AMM) is 32km (20 miles) Southeast of the capital.

Specifications

The Jordanian market is purchasing process weight cattle.

Jordan has a market preference for Bos Indicus cross bulls of +350 kg, for specific festive times. The market will take steers.

Mexico

Land Area	1,972,550 sq km
Capital	Mexico City
Time	GMT -6 WST -14
Business Hours	Mon to Fri
Govt	0900 – 1400 , 1500 – 1800
Private	0900 – 1400 , 1500 – 1800
Banks	0900 – 1400 , 1500 – 1800
Shops	0900 – 1400 , 1500 - 1800
Currency	1 New Mexican peso (Mex$) = 100 centavos
Exchange Rate	December 2005
	A$ 1 = 7.99 pesos
	US$ 1 = 10.65 pesos
Climate	Varies from tropical to desert

People

Population (2005)	106.2 million
Growth Rate	1.17%
Languages	Spanish, various Mayan, Nahuatl, and other regional indigenous languages
Religions	Nominally Roman Catholic 89%, Protestant 6%

Government

Form of Government	Federal republic operating under a centralised government
Head of State and Head of Government	President Mr Vicente Fox Quesada

Economy

GDP (2004)	US$1,006 billion
GDP Growth (2004)	4.1%
GDP per Capita	US$9,600
Consumer Price Index	5.4%
GDP by Sector	agriculture: 4%
	industry: 27.2%
	services: 68.9%
EFIC Country Rating	2 (1= lowest risk, 7 = highest risk)
Labour Force	34.75 million - by occupation:

Agriculture; 18%, service; 58% and industry; 24%

Trade

Exports (2004)	US$182.4 billion (f.o.b. 1998)
Major Exports	crude oil, oil products, coffee, silver, engines, motor vehicles, cotton, fruit and vegetables and consumer electronics
Major Export Destinations	US, Canada, Japan, Spain, Germany
Imports (2004)	US$190.8 billion (f.o.b. 1998)
Major Imports	commodities: metal-working machines, steel mill products, agricultural machinery, electrical equipment, car parts for assembly, repair parts for motor vehicles, aircraft and aircraft parts
Major Import Sources	US, China, Japan, Germany, Republic of Korea, Canada, South Korea
Major Ports/Airports	Acapulco, Altamira, Coatzacoalcos, Ensenada, Guaymas, La Paz, Lazaro Cadenas, Manzanillo, Mazatlan, Progreso, Salina Cruz, Tampico, Topolobampo, Tuxpan, Veracruz, Morro Redondo Mexico's major airport is Mexico City

Specifications

Mexico has accepted light weight Bos Indicus infused and short coat shorthorn steers and heifers.

China

Land Area	9.6 million sq. km. Hong Kong – 1,095 sq. km.
Capital	Beijing
Time Zone	GMT + 8 Hours; WST
Business Hours	Mon to Fri
Govt	0830 – 1700
Private	0830 – 1700
Banks	0900 – 1200
Shops	1300 – 1630 0900 - 2100
Currency	1 Yuan Renmimbi = 100 Jiao or Fen
Exchange Rate	December 2005
	Hong Kong Dollar HKD=100cents
	A$ 1 = 6.076 Rmb
	US$ 1 = 8.08 Rmb
Climate	Generally a temperate climate, but with such a large country extending far inland and embracing a wide range of latitude as well as containing large areas at high altitude, many parts experience extremes of climate.

People

Population (2005)	1,306 million; Hong Kong – 6.89 million.
Growth Rate	0.58%; Hong Kong – 0.65%
Languages	Official – Mandarin
	Other – Cantonese, English in Hong Kong
Religions	Buddhism, Daoism, Confucianism, Muslim, Protestant and Roman Catholic.

Government

Form of Government	Communist
Head of State	H.E President Mr Hu Jintao
Head of Government	H.E Premier of the State Council Mr Wen Jiabao

Economy -	**China**	**Hong Kong**
GDP (2005)	US$7.626 trillion;	US$234.5 billion
GDP Growth	9.1%;	7.9%
GDP per Capita	US$5,600;	US$34,200
Consumer Price Index	4.1%;	-0.30%
GDP by Sector	agriculture 13.8% services 33.3% industry 52.9%	agriculture: 0.1% industry: 11.3% services: 88.6%
Unemployment	9.8% in urban areas.	6.7%
EFIC Country Rating	2 (1 = lowest risk, 7 = highest risk)	
Labour Force	**China** – 760.8 million - by occupation: agriculture 49%, industry 22%, services 29%. **Hong Kong** -3.54 million – by occupation wholesale and retail trade, restaurants, and hotels 43.7%, social services 9.9%, manufacturing 7.5%, financing, insurance, and real estate 19.2%, transport and communications 7.9%, construction 2.9%, community and social services 18.5%	

Trade

Exports (2004)	**China** – US$583.1 billion	**Hong Kong** – US$268.1 billion
Major Exports	garments, textiles, footwear, machinery and equipment, plastics, optical and medical equipment, iron and steel	
Major Export Destinations	Japan, US, Germany, South Korea and Singapore.	
Imports (2004)	**China** – US$552.4 billion	**Hong Kong** – US$ 275.9 billion
Major Imports	**China** -Machinery and equipment, oil and mineral fuels, plastics, optical and medical equipment, organic chemicals, iron and steel **Hong Kong** – raw materials, semi-manufactures, consumer goods, foodstuffs and fuels	
Major Import Sources	Japan, Taiwan, US, Republic of Korea and Germany	
Major Ports/Airports	China's major ports are located at Shanghai, Qinhuangdao, Dalain, Guangzhou, Ningbo and Quingdao. China has 383 airports, with the major ones being located at Beijing and Shanghai.	

8.2 State of the Industry report – sheep/goats

Development of A Livestock Export Market Reporting Service

Key Demand and Supply Influences in the Live Sheep and Goat Export Industry

Profarmer Australia Pty Ltd.

Quin Consulting and Analysis

Table of Contents

List of Figures

List of Tables

Executive Summary

Underpinning recent increases in global demand for meat protein has been an increase in total GDP and GDP per capita across many importing countries, particularly in the Asian and Middle East regions.

Australian live sheep exports are valued at approximately US$286 million, in a +US$3.5 billion sheep meat export trade. This equates to an approximate 8.11% market share of the global sheep meat import market. Improved economic growth and increasing per capita incomes have generated demand for sheep meat in excess of local in-country production resulting in increased import demand.

Australia is the world's largest shipper of live sheep, with 98.8% of shipments being sold to the Middle East. Middle East demand grew out of the developing oil industry in the late 1960s to early 1970s. Supporting the demand for Australian live sheep imports is the preference for fresh meat, the predominant wet market distribution system, religious beliefs and customs, limited refrigeration, limited local supply, processing costs, population growth, and policies supporting the development of the sheep meat processing sector.

Australian sheep exports peaked in 1987 at 7.2 million head. Higher prices for sheep, reduced supply, a rising Australian dollar and disease issues have resulted in a decline in export numbers from a more recent peek of 6 811 565 head in 2001. Markets experiencing significant declines included Saudi Arabia, the UAE, Qatar and Oman.

Australia exported 4 184 938 live sheep in 2005 valued at $280 520 502, up from 3 397140 head in 2004. Exports of live sheep have averaged approximately 5.3 million head per annum over the past decade.

The Middle East market can be broadly segmented into three parts; domestically produced fat tail sheep, imported fat tail and merino cross sheep. Australia primarily exports merino cross-bred sheep to the Middle East.

Over the last ten-year period Australia imported a variety of fat tail sheep as breeding stock primarily from Southern Africa. These sheep have been bred to Australian Merinos with the produce primarily destined for mid-level Middle East markets.

An extended period of relatively low real wool prices has resulted in a drop in total Australian sheep numbers and contributed to a reduction in the number of stock available for export. A drop in sheep numbers also resulted from drought. Low real wool prices also reduced herd numbers in competitor countries such as Uruguay and Romania.

This drop in global sheep herd numbers has coincided with an increase in demand for sheep meat due to rising GDP per capita, and combined periodic disease factors in other meat substitute products such as beef, pork and chicken. Prices for sheep meat have risen in response to these pressures.

Strong domestic demand for sheep meat in Australia has increased the ability of meat processors to compete for stock against the live trade. Additionally the demographics of the Australian herd has shifted towards younger sheep and the prime lamb market, as producers seek early returns and shifted away from wool production.

The Australian sheep export sector's reliance on Saudi Arabia and Kuwait is significant. However, this trade has been hampered by disease and regulatory issues particularly into Saudi Arabia. Saudi Arabia is a key driver of total market demand and disease has been the primary influence on trade flows.

The landed price of Australian sheep in local currency terms is a key sensitivity for export volumes. However, factors including disease in alternative protein markets and in near country produced sheep, combined with the above mentioned wool situation has resulted in limited product supplies. This has seen continued strong demand despite higher sheep prices.

The live sheep export markets are not fully deregulated. In addition to trade protection measures such as duties, the sector operates within a framework of regulation. Many of these regulatory restrictions on trade have resulted from disease considerations.

In some cases this regulatory framework exceeds the importance of landed cost based economic factors. For instance, in some live sheep import markets the regulatory framework dictates whether an exporting country can even enter into trade, thus in these circumstances relative landed costs of product become irrelevant for the banned export country.

Primary factors influencing landed costs are, increasingly stringent export regulations and the cost of sea freight. Export standards have been progressively tightened in response to animal welfare incidents and general community concerns. The trade's primary export port is Fremantle, an area of relatively high population density. This acts to keep the industry in the public eye, with continued lobbying for the trade to stop, with higher animal husbandry standards a threat to longer-term economic viability.

Because live sheep are a lower value added product, freight rates as a component of unit costs, combined with commonly one-way freight shipments, result in the freight component of price having a significant effect on product competitiveness. It is therefore likely that freight rate increases as a result of rises in fuel costs have a larger proportional influence on the live sheep trade than on the substitute product processed sheep meat, and other competing proteins.

Australia is the world's largest goat meat exporter primarily out of Queensland. The primary markets for live goats have traditionally been close Asian countries including Malaysia and Singapore. The goat trade has also been assisted by access to Middle East markets in conjunction with live sheep exports.

A combination of rangeland supply, proximity to market and limited processing opportunities, due to limited domestic goat meat demand and less development of the export market, have been factors in Western Australia's dominance of the live goat trade.

The live goat industry is significantly hampered by weather making collection and distribution of goats difficult during rain periods. Additionally, many producers view rangeland feral goats as a secondary line and will switch quickly between live and processed markets. These factors have reduced supply consistency and made export market development more difficult.

Goat exports to the Middle East have also been hampered by disease issues. This has periodically significantly reduced trade. The goat export industry remains relatively small in comparison to the live sheep trade, with this situation likely to remain given the relatively limited use of controlled production methods.

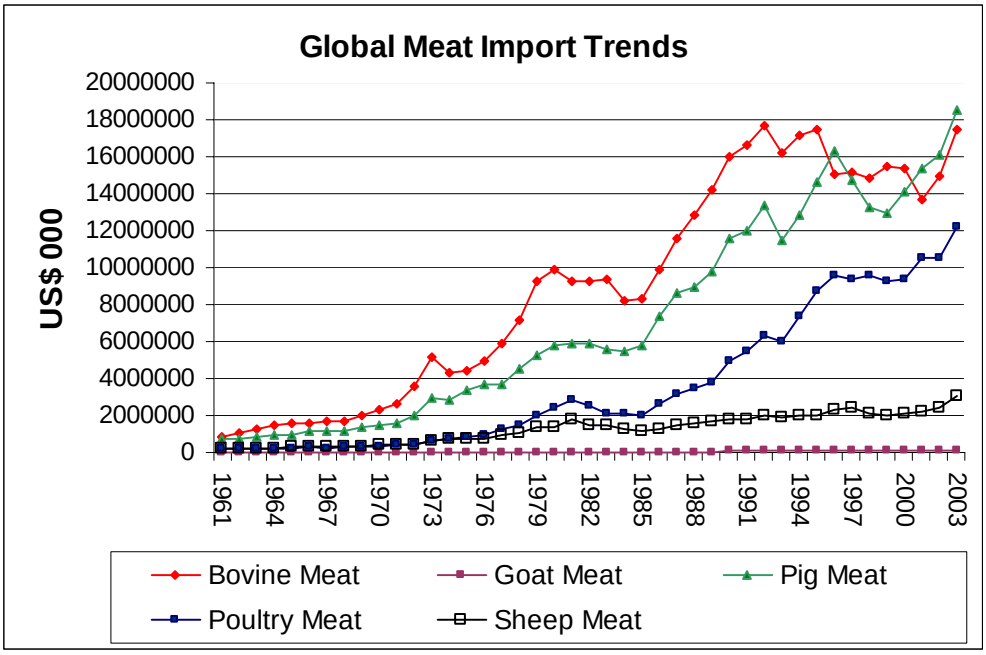
Primary Supply And Demand Influences

Livestock Trade in Context of the Global Meat Industry

Underpinning global demand for meat protein is an increase in total GDP, and GDP per capita across many importing countries.

The graph below demonstrates long-term rising value trends in beef, sheep, goat, poultry and pork meat imports. The significant effect of BSE and Foot and Mouth Disease (FMD) on total beef import values can be seen through the 1990s. An increasing global demand for lamb and mutton has seen rising imports of these products in recent years. Pork demand remains strong on a global basis.

Figure 12 - Global Meat Import Trends



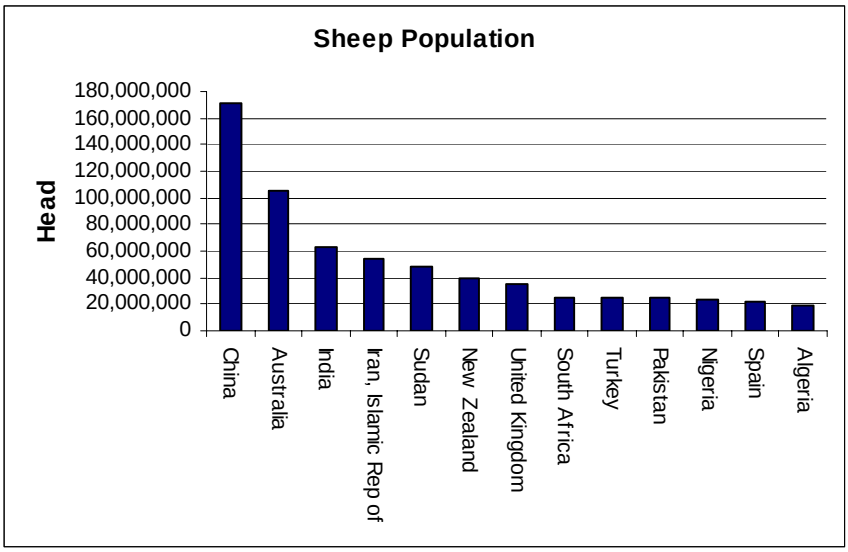
Source: FAO

In addition to an increasing global demand for meat protein, disease and regulatory influences will remain significant drivers of world import demand and supply.

Australia is the largest exporter of live sheep, supported by a large sheep population built-up in response to historic demand for wool, and as a rotational product to cropping. Limited domestic meat demand, relative to sheep production allows the export of live sheep to take place at economic levels. This is relatively unusual in the world where the majority of sheep production is consumed in-country, or imported in the form of mutton or lamb.

Australian exporters face additional challenges in regard to regulation, shipping costs and animal husbandry due to live sea transport requirements.

Figure 13 - Global Sheep Population by Country

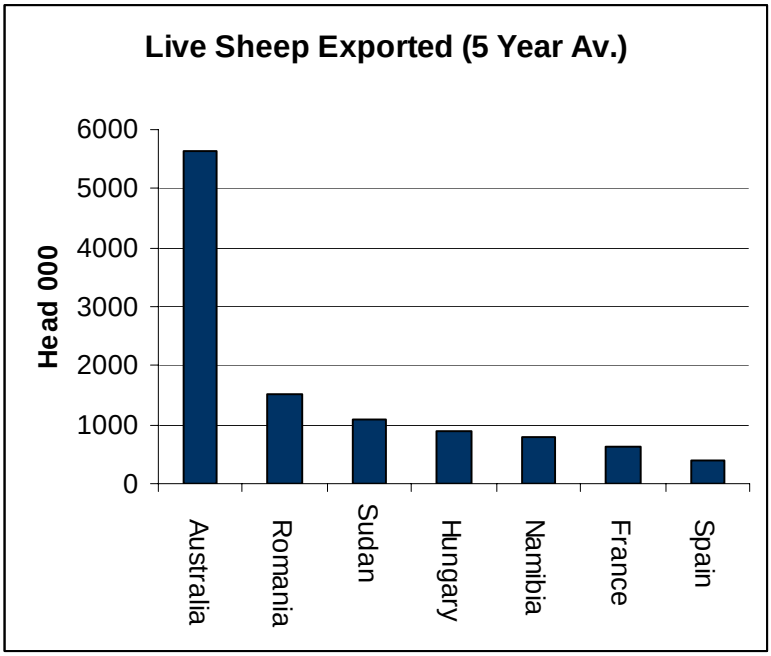


Source: FAO

Global sheep meat imports are approximately 6 times the value of global live sheep imports. Currently, Australian live sheep exports are valued at approximately US$286 million, in a +US$3.5 billion sheep meat export trade. This equates to an approximate 8.11% market share of the global sheep meat import demand market, a close substitutable product in some markets. Allowing for in-country produced sheep meat, the proportion of live sheep exported, against total sheep meat consumption is relatively small.

China, India, Pakistan and the Sudan have the largest goat herds. Australia is the largest exporter of goat meat despite having a relatively small goat herd.

Figure 14 - Major Live Sheep Exporters



Source: ABS

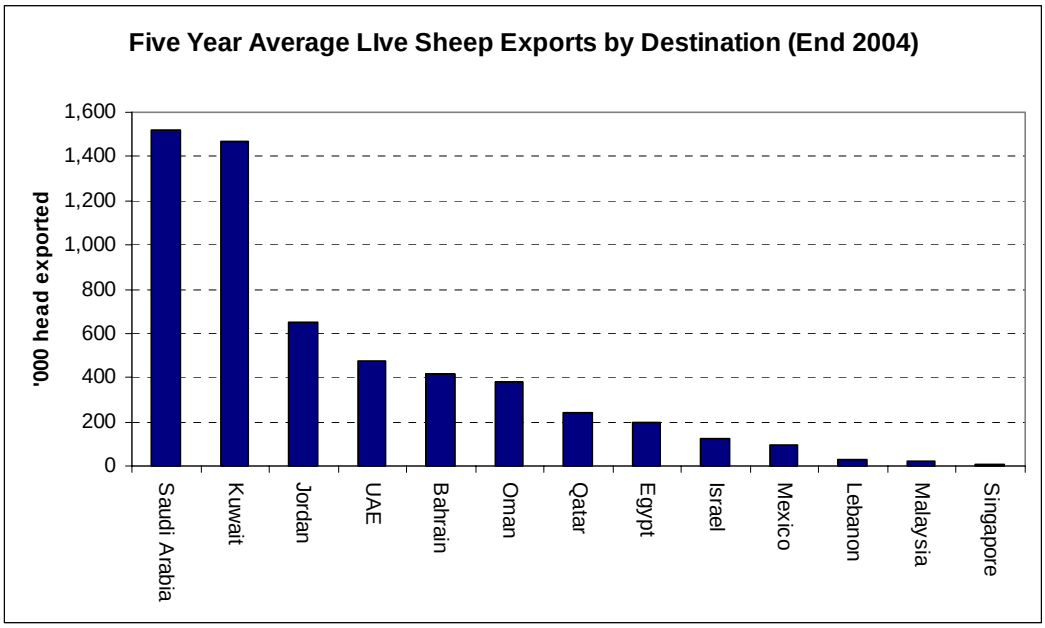
Figure 15 - Australian Live Sheep Exports by Value

Source: ABS

Australian exports of live sheep are predominantly focused on the Middle East. Trade into this market has been assisted by traditional production systems (limiting production), arid climates, a religious preference for locally killed fresh product, limited refrigeration, immigrant workers, neighbouring country disease factors, and increases in oil wealth and population lifting total meat demand.

In general, the majority of Australian sheep exported to the Middle East (Merino/Cross) are destined for the lower per capita economic groups including immigrant workers. Australian fat tail sheep are targeted at the middle market, and domestically produced fat tail sheep are considered the highest quality product and are targeted at higher income earners. There are approximately 13 breeds of fat tail sheep in the Middle East and Africa.

Figure 16 - Five Year Sheep Export Average by Destination



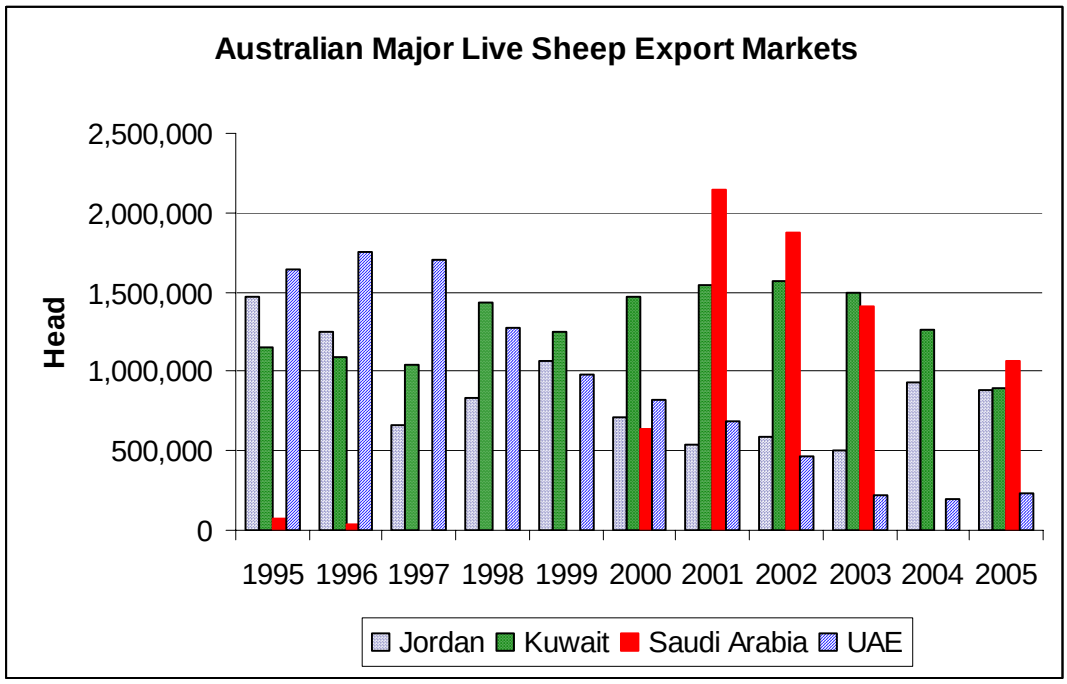
Source: ABS

The major live sheep importer Saudi Arabia has historically been an extremely volatile market due to periodic import bans due to disease factors. For example, Australian sheep imports have been periodically banned for scabby mouth disease and African imports due to Rift Valley Fever. Disease factors influence demand both on an animal quality basis and religious basis where healthy, disease free animals are preferred for the production of meat.

Kuwait and Jordan have remained relatively stable markets, while there has been a decline in direct imports into the UAE from Australia.

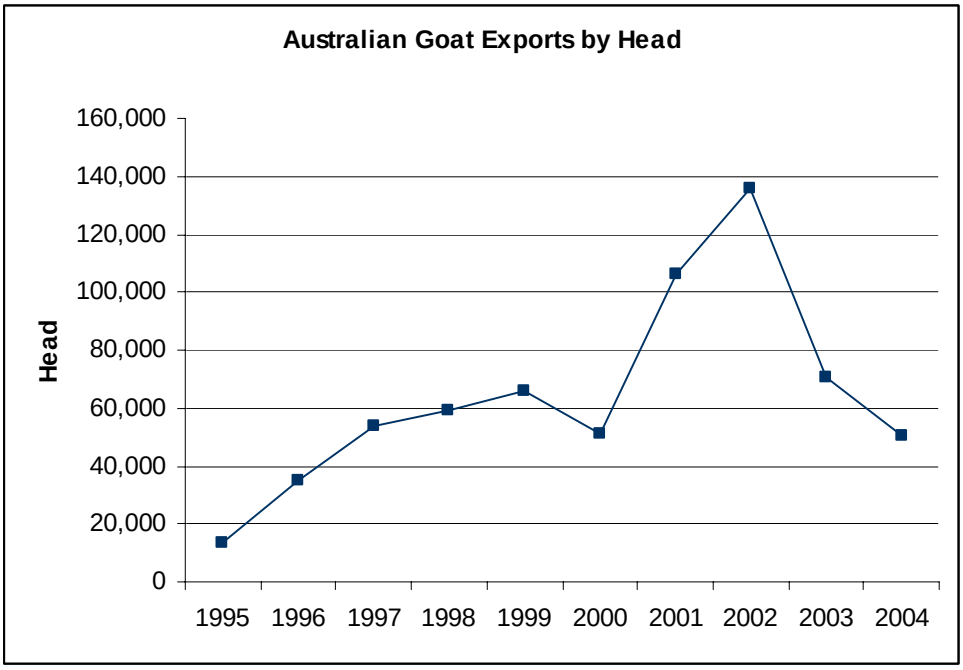
The supply of goats into the live export market was influenced by the ban on sheep and goats exported to Saudi Arabia. During this period goats that would normally sell for approximately $45 per head FOB were diverted to the processing market for prices around $33 per head, or alternatively were left on stations.

Figure 17 - Major Live Sheep Export Destinations



Source: ABS

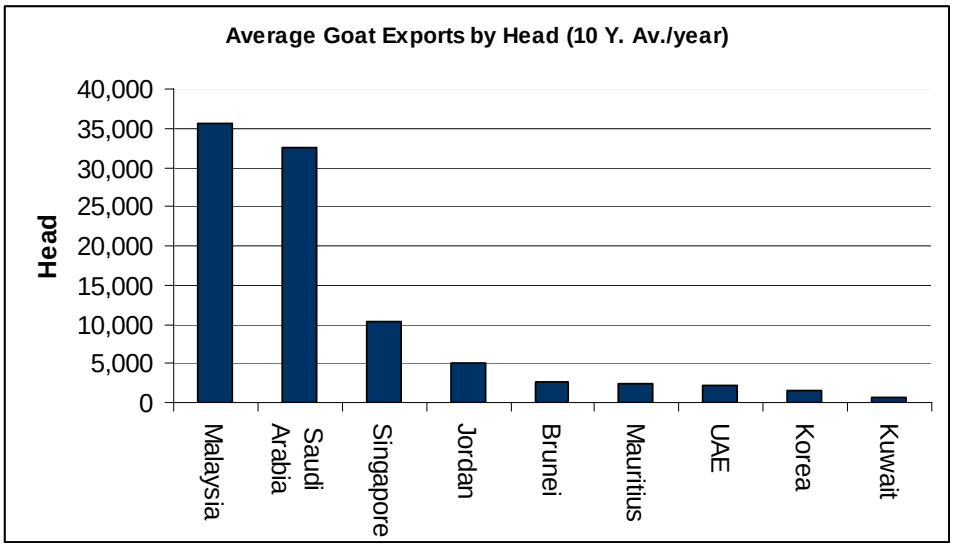
Figure 18 - Australian Live Goat Exports by Head



Source: ABS

Malaysia has been the most consistent Market for Australian live export goats.

Table 27 - 10 Year Average Live Goat Exports by Destination



Source: ABS

Key Points:

- **Over the long-term global sheep and goat meat demand is rising with GDP per capita and population increases.**
- **Global sheep meat import demand has increased in recent years however, by value is significantly below beef, pork and chicken import demand.**
- **Disease and regulatory issues have a significant effect on market structure and the economics of both sheep and goat markets.**
- **Live sheep exports make up a relatively small percentage of total sheep meat supply when measured on an FOB basis. However, it should be noted that when measured on an in-country processed basis total market value held would be in the region of 16%.**

Live Sheep Exports from Australia

First reports of sheep exported from Australia were in 1845. By 1895, about 1000 sheep annually were being exported from Western Australia to Singapore (*Livecorp).*

Live sheep exports grew into the Middle East during the late 1960s to early 1970s, when companies such as the Danish Clausen shipping group converted surplus oil tankers to livestock carriers. Kuwait was a significant buyer through this period when Australia mostly exported aged wethers of low wool and meat value.

Following a rise in oil production and real oil prices in the Middle East a significant rise in demand for live sheep was experienced. This was aided by the market's enhanced ability to pay, increased immigration in key markets, and a preference primarily for religious reasons for fresh locally slaughtered meat.

Australian live sheep exports peaked in 1987 at 7.2 million head. Exports of live sheep have averaged approximately 5.3 million head per annum over the past decade.

Australian sheep export numbers were 4 184 938 head in 2005, rising 23% from the 2004 figure of 3 397 140 head. Live sheep exports were valued at A$280,520,502 FOB in 2005. Resumption of the trade to Saudi Arabia in July boosted the figures with Saudi becoming the largest importer of live sheep for the year. Kuwait, Jordan and Bahrain were the next three largest importers of Australian sheep *(Livecorp).*

The Middle East region takes 98.8% of Australian live sheep exports. In 2005 Saudi Arabia held 25.6% of the market, while Kuwait decreased its market share to 21.3%, and Jordan reduced to 21.1%.

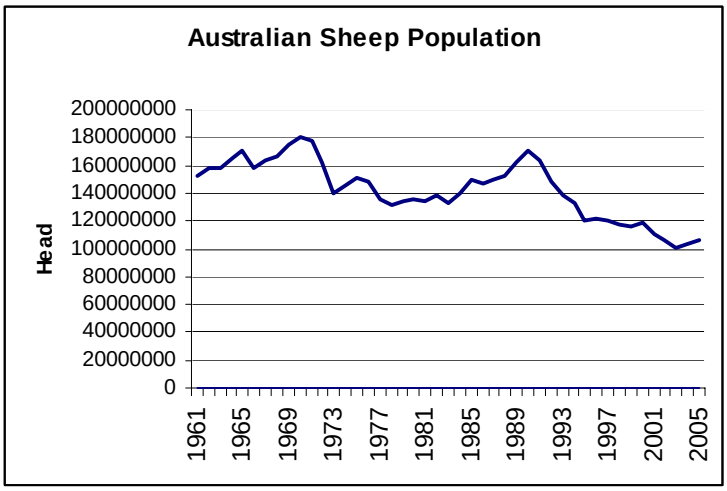
Demand has shifted towards improved quality younger sheep both of the Merino and fat tail type.

Key Supply Side Factors

Wool Prices

Weak real wool prices over an extended period have resulted in a decline in sheep stocking numbers across Australia. This decline in stock numbers flows through to stock available for live export. In recent years importing countries have been forced to substitute product from South America and Europe, although these suppliers are also experiencing declines in stock numbers.

Figure 19 - Australian Sheep Population

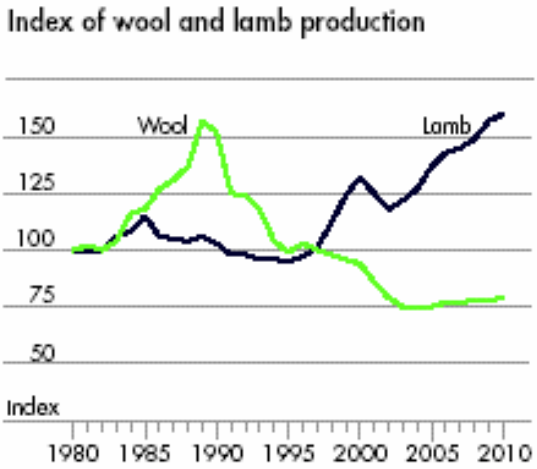


Source: ABARE

In Australia between 1994/95 and 2004/05 there has been a 41% contraction in wool production. However, production of finer wools, 19 micron or less rose by 61%. Real prices for 19 micron and finer wools have fallen since 1999 *(ABARE).*

The drop in wool returns, combined with the 2002/03 drought caused producers to reduce sheep production, and re-focus production towards sheep for the meat market, particularly prime lambs.

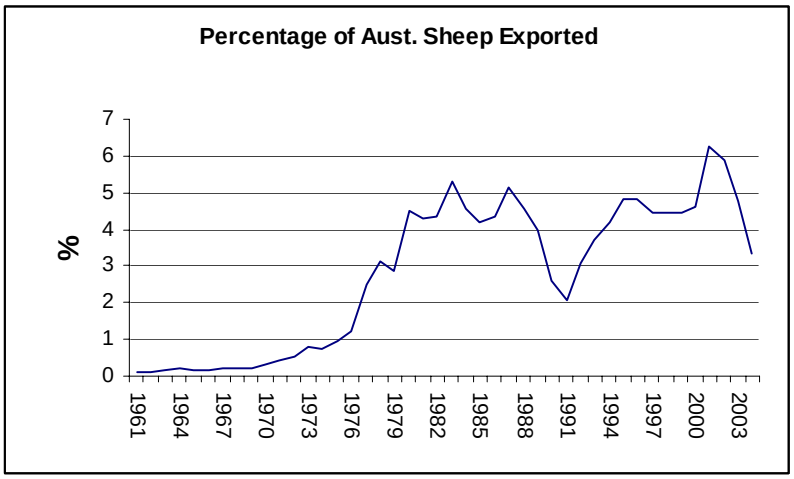
Figure 20 - Australian Wool and Lamb Index



Source: ABARE

Over time the percentage of the total Australian flock exported has fluctuated depending on the prices paid for processing against the live trade, the wool price, disease factors influencing live import demand and herd demographics.

Figure 21 - Percentage of Australian Sheep Flock Exported



Meat Prices

Historically, for most producers with the option to carry sheep the primary decision in regard to enterprise emphasis on production was determined by the return from wool. Meat prices were generally considered to be a secondary decision in regard to the carrying of sheep.

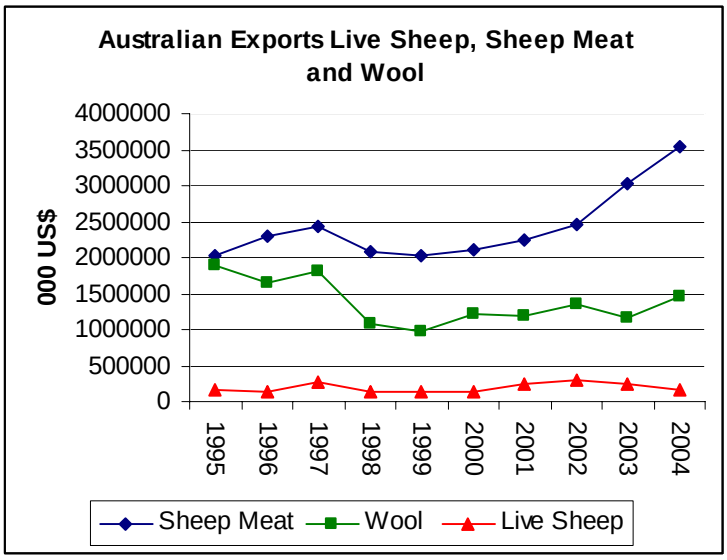
With the real decline in wool prices produces have placed greater importance on the production of sheep for meat. Recent emphasis on lamb production, fat tail breeds and the South African Meat Merino are examples of this trend. Fat tail breeds generally do not produce saleable wool quality by the second cross. Therefore these producers are primarily concentrated on meat value.

The consequent reduction in stocking numbers following low wool prices has occurred at a time when demand both domestically and in international markets for sheep meat is rising. This has resulted in increased prices for sheep. Increased demand for sheep meat has also been assisted by disease problems such as BSE in beef.

Total Australian sheep numbers have fallen 15% since 1994/95 *(ABARE).* This fall in stock numbers has contributed to reductions in sheep numbers exported and processed.

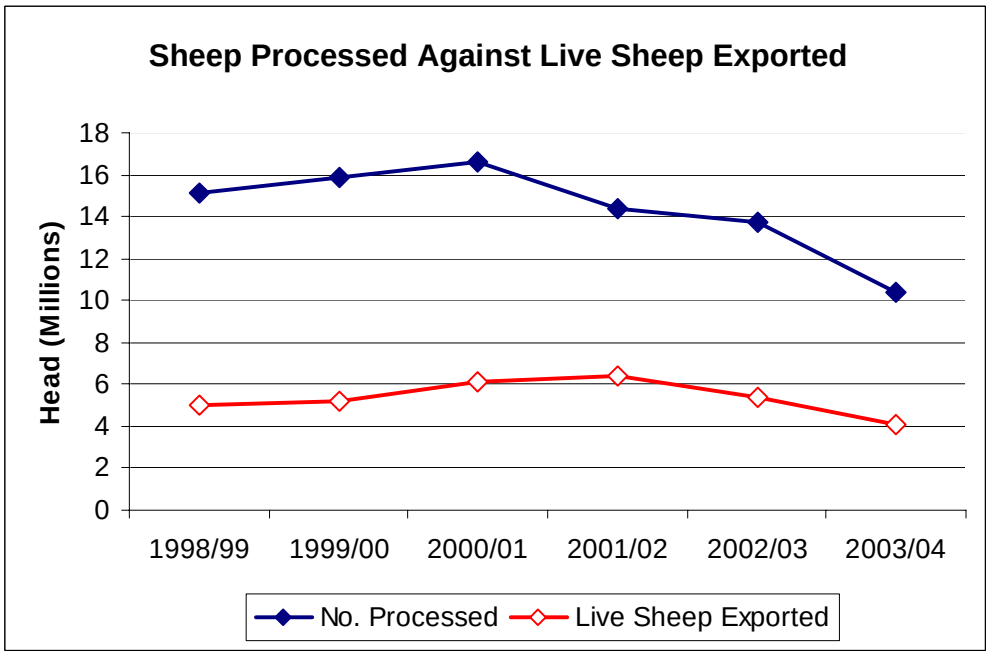
However, the total value of sheep meat exported from Australia has risen despite a fall in processing numbers. Since 1994/95 significant real price increases have been experienced for mutton (substantial increase), lamb and beef. While real prices for crop products have remained relatively unchanged, and there has been a real price decline in wool.

Figure 22 - Australian Exports Live Sheep, Sheep Meat and Wool



Source: ABS

Figure 23 - Live Export Against Domestic Slaughter



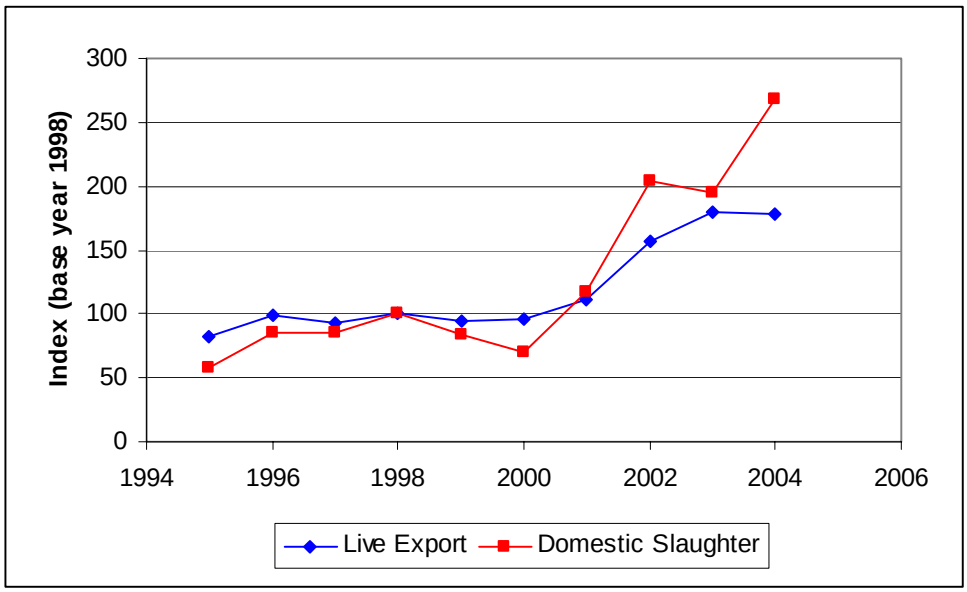
Source: ABS

Sheep availability for the live trade is influenced partly by the prices received for processing against the live sheep price. Processor ability in recent years to out bid the live market is demonstrated in the chart below.

This processor strength has been aided by strong domestic and export meat demand. Historically, particularly in Western Australia where domestic meat demand is limited, live sheep prices have had

a significant influence on the setting of total sheep prices. Prices in Western Australia are usually lower than the eastern States due to lower relative domestic demand for sheep meat.

Figure 24 - Live Export Against Domestic Slaughter Value Index



Source: ABS

Production Alternatives

The returns of production alternatives such as cattle or cropping, or between meat and wool production can change producer enterprise focus over longer-term periods. Obviously, the ability of producers to alter enterprise mix varies depending on resources, land availability and location, skills etc.

In Western Australia the livestock cropping rotation option remains predominant for most producers.

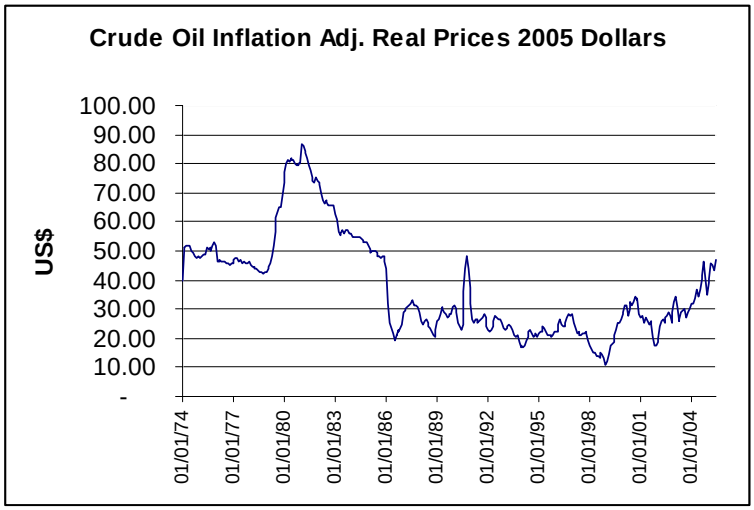
Some producers particularly in lower rainfall areas have moved out of wool production and into the production of fat tail breeds such as Damara and Dorpers. Predominantly Damara sheep where cropping is generally not an option, and Dorpers as part of a cropping rotation production system.

Key Demand Side Factors

Oil Price

Crude oil supports a significant percentage of Middle East GDP. Oil is therefore a key underlying factor in Middle East import food demand. It is likely however, that oil prices would need to fall to a low pricing point before demand was seen to be significantly influenced. Above this pricing point oil plays a demand supporting role in Middle East markets.

Figure 25 - Crude Oil Inflation Adjusted

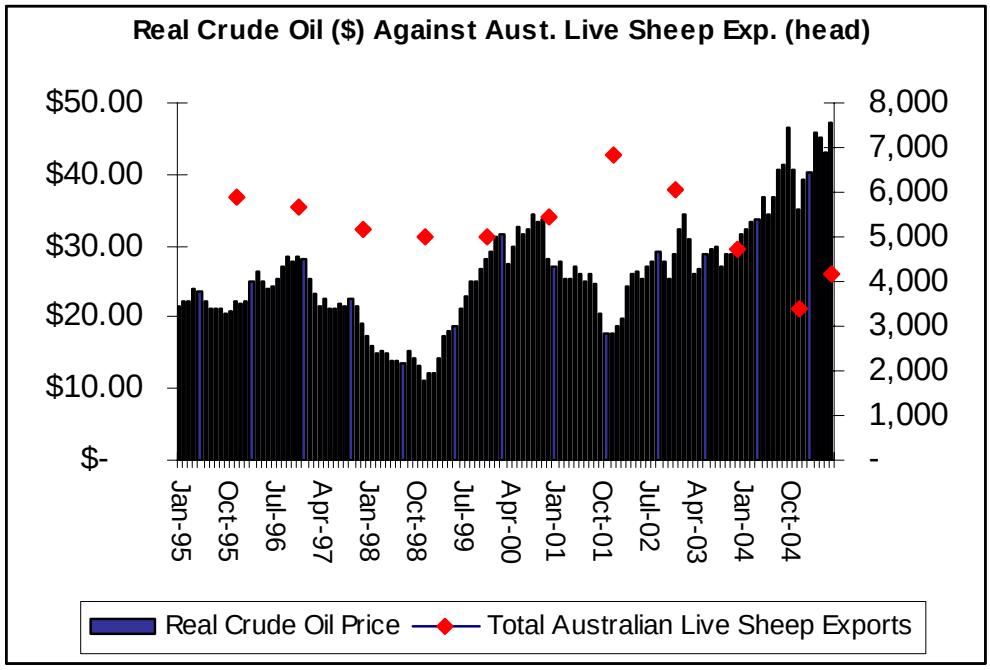


Source: US futures

In the early late 1960s, and early 1970s the development of crude oil, and high real oil prices assisted the expansion of the live sheep industry into Middle East markets. The oil industry in the Middle East brought both immigrant workers and increases in per capita incomes, leading to increased meat protein consumption *(See Saudi Arabia section).*

Over the last ten years, while oil prices have influenced shipping costs and to an extent import country ability to purchase, their effect has been overshadowed by disease and supply constraints. Oil prices influence demand, however they have not been a significant driver within the oil price band experienced over the last ten years.

Figure 26 - Real Crude Oil Against Live Sheep Exports



Source: ABS, US futures

Underlying Country Demand

Live sheep demand is dominated by the Middle East. These countries taking 98.8% of total Australian sheep exports. There are a number of factors contributing to demand from this target market.

The scope for directly substituting sheep meat for live sheep is in part limited by market characteristics and preference. (See Saudi Arabia Section graph, Sheep meat imports against live sheep imports.) Thus, unlike many other meat protein import markets, where live animal imports compete more directly on a substitute basis with meat imports, this relationship is not as evident in the Middle East sheep trade.

Factors contributing to underlying demand for live sheep imports include:

Population Growth

The population of the Middle East is projected to rise at over 2% per annum through to 2020. According to the FAO the population is expected to increase from 586 million in 2003 to 680 million by 2010 an increase of 16%.

This population rise combined with production limitations should underpin increased demand for food imports.

Limited ability to lift production in-country
A range of factors including climatic conditions, lack of water, farming methods and disease mean that significantly lifting in-country or close country production of sheep and goat meat is difficult.

Religion
The religious preference for Halal processed meat, contributes to a preference among consumers for local live processed product where there is an enhanced level of confidence in processing methodologies.

Taste
Middle Eastern consumers are traditional eaters of sheep and goat meat. This meat has primarily been fresh killed and therefore there is a preference for fresh followed, by chilled, and finally frozen meat cuts.

Refrigeration
Limited refrigeration at both the import/wholesale/retail and consumer levels limits the holding ability of chilled or frozen meat. This means the holding of live product is preferred.

Processing costs
Middle Eastern processing costs can be relatively low, or coincide at the consumer level. It is not unusual for consumers to buy and slaughter their own animal especially during religious festival periods.

By-product use
The import of live product provides access to by-products and other animal parts that may be consumed or further processed. By-products such as hides can return a significant cost percentage of an animal and offer value adding opportunities.

Disease
Disease and its influence on demand for Australian sheep into the Middle East has been the significant driving force in the Australian live sheep export market. Saudi Arabia has traditionally been Australia's largest sheep market, however it has also been very volatile due to disease issues halting trade.

Australia has periodically banned exports of goats and sheep to Saudi Arabia due to disease problems.

While during a ban on sheep imports underlying demand could be said to still exist for imported sheep, for the purposes of a demand and supply model the outright banning of imports can be considered as a drop in import country demand to nil. Additionally, a ban in exports has periodically been put in place by the Australian government, following problems with importing countries, it can therefore also be seen as a ban on supply.

Trade has been banned outright or halted for considerable periods due to alleged blue tongue, sheep pox and scabby mouth diseases.

Disease problems with the Middle East are not confined to Australian sheep. For instance Saudi Arabia imports up to 5 million sheep per annum, approximately 40 - 50% from surrounding countries (Australia has approximately 40% market share of imported sheep into Saudi Arabia). However, this has varied greatly due to periodic bans.

This close neighbour trade from countries such as the Sudan, Somalia, Turkey and Yemen, has been significantly disrupted by diseases such as Foot and Mouth, and Rift Valley Fever.

The effect of disease on total demand has been the single largest influence on trade over the last two decades.

While recently constructed MOUs in regard to improved management of disease issues have recently been signed with a number of significant importing countries, the monitoring of possible disease threats remains a primary marker for live sheep and goat demand.

Exchange Rates

See Price and Currency Factors below.

Product Substitutes

Live sheep in the Middle East compete against imported live sheep from other supplying countries both delivered by sea, and overland from close neighbours. Additionally, the product competes with other processed sheep meat imports and meat proteins such as chicken and beef.

The clear preference for fresh killed meat, supports the demand for imported live product against imported chilled or frozen meat. This is a more pronounced characteristic of Middle East meat protein demand, than occurs in other meat import markets. Generally, in the cattle import sector for example, live product competes more closely with imported chilled or frozen product.

As a result, in the Middle East live sheep import market, price discounting to a certain point relative to competitive imported sheep meat product, may not result in a proportionate fall in demand for imported sheep meat. Alternatively, live sheep price increases above a certain relative point may not result in a proportionate increase in demand for imported sheep meat. (see Saudi Arabia section - Live sheep imports against imported sheep meat).

This characteristic is somewhat in contrast to the more normal trend towards significant price elasticity of demand for commodity products in lower or middle income market sectors.

This preliminary analysis suggests that live sheep imports against sheep meat imports in the Middle East are relatively distant substitutes. Additionally, that local live sheep production is a close substitute for imported live sheep within certain market segments.

Goats

Key Supply Side Factors

Weather
The majority of live goats exported from Australia are feral. These goats are generally caught when they come in for water. Extended rainy periods mean the goats become dispersed rather than moving into a central point. Additionally, many of the station country tracks become impassable for trucks when wet. In such conditions goats can not be collected or transported to market.

Meat Prices
Historically, the live goat trade has tended to be able to out bid the processing market for goats. However, in recent periods, as with sheep, greater strength has rested with the processors. This processor strength has been aided by strong domestic and export meat demand.

A particular problem with the development of the live goat export sector has been inconsistent supply, and the habit of some suppliers to switch quickly between the live and processing market according to the highest prices being offered.

Production Alternatives
For many rangeland producers goats are a secondary side-line. Producers tend to concentrate resources on their primary production options of cattle and sheep.

Key Demand Side Factors

Underlying Country Demand
Live goat demand is dominated by Malaysia, Singapore and the Middle East. There are a number of factors contributing to demand from these target markets.

Factors contributing to underlying demand for live imports include:

Population growth
Population rises in Asia and the Middle East should underpin increased demand for live goat imports.

Limited ability to lift in-country production
A range of factors including climatic conditions, lack of water, farming methods and disease mean that significantly lifting in-country or close country production of goat meat is difficult.

Religion
The religious preference for Halal processed meat, contributes to a preference among consumers for local live processed where there is an enhanced level of confidence in processing methodologies.

Taste
Asian and Middle Eastern consumers are traditional eaters of goat meat. This goat meat has primarily been fresh killed and therefore there is a preference for fresh followed by chilled and finally frozen meat cuts.

Refrigeration
Limited refrigeration at both the import/wholesale/retail and consumer levels limits the holding ability of chilled or frozen meat. This means the holding of live product is preferred.

Processing costs
Asian and Middle Eastern processing costs can be relatively low, or coincide at the consumer level. It is not unusual for consumers to buy and slaughter their own animal especially during religious festival periods.

By-product use
The import of live product provides access to by-products and other animal parts that may be consumed or further processed. By-products such as hides can return a significant cost percentage of an animal and offer value adding opportunities.

Disease
Disease and its influence on demand for Australian goats and sheep into the Middle East has been the significant driving force in the Australian live goat export market.

The effect on goat exports has been similar to the sheep industry, particularly into the Middle East, where goats travel on the same vessels.

Exchange Rates
See Price and Currency Factors below.

Product Substitutes
Live goats compete against local and imported live goats from other supplying countries both delivered by sea, and overland from close neighbours. Additionally, the product competes with other processed goat meat imports and meat proteins such as chicken and beef.

Key Points:

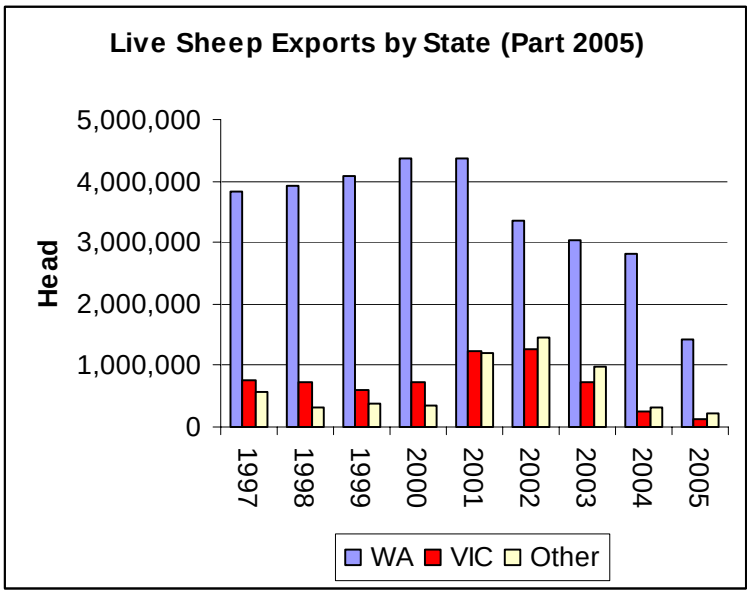
- **Crude oil prices, development and immigration supported the early development of the Middle East live sheep and goat import trade.**
- **Crude oil prices with in the pricing band experienced over the last decade are not a primary demand driver of live sheep demand. Falls in price below this level may alter demand.**
- **Low real wool prices have forced a reduction in sheep numbers globally and in Australia.**
- **Weather and processing prices are major factors in goat supply.**
- **High real sheep meat prices are changing flock demographics.**
- **Processor's ability to gain supply has improved due to domestic and export meat demand.**
- **Live sheep and goat import demand is driven by population growth, limited domestic production ability, religious preference, taste for fresh kill, refrigeration access, processing costs, by-product access and disease controls.**
- **Disease factors have been a primary demand/supply driver over the last decade.**
- **In the Middle East market live sheep against imported sheep meat are not close substitutes.**
- **Live sheep/goat import against domestic sheep/goat production are close substitutes in certain Middle Eastern market segments.**

State Based Live Sheep Export Analysis

Western Australia exported 83% of Australian sheep in 2005 with Victoria and South Australia sharing the remainder. Factors such as a relatively small domestic population offering limited meat demand, and reduced freight and shipping times to Middle East markets support Western Australia's market share of the live sheep trade.

Western Australian producers are significantly more reliant on the live sheep sector than their eastern States counterparts.

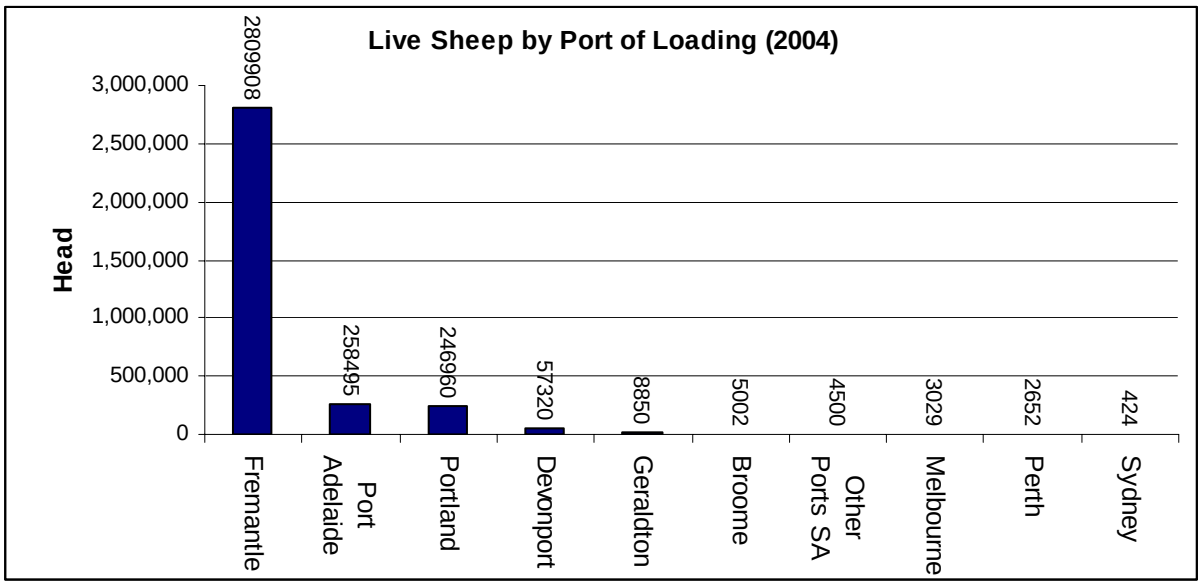
Figure 27 - Live Sheep Export Market Share by State - 5 Year Average



Source: ABS

Fremantle is the dominant shipping port, followed by Port Adelaide and Portland.

Figure 28 - Annual Live Sheep Exports by Port



Source: ABS

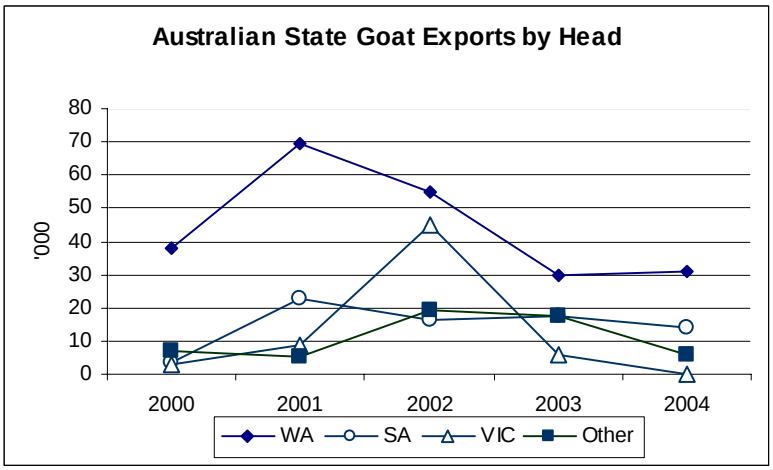
Western Australian mutton and prime lamb sheep prices are significantly influence by live sheep demand. While there are several sizeable sheep meat processors (Trefort and Fletcher) in Western Australia, against the numbers of live sheep shipped capacity is limited, particularly by labour shortages. These shortages are partly as a result on the strong mining sector.

Goats

Western Australia has consistently been the major live goat exporter aided by large feral numbers, a limited domestic processing market, close access to the markets of Malaysia and Singapore, and shipping access, in conjunction with sheep, to the Middle East.

Western Australia exports approximately 51% of Australia's live goat exports, followed by South Australia (21.3%) and the Northern Territory (10%).

Figure 29 - Goat Exports by State



Source: ABS

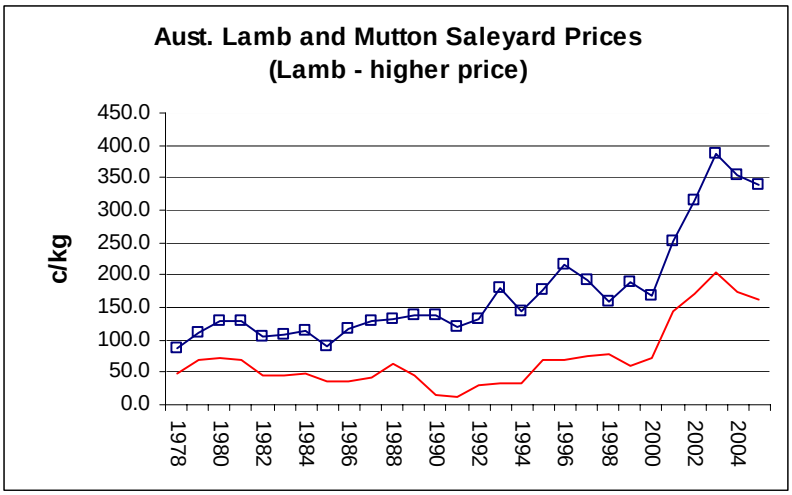
Key Points:

- **Western Australia is the major shipper of live sheep and goats through the port of Fremantle.**
- **The industry is aided by low domestic demand, processing constraints and shipping proximity.**
- **Western Australian prime lamb and mutton prices are influenced by live sheep demand.**
- **Western Australian producers are significantly reliant on the live sheep trade.**
- **Capacity constraints such as labour, limits the sector's ability to divert sheep and goats away from live shipment through to processors. However, processors have increased pricing strength in recent years.**

Price and Currency Factors

Australian lamb and mutton prices have pushed higher on increased demand and low sheep numbers. Strong sheep meat demand has been lifted by disease problems in other competing meats such as beef. This has in certain regional areas of Australia enabled processors to out bid live sheep export buyers. This change in purchasing power is the opposite to the strong purchasing power experienced by the live trade during the sheep export boom of earlier periods.

Figure 30 - Australian Lamb and Mutton Saleyard Prices

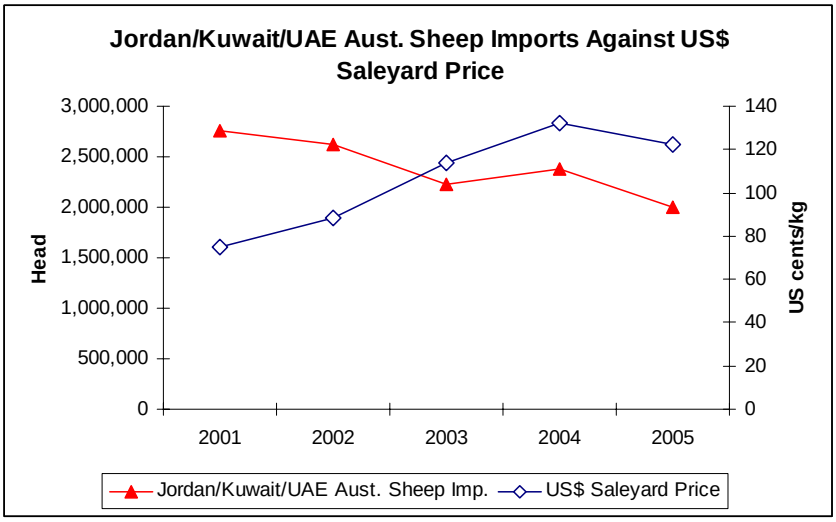


Source: ABS

In order to develop a broad understanding of exchange rate and pricing effects on the live sheep exports sector, the US Dollar saleyard price against imports into Jordan, Kuwait and the UAE has been plotted.
Saudi Arabia has been left out of this pricing analysis due to disease issues causing major fluctuations in exports to that country.

The US Dollar has been used to better approximate effects from other competing sources of animal protein. This brief analysis indicates broadly that prices in Australian saleyards equivalent to the US Dollar 80 - 1.00 cents/kg range begins to have a demand influence on exports into the Middle East. It is likely that the market in part switches to domestic producer, near country imports, or alternative protein products at these pricing levels.

Figure 31 - Jordan, Kuwait, UAE Australian Sheep Imports Against US$ Australian Saleyard Price



However, it should also be noted that reductions in supply play an important role in total sheep numbers exported. The analysis, excluding Saudi Arabia, does however lead to some relationship conclusions in regard to pricing, and exchange rate effects given that when Saudi Arabia is out of the market it could be assumed that an increase in sheep were available to other markets.

Key Points:

- **Australian sheep prices have remained buoyant due to disease pressures in alternative protein markets and reduced supply.**
- **A rise in the Australian saleyard price of sheep towards the US Dollar 80 - 1.00 cents/kg begins to influence live sheep demand.**

Emerging Competitor Trends

Australian live sheep exports are primarily constrained by reduced sheep numbers. The majority of competitors are also experience supply pressures. Other potential competitors into the Middle East markets are constrained by disease issues or strong domestic demand reducing the surplus of sheep for export.

The major competitor for Australian sheep imports in the Middle East is locally produced sheep, or near country cross-land-boarder trade. Domestically produced sheep are commonly preferred, however supply limitations have meant a requirement for sheep imports. The ability to significantly lift sheep numbers produced domestically is generally limited based on climatic production factors and commonly disease influences.

Few significant threats exist on the seaborne live import side, while imported sheep meat is not considered a close substitute in most market sectors.

Seaborne competitive threats such as those from South America and Europe are currently also experiencing production limitations as low real wool prices have seen reduced stocking numbers.

Poultry, Goats, Beef and Seafood

Australian live sheep imports face broader competition from other protein sources. Competitive threats exist to some extent from other meats such as chicken, goat, seafood, camel, beef and buffalo. Major beef and buffalo meat markets in the Middle East include the UAE, Saudi Arabia, Iran, Jordan, Kuwait, Iraq and Egypt.

While the proportion of food expenditure is falling with rises in total household income, it is still relatively high and as a result, the price competitiveness of alternative protein sources is a key in any consumption decision. White meat is commonly produced locally and therefore carries a significant advantage over imported produce. Changes in price differentials against sheep meat may therefore impact on the amount of sheep produced and imported vis-à-vis alternative proteins.

Key Points:

- **Competition for Australian seaborne live sheep is mainly from domestically produced or cross-land-boarder imported sheep.**
- **Both domestically produced and land boarder imported sheep competition is limited by climatic and disease conditions. With imports supplying the demand gap.**
- **Australian sheep compete to an extent with alternative proteins such as chicken, beef, buffalo and seafood.**

Regulatory Requirements

In regard to close product substitutes, from an importing country's perspective the decision to import live sheep is primarily based on three key considerations:

- Regulatory requirements in regard to access to imported sheep or sheep meat.
- The relative in-country landed cost of imported sheep against domestic in-country produced sheep; and,
- To a lesser extent the relative in-country landed cost of imported sheep against the landed cost of fresh/frozen sheep meat.

The live sheep export markets are not fully deregulated. In addition to trade protection measures such as duties, the sector operates within a framework of regulation. Many of these regulatory restrictions on trade have resulted from disease and animal health considerations.

The regulatory aspects of the industry can act to:

- Effectively ban a country from exporting live sheep to another country. Such as has periodically been the case with live sheep shipments to Saudi Arabia.
- Create market gaps for unaffected countries to capitalise on. For example, reductions in Australian exports of sheep to Saudi Arabia have reduced market pressures on domestically produced and close country imported sheep.

In some cases this regulatory framework exceeds the importance of landed cost based economic factors. For instance, in some live sheep import markets the regulatory framework dictates whether an exporting country can even enter into trade, thus in these circumstances relative landed costs of product become irrelevant for the banned export country. Additionally, changes in regulations can be the cause of major market volatility, as barriers are erected, removed or altered.

A ban on export supply does however, influence competitive positions for those with access to the market. It may for instance make some export suppliers cost competitive where previously they were not.

Thus, a linkage between regulation and landed competitive product cost exists. This regulatory framework and its influence on trade patterns are an important part of the live sheep export market. In many cases it holds the potential to override free market comparative cost considerations and influences supplier competitive abilities.

Landed cost considerations can therefore not be assessed in terms of sustained competitive advantage and threat assessment without significant consideration being placed on regulatory factors and their potential for alteration. The balance of regulatory influences against landed cost competitive considerations will of course vary from market to market.

Recently Australian sheep exporters led by Senator Warren Truss, have signed a number of MOU agreements with Middle Eastern countries, including Saudi Arabia, Kuwait, Eritrea and the UAE. These agreements set out a regulatory, agreed framework for the live sheep trade including

unloading and quarantining arrangements should a disease issue become apparent. Additionally, a number of requirements in regard to animal handling have been agreed to.

These MOUs hold the potential to reduce the volatility and risks faced by the Australian live export industry as a result of disease and animal handling issues. Going forward these MOUs should create a more stable export trade.

In addition to agreements with importing countries, the industry has implemented wide ranging initiatives to improve animal handling for the export market (see Animal Welfare section below).

Key Points:

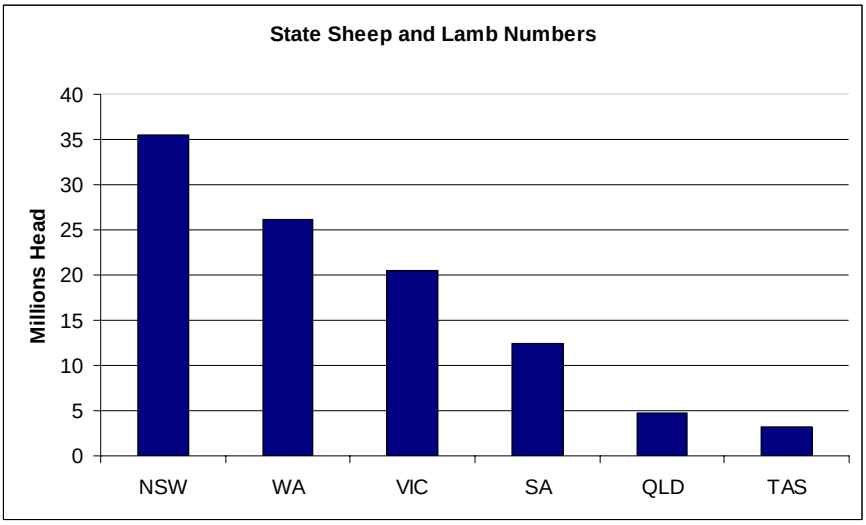
- **Regulatory factors, particularly in regard to disease provide a framework for the live export trade and influence market structure.**
- **In some circumstances this regulatory structure will override landed cost considerations, and alter relative comparative advantage of products.**
- **Correct market forecasting structures will take into account both regulatory structure, its potential for change, and its impact on relative comparative advantage.**
- **The interplay between regulation and landed cost competitive considerations will vary significantly between different export markets.**
- **MOUs signed with key importing countries should reduce export volatility due to disease risk.**

Production Distribution Alternatives

Sheep producers in Australia face differing distribution and market alternatives. Western Australian producers are more reliant on the live sheep sector, with both limited processing capacity and domestic meat demand due to a relatively small isolated population reducing alternative market options. Additionally, the trade benefits from proximity to the Middle East providing reduced sailing costs and shipping times.

Eastern States producers are relatively more focused towards wool production and domestic/export processing of sheep and lamb meat.

Figure 32 - State Sheep and Lamb Numbers



Source: ABS

Western Australia exports on a yearly basis, approximately 10.71% of its total sheep flock, while South Australia exports 2.08% and Victoria 1.2%.

Despite rising Western Australian sheep meat exports in recent years, the state contributes a relatively minor percentage of total Australian sheep meat exports.

Goats

Western Australia exports approximately 19.5% of total Australian goat meat production, against Queensland's market share of 41.4%. The majority (50%) of goat meat production is exported to the US.

Producers will commonly switch between the processing and live market. The Queensland processed market is more competitive against the live trade in competitive ability, than is the Western Australian processing sector. This is due to a stronger Queensland processing sector and reduced opportunities for live goat exports.

The habit of Western Australian producers to quickly switch between processing or live trade market distribution systems, combined with variations in supply due to factors such as weather has made the building of consistent export markets more difficult.

Key Points:

- **Sheep and goat producing regions are not evenly reliant on the live sheep/goat export sector. There exists the ability to switch between the live trade and processing options particularly in Western Australia.**
- **Western Australian producers have tended to be more reliant on the live sheep trade with a less developed processing sector due to smaller domestic demand, relative to the eastern States.**
- **Western Australian goat producers commonly switch between processing and live options. This combined with supply variability hampers the ability to grow consistent export markets.**

Trade Barriers

There are generally limited tariff barriers for live sheep and goats, though considerable non-tariff barriers, i.e. disease controls.

In addition, a number of other challenges (non-tariff barriers) remain when servicing the Middle Eastern markets. In particular, equity and transparency regarding sheep handling, processing sanitary and phytosanitary standards and other technical trade access matters are a key concern.

Goats

Apart from on-going efforts through the WTO to unilaterally reduce tariff and non-tariff barriers on global trade in meat and livestock, the Australian government has recently initiated discussions aimed at establishing an Australia-ASEAN-NZ FTA.

The prospects of an FTA delivering ongoing market access improvements in ten Southeast Asian Nations (Brunei Darussalam, Myanmar [Burma], Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam) may offer alternative live markets.

Key Points:

- **Generally tariffs on live sheep and goats are low.**
- **Despite efforts to reduce tariffs significant non-tariff barriers continue to exist.**
- **On-going trade discussions are likely to continue to see reduced levels of tariff protection in future. However, significant non-tariff barriers are likely to remain.**

Animal Welfare

The Australian live export trade has been the centre of an intense and persistent campaign by the animal welfare lobby protesting against the live shipment of animals. The Cormo Express incident that led to unacceptable welfare and mortality outcomes attracted widespread criticism of the trade within Australia and internationally.

The Minister for Agriculture Fisheries and Forestry announced a review into the livestock export industry in response to concerns about animal welfare.

This review examined:

- The adequacy of welfare model codes of practice;
- The adequacy of regulatory arrangements;
- The types of livestock suitable for export;
- Supervision of voyages to ensure accurate reporting; and,
- The factors that contributed to excess mortalities on the Cormo Express.

The review made the following recommendations:

1. The development of a national standard for livestock exports
2. The Government should be solely responsible for issuing export licenses and a compulsory levy be established to fund research and development activities
3. The criteria for approval of export licenses should be explicit in the legislation
4. 'Third party' veterinarians accountable to AQIS must be contracted to oversee shipments and ensure license conditions are adhered to.
5. A suitably qualified veterinarian must be on board all livestock export ships where the journey takes over 10 days
6. There must be a continuation of investment in R&D
7. A quarantine holding facility in the Middle East must be established and a MOU to govern the Saudi trade must be established.
8. A national response system should be established to manage any future livestock export emergency.

This review brought the end of industry self-regulation. These recommendations have now been implemented and while they have led to a more robust and sustainable regulatory structure they have also significantly increased the cost of live exporting. Costs have also increased both directly and indirectly in terms of additional administrative requirements for live exports.

Australian livestock export markets are extremely price sensitive and exporters have been unable to pass on the increased regulatory costs to customers and as a result margins have fallen. This is

particularly the case in countries where Australian exports compete against livestock coming from countries that do not have such stringent export regulations.

Over time, the increased cost of compliance following an adjustment period should lead to a consolidation in the number of live export licensees, a fall in competition and the restoration of margins.

The recent complaint lodged by Animals Australia with the WA Department of Local Government and Regional Development, who administer the WA Animal Welfare Act (2002) highlights the increasing personal risk posed to industry participants by the animal welfare lobby.

The majority of live sheep are shipped via Fremantle in Western Australia. Over the years Fremantle has become increasingly urbanised. Both sheep vessels in port and sheep trucks delivering sheep are highly visible and accessible. Such high profile in a built-up area increases the protest and anti-live sheep lobby groups focus on the trade.

This and uncertainty to the trade posed by the continued and ongoing protests of the animal welfare lobby will also increase the risk return expected by participants and investors in the industry.

Key Points:

- **Animal welfare issues remain a significant threat to the on-going economic viability of the live sheep trade.**
- **Increasing risks exist for participants in the industry. These risks need to be balanced against an improvement in returns, however this is not always possible given present price pressures.**
- **There is potential for industry consolidation due to animal welfare cost increases and heightened risk of industry participation.**
- **While recent additional regulation of the trade has added to compliance costs and reduced margins, in the longer term they may serve to make the trade more sustainable and less volatile.**

Shipping Influences and Freight Rates

Access to Shipping

The shipping of live sheep and goats requires specialist carriers. Changes to shipping regulations in addition to requirements for improved animal welfare is placing pressure on shipping access to several markets. Some vessels are expected to become obsolete or require upgrading following the introduction of new maritime regulations in 2007.

Economic costs have also led some carriers to exit the live sheep shipping market. At the same time however, there is an expectation that other carriers will enter the market.

Changes in capacity influence freight rates and shipping access, especially during peak demand periods. Live sheep vessels are expensive to run primarily because of the limited opportunities for return loading. Thus many vessels run empty on the return voyage increasing per head shipping costs and reducing the relative competitive position of the trade.

Freight Rates and Export Destination

Differentials in sea freight rates and freight access have a number of influences on trade structure:

- Movements in freight rates can have a significant influence on the relative competitiveness of Australian sheep and goats in some markets;

- The development of secondary lines, such as goats travelling on the sheep vessels, improving economic viability and market distribution access; and,

- Relative Australian production location competitive advantage into different export markets is created. For example Western Australia has a freight rate and time advantage into the Middle East.

Because live sheep are a lower value added product, sea freight rates as a component of unit costs result in freight price movements having a significant effect on product competitiveness. Because there is commonly no back-loading in the live sheep trade unit shipping costs are expensive. It is therefore likely that sea freight rate increases have a larger proportional influence on the live sheep trades ability to compete than on the close substitute products of near import country producers, in-country production, and the more distant substitute, imported fresh or frozen sheep meat.

Key Points:

- **Western Australia's proximity to Middle East markets provides it with a competitive shipping advantage relative to Eastern Australia.**
- **The goat export industry to the Middle East has been significantly supported by shipping access due to the sheep trade.**
- **Live sheep exports are likely to be more significantly influenced by sea freight rate changes than higher value substitute products, or close/in-country live producers.**

Supply Side Constraints

A number of broad land use factors are influencing the production of sheep for the live market.

These include:

Government Legislative Restrictions - Land Use

State Government restrictions on freehold and leasehold land for agricultural production. Includes, for example, environmental protection factors such as restrictions on clearing, and land use restrictions due to urban encroachment.

Economic - Alternative Use

Following reductions in real wool prices producers have shifted production focus towards fat lambs, cattle, increased cropping, or fat tail sheep production.

The live export industry competes directly with alternate agricultural pursuits including:

- Breeding and fattening for beef production;
- The relative profitability of grain, cattle and sheep meat production;
- The relative profitability of wool production; and,
- In Western Australia an increase in land values in the south west of the state, as production shifts to intensive agricultural land uses such as wine and complementary activities such as tourism.

The ability of produces to significantly expand flock numbers and therefore product available to the live trade is limited by carrying capacity, seasonality of pasture growth, relative economic returns and the high incidence of droughts over the past two decades (1993-96, 1998/99 and 2002-2005).

The limited number of goats produced under controlled farming conditions combined with the influence of weather on goat gathering and transport is a significant supply side limitation to the industry's development.

Key Points:

- **Supply constrains for the increase of live sheep are limited by Government regulation reducing land use options and pasture expansion, and economic factors such as returns available for alternative production enterprises.**
- **Government restrictive practices act to influence the production base and thus total regional sheep supply.**
- **Lack of controlled farming systems and weather influence goat distribution and supply.**
- **Rangeland production systems are regulated by carrying capacity. Thus the ability to expand supply past a certain maximum point is not possible.**

Primary Live Sheep and Goat Supply and Demand Influences Summary

The above overview analysis highlighted a series of key factors currently influencing the Australian live sheep and goat export sector. It is designed to act as a background framework for decision making in regard to factors currently impacting upon the structural dynamics of the sector. The following table further summarises these factors.

Table 28 - Live Sheep and Goats Key Drivers

DEMAND DRIVERS	SUPPLY DRIVERS
Individual country GDP and GDP per capita growth rates aided by oil development and prices.	Relative returns of production alternatives. Especially wool and fat lambs.
A rise in global GDP and GDP per capita is underlying an increase in protein consumption.	Domestic and international disease influences.
Australian live price against substitute product - primarily domestic import country production and cross land border imports. Competitors - Europe, Turkey, Africa, M East and South America.	Australian interplay between sheep and goat meat prices and live prices.
Exchange rate differentials. Particularly Australian Dollar against importing country currency, or US dollar peg.	Climatic and seasonal conditions.
Regulatory and disease issues impacting on trade flows.	Relatively small domestic population.
Religious preferences.	Processor competition for sheep/goats.
Fresh product preference.	Access to shipping and freight rates.
Production gap and disease issues in domestic and cross land boarder sheep supply.	Animal welfare regulations - reduce attractiveness of industry.
Government restrictions on trade flows. For example; non-tariff barriers.	Production base access and regulation.
Substitute product disease issues.	Shift to reduced wool, increased sheep meat production.
Co-product demand - skins, offal etc.	Regional carrying capacity.
Differing sea freight rates to export destinations influences Australian regional export demand.	Management skills and ownership objectives.
Freight and on costs.	Longer - term influence of animal rights groups.
Importing country production conditions eg. drought, disease.	Resulting cost add on from animal rights groups.
Australian sheep type.	Goats - weather constraints for collection and transport.
Trend towards higher protein diets.	Access to labour - against the mining industry.
Limited refrigeration.	

14 Demand and Supply Influences in the Live Export Market

14.1 Middle East/North Africa

14.1.1 History of the Trade

Historically, Islamic countries produced Halal food for both domestic consumption and export to other Islamic countries.

Through the 1970s increasing urban incomes aided by oil money across much of the Middle East and North African region lifted demand for meat. Several governments, such as Saudi Arabia, encouraged producers to increase livestock production, targeting sheep, camel, poultry and dairy.

However, traditional suppliers (Beduin) and other larger commercial producers only partially responding to livestock price increases. A substantial increase in imported meat demand resulted. This demand was also aided by a rapidly growing population base across the region, including a substantial influx of immigrant workers in oil rich countries.

Increasingly, non-Islamic countries produced meat processed under Halal certification and were able to make inroads into traditional Islamic markets. Across the region a number of commercial feedlots for sheep and cattle were established during the 1980s, however this did not stem a growing requirement for imported meat and animals.

With domestic production unable to keep pace with demand and a consumer preference for fresh killed meat, the live sheep trade developed.

14.1.2 Country Comments - Saudi Arabia and Kuwait

In Saudi Arabia Beduin tribes' people have been producers of sheep and goats for many thousands of years. In an effort to improve food self-sufficiency, since the 1960s government policies have helped to support agricultural development. For a period production was subsidised, however more recently subsidies on agricultural production have been reduced. Today, agriculture contributes approximately 10.3% of non-oil GDP.

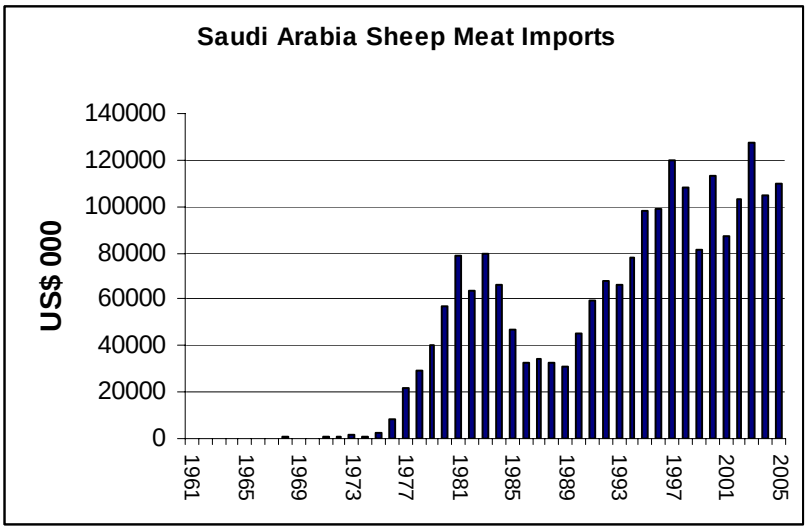
Saudi Arabia began importing sheep meat globally, and live sheep from Australia, in significant volumes, in the early 1970s after increased oil production and real oil prices lifted per capita incomes and increased the numbers of immigrant works entering the country

Kuwait's harsh climate, landscape and limited water means only 0.3% of the land area is used for cropping. Traditional livestock production systems were supported with increased imports during the 1970s responding to similar market demand factors experienced in Saudi Arabia.

More than 80% of livestock died during the Iraq invasion of Kuwait between August 1990 and the cease fire in March 1991. The majority of these animals were cattle, sheep and goats. An approximate 800 000 sheep existing before the occupation were reduced to approximately 10 000 head, however numbers had recovered to almost 600 000 head by the year 2000.

During the early start-up phase of the industry supply from Australia was assisted by higher numbers of older sheep as a result of the significant wool industry and limited domestic demand for lower quality mutton.

Figure 33 - Total Saudi Arabian Sheep Meat Imports



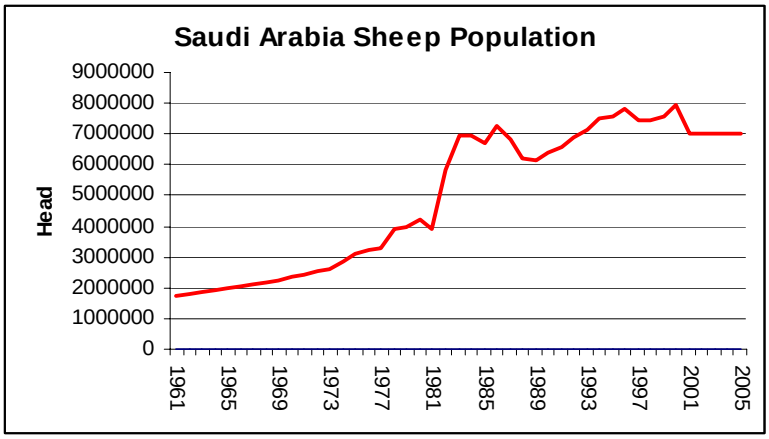
Source: FAO

Saudi Arabia grew into Australia's largest live sheep market, however has been beset by disease issues making trade volatile. When Saudi Arabia is out of the market Kuwait has commonly become the largest market for Australian live sheep.

Demand for younger sheep has increased in recent years.

Saudi Arabia is 68% self sufficient in chicken and 46% self sufficient in red meat. Sheep production stood at approximately 6.9 million head in 1992, rose to 10.6 million head in 1996, and has since contracted to 7 million head. Approximately 11 million head are processed on an annual basis with about half these sheep being domestically produced and the other half imported.

Table 29 - Total Saudi Arabian Sheep Population



Source: FAO

14.1.3 Population Increases

With a population of more than 580 million people – including 270 million Arabs, 156 million Pakistanis, 71 million Turks, 69 million Iranians and 6 million Israelis – the Middle East represents a tremendous market for food and agriculture commodities. According to projections by the United Nation's Food and Agriculture Organisation (FAO), the population of the Middle East region will increase by 130 million people per decade to reach 820 million people in 2020. The population is predominantly Muslim (Sunni and Shiah), with a large group of Coptics (Orthodox Christians in Egypt), Jews and many other religions *(Agriculture WA).*

Table 30 - Middle East Population Growth

	Country	2003 (million)	2010 (million)
1	Bahrain	0.7	0.8
2	Kuwait	2.5	3
3	Oman	2.9	3.5
4	Qatar	0.6	0.7
5	Saudi Arabia	24	30
6	United Arab Emirates	3	3.5
7	Iran	69	75
8	Iraq	25	30
9	Yemen	18	25
10	Pakistan	156	182
11	Jordan	5	6
12	Lebanon	3	4
13	Turkey	71	78
14	Israel	6	7
15	Palestine	1	1.7
16	Syria	16	20
17	Algeria	31	36
18	Egypt	71	84
19	Libya	6	7
20	Morocco	30	34
21	Tunisia	10	11
22	Sudan	34	38
	Total	586	680

Source: FAO 2003, Projection 2010.

14.1.4 Middle East/Northern Africa Meat Consumption

Muslims are prohibited from consuming pork. Beef and poultry products must be certified as Halal and must originate from certified processors following Islamic practices.

Estimates of meat and beef consumption on a per capita basis vary widely across the region. According to the US Meat Export Federation (USMEF) between 4 - 22kg per capita of beef is consumed, with Saudi Arabian estimates placed at 4kg, and Egyptian at 9kg.

Chicken, sheep and goat meat are the primary sources of animal based protein in the region. Camel meat is mainly consumed during celebrations such as weddings.

In Saudi Arabia the Saudi Ministry of Agriculture concluded that sheep meat accounted for 70 percent of total red meat consumption followed by beef (20 percent) and camel meat (10 percent).

Primarily for religious reasons, Middle East buyers/consumers are very concerned about the state of an animals health prior to slaughter. The animal should free from disease and have no physical blemishes, additionally there are preferences for different coloured or marked sheep.

14.1.5 Sheep Meat Market Structure

Imported sheep are generally held in feedlots for a period prior to slaughter. Sheep can be slaughtered through larger processing establishments, or small local butchers, and even by individual buyers.

Butchers sell fresh sheep meat, usually with the full carcass displayed.

Historically, the majority of Australian sheep meat has been sold into the lower to middle market sectors. This market commonly is made up of immigrant workers. For instance in Kuwait approximately 45% of people are native Kuwaitis, while the remainder of the population are foreign workers from other Arab countries, North Africa, India, Pakistan, Bangladesh, Sri Lanka and the Philippines.

Higher quality sheep meat is commonly destined for the supermarket, restaurant, catering, or the tourism trade. The tourism sector is increasing in countries like Egypt and Dubai. However, this has been periodically disrupted by regional political volatility.

The retail sector is a growing industry in the Middle East. Major retail chains are beginning to emerge in conjunction with international franchises such as Carrefour, Géant-Casino and Spinneys. Additionally, the number of local upscale retail chains continues to increase.

14.1.6 Sheep Market Price Comparison

Oil rich countries within the region are experiencing increasingly sophisticated distribution of meat with the introduction of supermarket chains and fast food outlets. Combined with a relatively young population and rising incomes, the demand for better quality meat cuts is expanding. The market however, remains significantly segmented across the region due to unequal distribution of oil money, large immigrant workforces, and the persisting of traditional lifestyles.

The primary market competitors for Australian imported sheep are local producers, or close neighbour producers. In Saudi Arabia for example, sheep are imported from Jordan, Syria, the Sudan and other Middle Eastern countries. Sheep are also supplied from South America, Europe and Northern Africa. Periodically, the majority of suppliers have all experienced problems with disease influencing import demand.

Price competition between locally produced sheep and imported sheep is strong, however some differentiation in product exists. Especially, between local breeds such as the 13 varieties of fat tail sheep and Australian imported merino cross sheep. Australia is also shipping fat tail sheep to the market, however the industry is in relatively early stages of development, and is primarily concentrated on the Damara and Dorper breeds.

14.1.7 Feedlot Sector

The feedlot sector was aided during the 1980/90s in its development by promotion of the livestock sector in countries such as Saudi Arabia. This promotion saw the establishment of larger and more commercially focused feedlot establishments and some market distortion effects.

Live sheep imports benefited from government policies to modernise Saudi Arabia's agricultural production sector. These efforts saw considerable investment in large-scale company feedlots and in the associated infrastructure such as yards, loading and unloading infrastructure, and processing facilities.

In Saudi Arabia feedlots commonly feed both domestically produced and imported barley, the feed being lower cost due to periodic government subsidies. Imported sheep are usually kept by traders for up to three months.

14.1.8 Processing Sector

It is a requirement that both domestic and imported sheep be processed under Halal practices. Processing across the Middle East and North Africa varies in sophistication considerably. It is not unusual for consumers to purchase a single animal that is then slaughtered by the family or by a local slaughter person. This is particularly the case for sheep and goats produced by traditional Beduin methods.

Both processors and feedlot establishments have a tendency to quickly switch between domestically produced and imported sheep depending on price, supply availability, breed, and animal consistency.

Processing standards have continued to be a point of contention for animal liberation activists. These issues tend to relate to poor animal handling practices, sub-standard infrastructure and differing slaughter methods due to religious practices.

The sub-scale nature and smaller level of capital expenditure required to operate a processing facility in parts of the Middle East, combined with abundant sources of cheap labour is a major factor supporting the live trade vis-à-vis sheep meat imports.

The processing sector is also an important source of employment, which underlies some of the policies supporting the live sheep trade.

14.1.9 Seasonal Influences

Demand for food is significantly influenced by Islamic religious factors. The Islamic year is based on the lunar cycle, consisting of twelve months of 29 or 30 days each, totalling 353 or 354 days. Each new month begins on the sighting of a new moon. Exact dates for activities will therefore vary from year to year.

Islamic holidays and observances include:

Muharram (Islamic New Year) (April)
Mawlid Al Nabi (Muhammed's birthday) (June)
Ramadan begins (Holy month) (November)
Eid al Fitr (Ramadan ends) (December)
Eid al Adha (Festival of Sacrifice) (March)

Consumption of meat, and meat based products usually decreases significantly during Ramadan due to fasting, and during the summer holiday period, starting from the second week of June up to the first week of September.

In Saudi Arabia demand strengthens during the Hajj season as the hotel and retail industry services the 2.5 million Muslim pilgrims who travel to Mecca every year. Foreign pilgrims, accounting for 50 percent of total pilgrims, spend on average 2 weeks in Mecca, Jeddah and Madina before and after the Hajj rituals.

14.1.10 Economic Assessment

The Middle East and North Africa region has sustained strong growth in recent years, not experienced since the 1970s. Advances in GDP were primarily driven by high oil prices and increased oil production resulting in a drop in the unemployment rate. However, unemployment rates across the region remain at a relatively high 13.4% (*World Bank est.*).

According to the World Bank, a potentially large, negative impact on the broader region from the conflict in Iraq was largely avoided, with an initial downturn in economic activity limited to countries bordering and maintaining strong economic ties with Iraq.

Subsequent reconstruction efforts in Iraq are likely to present potentially large economic gains for the region through trade and business activity related to the reconstruction and reintegration effort.

A significant challenge for the region is the creation of jobs for a growing population of young people. This is likely to continue to see significant government expenditure and investment, particularly in countries benefiting from higher oil prices. Additionally the distribution of wealth across the region is highly segmented along political and oil access lines.

The region is expected to see continued economic growth on the back of high oil prices, however the region remains politically volatile. In addition to Iraq, the Palestinian conflict and Iran's nuclear intentions remain a potential risk to regional political and economic stability.

Many of the oil producing countries of the region peg their currency to the US dollar. Reductions in the dollar's strength in recent years has acted to lift import prices into these countries. The regional current account surplus average is approximately 12%.

Table 31 - Middle East/North Africa Table Economic Indicators

	2000	2003	2004	2005	2006est
Population (million)	273.7	289.1	294	299	304.67
GDP ($USb)	470	532	600	610.8	621.79
Per capita GDP ($US)	1680	1830	2000	2100	2205
GDP (% change)	3.6	5.2	5.1	4.9	4.3
Unemployment rate (%)	14.9	14.5	14	13.4	13.2

Source: World Bank/Consultant

While oil prices are forecast to continue to underpin economic and population growth and therefore imported sheep demand, political conflicts hold significant potential to alter demand for Australian sheep imports. The Middle East political outlook is a key factor in the development of a price/demand forecasting model for Australian sheep exports.

14.1.11 Meat Consumption

Poultry is the most commonly eaten meat in the Middle East/Northern Africa followed by sheep meat, goat and beef. Pork is not eaten due to religious prohibitions.

14.1.12 Country Example - Saudi Arabia

Total sheep meat imports into Saudi Arabia are relatively stable compared to imports of Australian sheep. This would tend to indicate that live sheep are not a close substitute for sheep meat imports.

Figure 34 - Australian Exports of Live Sheep against Total Saudi Arabian Sheep Meat Imports
Source: ABS

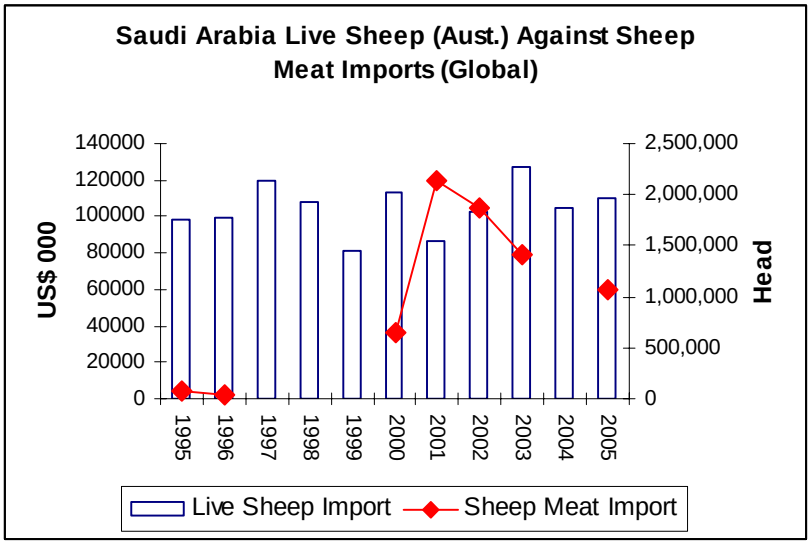


Table 32 - Per Capita Meat Consumption - Saudi Arabia

Product	Consumption (Kg per capita)	Market Share
Poultry	32.2	67.4%
Lamb/Sheep	12.7	26.6%
Beef and Veal	2.9	6.0%
Pork	0	0%
TOTAL	47.8	

Source: CIE GMI model

14.1.13 Middle East Per Head Break-up

The pie graph below demonstrates a per head break up of landed cost components. It can act as a visual reference to price sensitivities and therefore possible component influence on import country demand.

Figure 35 - Middle East Per Head Break-up - Cost Percentage

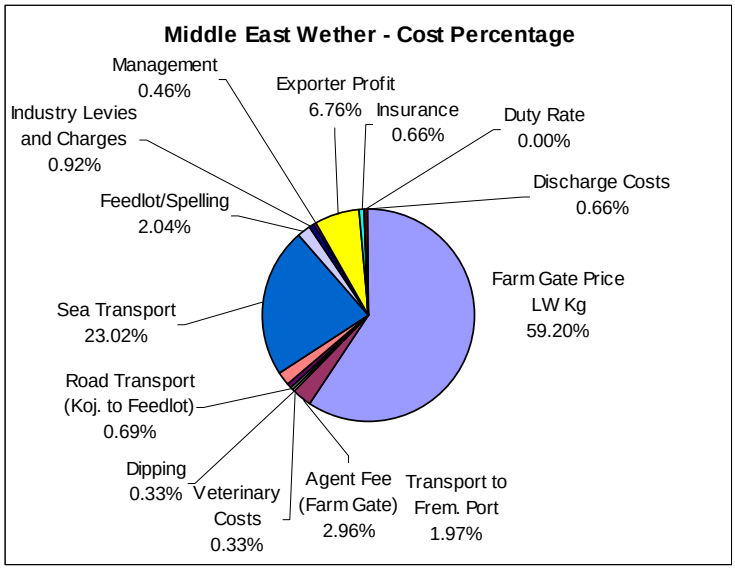


Table 33 - Landed Cost Model Australian Wethers Delivered Main Middle East Port

MIDDLE EAST - LIVE SHEEP WETHERS		Total Cost
Livestock Costs		
Average Weight (Kg)	45	
Farm Gate Price LW Kg	2	90
Agent Fee (Farm Gate)	5%	4.5
Veterinary Costs		
On Farm		0.5
Dipping		0.5
Road Transport (Kojonup to Feedlot)		
Distance (Km)	350	
Cost per deck/Km	0.3	
No. Head Per Deck	100	1.05
Feedlot/Spelling		
Days on Feed	5	
Feed Costs Per Day	0.3	1.5
Average Daily Wt. Gain	*0.8*	
Shearing		1
Insurance		0.5
Electrolytes etc.		0.1
Road Transport to Vessel		
Distance (Km)	70	
Cost per deck/Km	1	
No. Head Per Deck*	70	1
*Higher cost due sml. truck. Ref: Matthews Tran.		
Industry Levies and Charges		
Transaction Levy		0.2
Wharf Charges Fremantle		0.208
Third Party Vet		0.5
AQIS		0.1
Ports Charge Mis.		0.2
Receival Yard Fees		0.1
Weighbridge		0.1
Management		
Administration		0.2
Office		0.5
Sub Total		102.758
Exporter Profit		
Profit	10%	10.2758
Value at Fremantle		
FOB		113.0338
Sea Transport		
Freight Per Head		35
Insurance		
Insurance Per Head		1
Sub Total		149.0338
Middle East Main Port - Alongside Ship Costs		
Duty Rate	0%	0
Discharge Costs		1
FAS Main Middle East Port		
Australian Dollars		**150.0338**
US Dollars	**0.75**	**112.52535**

15 Emerging Markets

Presently the global sheep meat and live sheep sectors remain under supply side pressures with much of the global industry rebuilding flocks, or changing production systems away from wool. In such situations exporters will tend to supply markets able to pay higher prices, though will also commonly balance this consideration with the maintenance of supply, where possible, to traditional markets. Thus, price considerations are balanced with the strategic issues of maintaining a presence in markets where comparative competitive advantage has traditionally been experienced during periods of higher supply levels.

Thus, price is not the only determination in the supply of markets and sheep exporters are not purely price chasing. The theory commonly being held that profit maximisation over time will result from the supply of markets where highest comparative competitive advantage exists over the long-term.

Thus, the desired characteristic of a new emerging market is both the ability to pay higher prices relative to other options, and the long-term maintenance of the market.

For these reasons the live sheep export market is likely to remain primarily focused on the Middle East and Northern Africa. Periodic shipments and airfreight consignments have taken place into Asia, however these have been relatively small against Middle East exports. Additionally, some trade in breeding sheep takes place to countries outside the Middle East.

The industry is presently initiating moves to consolidate its presence in key Middle East markets with the development of MOUs in regard to animal handling and disease.

16 Conclusions

In the Middle East sea-borne live sheep exports make up a relatively high percentage of the market, competing with the close substitute product in-country produced sheep. Cross-land boarder sheep also hold a significant market share and are close substitutes to domestically produced animals. In most Middle East countries, imported chilled or frozen sheep and goat meat does not appear to be a close substitute for imported live sheep or goats. This is likely the result of the relatively differentiated target markets and distribution systems. For example the preference for fresh killed meat.

Movements in the Australian dollar price of landed sheep are one demand driver, though this factor is also influenced by a number of Middle East countries pegging their local currencies to the US dollar. Over the last 10 years there have been significant periods when the Australian dollar price of sheep and export demand have been positively correlated. That is, a rising sheep price, coincided with rising live sheep exports, and a falling sheep price coincided with falling export numbers. The analysis is however, influenced by primary factors of diminishing supply and disease.

The determination of this market characteristic is beyond the current introductory section of this report. However, it is possible that when viewed in its total, demand for live sheep maintains a broadly proportional market share relative to its primary competitors of import country locally produced sheep, and cross-land boarder sheep. With some minor influence from imported sheep meat. In effect, the proportional demand for Australian sheep, and likewise the market for local in-country, and imported cross-land boarder sheep, follows a reasonable correlation with a theoretical global sheep price.

Thus, total market share for Australian live sheep will be broadly maintained while close substitute product values move in similar price proportion.

The price sensitivities of demand for live sheep are therefore seen as being a result of the predominantly low income markets targeted such as immigrant workers, the breed of sheep offering differentiation at the lower market end, and any movement in close substitute prices away from historic proportional values. The industry appears to have a degree of import price in-elasticity of demand. This may be influenced by product differentiation, limited protein substitute availability, oil incomes, consumer preference, pricing levels or structure within the market, and distribution factors.

The primary drivers of Australian live sheep export demand over the last ten years have predominantly been both individual importer country factors and global sheep supply issues.

These have included:

- The landed price of Australian sheep, modeled as a US dollar price. While difficult to actually determine specific pricing points primarily because of the influence disease factors have on total exports, in general when the landed price of sheep in US dollars increases, demand falls. However, as noted above, this pricing factor is not as strong as expected in most commodity markets.

- In-country regulatory factors. These factors have acted to both limit access for Australian sheep, or to limit access for closely competitive products. Of particular note has been the significant influence of disease issues on import demand. This has been most evident in both the sheep distributed by sea and cross-land boarders and in substitute product markets, such as beef distribution changes due to BSE and FMD.

Analysis would tend to indicate that Australian sheep exports have been significantly hampered by disease issues into the Middle East market. However, at the same time, disease issues in other substitute products such as beef, or Northern African sheep, have from time to time acted to benefit Australian sheep import demand.

- Diminished global production of sheep following sustained low real wool prices and drought. Commonly when producers have re-built after drought there has been a shift in focus away from wool towards fat lamb production providing quicker cash flow returns.

  This sustained shortage in sheep numbers has seen rising prices in import markets, partly aided by supply and disease issues in close substitute protein markets.

Producers in Western Australia, have held the majority of market share for live sheep out of Australia into Middle East markets. The primary advantages offered by the State include a small local population relative to sheep numbers, freight rate and shipping time advantage due to proximity, and a consistent, slightly lower sheep price relative to Eastern Australia.

16.1 Recommendations and Actions for Part Two of the Project

This report has acted as a preliminary overview of the key demand and supply drivers in the Australian live sheep market. Several key factors are apparent:

7) The price of landed sheep when expressed in the local importing country's currency, often pegged to the US dollar is a driver of demand.

Recommendation:
To determine pricing point sensitivities. Historic import demand on a country basis should be modeled against the landed domestic currency price on a per head basis.

8) Australian live sheep total demand has a tendency to broadly maintain proportional market share against substitutes. That is, there is a tendency for global prices of substitute products to move in unison.

Recommendation:
There is presently insufficient in-market pricing feedback to determine movements away from historic relative competitive positions. Without such feedback market forecasting will be difficult. It is necessary to determine a methodology to access this information for modeling on an on-going basis.

9) Import country GDP growth, oil prices, local/cross-boarder sheep production, and currency values are primary drivers of total demand.

Recommendation:
A methodology to monitor import country current and forecast economic performance, sheep/goat import and production be determined.

10) Import country regulation is a primary driver of demand relative to substitute products. A primary influence over the market has been disease issues both directly in regard to imported Australian sheep and in regard to substitute protein products.

Recommendation:
A methodology to monitor import country regulations and disease risk be determined.

11) Australian producer ability to switch markets is a primary supply issue, influenced by price differentials in alternative markets including the wool, processing, fat lamb and live markets. In both the goat and sheep sectors these options are more accessible to Western and South Australian producers.

Recommendation:
A methodology to monitor Australian supply factors in the sheep and goat sectors and to determine the changes in pricing power between differing Australian production and market options should be developed.

12) There is a need for more accurate supply forecasting in the live sheep and goat sectors.

Recommendation:
A methodology for the timely distribution of information be developed.

17 References

Cattle and Sheep Meat Processing Review, Jun. 2005, W. Burggraaf, Department of Agriculture WA.

Disease-Related Trade Restrictions Shaped Animal Products Markets in 2004 and Stamp Imprints on 2005 Forecasts, 2005, USDA Economic Research Service.

Israel Agricultural Initiative - Year End Report, 2004, IAI.

Key Development Indicators, 2005, Asian Development Bank

Livestock Dynamics in the Arabian Peninsular, 2003, David Boum, Environmental Research Group Oxford Ltd.

Middle East and Central Asia Department, Regional Economic Outlook, September 2005, International Monetary Fund.

Sheep Industry Outlook 2010 - 2011, ABARE 2005.

The Live Export Industry: Value, Contribution to the Economy and Outlook, December 2005, Hassall & Associates for MLA.

The Development and Retention of Adequate Processing Capacity for all Meat Species in Western Australia, Sept. 1999, A. Quin, M. Donnelly/AGWEST Trade and Development.

USMEF, USDA, ABC and World Bank web sites.

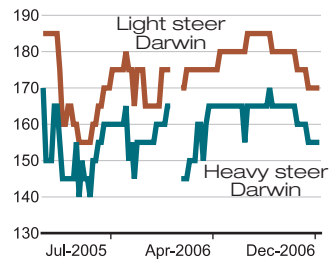
8.3 Pilot cattle market outlook report

Australian Live Export Cattle Quarterly Projections

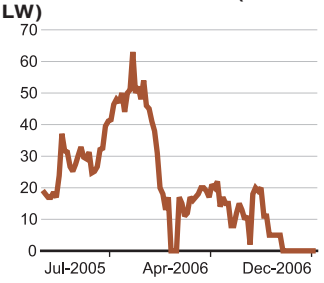
Sept Quarter 2006

EXCHANGE RATES

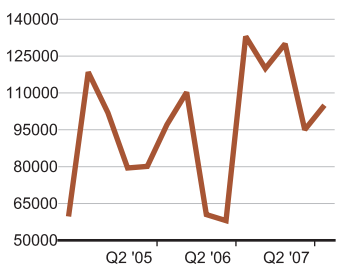
LIVE EXPORT PRICES - INDONESIA (C/KG LW)



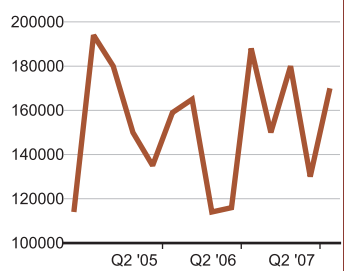
SPREAD STH FEEDER VS LIVE EXPORT PRICE (C/KG LW)



CATTLE EXPORTS - INDONESIA (HEAD)



TOTAL AUSTRALIAN CATTLE EXPORTS (HEAD)



Stronger Asian economies & currencies to drive growth

Supported by strong external demand (demand for exports) rates of growth across the Asian region have generally exceeded expectations during 2006.

At the start of the year, there was concern about the ability of Asian governments to manage inflation in the face of rocketing oil prices.

Inflation concerns remain but the main threat to forecasts of stronger growth across Asia is now an easing in demand for exports as higher interest rates and oil prices reduce demand for Asian exports from developed economies.

Stronger growth across Asia should assist a further gentle strengthening in currencies across the region.

Despite disruptions caused by the Israeli war with Lebanon, prospects for demand across the Middle Eastern region have improved, particularly in Egypt.

Egypt is benefitting from wide ranging economic reforms and a strong investment climate across the region (boosted by larger oil receipts across the Gulf nations).

US re-entry and seasonal conditions to lead prices lower

Live cattle export prices have moved into line with prices for feeder cattle in southern markets. Driving this is a change in supply/demand variables in favour of the live export industry.

Live cattle exports are moving into their peak demand period associated with religious festivals across Asia. Gradually strengthening economic growth and currencies should also support increased demand through Q4 2006 and into early 2007.

It is unlikely that access to supply will constrain volumes through this period. In recent years the increased ownership of northern breeding properties by large integrated feeding operations has seen northern feeder stock move south for fattening and slaughter. But this may change from late this year as market dynamics change, particularly on secondary cattle lines.

US re-entry into north Asia is likely to curtail beef export returns and reduce the profitability of fattening and slaughter of northern cattle vis-a-vis live cattle exports.

On top of increased competition in beef export markets, poor seasonal conditions across southern Australia will increase slaughter cattle supply and place further pressure on southern markets. It will now take substantial rain across the eastern seaboard to prevent a flood of livestock entering southern markets over the next few months.

This will depress southern feeder cattle values and should see increased live export cattle availability as cattle are diverted from southern feeder cattle markets back into live export markets (see declining price differential between live export and southern feeder steer prices in chargt above).

Southern feeder cattle prices have eased from a peak of $2.05¢/kg lw through the September quarter to $1.95¢/kg lw and are holding a premium of just 10¢/kg/lw over live cattle exports. Further falls are anticipated unless seasonal conditions across southern Australia turn around substantially.

Strong increase to Indonesia

Over the next quarter, a strong economic climate and a seasonal increase in demand will see Indonesia import volumes 135,000 head - the highest quarterly import volume since prior to the currency crisis in 1997.

A steadily strengthening in the AU$/Rp and a gentle reduction in live cattle export values should lead to a reduction in the landed price of Australian cattle in Indonesia.

Shipment volumes will be particularly strong in Oct and Nov with upwards of 50,000hd per month before easing back to around 30,000hd in Dec.

War doesn't trade

The Israeli-Lebanon War has, to date, had a very limited impact on live shipments. There were reports that the discharge of a shipment of Uruguayan cattle to Lebanon was delayed, but exporters report no problems with shipments to Israel.

Israel is an important buyer of live Australian cattle, importing 30,000-40,000 head per year. Previously, shipments were discharged in Jordan and Saudi Arabia trucked overland to Israel; but the Israeli government now requires shipments direct to Israeli ports. It is likely that shipments to Israel will now rise to between 5,000-10,000 head per month.

Strong demand is also being experienced from other Middle Eastern destinations (see inside).

LIVE CATTLE EXPORT FORECASTS

	Sep 06	% chng Sep 05	Dec 06 f	06 f	% chng 2005	Mar 07 f	Jun 07 f	06/07 f	% chng 05/06
Live cattle exports	150,000	-8.5%	180,000	630,000	10%	130,000	170,000	690,000	19%
to Indonesia	120,000	9%	135,000	445,000	26%	95,000	120,000	475,000	31%
to Malaysia	10,000	-38%	10,000	40,000	11%	15,000	15,000	50,000	11%
to Middle East	20,000	25%	20,000	90,000	24%	20,000	20,000	90,000	13%
Live cattle price $A/kg lw ex Darwin	1.85	16%	1.75	1.78	4.7%	1.60	1.50	1.68	-4%
$A/Rp	6,900	-10%	6,750	6,827	-9%	6,600	6,600	6,694	-2%
$A/US	0.76	-1%	0.77	0.75	-1%	0.78	0.79	0.78	-4%

f = forecast

TRADE BARRIERS

Bird Flu continues to plague Asia

The Food and Agriculture Organisation has warned of the need for heightened vigilance and vigorous implementation of control measures for avian influenza, stating that Asia is at a critical juncture in its fight to contain the disease.

This follows the discovery of nine suspected human cases of bird flu in Indonesia's West Java province and two confirmed cases earlier in the month of August. The FAO reports that the disease recurrence is due to both endemic and new sub-types of the AI virus, and has been encouraged by the continuing poultry trade within eastern Asia. Trade reports suggest that the prevalance of bird flu has seen a shift towards the consumption of red meat across the medium and upper income earning households.

Egypt recently reported a case of bird flu, its first since early June. With the migratory season commencing soon governments throughout Asia are on heightened alert for new outbreaks.

Sth American cattle pose a threat

New larger and faster ships, the weaker regulatory regime governing cattle shipments from these destinations, and cheaper feeder cattle are making Sth America cattle an increasingly attractive alternative to Australian cattle. Shipments of Uruguyan cattle have been imported into Lebanon and there are thoughts that Brazilian cattle may soon enter the Philippines.

Cattle exports for 2007 are expected to remain stable as domestic prices will continue to be high, although contacts assert that they will not remain at the record levels of 2006. Primary cattle destinations in 2005 were: Jordan (5,700 head), Tunisia (1,800 head), Brazil (1,400 head), Peru (1,300 head), and Turkey (1,000 head). Other cattle export markets were Syria and Argentina.

Uruguayan cattle prices have reached record levels in mid 2006, reaching $US0.97/kg for live steer and exceeding the values prior to the FMD crisis, which ranged from $0.80 to $0.90/kg. This has been due to the recovery of most export markets; the privileged sanitary condition of Uruguay, compared with its neighbouring competitors, Brazil and Argentina; and beef export restrictions imposed by Argentina. Prices are expected to decrease slightly but remain stable at average historical levels of $US0.85-0.90/kg in the second part of 2006, assuming Argentina and Brazil re-enter export markets.

The impact of the Foot-and-Mouth (FMD) outbreak in 2005 combined with the continued appreciation of the Brazilian currency has reduced significantly the profitability of cattle producers. Cattle prices have eased to $US0.70-0.80/kg - in Brazilian terms the lowest level since 2002 - but the almost doubling in the Real against the $US has meant that cattle prices have held up in $US terms.

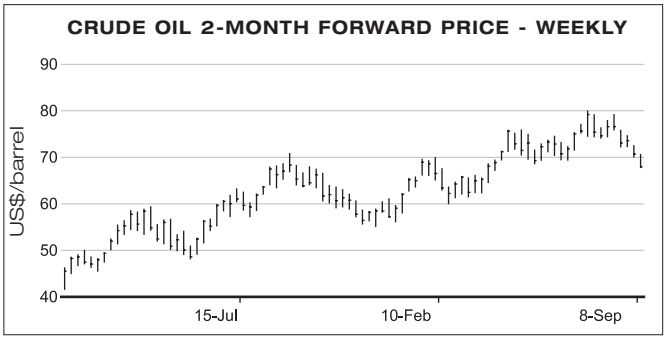
SHIPPING RATES

Move to larger ships helping reduce shipping costs

The move to larger ships (2,000 to 10,000 head capacity) has helped to offset the impact of a doubling in fuel costs from 4US¢/kg in 2004 to 9-10US¢kg currently. Overall shipping costs have increased from 23-24US¢/kg to 30-35US¢/kg with efficiency gains in other non-fuel shipping costs.

With an end to the northern hemisphere summer in sight, a cooling in hostilities across the Middle East, the so-far benign hurricane season, and the increased use of alternative energy, there is increasing confidence that oil costs may ease over the next quarter.

The increased cost of shipping has placed the live export sector on the path of searching for efficiency gains. Since the mid-1990s the industry has now moved to fewer players of larger scale (both in shipping and exporting), and provided these sectors work together there is evidence that these gains can be passed through the industry value chain (there are currently another 2 large vessels under commission that will come on line in 2007).



SEASONALITY AND SUPPLY

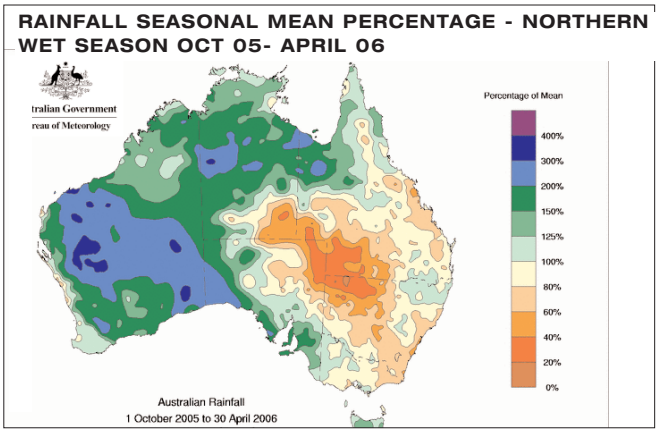
Changing trade dynamics to ensure solid supply

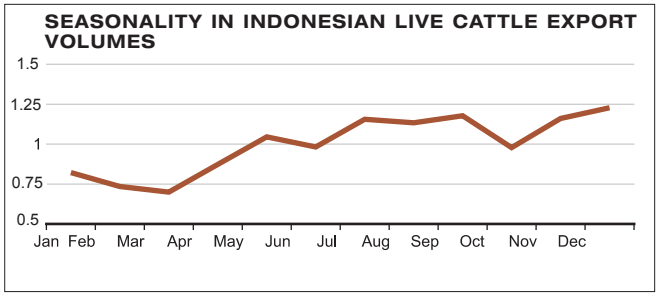
In volume terms, live cattle shipments show significant levels of seasonality, increasing from mid-year after the northern monsoon season has finished and in preparation for increased Ramadan demand in Indonesia. The adjacent chart shows that export volumes to Indonesia in the second half of the calendar year increased up to 50% from levels during the first half.

This year, the monsoon season has been one of the wettest on record and has lingered for much longer than normal. This has delayed the ramp-up in northern export volumes until late in Q2 2006. Over the past few months volumes have been very strong compared to recent years as feedlots in Indonesia build supplies to meet increased demand for beef through Ramadan during November/December. It is expected that shipment volumes during Q4 2006 will increase further on third quarter levels.

It is unlikely that supply will be an impediment to higher volumes in the short-term. Increased supplies will be assisted by the lift in live cattle export returns vis-a-vis southern feeder cattle prices.

The excellent season enjoyed by northern cattle producers, combined with strong levels of profitability, should encourage further expansion in northern herd numbers which should bode well for longer-term supplies. The main threat in the short-term is the trend of large integrated feedlot and beef operations trucking cattle south from their northern breeding operations. It will be interesting to see if this trend persists through 2007 when beef export profitability eases in the face of increased US competition in north Asia.





INDONESIA

Decision soon on Indonesian FMD import policy

In recent years there has been lobbying within some sectors of the Indonesia meat industry to relax the Indonesian ban on FMD product. Currently the Indonesian government has a total ban on any ruminant products from FMD-infected countries. A proposal has been made to recognise regional FMD freedom as per OIE guidelines. There has been a significant amount in the press surrounding this debate in recent weeks.

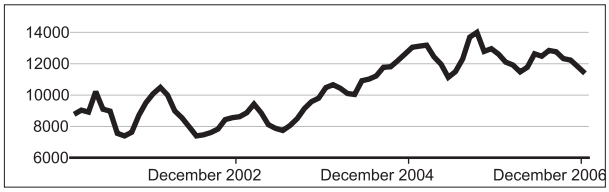
The local Indonesia livestock industries have contended that this will reduce local livestock prices and seriously affect employment across the sector. The Indonesian Government is expected to make a decision on this in the next few weeks.

AI continues to lurk throughout Asia and may again rear its head through the upcoming bird migratory season.

WHOLESALE MARKET PRICES ($A/KG)

	June Qtr 2005	March Qtr 2006	June Qtr 2006	% Chng on Qtr	% Chng on Yr
Ch Striplion	16.76	17.43	17.43	0%	4%
Ch Topside	10.03	10.65	10.65	0%	6.2%
Fr Topside	7.35	6.15	6.15	0%	16%

LANDED CATTLE COST ESTIMATE (RP/KG LW)



MALAYSIA

Export volumes to Malaysia decrease

Malaysian cattle imports peaked in 2002 and 2003 at 90,000 head, but volumes have since deteriorated on the back of a hike in the landed cost of Australian cattle and an increase in shipping costs due to high oil prices..

Malaysia continues to be a standout economy across Asia and boasts one of the strongest rates of growth across the region.

A steady improvement in the Rupiah against the $A and a forecast decline in Australian live cattle export values should lead to a steady increase in cattle export volumes to Malaysia during the last quarter of Q4 2006 and into 2007.

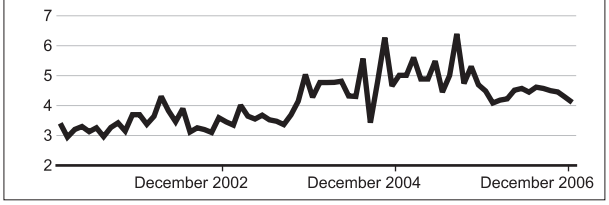
Recently some shipments have resumed to Malaysia and Philippines from Townsville, the first shipments since July 2004. These shipments were related to easing QLD cattle prices, which themselves are largely related to seasonal conditions and a fall in prices in southern feeder cattle markets.

The decay of live export facilities in nth QLD (Townsville) will constrain shipments in the short-term, as will the availability of cheap secondary quality cattle in Australia. To reach earlier shipment volumes Australian cattle prices would need to fall below $1.50¢/kg lw.

WHOLESALE MARKET PRICES ($US/KG)

	May 2005	Apr 2006	May 2006	% Chng on Qtr	% Chng on Yr
Ch Aust Topside	4.5	6.1	6.1	0%	35%
Fr Aust Topside	3.7	4.7	4.7	0%	27%
Aust Lamb	7.2	6.6	6.6	0%	-8.3
Indian Buffalo					
(topside)	1.8	1.9	1.9	16.7%	7.7%
(tenderloin)	2.6	2.7	2.7	9.5%	4.5%

LANDED CATTLE COST ESTIMATE (RG/KG LW)



MIDDLE EAST

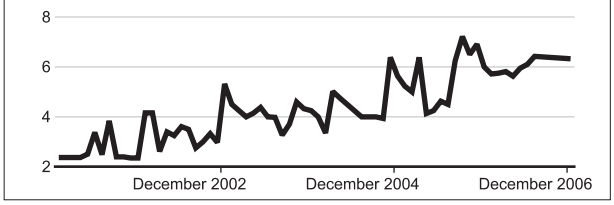
Israel down but Egypt not far away

There is some hope for increased shipments to the Middle East region. Israel is expected to take 5-8,000 head per month. Similar volumes are expected into Saudi Arabia and Jordan. At these rates the Middle East would import around 180,000 head per year, which is double the rate of 2005.

The lift in volumes to Saudia Arabia and Jordan relates to increasing affluence and changing diets throughout the region and recognition that Australian cattle perform much better than north Africa cattle.

The major constraint to increased volumes is the prevalence of much cheaper FMD-affected product from South America and live cattle imports from South America. Throughout the year Lebanon has imported cattle from Uruguay. Higher fuel costs and increased demand for beef from within the Sth American region may limit export capacity in the short term.

LANDED CATTLE COST ESTIMATE ISRAEL(SCH/KG LW)



Egypt & Libya imported around 200,000-300,000 head per annum from Australia in 1999-2002, and they remain potentially significant customers. The Australian government is currently working on establishing import and animal health protocols into these countries. It is unlikely that this trade will re-start any time soon.

PHILIPPINES

Philippines to import Brazilian cattle

The Philippines allows beef and cattle imports from FMD-affected countries, lowering the price of beef to well below the level attainable in non-FMD markets. Currently Brazilian frozen manufacturing beef is wholesaling at around A$6.60/kg, and Indian buffalo at about half this. Australian beef is trading at a level 3 times the value of Brazilian beef. Based on this, the volumes of Australian beef will be constrained.

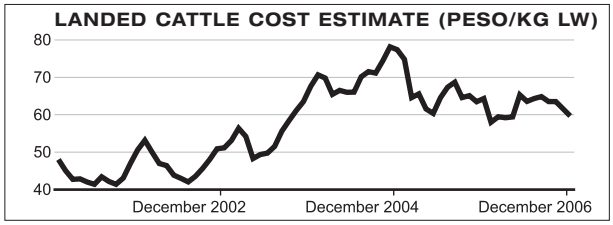
Based on our projections of feeder cattle prices and the Peso, it is unlikely the landed cost of Australian cattle will fall enough to encourage significant imports this year. It is estimated that Brazilian cattle can be landed in the Philippines at $US1.55-1.60/kg about US30¢/kg below what Australian cattle can be landed in the Philippines.

It is unlikely that Australian cattle prices will ease enough to make it profitable to export significant volumes into this market in the short to medium term, and as such our projections indicate that only 1,000-2,000 cattle per month will be exported to the Philippines market.

WHOLESALE MARKET PRICES (PESO/KG)

	Aug 2005	July 2006	Aug 2006	% Chng	% Chng on Yr
Brazilian	N/A	6.61	6.61	0%	N/A
Australia	18.35	22.74	22.64	-0.5%	23%
US	27.12	29.85	29.72	-1%	10%

LANDED CATTLE COST ESTIMATE (PESO/KG LW)



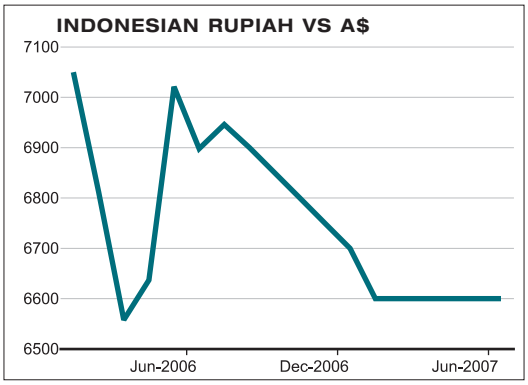
INDONESIA

Indonesian economy & currency on path to recovery

Despite the impact of some large one-off items, Indonesian inflation is declining, falling from 17% in the first quarter of 2006 to under 15% for August. Key to bringing inflation under control has been policies introduced earlier in the year to reduce petrol subsidies. Lower inflation will help support interest rate cuts by Bank Indonesia (BI) and aid in accelerating economic growth. BI cut its key rate half-a-point last month to 11.75%, after previously hiking it to 12.75%, to contain inflation surging to 17% from last year's fuel price hikes.

Indonesian economic growth is now forecast to exceed 5% per annum this year. Second-quarter economic growth has exceeded 5.2%. A surging trade balance combined with positive growth in imports of raw materials and capital goods signals further improvement in the manufacturing and processing industries. Indonesian economic growth is still on track to exceed 6.2% in 2006, outpacing the 5.6% growth in 2005.

The steady improvement in most key Indonesian economic indictaors should facilitate a modest strengthening in the Rupiah over the medium term.



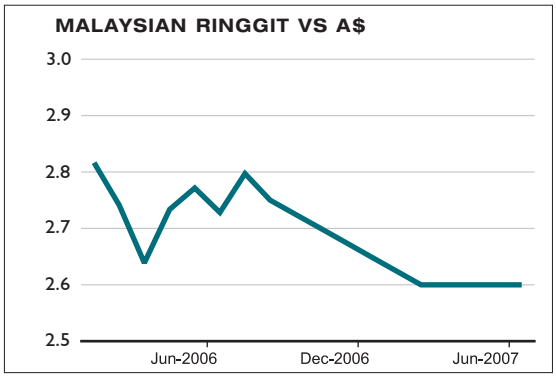
MALAYSIA

Malaysia growing steadily

Malaysia's central bank is on track to exceed forecast economic growth of 6% this year, up from 5.3% in 2005. Second-quarter growth strengthened to 5.9% (4.1% Q2 '05) based on strong growth in the private sector. The services, manufacturing and agriculture sectors were the key contributors to growth during the quarter. Growth has been supported by the strong export performance that has been reinforced by sustained domestic demand.

It is anticipated that the pace of growth in GDP may ease during the second half as external demand (from the US and EU) eases. Some of this weakness will be taken up by a lift in domestic demand: the central bank is still forecasting 2006 growth at 6%. Inflation has stabilised after energy-related increases in the first quarter of 2006 drove inflation to 4.8%. The Governemnt has taken to the opportunity to use windfall gains in oil prices (which account for 40% of government revenue) to reduce company tax for the first time in 9yrs. It is hoped that this tax cut increases business investment.

Demand and outlook for the local currency remained strong on optimism on the outlook of the Malaysian economy.



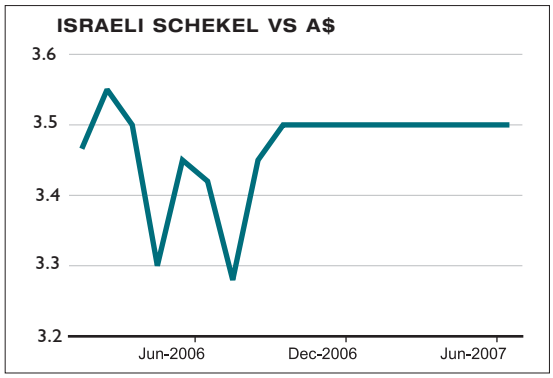
MIDDLE EAST

Oil prices aid stronger growth across Middle East

GDP in the Gulf Cooperation Council countries - Saudi Arabia, Oman, Qatar, Kuwait, the United Arab Emirates and Bahrain - has grown 75% over the past three years. This is fuelling a wave of investment across Gulf countries which is aiding strong growth across the region. Egypt has been one of the major beneficiaries of this investment.

Despite increasing inflation the Egyptian central bank has left interest rates unchanged. Growth in Egypt has been assisted by wide-ranging economic reforms, supportive macro-economic policies and a favourable economic environment. Growth has increased from a 3-4% range in 2004 to 5-6% in 2006.

Israel's economy grew some 6% in the second quarter led by a jump in exports, but the rapid growth looks set to stall temporarily in the third quarter due to Israel's one-month war with Hizbollah guerillas. Such strength will allow Israel's economy to quickly bounce back from the war, which has forced many businesses in Israel's north to close or scale back operations. Forecasts are for GDP to fall to 4% next year (down from 5% in 2005 and 2006). The schekel will probably ease in line with the fall expected in GDP.



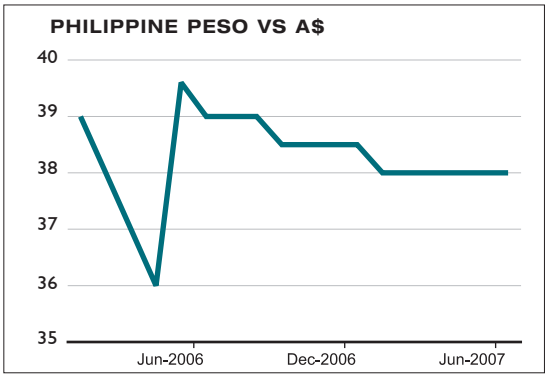
PHILIPPINES

Fiscal tightening aids Philippines economy

GDP grew by around 5.5% in the second quarter of 2006, sustaining the 5.5% growth recorded in the first quarter, above forecast growth of 5% for 2006. Strong growth was credited to a recovery in the agriculture sector, double-digit increases in exports, robust remittance and tourism revenue inflows, and continuous expansion of the business process outsourcing and call centre sector.

For the whole of 2006, GDP growth may reach 5.75% and increase again during 2007 to 6.25%. The lack of infrastructure investment continues to be a major impediment to longer-term growth. As in most other Asian economies, a slowing in external demand (demand for exports) has replaced high oil prices as the major threat to ongoing growth.

The stabilising political environment, sustained influx of income remittances from overseas Filipino workers, and the generally upbeat economic outlook propelled the Peso to a 4-year high against the $US during the week.

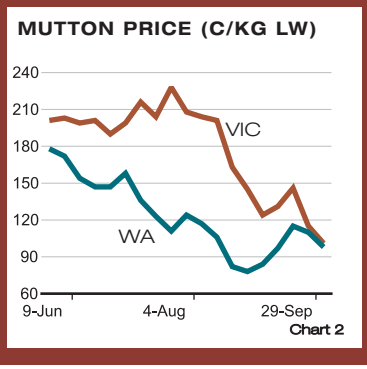


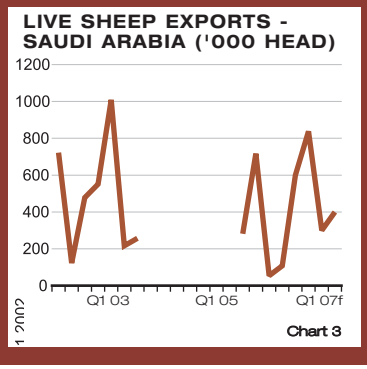
8.4 Pilot sheep/goat market outlook report

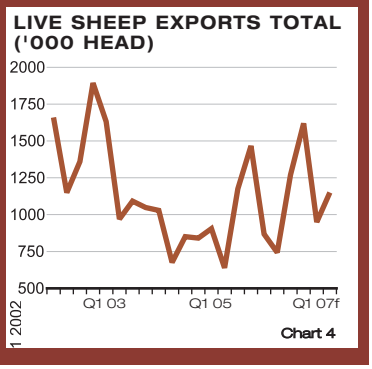
Australian Live Sheep Quarterly Projections

Sept Quarter 2006

SNAPSHOT - KEY INDICATORS







Goat exports on the increase

The re-opening of the Saudi trade combined with the increased availability of goats will see a quantum leap in goat exports this year.

After a couple of years of constrained demand and low prices, volumes and prices are set to increase significantly towards the end of 2006 and into 2007.

In 2001-2003 annual goat export volumes exceeded 100,000 head but have since eased to below 50,000 head.

One factor that has driven volumes lower is the shift in exports from live goats to goat carcase.

The strength of international demand for sheepmeat has created opportunities to add value to goat exports.

In the past three years, goatmeat export volumes have more than trebled to 20,000t, which may explain some of the reduction witnessed in goat export volumes.

Tough season to increase supply in the short-term

An extremely tough spring across the eastern states will increase the availability and reduce the cost of sheep suitable for live export.

Since mid winter sheep values have fallen by around 25% as saleyards have been inundated with large supplies of plain quality sheep.

This combined with strong economic conditions across the region and a full year's exports to Saudi Arabia under the MOU should underpin a strong lift in export volumes through the final part of 2006 and into 2007.

Livesheep price to ease

With the almost total failure of spring rains across southern Australia (see map 1, p.2), unless there is a dramatic and unseasonal change in conditions, supplies will continue to increase and prices deteriorate.

In years previous where spring rains have been less than satisfactory, producers were able to hold onto livestock by supplementary grain feeding.

However, this year is different as the lack of surface water and high grain prices are making holding onto surplus stock unrealistic. Grain prices have increased dramatically in the past few months as crops and pasture conditions have deteriorated.

Over the next few months and into the first quarter of 2007 mutton prices in the eastern states are likely to fall below $1/kg dw; this is around half the value paid for the same sheep during winter this year. The national saleyard indicator has not fallen below this level since March 2003.

More sheep from SA & VIC

But to obtain required supplies, live exporters will be forced to source an increasing proportion of shipments from eastern states ports.

During the last drought in 2001-2003 significant numbers of sheep were exported out of south-eastern Australian ports. For example, during this period volumes exported out of Pt Adelaide averaged 1.1 million head. Prior to the dought annual export volumes out of Pt Adelaide averaged just 300,000 head.

Similarly, volumes ex Portland rose from 700,000 head and peaked at 1.2 million head in 2001 and 2002 before easing back to between 200-300,000 head.

Increased volumes from the eastern states will help compensate for lower volumes available in WA due to poor lamb marking rates this autumn-winter.

A cause for concern for the trade over the longer term is the changing composition of the flock; these changes will constrain export volumes in the longer term.

Since the early 1990s the ewe proportion of the flock has risen from 42% to around 52%. This has restricted the number of cull whethers available to the live sheep export industry. This trend is being partly offset by the changing demand patterns of the live sheep trade in favour of younger sheep.

Regional prosperity in Middle East

The Middle East region is enjoying its strongest period of growth in decades due to high oil prices. Although they have recently come back off their highs, most analysts are forecasting that oil prices will remain at historically high levels in the short-term, and this will sustain regional growth rates at between 5-6%.

The greatest threat aside from political instability is asset inflation across the region. At the moment this is not a threat to medium term growth.

LIVE SHEEP EXPORT FORECASTS

	Sep 06	% chng Sep 05	Dec 06 f	06 f	% chng 2005	Mar 07 f	Jun 07 f	06/07 f	% chng 05/06
Live sheep exports	1,270	1,174 (-8%)	1,620	4,500	4,183 (+8%)	950	1150	5,000	4,251 (+17%)
Saudi Arabia	600	355 (+69%)	838	1,600	1,072 (+49%)	300	400	1,750	1,243 (41%)
Kuwait	250	304 (-22%)	124	850	890 (-4%)	220	250	1,000	993 (N/C)
Bahrain	125	174 (-28%)	153	550	521 (+5%)	140	140	600	597 (N/C)
Jordan	125	71 (+76%)	160	650	885 (-26%)	150	170	900	603 (+49%)
Oman	80	107 (-25%)	110	330	359 (-8%)	50	100	350	361 (-3%)
Qatar	40	52 (-23%)	87	210	180 (-14%)	40	40	200	181 (+10%)
UAE	50	104 (-52%)	112	260	231 (+12%)	50	50	200	244 (-18%)
Live export price ($/head ex Freo)	56	-1%	50	55	N/C	50	45	50	56 (-11%)
$A/$US	0.76	-1%	0.77	0.75	0.76 (+1%)	0.78	0.79	0.78	0.75 (+4%)

Table 1

TRADE BARRIERS

Price control and subsidies support live trade

Various governments across the Middle East interfere in the free operation of live exports. Some governments such as the Kuwaiti Government own livestock importing companies and place controls on the prices that various segments of the industry can charge for livestock and meat. Controls and subsides can operate right across the value chain and include price controls/subsidies on live sheep, carcase trade, livestock feed, slaughter and transport.

The existence of these can distort the trade, and they are often cited as the reason for the dominance of live imports over imports of sheepmeat. As an example, some countries impose regulations that prohibit frozen meat or required chilled or fresh meat to be sold at the same price as frozen meat. Often, there are also shelf-life restrictions imposed and restrictions around how frozen meat can be sold (eg, it can't be sold alongside chilled/fresh meat) and how frozen meat is thawed.

Competition in meat trade

The major competitor to Australian live sheep across the Middle East region remains frozen sheepmeat imports from Australia and New Zealand. The increasing attractiveness of markets outside of the Middle East is reducing the amount of chilled and frozen exports directed from New Zealand to the Gulf Countries.

Australian lamb exports have risen over the past couple of years owing to the combination of an increase in the availability of lighter merino lambs (as result of a succession of dry seasons) and the increased purchasing power of Gulf countries due to rising oil prices. Lamb exports (14,000-15,000t) remain small in comparison to the live trade. Mutton exports have risen similarly to around 38,000t but remain below peak levels.

There is some potential for increased exports of live sheep from Romania, Bulgaria, Hungary and Poland to compete with Australian exports. This competition will remain sporadic and may be driven by a need for foreign currency and poor seasonal conditions.

Turkey is one of Australia's largest competitors. It exports fat tail lambs, which are preferred in the Middle East, and it has a significant freight advantage over Australia.

Egypt and Syria has also competed against Australia, but increased domestic consumption and poor management and severe climatic conditions limit the productive capacity of this region.

Somalia, Sudan and Ethiopia are traditional suppliers of fat tail sheep to Middle Eastern markets. Competition from these nations is being limited by ongoing civil wars and severe droughts in recent years.

SHIPPING RATES

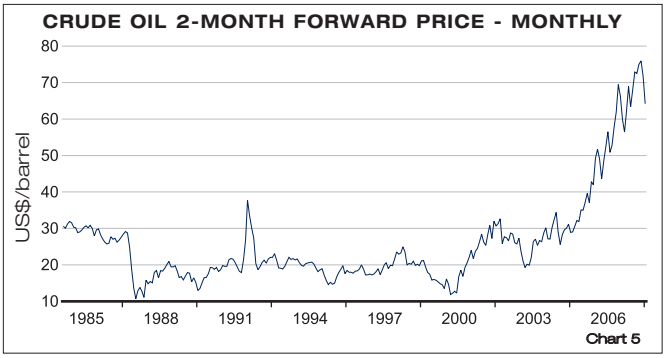
Sheep exports now dependent on cattle volumes

The live sheep export industry has the capacity to ship around 600,000 head every six weeks at full capacity. There are two major shipping companies that service live sheep export routes; Kuwait Livestock Transport and Trading (KLT) and Livestock Shipping Services.

KLT, which is 50% owned by the Kuwait Government, has 3 ships in service (capacity 250,000 head) and is in the process of commissioning another two ships with capacity of 70-80,000 head each. These vessels will replace the Al Kuwait, which will be retired to service alternative routes. The longer voyage times and tighter animal welfare restrictions mean that better faster and newer ships are required for this trade.

Livestock Shipping Services, which is Jordanian owned, has two large vessels with capacity of approx. 100,000 head each. These vessels service the western Gulf via Jordan.

A trend that is likely to have an impact on future sheep volumes is the increasing interdependence between volumes of cattle and sheep shipped. Most vessels now are dual-purpose and have the ability to shift easily between sheep and cattle exporting. Increasing cattle volumes may well mean a reduction in shipping capacity for the live sheep industry and could limit volumes in the medium term until new shipping capacity can be built.



Shipping costs have increased as a result of the sharp increase in oil prices from $US30-40/barrel in early 2004. Since this time, shipping costs have risen to $US20/head, up from $US15-16/head before the hike in oil prices.

With an end to the northern hemisphere summer in sight, a cooling in hostilities across the Middle East, the so-far benign hurricane season, and the increased use of alternative energy, there is increasing confidence that oil costs may ease over the next quarter, assisting an easing in shipping costs.

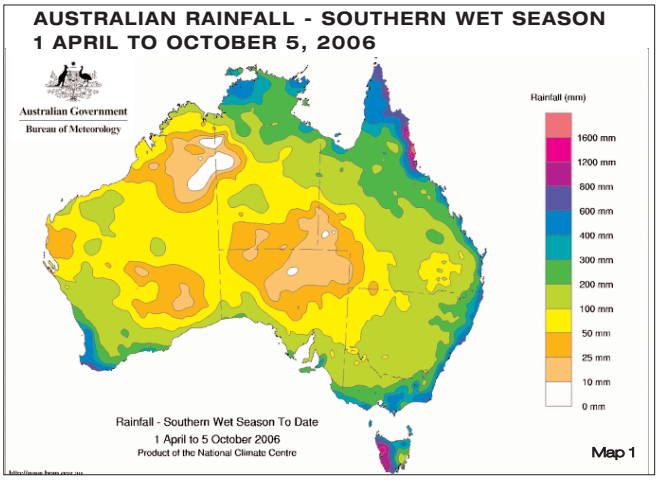
SEASONALITY AND SUPPLY

Poor seasonal conditions increase supplies

The season being endured by producers in the southern half of Australia is in sharp contrast to those being enjoyed in the northern half of Australia.

Conditions in WA have begun to recover after very much below average rainfall during June-July that seriously restricted pasture growth. Although August and early September conditions have been kinder, most areas remain seriously deficient of sub-soil moisture. Crops will yield well below average, and it is expected that many producers will move to offload excess livestock prior to the onset of summer. Through the latest season, WA markets have been well supplied during what are normally low supply months in June/July, but a bit of a hole has been created in supplies in early spring.

But with conditions deteriorating in the eastern states, live exporters have been able to supplement supplies from the eastern states, picking up 30-60,000 head per month from east coast ports.



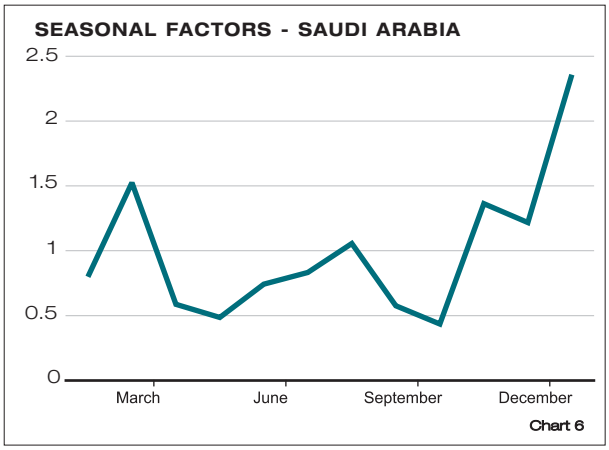
SAUDI ARABIA

Saudi volumes to ramp up

The combination of cheaper sheep costs and increased availability due to poor seasonal conditions both across the east and west coasts of Australia will drive sheep export volumes to Saudi Arabia higher over the last quarter of 2006 and into 2007.

The Saudi market is one of the less price-sensitive markets in the region and prefers younger type sheep. In the recent past, volumes into the Saudi market peaked at over 2 million head per annum in 2002 when the cost of sheep was below $US30/head. Since this time, the appreciation in the $A against the $US and the rise in Australian sheep prices have forced prices over $US50/head. The ability of the region to pay has been enhanced by improved economic conditions, but the high cost of Australian sheep and tight availability has so far prevented volumes from moving back to their highs.

Sheep costs in Australia wil ease over the next couple of quarters and will reduce the cost of sheep to below $US40/head. The Saudi trade is highly seasonal and skewed towards the back-end of the year, with over 40% of volumes exported in the final quarter of the year.



KUWAIT

Retail price caps Kuwait exports

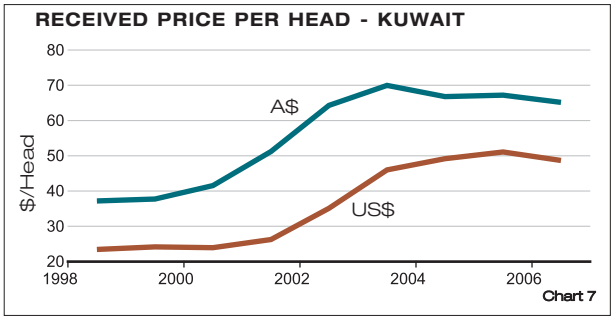
Like many countries throughout the Middle East region, the Kuwait Government distorts the market by capping the price at which sheepmeat can be sold through retail outlets within Kuwait. As well as distorting the market, this practice can have a significant impact on volumes imported, particularly in years when the increased price of livestock compresses margins and makes it uneconomic for imports.

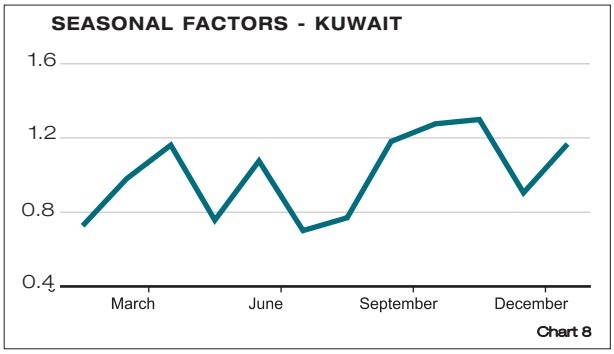
The Kuwait Government is heavily involved in the trade and understands the issues of high livestock prices, and from time to time it relaxes the retail price caps to ensure the domestic population has adequate supply.

The impact on the trade of price caps can be seen in the traded volumes. In the late 1990s and in the early years of this decade, sheep volumes exported to Kuwait peaked at over 1.5m head when sheep prices were between $US25-35/head. Since then as prices have increased above $US50/head exports have contracted to below 1m head.

Over the final part of 2006 and into 2007, volumes should resume at a pace above 1m head per annum. The Kuwait trade is far less seasonal than Saudi Arabia and due to its price-sensitive nature generally purchases limited volumes during winter when livestock prices in Australia are generally high. For the final quarter of 2006 with a fall expected in sheep prices, Kuwait will import around 300,000 head.

In the coming year we expect that Kuwait will import at a rate of around 1.2 million head. Recognising the price-sensitive nature of this market, lower sheep costs and a higher turn-off through to winter next year Kuwait are expected to increase imports to around 300,000 head per quarter through the first half of 2007 before easing during the 3rd quarter.

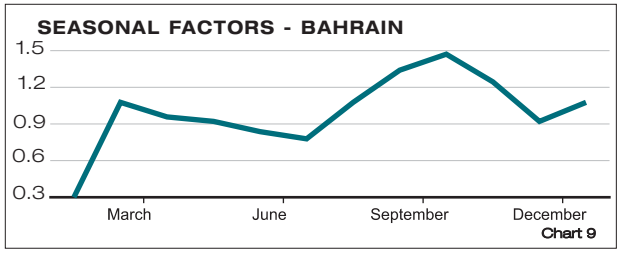




BAHRAIN

Bahrain subsidies imports

Owing to the size of its population and its endowment of oil reserves, the Bahrain Government is able to subsidise some basic needs of the population. This extends to food items and sheepmeat, and it has allowed export volumes to Bahrain to remain relatively constant at around 400,000-500,000 head annually, despite increased livestock costs. Volumes have risen over the past 2-3yrs as the government has been able to increase its subsidies to overcome the hike in the cost of livesheep to $US50/head. In the next year volumes will increase slightly to 600,000 head.

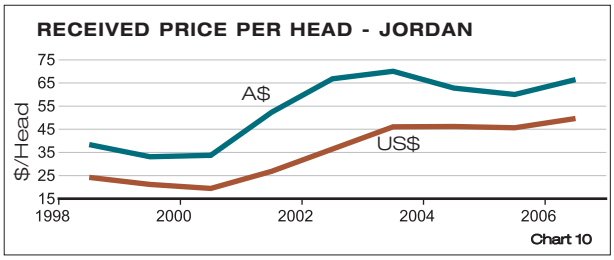


JORDAN

Jordan volumes suffer due to influence of Saudi Arabia

Volumes heading to Jordan tend to show some inverse correlation to Saudi import levels. At times when the Saudi market has been open, Jordan has imported about 500,000-600,000 head; but at times when the Saudi market is closed, volumes entering Jordan jumped up to 1 million head.

With the easing in livesheep values expected in the short to medium term, export volumes will remain at the high end of the range for Jordan when the Saudi market is open.



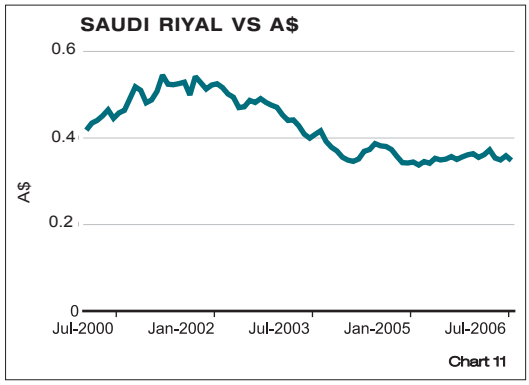
SAUDI ARABIA

Saudi tries to diversify economy

With oil export revenues making up around 90-95% of total Saudi export earnings, 70-80% of state revenues, and around 40% of the country's gross domestic product (GDP), Saudi Arabia's economy remains, despite attempts at diversification, heavily dependent on oil.

After very low growth in the early part of the decade, the rise in oil prices has created a sharp lift in growth to 6-7%. The Saudi Government has used a significant proportion of windfall oil earnings to firstly reduce debt, but it is now turning to purchase productive assets in a bid to widen its revenue base.

Oil wealth has increased the standard of living of most Saudis. However, significant population growth has strained the government's ability to finance further improvements in the country's standard of living. The mismatch between the job skills of Saudi graduates and the needs of the private job market at all levels remains the principal obstacle to economic diversification and development; about 4.6 million non-Saudis are employed in the economy. Growth in the Saudi economy will be aligned with oil prices and should ease in the next few years as high oil prices act to reduce global growth.



The Saudi Riyal has been pegged at 3.75 against $1US. Australian sheep therefore become more affordable when the $A depreciates against the $US.

JORDAN

Jordan benefitting from growth across region

Gulf Co-operative Council economies have been active in investing in other upcoming Mena (Middle East & North Africa) economies such as Egypt, Jordan, Lebanon, Syria and Palestine.

The Jordanian economy saw increased investment from the Arab countries as the economy showed signs of improvement. The government has been a great supporter for the sector, providing numerous incentives such as the establishment of industrial estates, free-trade zones and granting tax breaks.

Tourism has been a major driver of the real estate market in Jordan, with many projects under construction coming up shortly in the tourism sector. Jordan accounted for 7.8% of total tourist arrivals in the Middle East region in 2005, and grew by 4.7% on a year-on-year basis.

The Jordanian economy was hit in the aftermath of the Iraqi war in 2003, resulting in the sharp decline in exports to Iraq and the shortage in supply of cheap oil as the Kingdom mainly depended on Iraq for its energy needs.

Growth in the Jordanian economy has increased from 4-5% in the early part of this decade and in 2005 reached 7.2%. Continued strong oil receipts and regional economic growth have ensured a similar rate of growth during 2006. Growth may ease slightly in the coming years as oil prices retreat from their highs and regional growth recedes.

The Central Bank of Jordan supports a fixed exchange rate between the Jordanian dinar and the US dollar.

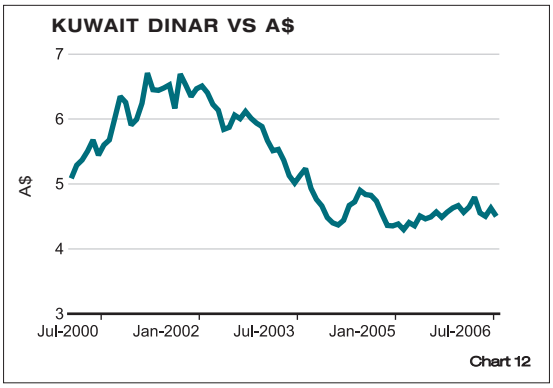
KUWAIT

Kuwait on the way back

Kuwait is a small (3m population), rich, relatively open economy with 10% of the world's proven crude oil reserves. The labour force totals 1.7m people, only about one-fifth of whom are Kuwaiti citizens. Petroleum accounts for nearly half of GDP, 95% of export revenues, and 80% of government income. Kuwait's climate limits agricultural development and with the exception of fish, it depends almost wholly on food imports. Because the government owns the oil industry, it controls most of the economy - in all, about 75% of GDP.

The expenses of the Iraqi invasion and post-war reconstruction placed a heavy economic burden on the country, but by the mid-1990s Kuwait had resumed its pre-invasion prosperity. GDP grew at over 8% for 2005, giving Kuwait a per capita GDP of $US22,800. It is expected that growth will ease slightly in 2006 but remain around 6%.

The Kuwait Dinar is pegged against a composite basket of currencies. After depreciating moderately in 2003 and 2004, the currency has strengthened with the rise in oil prices.



BAHRAIN, UAE, QATAR, OMAN

Widespread strong growth

In Bahrain, petroleum production and processing account for about 60% of export receipts, 60% of government revenues, and 30% of GDP. The people of Bahrain enjoy high living standards, but there are considerable differences between social groups. Housing and transportation is subsidised by the state. In 2005, Bahrain grew at 6.9%; it is forecast to grow at 7.1% in 2006, and it should hold at around this level in 2007.

According to the UAE central bank, the economy grew by 8.2% last year, marginally slower than the 9.7% growth it posted in 2004. Growth has eased slightly through 2006 and will continue to ease in 2007 to around 6%.

The outlook for Oman's economy looks bright in the short-to-medium term due to healthy international oil prices, higher Liquefied Natural Gas (LNG) exports and investments in new infrastructure projects. Oman's GDP registered a strong growth of 24% in 2005, as against 13.7% in 2004.

Buoyed by world energy prices, Qatar's economy has been growing at an average of about 9% in real terms since 2003. Qatar now rivals Luxembourg as the world's richest nation in term of per capita Gross Domestic Product.