Department of **Employment, Economic Development and Innovation**

# The Queensland beef industry

## Current trends and future projections

Updated August 2010

Toward Tomorrow's Queensland

Queensland Government

# Contents


**Introduction** 1

**World production and consumption** 2

Exports 5

**Cattle production sector** 6

Queensland's cattle producing regions 7
Number of enterprises 9
Employment 10
Size of the cattle herd 11
Selling methods 13
Cattle prices 14
Feedlot activity 15
Gross value of production 17
Cattle slaughter 18
Cross-border cattle movements 19
Supporting services 20

**Meat processing sector** 21

Characteristics 21
Employment in meat processing 23
Outlook for meat processing 23

**Market situation** 24

Global economy 24
Domestic market 24
Export markets 26
Cattle to live export: drivers and trends 28

**Outlook** 29

Outlook for Queensland 30

**Challenges and opportunities** 31

Production issues 31
Processing issues 33
Other issues 35

**Appendix 1: Key statistics tables** 38

**Bibliography** 44

# Introduction

Queensland has Australia's largest beef cattle herd and is the nation's largest producer and exporter of beef. The combined gross value of Queensland's beef cattle production and meat processing sectors is expected to be worth an estimated $4.5 billion in 2009–10.

At the farm gate level, beef cattle production is Queensland's largest agricultural industry. Queensland's gross value of beef cattle production is estimated to be about $3.4 billion in 2009–10 (Department of Employment, Economic Development and Innovation 2010).

Beef cattle production provides about 83% of the total gross value of production of all Queensland's livestock industries and over one-third of the total gross value of all Queensland's agricultural industries.

Beef cattle production occurs across all regions in Queensland. Cattle are mostly pasture-raised in the state's western districts, of which 70% are grass-fed. The remaining 30% are typically raised on pastures for around 17 to 21 months and then moved to feedlots to be grain-fed or 'finished' for between 2 and 4 months. Feedlots are concentrated in the major agricultural regions where they have access to adequate supplies of store cattle, grain and other feedstuffs.

In 2008–09, Queensland exported beef and veal to 79 countries with a value of about $3.1 billion. The top three export destinations were Japan (about 50%), the United States (about 19%) and South Korea (about 12%). Queensland beef exports to these destinations were valued at approximately $2.5 billion.

The industry faces some challenges in the next few years. These include the changes in the world economy and gradual recovery from the economic slowdown caused by the global financial crisis of September 2008. These new conditions will test the flexibility of the industry, especially the processing sector.

The purpose of this paper is to provide an analysis of the current situation and future trends for Queensland's beef industry. This information may be used as an authoritative source of data and information to assist industry stakeholders and government with project design and strategic priority setting.

# World production and consumption

This section examines trends in beef consumption and production in major producing countries and whether volumes of exports and imports are maintaining a balance in world beef demand and supply.

Between 2000 and 2005, total world beef consumption generally equalled total world beef production. After 2005, world production tended to exceed world consumption. This trend was associated with a decrease in world per capita consumption (Table 1).

**Table 1: Trend in world beef production and consumption**

| Year | World beef production (Mt) | World beef consumption (Mt) | World consumption per person (kg) |
|---|---|---|---|
| 2000 | 53.7 | 53.4 | 8.8 |
| 2001 | 52.9 | 52.6 | 8.5 |
| 2002 | 54.3 | 54.1 | 8.7 |
| 2003 | 54.5 | 54.5 | 8.6 |
| 2004 | 55.5 | 55.2 | 8.6 |
| 2005 | 56.3 | 55.8 | 8.6 |
| 2006 | 57.5 | 56.8 | 8.7 |
| 2007 | 58.4 | 57.9 | 8.7 |
| 2008 | 58.0 | 57.5 | 8.6 |
| 2009 | 56.7 | 56.1 | 8.4 |
| 2010 | 56.4 | 55.9 | 8.2 |

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

In its 2010 outlook for Australian agricultural exports, the Australian Bureau of Agriculture and Resource Economics (ABARE) is expecting world beef prices to decline in 2010–11. A decline in world beef prices is normally associated with increased production relative to consumption.

Figure 1 shows trends in beef (bovine) meat production for the top 10 producing countries. Brazil and India have increased their production by 37% and 56% respectively over the period, while most other countries have maintained annual production at similar levels to 2000 or within a narrow band over the same period.

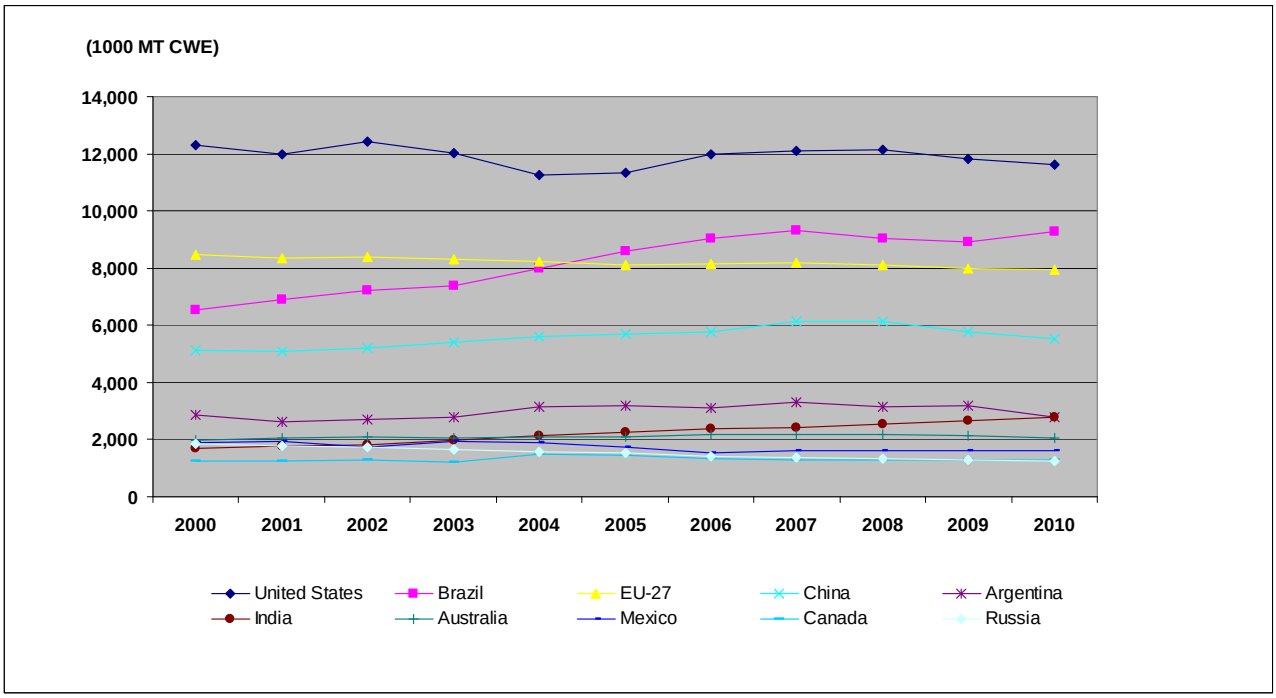


**Figure 1: Major beef producing countries**

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

Other major beef countries to have increased production since 2000 are China (12%), Argentina (11.1%), Australia (7.1%) and Canada (2.9%). Production declined over the same period in Russia (30%), Mexico (14.5%) and the European Union (EU) (5.8%). Production in the world's biggest beef producing country, the United States (US), also declined by almost 4% between 2000 and 2009.

Table 2 indicates beef production data for the top 10 producing countries and rest of the world. Apart from Brazil and India, the other major producing countries are expected to produce lower volumes in 2010, but total world production will only be slightly less than in 2009.

**Table 2: Top 10 beef producing countries and the rest of the world (kilotonnes)**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| US | 12 298 | 11 983 | 12 427 | 12 039 | 11 261 | 11 318 | 11 980 | 12 096 | 12 163 | 11 816 | 11 631 |
| Brazil | 6 520 | 6 895 | 7 240 | 7 385 | 7 975 | 8 592 | 9 025 | 9 303 | 9 024 | 8 935 | 9 290 |
| EU | 8 492 | 8 346 | 8 397 | 8 304 | 8 245 | 8 090 | 8 150 | 8 188 | 8 090 | 8 000 | 7 950 |
| China | 5 131 | 5 086 | 5 219 | 5 425 | 5 604 | 5 681 | 5 767 | 6 134 | 6 132 | 5 764 | 5 530 |
| Argentina | 2 880 | 2 640 | 2 700 | 2 800 | 3 130 | 3 200 | 3 100 | 3 300 | 3 150 | 3 200 | 2 800 |
| India | 1 700 | 1 770 | 1 810 | 1 960 | 2 130 | 2 250 | 2 375 | 2 413 | 2 525 | 2 660 | 2 795 |
| Australia | 1 988 | 2 049 | 2 089 | 2 073 | 2 081 | 2 102 | 2 188 | 2 180 | 2 161 | 2 129 | 2 045 |
| Mexico | 1 900 | 1 925 | 1 725 | 1 950 | 1 900 | 1 725 | 1 550 | 1 600 | 1 600 | 1 625 | 1 630 |
| Canada | 1 263 | 1 262 | 1 298 | 1 204 | 1 500 | 1 470 | 1 329 | 1 278 | 1 288 | 1 300 | 1 275 |
| Russia | 1 840 | 1 760 | 1 740 | 1 670 | 1 590 | 1 525 | 1 430 | 1 370 | 1 315 | 1 280 | 1 265 |
| Rest of the world | 9 654 | 9 231 | 9 623 | 9 704 | 10 116 | 10 330 | 10 642 | 10 497 | 10 602 | 10 073 | 10 194 |
| **Total** | **53 666** | **52 947** | **54 268** | **54 514** | **55 532** | **56 283** | **57 536** | **58 359** | **58 050** | **56 782** | **56 405** |

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

Figure 2 provides trends in beef consumption for the top 10 beef consuming countries and rest of the world between 2000 and the estimated consumption for 2010.

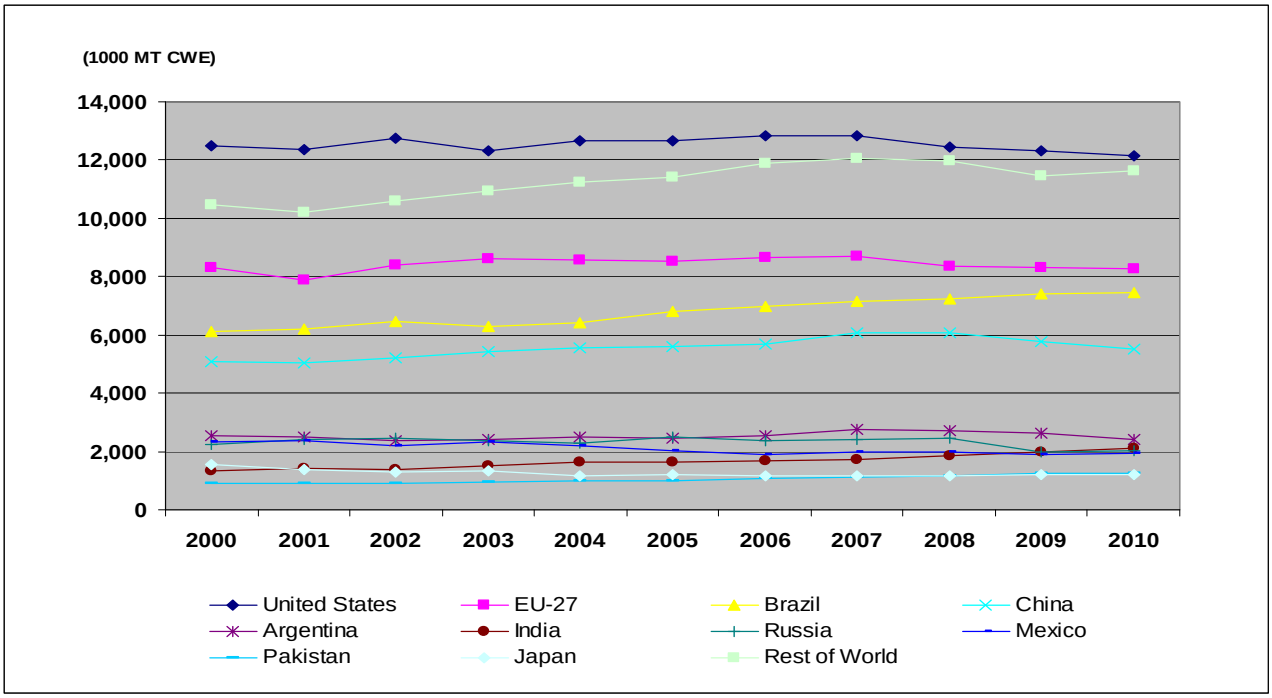


**Figure 2: Major beef consumption countries**

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

On average, the US consumes about 12 531 kilotonnes of beef annually and is the world's largest beef consumer. The EU is the second largest consumer of beef, while Brazil and China rank three and four.

**Table 3: Top 10 beef consuming countries and the rest of the world (kilotonnes)**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| US | 12 502 | 12 351 | 12 737 | 12 340 | 12 667 | 12 664 | 12 833 | 12 829 | 12 452 | 12 310 | 12 158 |
| EU | 8 324 | 7 874 | 8 416 | 8 596 | 8 582 | 8 550 | 8 649 | 8 690 | 8 352 | 8 310 | 8 280 |
| Brazil | 6 105 | 6 198 | 6 445 | 6 285 | 6 417 | 6 795 | 6 969 | 7 144 | 7 252 | 7 410 | 7 445 |
| China | 5 100 | 5 052 | 5 214 | 5 415 | 5 566 | 5 614 | 5 692 | 6 065 | 6 080 | 5 751 | 5 530 |
| Argentina | 2 545 | 2 515 | 2 364 | 2 430 | 2 519 | 2 451 | 2 553 | 2 771 | 2 732 | 2 642 | 2 420 |
| India | 1 356 | 1 405 | 1 399 | 1 528 | 1 638 | 1 633 | 1 694 | 1 735 | 1 853 | 1 985 | 2 095 |
| Russia | 2 240 | 2 392 | 2 441 | 2 369 | 2 300 | 2 492 | 2 361 | 2 392 | 2 441 | 1 968 | 2 033 |
| Mexico | 2 321 | 2 353 | 2 218 | 2 319 | 2 177 | 2 028 | 1 894 | 1 961 | 1 966 | 1 880 | 1 920 |
| Pakistan | 886 | 903 | 925 | 953 | 979 | 1 009 | 1 090 | 1 132 | 1 174 | 1 232 | 1 256 |
| Japan | 1 563 | 1 399 | 1 304 | 1 348 | 1 169 | 1 188 | 1 159 | 1 182 | 1 174 | 1 189 | 1 195 |
| Rest of the world | 10 487 | 10 198 | 10 611 | 10 924 | 11 226 | 11 408 | 11 910 | 12 046 | 11 974 | 11 439 | 11 640 |
| **Total** | **53 429** | **52 640** | **54 074** | **54 507** | **55 240** | **55 832** | **56 804** | **57 947** | **57 450** | **56 116** | **55 972** |

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

Since 2000, average annual world beef production has been 394 kilotonnes more than world beef consumption. Figure 3 shows world beef consumption converging with world production in 2003 and, after the gap, production again exceeds consumption. The gap was greatest in 2006, while it narrowed in 2007. The gap then widened again until 2009 and is forecast to narrow in 2010 to a surplus of about 433 kilotonnes.

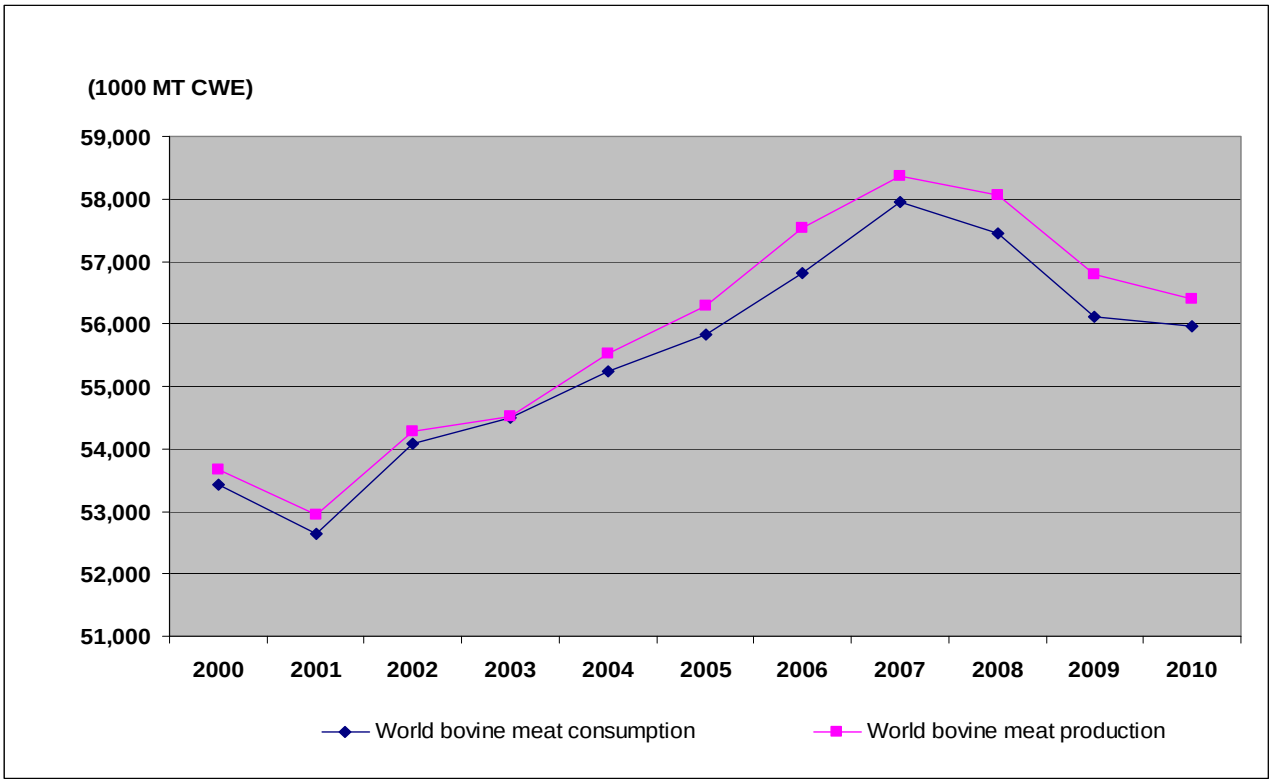


**Figure 3: World beef production and consumption**

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

The forecast surplus is not likely to cause any serious imbalance between production and consumption in world markets in 2010. The trends suggest beef exporters are operating in a highly competitive market where surplus supply favours beef importers over beef exporters.

## Exports

The United States Department of Agriculture (USDA) estimated the volume of world beef exports was 7110 kilotonnes in 2009. The world's leading exporter was Brazil, which exported about 1555 kilotonnes of beef and veal in 2009—about 21.9% of total world beef exports.

Australia was the world's second largest beef exporter behind Brazil. In 2009, Australia exported about 1370 kilotonnes of beef or about 19.5% of total world beef and veal exports.

The US is the third largest beef exporter, exporting about 785 kilotonnes or about 11% of total world beef and veal exports. The volume of beef exported by India was about 675 kilotonnes, placing India as the world's fourth largest bovine meat exporter followed by New Zealand, which exported 525 kilotonnes in 2009.

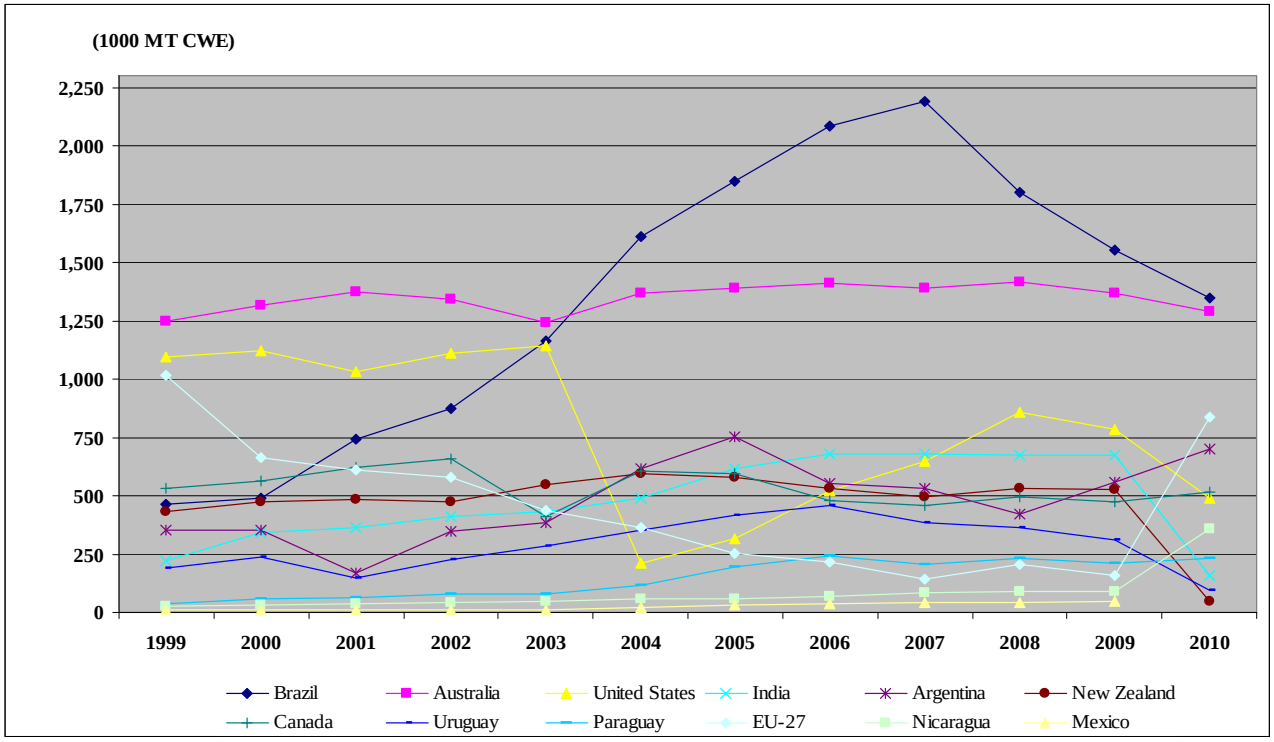


**Figure 4: Beef exports by major beef exporting countries**

Source: Production, Supply and Distribution Database, United States Department of Agriculture Foreign Agricultural Service, accessed 25 February 2010.

Note: Exports from India are buffalo meat (beef and buffalo are bovine meat).

Meat & Livestock Australia (MLA) is expecting global beef demand to slowly improve in 2010 and 2011, driven by the stronger global economic conditions forecast by the International Monetary Fund. However, Australia's ability to gain market share will be restricted by facts such as a decrease in production, a high Australian dollar, increasing US competition in Japan and Korea, and slow economic recovery in the US and Japan (Meat & Livestock Australia 2010a).

MLA has forecast that Australian beef exports will decrease from 927 300 tonnes in 2009 to 875 000 in 2010—nearly 6%. In 2010, MLA expects the volume of Australian beef exports to its major markets of Japan and Korea to decline by a little over 47 000 tonnes, offset slightly by a marginal increase of exports to the US. With Queensland's share of Australian beef exports currently at about 60%, it is expected Queensland beef exports will be down by about 31 000 tonnes in 2010 based on MLA's forecast.

# Cattle production sector

Queensland has Australia's largest beef cattle herd and is the nation's largest producer and exporter of beef. The composition of the herd is influenced by many factors, including rainfall, type of country and physical environs. It is also influenced by farm management practices such as type of enterprise, age of turn-off of sale cattle, branding percentage, rate of losses of different classes of cattle, age of mating heifers, age and rate of culling, and to a small extent mating intensity of bulls to cows (Queensland Department of Primary Industries 1982).

On most beef farms, regardless of the type of enterprise, sale cattle are usually turned-off by the end of the production season. Normally, cattle are turned-off ahead of the onset of winter, when feed dries off. Mixed farming (where there is beef cattle production and winter cropping) can be an exception, since cattle are able to be carried through the winter for further fattening and turn-off during the spring. (Queensland Department of Primary Industries 1982).

The sizes of beef cattle production enterprises range from non-commercial rural residential/peri-urban, to commercial and mixed farming enterprises. In Queensland, commercial beef enterprises range in size from:

- small (100 to 400 head)
- medium (400 to 1600 head)
- large (1600 to 5400 head)
- very large (more than 5400 head).

## Queensland's cattle producing regions

### Southern Queensland (Darling Downs and south west)

Southern Queensland has approximately 23% of Queensland's beef cattle enterprises. Native pastures (generally under woodlands of eucalypt, cypress pine and mulga) cover more than 70% of the region and are predominantly grazed for beef production. Much of the better land types, such as brigalow-belah, have been sown to improved grasses such as buffel grass. There are a diverse range of beef enterprises, including:

- breeding for the store trade (mainly western properties on less fertile country)
- breeding through to finishing on crop and/or pasture, suitable for the domestic market through to Japanese ox
- breeding and production of feeder cattle, which are finished on farm in opportunity feedlots or in commercial feedlots in the region
- backgrounding stock for feedlots
- buying and finishing on crop and/or pasture with or without grain supplementation
- seed stock (stud cattle) production
- cattle feedlots.

### Wide Bay Burnett

The Wide Bay Burnett has approximately 20% of Queensland's beef cattle enterprises. The region has three distinct land types—coastal zone, Gympie area and inland Burnett zone—where the following production systems are undertaken:

- The coastal zone generally consists of breeding and selling store steers from weaner (6 to 9 moths old) to 2 years old. There is also some finishing on improved pastures.
- The Gympie area consists of many small properties, mostly sub-commercial. The most common production systems are breeding and selling of vealers, butchers' calves and store weaners to yearlings. There are a smaller number of enterprises buying and growing stores.
- The inland Burnett zone consists of breeding and selling weaners and stores and Japanese ox, depending on the mix of land types available. Finishing is only feasible on the more productive land types.

### Fitzroy

The Fitzroy has approximately 14% of Queensland's beef cattle enterprises. Production systems include:

- store producing on coastal speargrass and ironbark woodlands, turning off yearling or weaner steers for grass and grain finishing
- breeding and finishing on brigalow country targeting the EU, Japanese ox and domestic markets
- finishing on brigalow country, buying store cattle and finishing them for the EU, Japanese ox and domestic markets.

## Central west

The central west is characterised by a diverse range of land types and has approximately 3% of the state's beef cattle enterprises and more than 8% of Queensland's cattle herd. Central west production systems include the following:

- Desert Uplands properties are breeder operations turning off weaners primarily through store sales as trade steers or sold direct to live export
- Mitchell grasslands consist of both breeder, finishing and trade operations; cattle sold as weaners, feedlot entry steers, or into Korean or grassfed domestic, heifers as feed-on yearlings; some steers still being sold into Japanese ox market; and northern properties where steers are sold to the live export trade.
- Mulga lands consist of primarily breeder operations with weaner turn-off however, in good seasons, steers can be sold as Korean or domestic grassfed
- Channel country consists of black soil flats producing herbage and grass for feed-on steer operations, and either finished as Japanese ox or sent on to feedlots for finishing.

## South west

The south-west region has approximately 8% of Queensland beef cattle enterprises and the main production systems in the region are:

- breeding and selling store weaners and, in good seasons, producing grassfed steers for the Korean and/or domestic markets
- feed-on steers that are either finished as Japanese ox or sent on to feedlots for finishing.

## West Moreton

The West Moreton region has almost 8% of Queensland's beef cattle enterprises but less than 2% of the state's beef cattle herd. Similarly, Brisbane, the Gold Coast and the Sunshine Coast combined have a similar number of beef enterprises. However, the majority of beef enterprises are mainly small and many are non-commercial. The large numbers of beef enterprises poses a serious problem for the ongoing management of biosecurity and animal welfare matters.

## Mackay

The Mackay region has 6% of Queensland's beef cattle enterprises and three distinct land types (i.e. coastal, brigalow and spear grass country). The main production in the Mackay region includes:

- predominantly weaner production by small-scale breeding operations on the central coast, some finishing and some large-scale improved pasture production systems
- brigalow country cattle enterprises that are mainly breeding and finishing of Japanese ox production systems
- northern spear grass country systems that are mainly large-scale breeding and mixed store/finishing production systems with some cattle being sold to the live export trade.

## Far North

Queensland's Far North region is characterised by the Cape York and Northern Gulf, and the wet coast and Atherton Tableland. Approximately 5% of the state's beef cattle enterprises and 6% of the state's beef cattle herd are located in the Far North, where the main production systems include the following:

- Cape York and Northern Gulf areas are mainly breeding properties turning off store cattle for southern markets, live export and coastal fatteners.
- Properties with more fertile soils will produce Japanese ox for slaughter.
- Wet coast and Atherton Tableland areas are mainly fattening store cattle from western breeding properties for local domestic trade, Japanese ox and yearling market at abattoir in Townsville, and live export.

### Northern

The northern region has slightly more than 3% of the state's beef cattle enterprises and almost 9% of Queensland's cattle herd. The region has extensive grazing areas inland and coastal grazing areas where the main production systems include the following:

- Inland extensive grazing on native pastures is supported by introduced species where the production systems include breeding and selling weaners, store steers and finishing 2.5- to 3.5-year-old Japanese ox, depending on land types. Most of the inland extensive grazing areas are capable of producing store steers to 2-year-old bullocks.
- The coastal grazing lands are characterised by native pastures, sown pastures and some irrigated pastures, and the production systems include breeding, selling weaners, store steers and finished Japanese ox (2 and 3 years). Some enterprises are non commercial.
- Both areas have a range of production systems that take animals from birth to slaughter and some producers focus on one enterprise—either breeding or finishing.

### North west

The north-west region has large properties and almost 16% of Queensland's beef cattle herd. This makes north-west Queensland the second largest beef producing region behind the Fitzroy, where just over 19% of the herd is located. The north west has a diverse range of land types and production systems. The land types and their production systems include the following:

- There are store producing enterprises on blue grass browntop plains and browntop plains in the Gulf and on spinifex country in the Mount Isa – Cloncurry region. Companies and large family enterprises turn-off weaner steers to finishing properties on the Mitchell grass downs, Channel Country and Central Queensland buffel country.
- Smaller enterprises without finishing properties typically turn-off store steers at 18 to 30 months for the live export trade or finishers.
- Breeding and finishing enterprises operate on Mitchell grass country and target the Japanese ox and domestic markets.
- Breeding enterprises also operate on Mitchell grass country producing yearling steers aimed at the grain and grass finishing and live export markets.

## Number of enterprises

Australian Bureau of Statistics (ABS) statistics on the numbers of beef cattle enterprises is published by the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry. These are:

- beef cattle farming and beef cattle feedlots (specialist)
- grain–sheep/beef cattle farming
- sheep–beef cattle farming.

In 1990, there were 26 321 establishments with agricultural activities in Queensland. The number of beef cattle farms comprised about 27% of all establishments undertaking farming activities. There were about 2266 mixed farms with beef cattle in Queensland.

The number of dedicated beef cattle properties in Queensland increased by about 71%, from 6997 to 11 998 between 1990 and 1995. Beef cattle farms and mixed farms with beef cattle comprised about 35% of all establishments undertaking farming activities in Queensland. Also, between 1990 and 1995, the number of mixed farms with beef cattle increased to about 2540, about 17% on farming establishments with beef cattle in the state.

Between 1995 and 2000 in Queensland, there was a 4.5% decline in the number of establishments with the main enterprise being beef cattle. However, the remaining 11 458 establishments still comprised over a third of all establishments undertaking agricultural activities. Mixed enterprises

with beef cattle declined marginally to 2534, but still comprised about 15% of the state's establishments with beef cattle.

Between 2000 and 2005 in Queensland, the number of enterprises with beef cattle as their main enterprise increased by 6% to 12 136, but the number of mixed farms with beef cattle declined by 21% to 1998. From 2005 to 2008, the number of specialist beef cattle establishments increased 11% to 12 452 and the number of mixed enterprises with beef cattle declined to 1819.

The increased number of cattle properties in Queensland has been supported by an expansion of the beef cattle feedlot sector and other farming enterprises shifting into beef cattle production for higher revenues.

Table 4 shows that as at 30 June 2009 about 32% of the nation's 39 425 beef cattle farms were located in Queensland.

**Table 4: Number of enterprises and main agricultural enterprises by state (as at 30 June 2009)**

| | Beef cattle farming plus beef cattle feedlots (specialised) | Sheep–beef cattle farming | Grain–sheep or grain–beef cattle farming | Dairy cattle farming | Total |
|---|---|---|---|---|---|
| Queensland | 12 452 | 517 | 1 382 | 735 | 25 136 |
| New South Wales | 13 409 | 3 309 | 5 224 | 1 016 | 38 051 |
| Victoria | 8 468 | 1 684 | 2 538 | 4 939 | 29 666 |
| South Australia | 1 355 | 680 | 2 367 | 380 | 12 868 |
| Western Australia | 2 259 | 282 | 2 168 | 177 | 11 124 |
| Northern Territory | 223 | - | - | - | 474 |
| Tasmania | 1 231 | 203 | 99 | 502 | 3 547 |
| Australian Capital Territory | 27 | 14 | - | - | 76 |
| **Australia** | **39 425** | **6 690** | **13 778** | **7 749** | **120 941** |

Source: Australian Bureau of Statistics 2010, *7121.0 Agricultural commodities Australia 2008–09*, Australian Bureau of Statistics, Belconnen.

Note: '-' equals nil or rounded to zero

## Employment

Employment in beef cattle production and meat processing plays an important role in the economic development of Queensland's regions.

### Employment in beef cattle production

The following information on employment is based on ABS statistics by ANZSIC industry where beef cattle production is the primary enterprise of a business.

Between 1999 and 2000 in Queensland, there were approximately 15 140 people employed on properties producing beef cattle as the main enterprise. An additional 3736 were employed on grain–sheep/beef cattle properties and 2899 in sheep–beef cattle farming. Therefore, in Queensland the total number of people employed on beef cattle–producing properties was approximately 21775 in 1999–2000.

Between 1999–2000 and 2004–05 in Queensland, the number employed on farms involved in production of beef cattle increased by approximately 37% to almost 30 000. In 2007–08, the number of people employed on farms involved in production of beef cattle had reached about 32 000, including employees, employers, own account workers, family workers and unpaid voluntary workers (Department of Agriculture, Fisheries and Forestry 2002, 2009).

Actual numbers employed will vary in response to major influences. For example, in times of low net farm incomes, on-farm employment will typically decline. In times of drought, employment can actually increase with more labour needed to feed and move or transport animals. Some events such as a floods and extreme weather often increase labour usage afterwards, moving cattle and carrying out repairs and maintenance.

### Employment challenges and innovation

In recent years, on-farm resident employment has declined due to economic factors and workplace health and safety changes. There has been a trend towards more contract labour on medium- and large-sized properties, and an increased use of unskilled labour for shorter periods. Cattle properties have adapted to less labour-intensive practices, with innovative approaches to make handling of cattle easier such as erecting laneways and self-mustering systems.

Technology is being used, such as remote monitoring telemetry technology to turn bores on and off and to record water use. Breeder selection now also takes into account animal temperament for easier handling and automated drafting and handling systems are becoming more common. Not only do such innovations reduce labour requirements, but they often have the added benefit of reducing stress on the cattle being handled.

## Size of the cattle herd

The size of Queensland's beef cattle herd has remained over 11 million head for the past six years. The state's ability to increase and maintain cattle numbers is due in part to the size of its lot feeding sector.

**Table 5: Meat cattle numbers by state—'000s of head (as at 30 June 2009)**

| | 2001–02 | 2002–03 | 2003–04 | 2004–05 | 2005–06 | 2006–07 | 2007–08 |
|---|---|---|---|---|---|---|---|
| New South Wales | 5 593 | 5 419 | 5 416 | 5 335 | 5 862 | 5 609 | 5 330 |
| Victoria | 2 463 | 2 491 | 2 390 | 2 540 | 2 646 | 2 575 | 2 254 |
| Queensland | 11 284 | 10 507 | 11 245 | 11 380 | 11 354 | 11 495 | 11 731 |
| South Australia | 1 201 | 1 209 | 1 164 | 1 223 | 1 161 | 1 067 | 966 |
| Western Australia | 1 980 | 1 815 | 1 962 | 2 011 | 2 275 | 2 223 | 2 013 |
| Tasmania | 432 | 482 | 496 | 498 | 501 | 481 | 444 |
| Northern Territory | 1 777 | 1 683 | 1 730 | 1 729 | 1 798 | 1 912 | 2 041 |
| Australian Capital Territory | 10 | 8 | 8 | 9 | 9 | 11 | 3 |
| **Australia** | **24 739** | **23 615** | **24 410** | **24 725** | **25 605** | **25 373** | **24 784** |

Source: Australian Bureau of Statistics, *7121.0 Agricultural commodities Australia*, Australian Bureau of Statistics, Belconnen (reports for 2001–02 to 2008-09).

Queensland's share of the national beef cattle herd was 40.1% in 2003 and has gradually increased since then. Figure 5 shows the states' shares of the national meat cattle herd as at 30 June 2009.

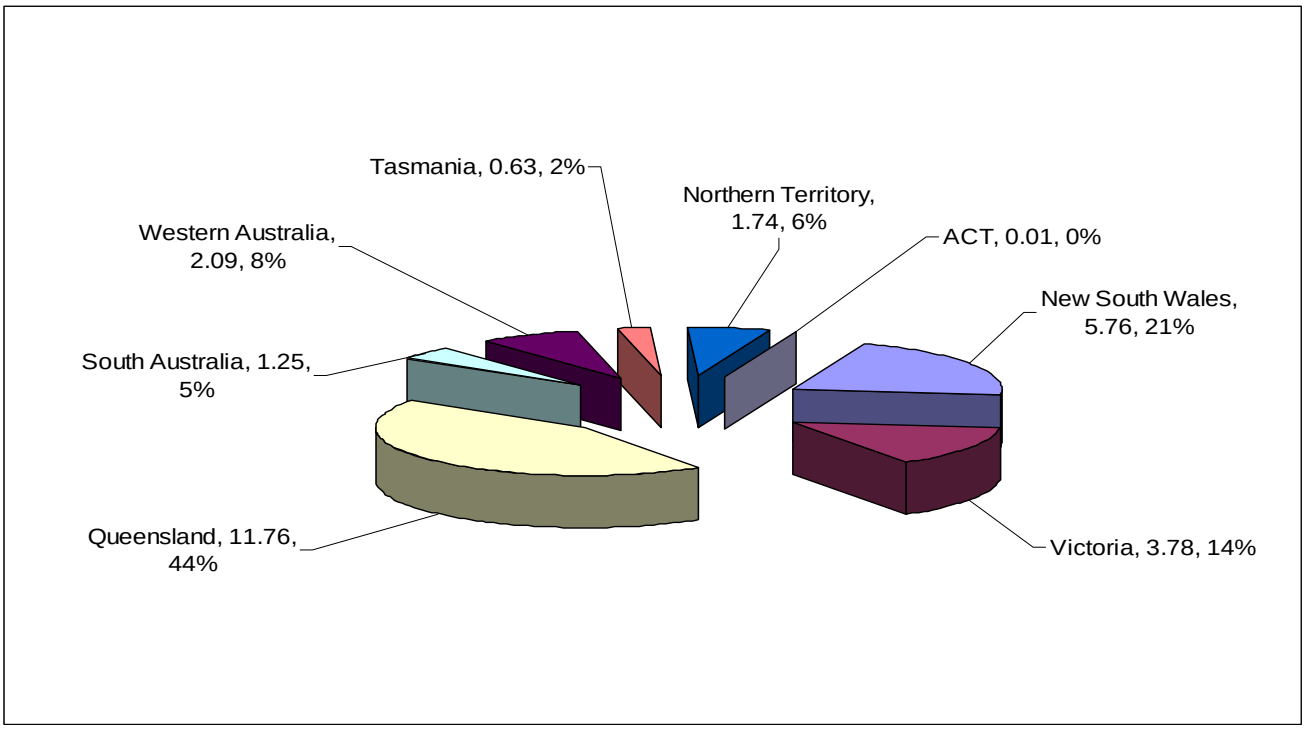


**Figure 5: Distribution of the Australian cattle herd (as at 30 June 2009)**
Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed February 2010.

It is expected that Queensland beef cattle numbers will be less than 11.6 million by 30 June 2010. The main reasons for this decline are:

- losses and low calving rates in areas affected by the floods in northern Queensland in 2009 and in south-western Queensland in 2010
- the increase in live cattle exports from 56 087 head in 2007–08 to 176 859 in 2008–09. These are also expected to increase by 4.4% in 2009–10
- maintaining annual slaughter numbers above 3.5 million head for over a decade.

As a rule of thumb, of the total adult cattle slaughter, a female slaughter percentage above 43% over a sustained period will lead to herd decline. The current retention of females would indicate that herd rebuilding is taking place.

Figure 6 shows trends in the size of Queensland's cattle herd between 2000 and 2009.

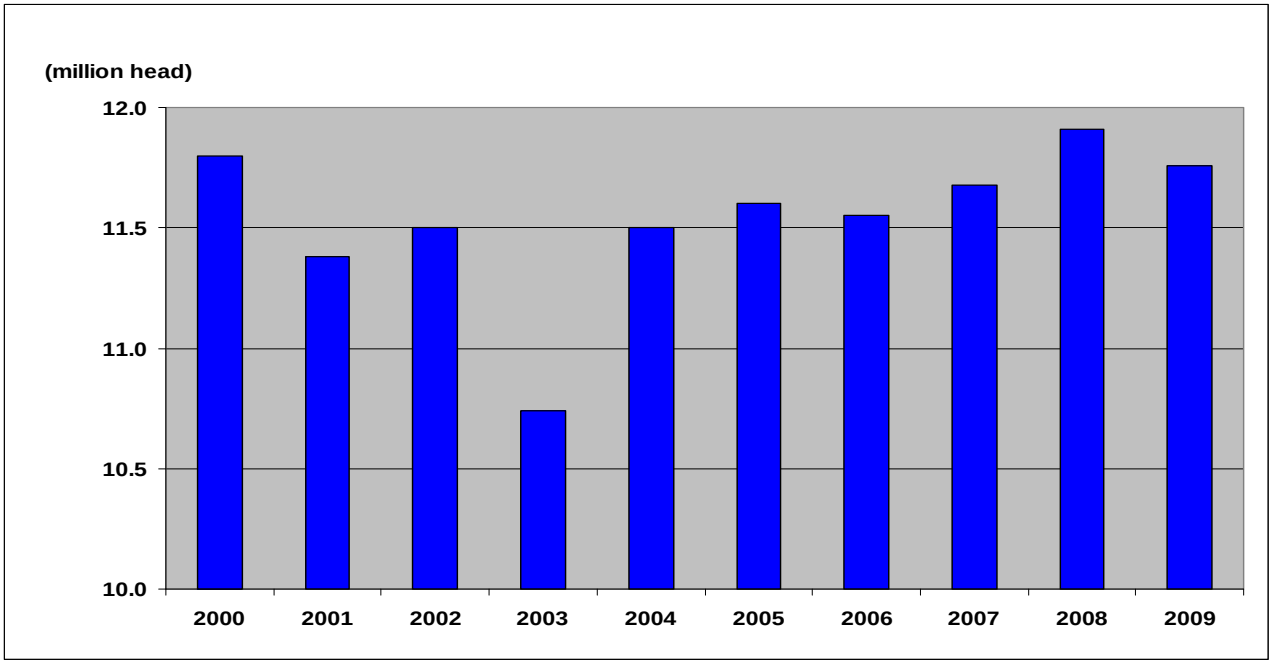


**Figure 6: Size of Queensland's cattle herd, 2000–2009 (as at 30 June)**
Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed February 2010.

Figure 7 shows the distribution of beef cattle across Queensland as at 30 June 2008.

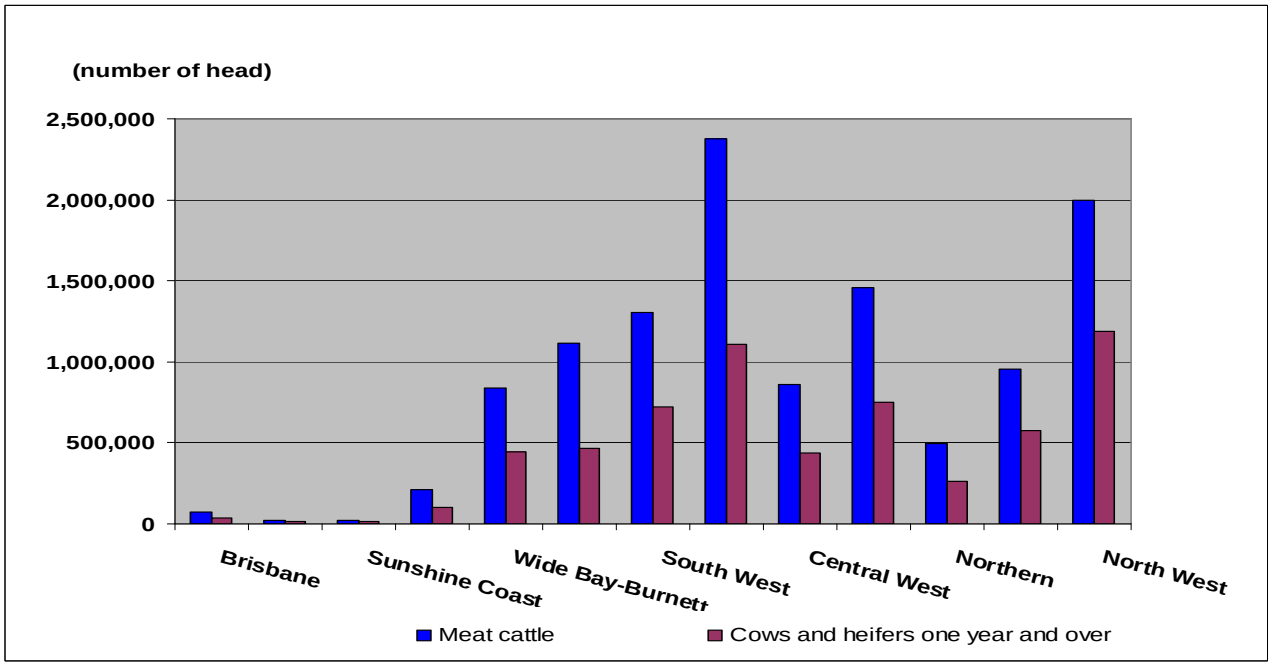


**Figure 7: Distribution of the Queensland cattle herd (as at 30 June 2008)**
Source:Australian Bureau of Statistics 2009, *7121.0 Agricultural commodities Australia 2007–08*, Australian Bureau of Statistics, Belconnen.

## Selling methods

Over the last decade, the expansion of corporate entities and vertical integration of national/multinational industry players along the supply chain has had a significant influence on selling methods.

The main cattle selling methods from farm to the wholesale level and their relative cost differentials are:

- paddock selling—live weight and carcase weight (including inter-property sales and direct consignment to feedlots and meat processors)
- saleyard auctions—includes sales to other regions and production systems
- over-the-hooks trading—carcase classification sales based on weight and grade
- carcase auctions.

Livestock agent commissions and saleyard costs associated with traditional auction selling are two major cost contributors and are difficult to avoid for small producers. Larger producers and corporates are better able to avoid commissions and saleyard costs by direct selling. Other selling factors that add to sale costs are costs incurred by buyers and increasing transport costs, which also fluctuate with the price of oil, have become more significant issues.

The distribution of the sale costs may often vary between producer and buyer depending on the selling method and the point in the marketing chain at which change of ownership occurred.

## Cattle prices

Queensland's beef industry has a higher reliance on exports than the other Australian states, which means Queensland's cattle prices are more influenced by fluctuations in export prices.

In 2010, MLA expects in a 5.7% decline in the volume of Australian beef exports. A modest improvement in Australian cattle prices is expected to result from tighter cattle supplies, due to herd rebuilding and poor branding rates, and a growth in live cattle exports.

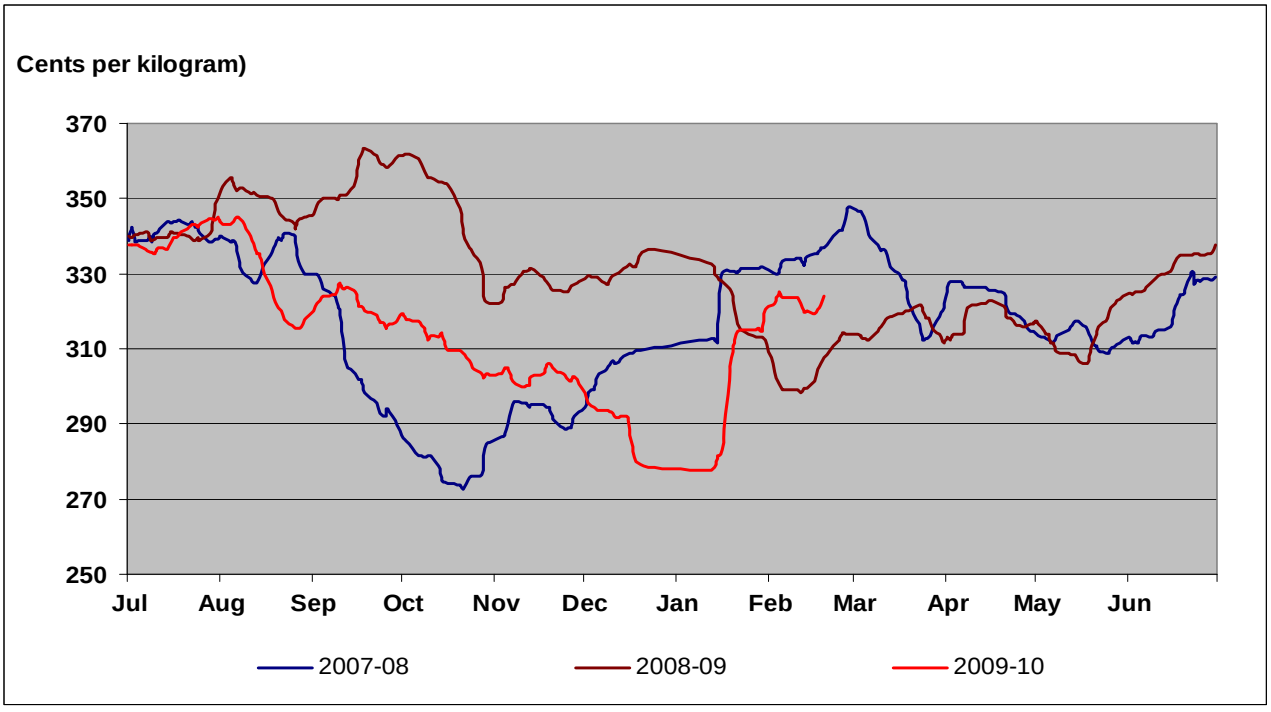


**Figure 8: Eastern Young Cattle Indicator (EYCI)**

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

Note: The Eastern Young Cattle Indicator, or EYCI, is produced by the MLA's National Livestock Reporting Service (NLRS). It is a seven-day rolling average of 24 young cattle categories from 24 saleyards across Queensland, New South Wales and Victoria. It is expressed in cents per kilogram carcase (or dressed) weight (¢/kg cwt) and is rounded to the nearest ¼ cent.

However, beef farm incomes are being eroded by a surge in costs, largely drought related. MLA reports this is a problem for many of the corporate beef operations, especially those with stations in western Queensland (Meat & Livestock Australia 2010a).

## Feedlot activity

Queensland has Australia's largest feedlot sector, which is a provider of high quality and consistent cattle to meat processors supplying grain fed beef to domestic supermarkets and many overseas markets. About 30% of cattle slaughtered in Queensland are grain fed, with the actual number based on feedlot throughput.

Table 6 provides numbers of cattle on a calendar year feedlot throughput basis for Australia. The fall in numbers between 2007 and 2008 was primarily due to the sharp increase in feed grain prices. Feed grain prices comprise a significant cost to feedlots, so any sharp increase in grain prices impacts on profitability.

**Table 6: Annual Australian feedlot throughput**

| | Australia | Queensland | New South Wales | Victoria | South Australia | Western Australia |
|---|---|---|---|---|---|---|
| **2000** | 2 493 363 | 1 210 595 | 902 679 | 156 482 | 129 289 | 94 318 |
| **2001** | 2 724 966 | 1 299 879 | 1 029 044 | 177 811 | 91 192 | 127 040 |
| **2002** | 2 748 205 | 1 367 808 | 999 205 | 181 751 | 74 430 | 125 011 |
| **2003** | 2 615 071 | 1 395 959 | 946 220 | 141 322 | 50 418 | 81 152 |
| **2004** | 2 888 692 | 1 395 582 | 1 099 513 | 222 852 | 49 615 | 121 130 |
| **2005** | 3 261 519 | 1 628 036 | 1 158 661 | 244 639 | 59 432 | 170 751 |
| **2006** | 3 625 874 | 1 871 619 | 1 217 403 | 258 304 | 88 814 | 189 734 |
| **2007** | 3 008 281 | 1 510 218 | 1 048 476 | 198 393 | 90 238 | 160 956 |
| **2008** | 2 650 629 | 1 451 611 | 843 622 | 147 530 | 83 000 | 124 866 |
| **2009** | 2 934 623 | 1 655 403 | 879 026 | 198 549 | 74 805 | 126 840 |

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

Figure 9 shows the share of Australian feedlot cattle throughput in 2009. Queensland had 56% of Australia's feedlot throughput compared to 30% in New South Wales and much lower shares in Victoria, Western Australia and South Australia.

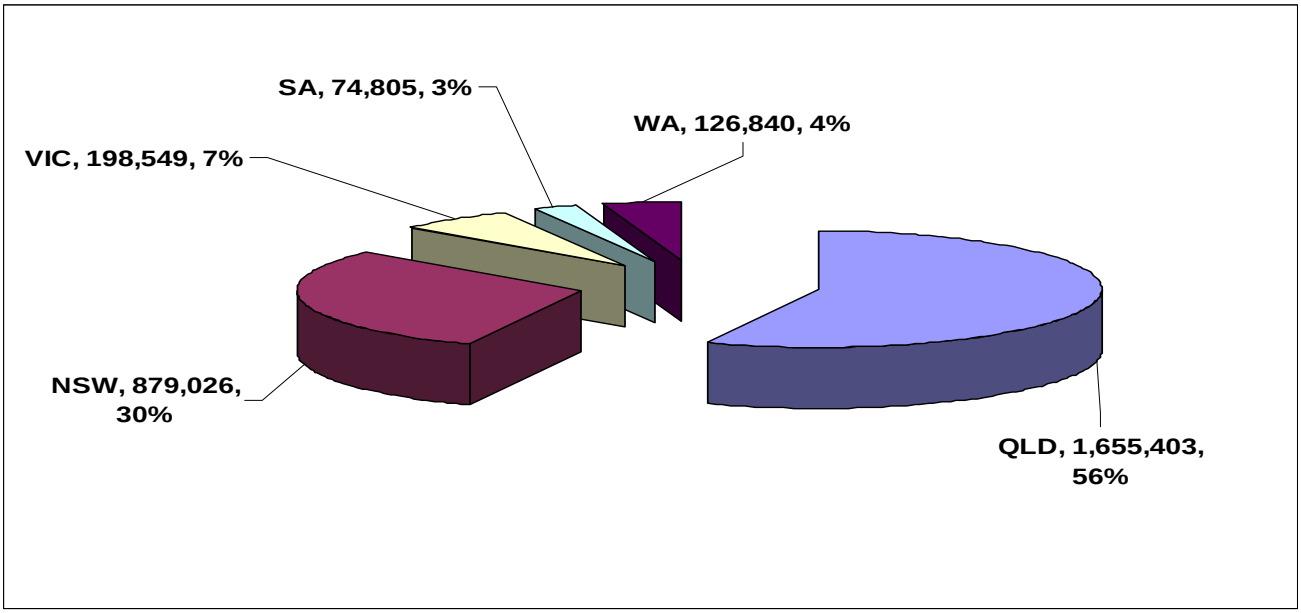


**Figure 9: Australian feedlot throughput 2009 (% shares by state)**

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

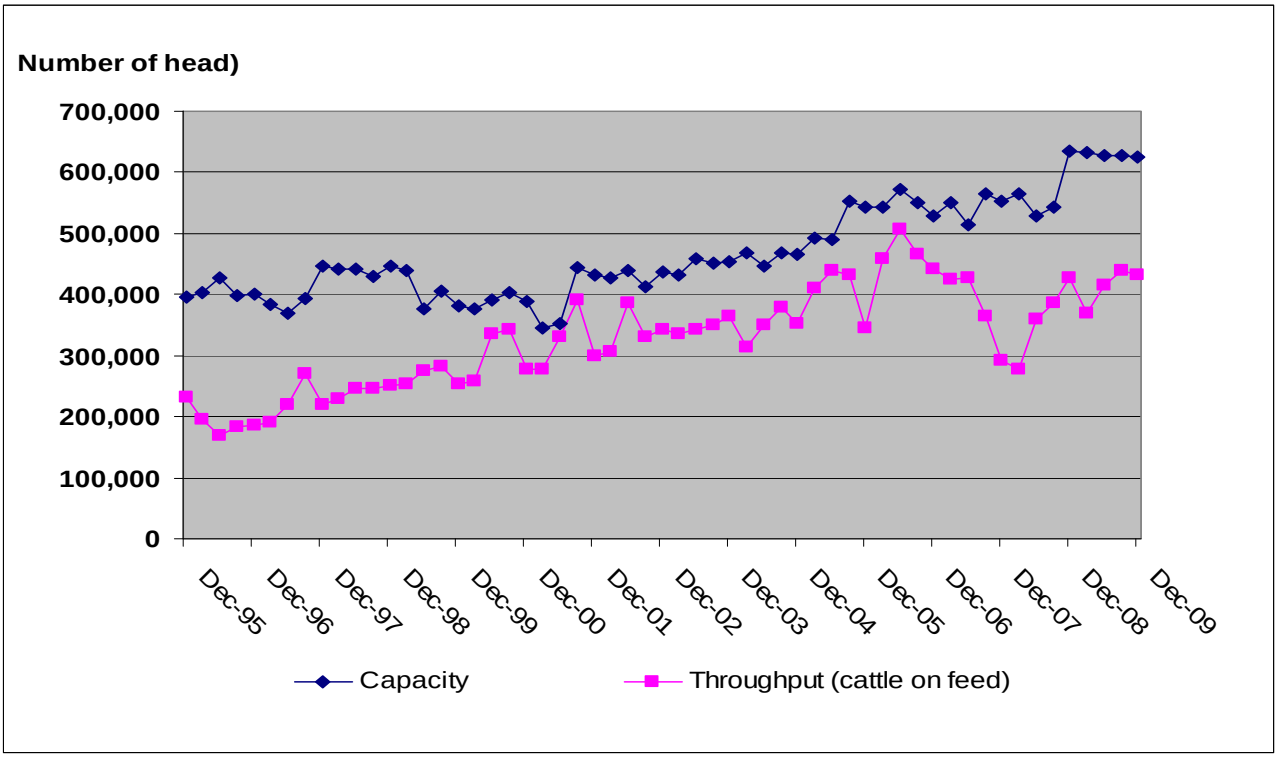


**Figure 10: Expansion of Queensland feedlot sector (December 1995 to December 2009)**

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

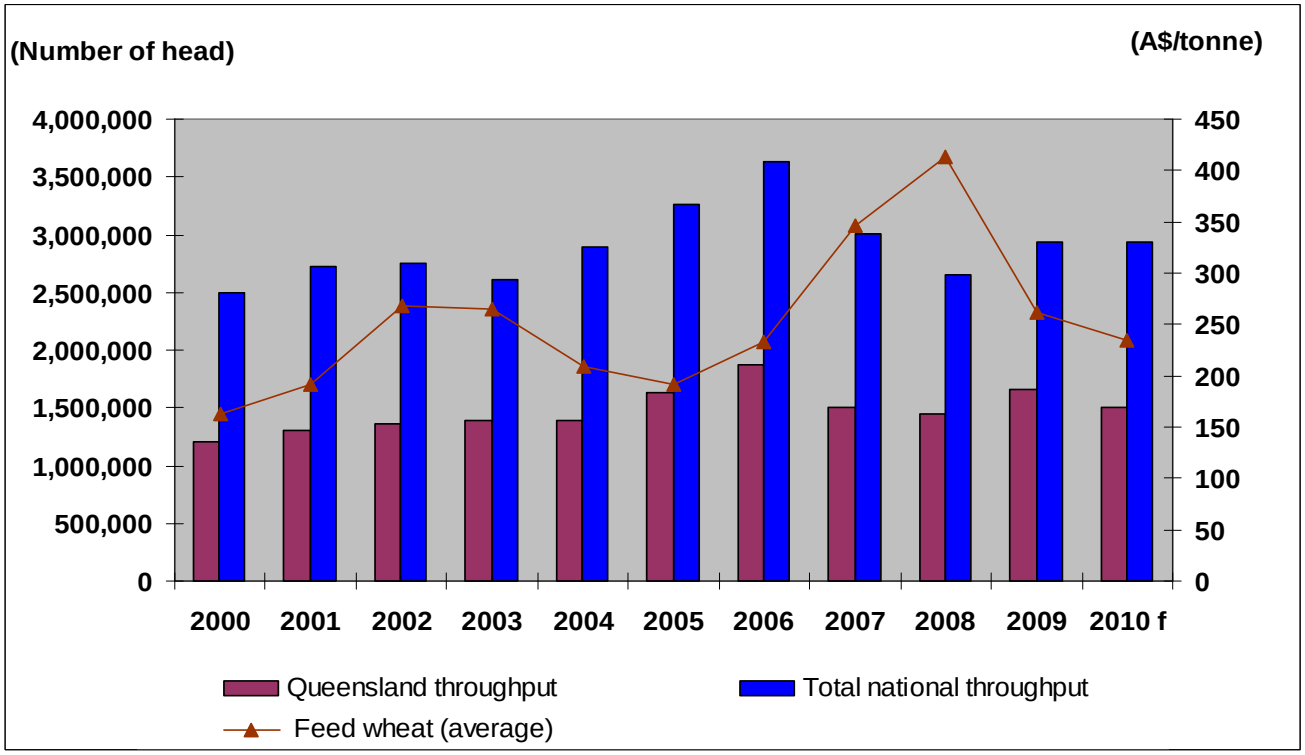


**Figure 11: Feedlot throughput numbers, 2000–2010**

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

In recent years, feedlot input costs have increased and the dramatic increase in feed grain prices have reduced feedlot margins. Figure 11 shows how feedlot throughput has fallen below trend since 2006 with the spike in the price of feed wheat. When grain prices dropped after only a slight

recovery is seen in feedlot throughput with another dip occurring due to the flow-on impacts of the global financial crisis.

While feeder grain supplies have improved and grain prices have declined, the short-term outlook for the feedlot sector is for continuing sluggish export demand. The business environment will be made tougher by the high Australian dollar impacting on competitiveness. In addition, shortages in numbers of suitable feeder cattle may result from two successively poor breeding seasons in Queensland.

The relatively strong Australian economy and the fact that 50% of grain fed beef is consumed domestically means the strength of the domestic economy will play a significant role in keeping the feedlot sector going until export demand recovers from the world economic slowdown.

While in the short-term feed grain prices have fallen to more normal levels, assisting a recovery of the feedlot sector, the sector still is vulnerable to price shocks. Other risks are domestic inflation, declining domestic beef consumption and a resources export boom keeping the Australian dollar high.

## Gross value of production

In 2008–09, the gross value of production from cattle and calves was estimated to be $3.4 billion. Annually, cattle and calf disposals provide about a third of all the total gross value of production from Queensland agriculture (Department of Employment, Economic Development and Innovation 2010).

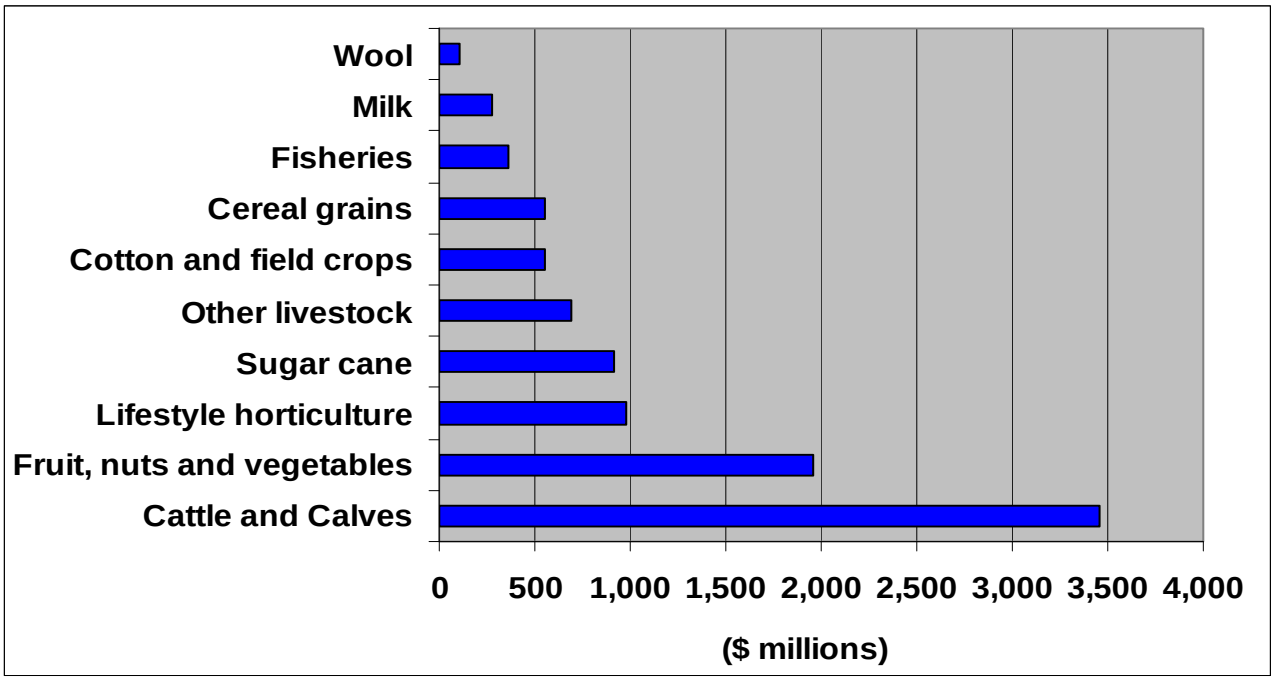


**Figure 12: Gross value of Queensland's major agricultural industries, 2008–09**

Source: Department of Employment, Economic Development and Innovation 2010, *Prospects update: March 2010*, Department of Employment, Economic Development and Innovation, Brisbane.

The combined gross value of production from beef cattle and meat processing sectors in Queensland is expected to contribute about $4.5 billion to the economy in 2009–10.

While the world economy is now recovering from the global economic slowdown, present economic conditions in major export destinations and a high Australian dollar remain the main constraints on increasing gross value of production for at least the next three years.

## Cattle slaughter

In 2009, Queensland's adult cattle slaughter declined 3.2% to 3.47 million head. As export demand from Japan eased, volumes shipped from Australia decreased. Despite this trend, Queensland's share of national export production increased and 2% more was shipped than in 2008.

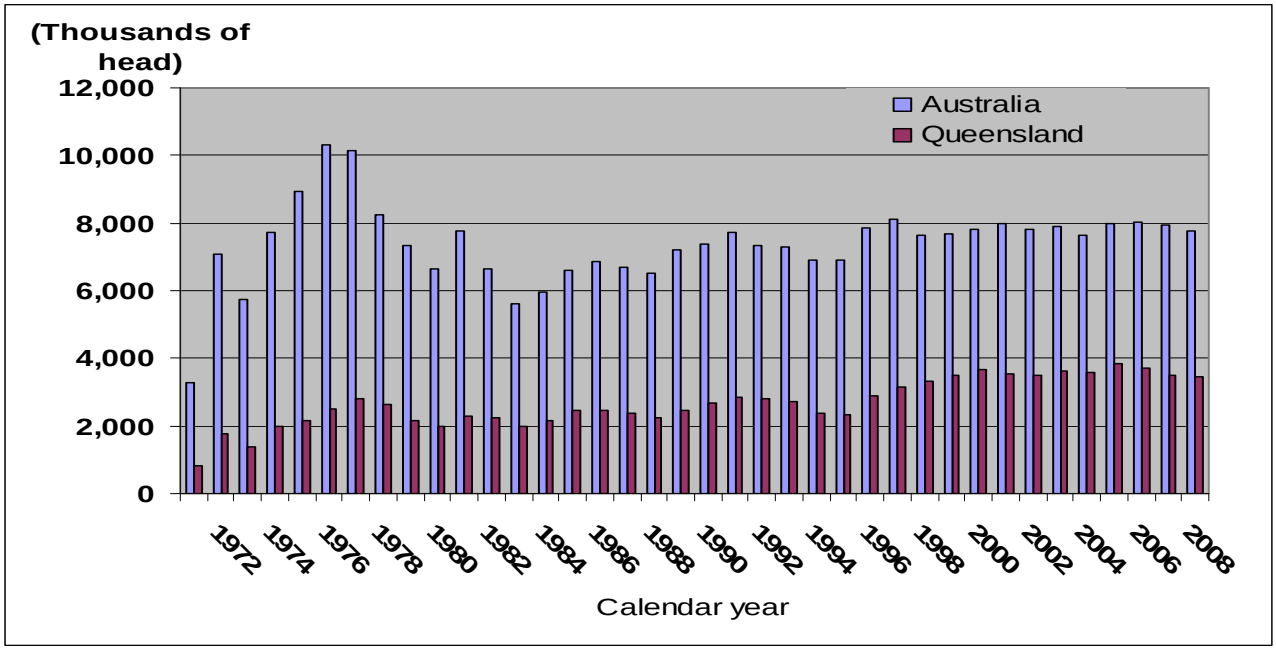


**Figure 13: Annual adult cattle slaughter—comparison of Queensland and Australian total**

Source: Australian Bureau of Statistics 2010, *7218.0.55.001 Livestock and meat Australia: January 2010*, Australian Bureau of Statistics, Belconnen.

Overwhelmingly, the high Australian dollar (averaging over US$0.90 in 2009) eroded beef exporter competiveness in international markets and demand eased, particularly from the US.

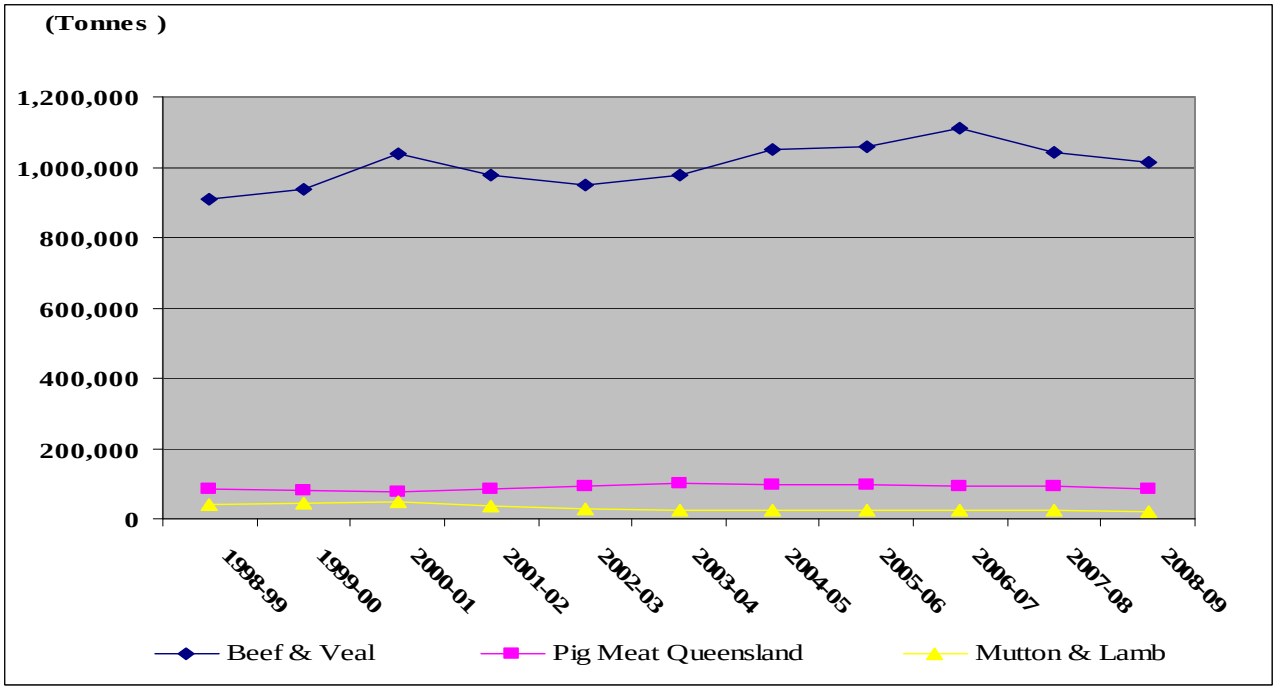


**Figure 14: Queensland red meat production, 1998–99 to 2008–09**

Source: Australian Bureau of Statistics 2010, *7218.0.55.001 Livestock and meat Australia: January 2010*, Australian Bureau of Statistics, Belconnen.

MLA expect 2010 to be a tough year for export processors because of sluggish Japanese demand, increased competition from US beef in Korea and the Australian/US dollar exchange rate up 13.5% on average over 2009 (Meat & Livestock Australia 2010a).

Generally, beef cattle production in Queensland has expanded with structural changes in the beef industry. This has resulted in increased investment in processing and feedlot capacity over the previous decade. The industry has proven its ability to maintain cattle numbers during prolonged dry seasonal conditions and its flexibility to supply product into changing beef export markets.

Queensland's cattle slaughter has increased from 25% of the total Australian kill in 1972 to 45% in 2008–09. It is due to increased numbers, an increase in carcase weight per animal from improved management, genetics and nutrition, as well as growth in the number of cattle finished in feedlots.

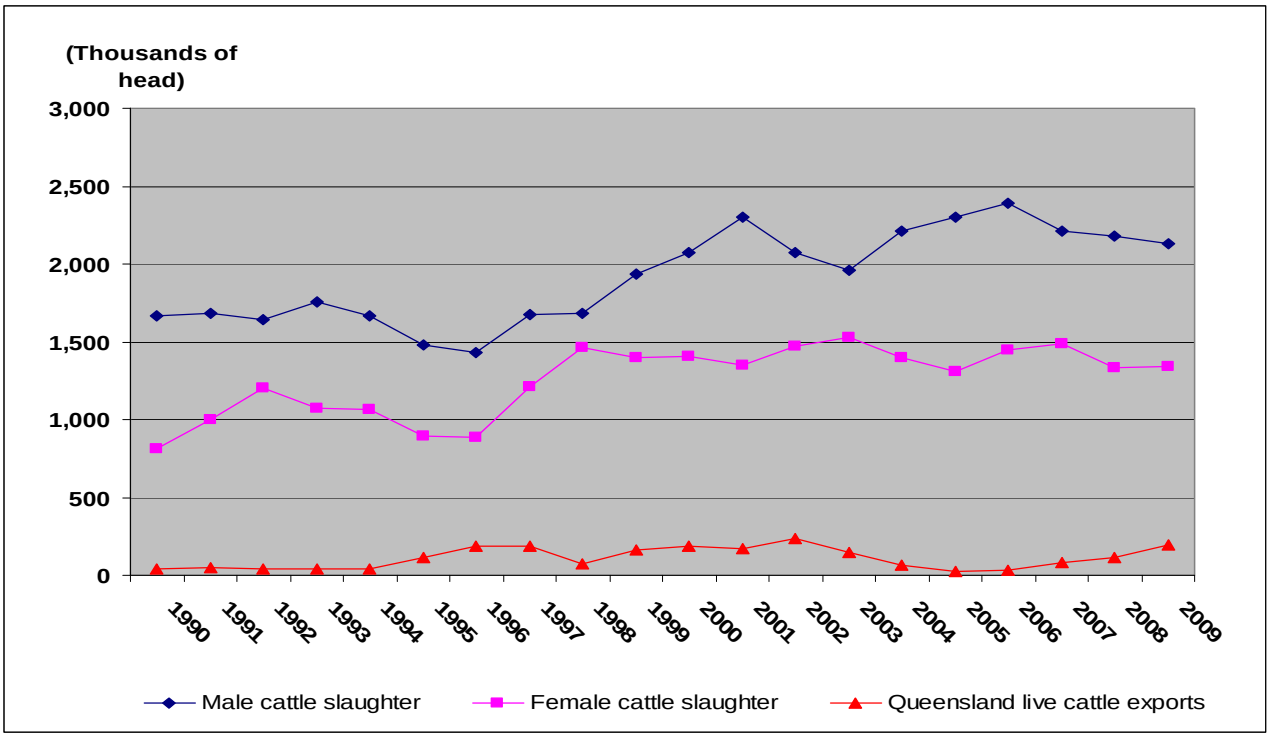


**Figure 15: Queensland cattle slaughter and live export trends**

Source: Australian Bureau of Statistics 2010, *7218.0.55.001 Livestock and meat Australia: January 2010*, Australian Bureau of Statistics, Belconnen; Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 23 February 2010.

Early in 2009, a large area of northern Queensland suffered flooding. This caused stock losses, especially in younger cattle and calves. Queensland regions then returned to drought conditions and the combined effects resulted in a decline in the 2010 calf drop. As a consequence, the size of the Queensland cattle herd is expected to have declined by about 1.1% in 2009.

## Cross-border cattle movements

Cross-border cattle movements show that there is a net flow of cattle into Queensland from other states and the Northern Territory. In 2008–09, Queensland had a net gain of 360 921 head in store cattle to grazing properties and feedlots (National Livestock Identification Scheme Database).

Actual numbers of cross-border cattle movements are given in Table 7. In 2008–09, the total number of store cattle moved into Queensland was 612 221, and the number exported to other states and the Northern Territory was 251 300. The largest movements were between Queensland and New South Wales, most probably going to feedlots or to processing facilities.

The numbers of cattle moving from Queensland into the Northern Territory are likely to increase as demand for live cattle for export overseas increases.

The movements of small numbers are probably related to movements of stud cattle for breeding.

**Table 7: Interstate cattle movements**

| | | Number of cattle | |
|---|---|---|---|
| **State of origin** | **State of destination** | **2007–08** | **2008–09** |
| Queensland | New South Wales | 158 311 | 168 383 |
| New South Wales | Queensland | 274 376 | 444 525 |
| Queensland | Northern Territory | 111 721 | 69 488 |
| Northern Territory | Queensland | 214 757 | 138 093 |
| Queensland | South Australia | 4 164 | 10 958 |
| South Australia | Queensland | 17 746 | 18 086 |
| Queensland | Tasmania | 36 | 33 |
| Tasmania | Queensland | 876 | 502 |
| Queensland | Victoria | 1 536 | 1 605 |
| Victoria | Queensland | 9 730 | 8 649 |
| Queensland | Western Australia | 1 050 | 833 |
| Western Australia | Queensland | 661 | 2 366 |

Source: National Livestock Identification System Database, Meat & Livestock Australia, accessed 4 February 2010.
Note: It is estimated approximately 200 000 head are imported annually direct to abattoirs in Queensland. The actual numbers were unavailable at the time of preparing this report.

## Supporting services

There are a large number of businesses supplying a wide range of goods and services to the beef industry. These firms provide off-farm employment for many people and supporting services add significant value to the economy.

Some business/industries supplying goods and services to the beef industry include:

- livestock transport
- general transport
- stockfeeds
- animal health products
- veterinary services
- vehicles and machinery
- fuel and lubricants
- fencing, water and building material suppliers and contractors
- livestock handling equipment
- legal and accounting
- aviation.

The beef industry is achieving efficiencies by using new technology. This includes solar water pumping, livestock handling equipment, radio frequency identification device technology utilised by the National Livestock Identification Scheme, and more traditional technology such as transport and aviation.

Fencing, helicopters and highly trained contract staff have enabled the beef industry to undertake more intensive cattle handling and management with less staff and less experienced staff.

Over the next five years, the outlook for beef producers is expected to improve, strengthening demand for supporting services.

# Meat processing sector

## Characteristics

Australian meat processors export chilled and frozen beef to over 100 countries world wide (Queensland processors exported beef to 79 countries in 2008–09), and the sector estimates its annual earnings to be about $6 billion per year (CSIRO Meat Industry Services 2009).

According to industry sources, Queensland's meat processing sector has assets estimated at $5 billion and an annual turnover of $3.5 billion. Four of the five largest beef processors operating in Australia have plants in Queensland. The industry is primarily concentrated in the state's south-east corner, with major plants also located in Rockhampton, Townsville and Mackay. Southern processors have the advantage of being close to the Port of Brisbane, supply from feedlots and the southern states.

Northern Queensland has meatworks that traditionally close or reduce shifts over the Christmas break (November, December and January) each year due to the annual wet season and an associated fall off in cattle supply. Depending on the wet season, production can be further interrupted through to April.

Queensland's meat processing sector has experienced significant rationalisation during the last 20 years. For example, since 1982 approximately 31 abattoirs have closed in the state. Even so, slaughter capacity has increased by more than 50% in recent years. Queensland meat processors have been at the forefront in adopting improved practices and technologies.

In the last two to three years, competition with restockers and live cattle exporters and lower export beef prices as a result of a higher Australian dollar has resulted in export abattoirs reducing throughput and cutting shifts and the number of killing days.

Domestic abattoirs have not been as adversely affected by the economic downturn because of the stronger Australian economy.

Table 8 provides a list of major abattoir types (export and domestic excluding local slaughterhouses) operating in Queensland and their location. The competitive business environment in which these firms operate means few statistics on their operations are publically available.

**Table 8: Major Queensland abattoirs**

| Region | Abattoir | Type | Location |
|---|---|---|---|
| South-east Queensland | Swift Australia Pty Ltd | Export abattoir | Dinmore |
| | Australian Country Choice | Export abattoir | Cannon Hill |
| | Stanbroke Beef | Export abattoir | Grantham |
| | Teys Bros Pty Limited | Export abattoir | Beenleigh |
| | Nolan Meats Pty Ltd | Export abattoir | Gympie |
| | Churchill Abattoir | Domestic abattoir | Churchill |
| | Kilcoy Pastoral Company Limited | Export abattoir | Kilcoy |
| | Highchester Pty Ltd | Domestic abattoir | Gleneagle, Beaudesert |
| | Green Mountain Foods | Export | Coominya |
| | Swickers Kingaroy Bacon Factory Pty Ltd | Domestic abattoir | Kingaroy |
| | Meramist Pty Ltd | Domestic abattoir | Caboolture |
| South Queensland | Nippon Meat Packers (Oakey Abattoir Pty Limited) | Export abattoir | Oakey |
| | Swift Australia Pty Ltd | Export abattoir | Beef City, Purrawunda |
| | John Dee Warwick Pty Ltd | Export abattoir | Warwick |
| | Don Allen and Company | Domestic abattoir | Stanthorpe |
| | Country Fresh (purchased by Adelaide-based group, T&R Pastoral) | Domestic | Wallangarra |
| Central Queensland | Teys Bros Pty Limited | Export abattoir | Lakes Creek, Rockhampton |
| | Nippon Meat Packers—Thomas Borthwick & Sons | Export abattoir | Mackay |
| | Teys Bros Pty Limited | Export abattoir | Biloela |
| | Swift Australia Pty Ltd | Export abattoir | Nerimbera, Rockhampton |
| North Queensland | Swift Australia Pty Ltd | Export abattoir | Stuart, Townsville |
| | Rocky Creek Abattoir Pty Ltd | Domestic abattoir | Tolga |

Meat processing companies have invested heavily in scientific and technical innovations to improve procedures and quality assurance to meet consumer requirements.

Some of the past scientific and technical innovations include:

- adoption of world-best microbiological quality for chilled and frozen meat, offal and other co-products
- eliminating visual defects and improving eating quality of chilled and frozen meat
- supplying beef that is true to specification, leading to reduced numbers of rejections and complaints
- the elimination of salmonella
- the tracing of the carcase to the live animal for complete whole-of-life identification
- improving the storage life of chilled meat.

Other improvements over recent decades include:

- registration of individual cattle producers and the licensing of processor facilities under the Meat Standards Australia grading program for guaranteed tenderness, including information to consumers through labelling and recommended cooking methods to ensure eating quality
- improved yields of meat, offal and other co-products
- reducing labour through enterprise bargaining
- reducing operational costs through investments in new plant and equipment
- minimisation of environmental concerns.

## Employment in meat processing

The meat processing sector is Queensland's largest manufacturing industry. At present, the combined number of people employed on properties with beef cattle as the main enterprise and in beef processing is estimated to be about 45 000.

There are presently about 14 100 people employed in meat and meat product manufacturing in Queensland (Australian Bureau of Statistics 2010a).

Meat processors in Queensland have also faced skilled labour shortages, with workers being attracted to other industries by higher wages and better working conditions. In a bid to overcome meat worker shortages, processors have attracted foreign meat workers covered by 457 visas.

Two consecutively poor breeding seasons, sluggish demand for Australia beef exports and the rapid expansion of live cattle exports have temporarily reduced slaughter cattle supplies resulting in reduced processor shifts and worker lay-offs.

## Outlook for meat processing

Expectations for the outlook of meat processing are not as optimistic as in previous years. World economic growth is recovering, but is expected to be gradual. During the next three years, the outlook is uncertain for beef exports and global beef prices.

Constraints on growth in the meat processing sector include sluggish beef export demand and increasing competition in beef export markets. Also, the high Australian dollar has reduced profits for beef exporters and makes Australian beef more expensive for importers.

Sluggish export demand for beef has limited the prices processors can pay for slaughter quality cattle, and with the recent growth in demand for live cattle exports processors are facing increasing competition from this sector.

Live cattle exports to Indonesia, the Philippines, Malaysia, the Middle East and Japan are an important part of the cattle industry in northern Australia. In the 2008–09 financial year, Queensland live cattle exports totalled 176 859 head, which is the equivalent of about 62 581 tonnes carcase weight. This grew from 65 632 head, about 22 581 tonnes, in 2006–07.

The industry has an opportunity to increase revenue through the production of value-added products. There are opportunities for developing and supplying niche markets to potentially offset declines in volumes to major markets. The sector is expected to expand exports to the EU, non-OECD (Organisation for Economic Co-operation and Development) countries, Asia and Eastern Europe (including Russia) over the next five years.

In summary, important outlook features are expected to include:

- domestic utilisation of beef to remain at levels of previous years
- continuing competition for cattle from restockers and live cattle exporters
- continuing high Australian dollar exchange rate
- sluggish import demand for Australian beef in the three top markets
- stronger economic growth for emerging economies in Asia, the Middle East and Western Europe.

# Market situation

## Global economy

In a report to the Australian House of Representatives, the Governor of the Reserve Bank of Australia advised that world gross domestic product grew at annualised pace of 4% in the second half of 2009, and that similar growth can be expected in 2010. International financial markets are functioning again and central banks support for large banks is being wound down. However, he warned that some challenges remain in the international situation.

One of these is described as the two-speed global upswing. There has been a quite sharp upturn in the Asia-Pacific region, which takes half of Australia's exports and includes China, India, Korea, Singapore and Taiwan. The region is characterised by secularly rising incomes, generally healthy banking systems, relatively low public debt levels and a significant increase in production and trade. These are all factors pointing to sustained expansion in demand. The challenge for these countries is how to manage this expansion without their economies overheating.

On the other hand, the large industrial countries of the EU and North America are taking a longer time to recover from the global economic downturn. Private demand remains subdued and the recovery is only expected to be gradual. Economic growth is expected to remain modest, characterised by a lot of spare capacity and ongoing high unemployment. In these economies the banking systems are still constrained by the effects of the economic crisis, and the winding back of temporary policy measures to stimulate private demand and give support to the highly indebted banking system is problematic.

The second challenge internationally is the increasing focus on sovereign creditworthiness. The Reserve Bank Governor has advised many governments are now focusing on strengthening their fiscal positions, but need to balance this with not undermining the strength of the economic upswing.

While global economic conditions improved during the second half of 2009 and are expected to continue improving at the same rate in 2010, it must be expected that global beef demand will continue to be subdued in those countries taking longer to recover. In 2009, the global beef market suffered a sharp downturn in consumer demand and weaker prices in the US, Japan and the EU. In addition, importers and exporters had to take into account much more volatility in foreign currencies and difficulties in accessing finance.

## Domestic market

Figure 16 shows trends and MLA projections for beef production, consumption and exports relative to domestic utilisation and exports between 1970 and 2014.

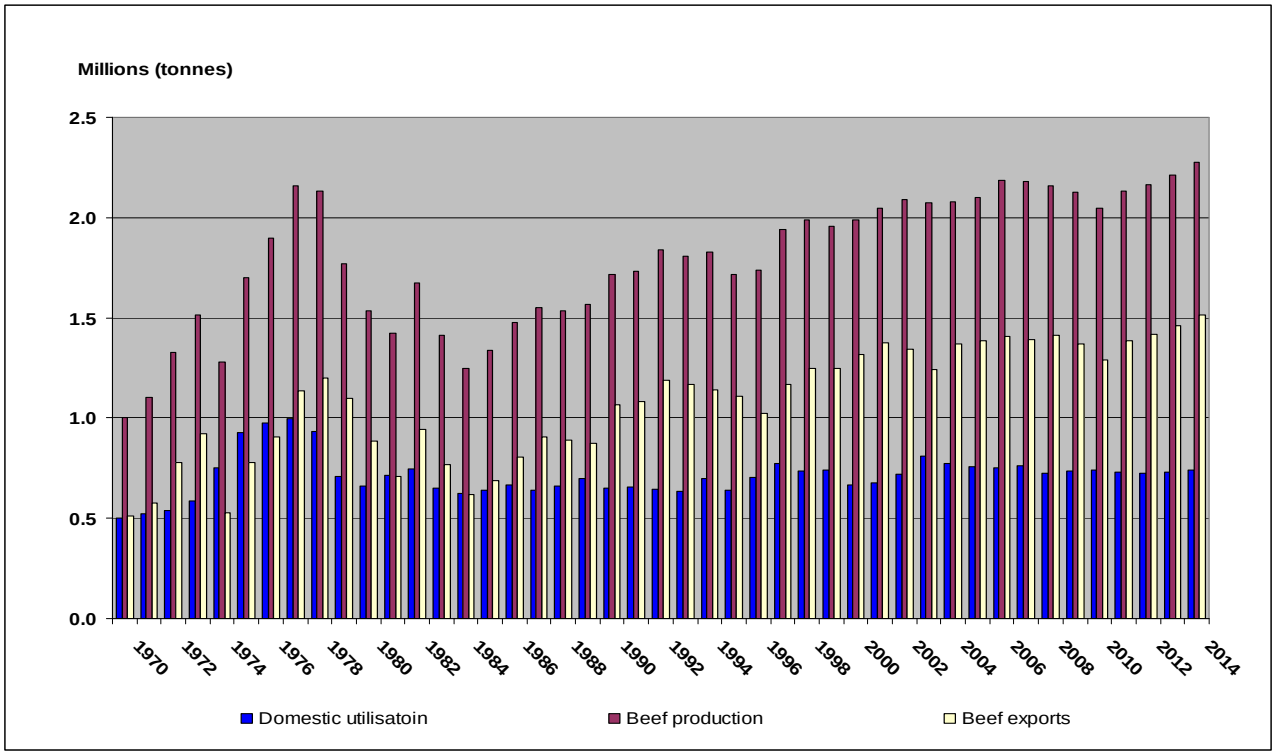


**Figure 16: Australian beef production, consumption and exports, 1970–2014**

Source: Meat & Livestock Australia 2010, *Australian cattle industry projections 2010*, Meat & Livestock Australia, North Sydney.

Economic growth in Australia is expected to maintain household incomes and drive domestic demand for beef. In 2009, gross domestic product increased by 2%. The outlook is for gross domestic product to increase by 3% in 2010, followed by a 3.5% increase in both 2011 and 2012. (Glenn Stevens, Reserve Bank Governor, opening statement to the House of Representatives Standing Committee on Economics, Canberra, 19 February 2010).

MLA is forecasting a continuation in 2010 of the tight consumer spending on specific beef cuts experienced in 2009. This means consumers continue to favour cheaper cuts, while consumer confidence remains low as a result of global economic conditions.

In 2009, beef consumption increased 1.6% to 738 kilotonnes compared to the previous year. The outlook is for consumption to increase 0.3% in 2010 (Meat & Livestock Australia 2010a, p.25). These increases are small and, after considering current beef production and export trends, the result suggests a build up in frozen beef stocks in Australia is likely over the next two years.

MLA is expecting domestic beef consumption to remain relatively similar in 2010–2014. With the expected decline in beef exports next year, there is not much evidence that a decline in export volumes can be absorbed by the domestic market.

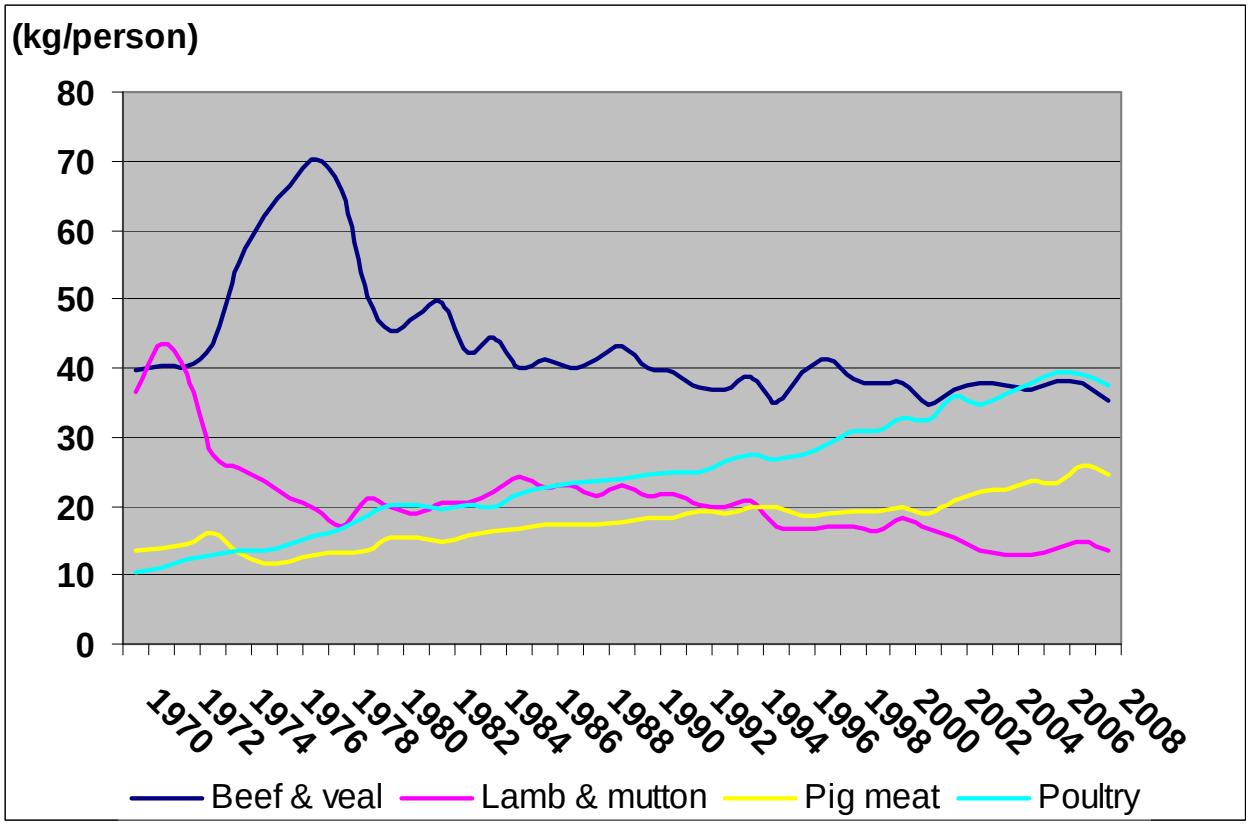


**Figure 17: Meat consumption trends in Australia, 1970–2008**

Source: Australian Bureau of Agriculture and Resource Economics 2008, *Australian commodities*, Australian Bureau of Agriculture and Resource Economics, Canberra.

Per capita beef consumption is expected to decline 9.1% between 2009 and 2014, from 33.7 kg per person to 30.6 kg per person. However, continuing growth in the domestic population will underpin domestic utilisation.

## Export markets

In 2008–09, Queensland exported about 596 000 tonnes of beef and veal, with about 45% of this to Japan, 22% to the US and 13% to South Korea. Beef exports to Russia overtook exports to Taiwan and Indonesia and became Queensland's fourth largest live cattle and export beef market. The outlook is for the Australian dollar to remain relatively high and for competition in the Japanese and Korean markets from US exports to increase in the next few years. MLA expects the Australian dollar will be around US$0.85 and US$0.95 in 2010 (up 13.5% on average over 2009).

In 2009–10, ABARE have forecast a 6% decline in Australian beef exports to Japan, followed by a 3% recovery in 2010–11. Exports to the Republic of Korea are forecast to increase 4% in 2009–10, but then decline 6% in 2010–11. Exports to the US are expected to decline 15% in 2009–10, but then increase by 4% in 2010–11. Exports to Indonesia are expected to expand both for beef and live cattle. Export markets are expected to hold firm to the Middle East, the EU and the Commonwealth of Independent States (former Soviet republics) where domestic demand is forecast to remain strong.

Japan is expected to remain the number one importer of Queensland beef in the foreseeable future, regardless of present economic trends. Likewise, the US and Republic of Korea are expected to remain the second and third largest importers (see Figure 18).

Figure 18 provides recent trends of meat export values for Queensland. In 2009–10, the value of Australian beef exports is expected to decline by about 14% from 2008–09. In 2010–11, the value of beef exports is again expected to decline by 1.6% (Australian Bureau of Agriculture and Resource Economics 2010).

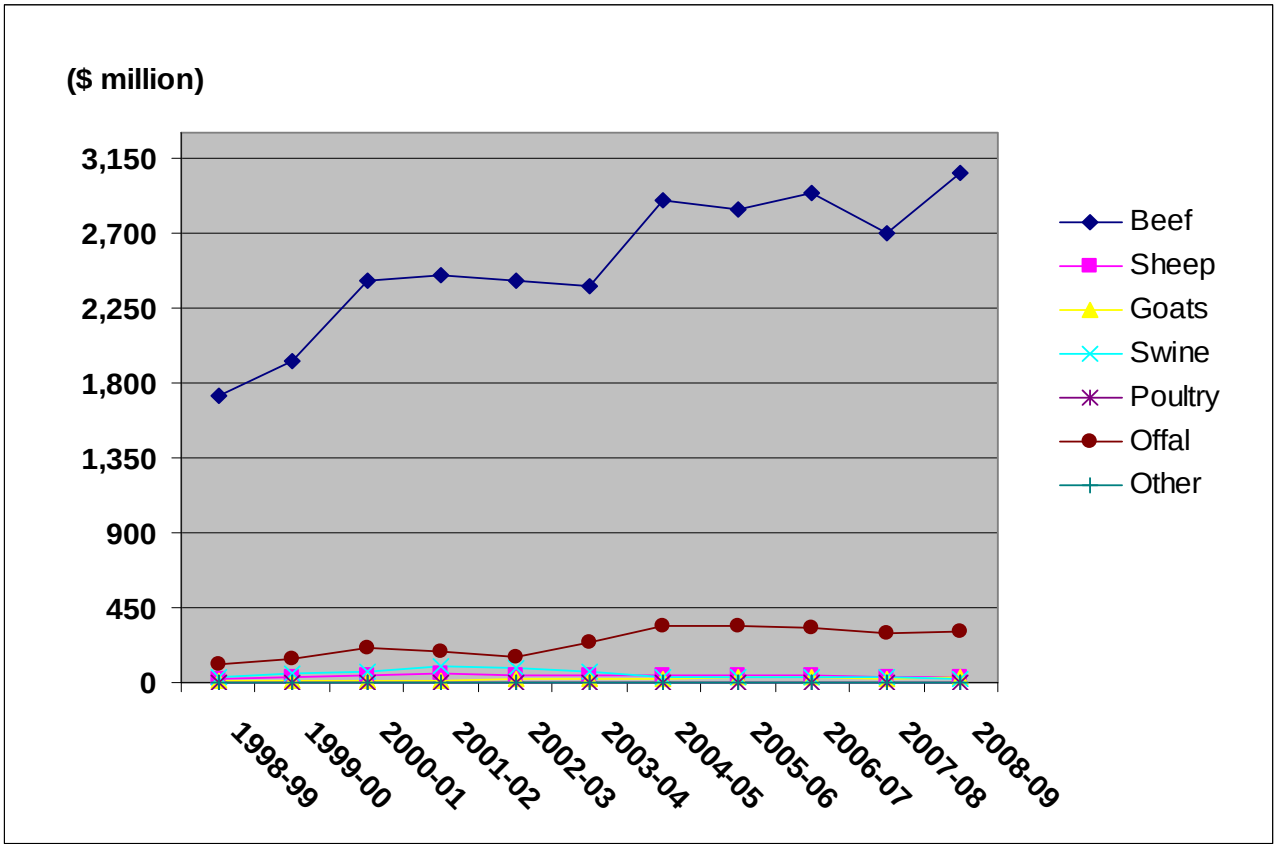


**Figure 18: Value of Queensland meat exports, 1998–99 to 2008–09**

Source: Australian Bureau of Statistics 2010, 'Various Queensland meat exports (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury.

The liquidation of cattle herds in most major exporting countries—including the US, Canada, Australia, New Zealand, Brazil, Argentine and Uruguay—is expected to reduce global beef supplies relative to demand. This is expected to have a positive impact on markets after 2012–13 and suggests the next three years will be tough for Australian beef exporters.

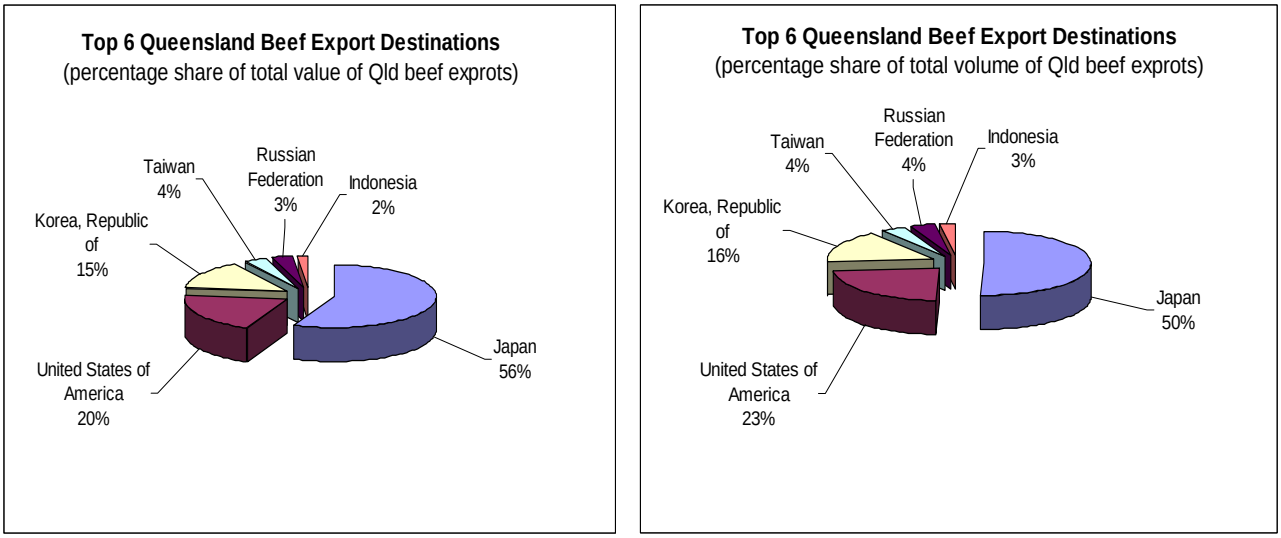


**Figure 19: Top six Queensland beef export destinations by value and volume**
Source: Australian Bureau of Statistics 2010, 'Queensland beef exports by destination (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury; Australian Bureau of Statistics 2010, 'Queensland beef exports by destination (volume)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury.

## Cattle to live export: drivers and trends

Current trends show a significant increase in the number of live cattle exports driven by increasing demand from Indonesia. Strong demand for cattle for live export has underpinned Queensland saleyard prices in 2010.

In 2006–07, Queensland exported 65 632 live cattle. Numbers declined in 2007–08 to 56 087 head, but then increased markedly in 2008–09 to 176 859 head.

The value of Queensland live cattle exports increased 19.2% in 2008–09, increasing from $40.2 million in 2007–08 to $125.2 million in 2008–09. The value of imports to Indonesia was $114 million in 2008–09, up from $23 million in 2007–08, and it is expected the value of live cattle exports will increase again in 2009–10 based on current trends.

**Table 9: Value of Queensland live cattle exports**

| | 2000–01 | 2001–02 | 2002–03 | 2003–04 | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008-09* |
|---|---|---|---|---|---|---|---|---|---|
| | $m | $m | $m | $m | $m | $m | $m | $m | $m |
| **Indonesia** | 24.1 | 34.9 | 61.7 | 22.4 | 12.4 | 9.1 | 29.8 | 23.1 | 114.1 |
| **Japan** | 7.3 | 9.2 | 11.2 | 13.0 | 14.9 | 14.8 | 13.7 | 13.9 | 10.3 |
| **Thailand** | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.7 | 0.2 | 0.1 | 0.5 |
| **Viet Nam** | 0.0 | 1.9 | 4.6 | 2.1 | 1.3 | 0.0 | 0.0 | 0.0 | 0.4 |
| **Total** | **96.4** | **95.4** | **142.0** | **45.1** | **32.1** | **25.3** | **48.4** | **40.2** | **125.2** |

Source: Australian Bureau of Statistics 2010, 'Live cattle exports 2001–02 to 2008–09 (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury.
* Preliminary estimate

During the financial year to date to February 2010, the number of live exports out of Queensland was 246 830 head—an increase of 19% for the same period the previous financial year. As a rule, live cattle exports drop off during the northern wet season. Monthly live cattle exports between March and June in 2009 totalled 81 451 head. If the same number were exported for these months in 2010, the financial year total for Queensland live cattle exports would be about 323 000 head.

The outlook for Australian live cattle exports is for a 4.4% increase in 2010 to 990 000 head. If live cattle export prices remain high and the demand for beef exports remains sluggish over the coming 12 months, it is likely, as northern cattle supplies fall behind demand, that live exporters will seek cattle from further south (Meat & Livestock Australia 2010a, p. 27).

ABARE has reported a 47% boost in northern beef farm incomes in 2008–09 that is directly attributable to live export prices pushing up saleyard prices for slaughter cattle.

## Outlook

MLA has forecast subdued prices and lacklustre export demand for the immediate future (Meat & Livestock Australia 2010a).

In 2010, Australian beef exports will fall 5.7% year-on-year to 875 000 tonnes shipped weight (swt). Beef exports to Japan are forecast to fall 7% to 330 000 tonnes, and exports to Korea are forecast to fall 18% to 95 000 tonnes (swt) (Meat & Livestock Australia 2010a).

Japanese demand is expected to remain sluggish and there is increasing competition in Korea from US beef as a result of a multi-million dollar US marketing campaign and a low US dollar (Meat & Livestock Australia 2010a).

The high Australian dollar is expected to remain the primary problem for Australian export processors and this will be exacerbated by lower numbers of cattle available for slaughter (Meat & Livestock Australia 2010a).

The Australian adult cattle slaughter is expected to fall by 4.5% to 7.4 million head in 2010. This will be the lowest number slaughtered since 1996 and is due to a decline in the size of the Australian cattle herd, previous poor breeding seasons and the retention of more females for herd rebuilding (Meat & Livestock Australia 2010a).

The volume of Australian beef production is expected to fall by about 4% to 2.05 million tonnes carcase weight because of a decline in numbers slaughtered, but they are also expecting a small lift in carcase weights from better growing conditions (Meat & Livestock Australia 2010a).

Finally, MLA believes the low point in beef exports and cattle prices has now been reached and that global economic conditions have started to improve (Meat & Livestock Australia 2010a).

## Outlook for Queensland

Table 10 is the situation and outlook of the Queensland beef cattle industry based upon published and derived numbers.

**Table 10: Situation and outlook for the Queensland beef cattle industry**

| | 2006 | 2007 | 2008 | 2009 | % change | 2010 (e) | % change | 2011 (e) | 2012 (e) | 2013 (e) | 2014 (e) | % change 2014 on 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cattle numbers ('000 head)* | 11,354 | 11,495 | 11,731 | 11,602 | | 11,950 | | 12,129 | 12,299 | 12,447 | 12,571 | 8.4% |
| Percentage change | -0.2% | 1.2% | 2.1% | -1.1% | | 0.3% | | 1.5% | 1.4% | 1.2% | 1.0% | |
| Slaughterings ('000 head) | | | | | | | | | | | | |
| Cattle | 3,832 | 3,701 | 3,510 | 3,470 | -1.1% | 3,426 | -1.3% | 3,550 | 3,630 | 3,728 | 3,820 | 10.1% |
| Calves | 60.3 | 59.9 | 50.2 | 75.4 | 50.2% | 81.0 | 7.4% | 60 | 55 | 50 | 50 | -33.7% |
| Total | 3,892 | 3,761 | 3,560 | 3,666 | 3.0% | 3,504 | -4.4% | 3,610 | 3,685 | 3,778 | 3,870 | 5.6% |
| Average carcase weight (kg) | | | | | | | | | | | | |
| Cattle | 289 | 287 | 290 | 293 | 1.0% | 290 | -1.1% | 295 | 296 | 298 | 299 | 2.0% |
| Calves | 22 | 25 | 25 | 32 | 27.0% | 41 | 25.8% | 29.7 | 26.8 | 23.8 | 23.2 | -8.7% |
| Production ('000 tonnes carcase weight) | | | | | | | | | | | | |
| Beef | 1,109 | 1,063 | 1,019 | 1,017 | -0.2% | *994* | *-2.3%* | *1,046* | *1,076* | *1,111* | *1,142* | *12.3%* |
| Veal | 2.7 | 2.4 | 2 | 2.3 | 18.3% | *2* | *-14.6%* | *2* | *2.1* | *2.1* | *2.2* | *-7.8%* |
| Total beef and veal | 1,112 | 1,065 | 1,021 | 1,019 | -0.1% | *996* | *-2.3%* | *1,048* | *1,078* | *1,113* | *1,144* | *12.3%* |
| Cattle exports ('000 head) | 32.6 | 83.7 | 112.4 | 166.0 | 47.7% | *163.4* | *-15.8%* | *179.6* | *186.0* | *192.1* | *198.2* | *21.3%* |
| Beef exports (tonnes)** | | | | | | | | | | | | |
| Total carcase weight | 915,433 | 881,236 | 867,700 | 859,799 | -0.9% | *886,124* | *3.1%* | *897,561* | *892,643* | *900,020* | *912,315* | *6.1%* |
| Total shipped weight | 620,633 | 596,639 | 587,475 | 582,125 | -0.9% | *599,589* | *3.0%* | *607,692* | *604,362* | *609,357* | *617,681* | *6.1%* |
| Domestic utilisation ('000 tonnes c/c weight)*** | | | | | | | | | | | | |
| Total carcase weight | 149 | 151 | 146 | 149 | 2.1% | *153* | *2.9%* | *152* | *154* | *154* | *155* | *-1.2%* |
| Kg/head | 36.3 | 36 | 33.8 | 33.6 | -0.7% | *34* | *1.3%* | *33.3* | *33.0* | *32.6* | *32.2* | *-4.2%* |

*As at 30 June; ** Excludes canned/misc, shipped weight; (e) preliminary estimates for herd, supply and domestic utilisation forecast in italics

The size of Queensland's cattle herd declined by 1.1% in the year to 30 June 2009 to 11.6 million head. Cattle numbers are not expected to start increasing until after the second half of 2010. Marginal annual growth in numbers is expected between 2011 and 2014, when the Queensland cattle herd is expected to increase to about 11.9 million head. MLA is forecasting Australian cattle numbers should return to 28 million by 2014, including dairy cattle.

Based on current trends, Queensland is expected to slaughter about 3.5 million head in 2010, 4.4% fewer than 2009. According to MLA, the expected difficult business environment for processors due to sluggish global demand and the high Australian dollar will continue to hamper their ability to attract stock off farm (Meat & Livestock Australia 2010a).

Queensland beef production has trended down after 2006 in line with slaughter numbers and poor seasonal conditions, and fewer cattle in feedlots reduced average carcase weight. The slaughter of lighter cattle is expected to result in an average carcase weight of 290 kg in 2010, compared to 293 kg in 2009. It is expected that heavier cattle will result in an average carcase weight of 299 kg by 2014.

This declining trend in Queensland beef production is expected to continue in 2010, with a year-on-year decline of 5.5% to 961 000 tonnes. By 2014, beef production is expected to return to the volume reached in 2006 of 1 109 000 tonnes.

Live cattle exports from Queensland are expected to increase year-on-year in 2010 by 4.4% to 205 000 head. Thereafter, numbers exported are expected to remain below 200 000 head annually.

# Challenges and opportunities

The following issues are not listed in priority order.

## Production issues

### Animal selection (opportunity)

Estimated breeding values (generated by Breedplan) in combination with rapidly developing DNA and identification technology, allows animal breeders to better identify and measure the genetic characteristics and potential of their animals. DNA tests are currently being used for parent verification, improvement of production traits and management of genetic defects. Marker assisted estimated breeding values will become increasingly useful as an animal selection tool in the future helping to boost farm productivity.

### Cattle ticks (challenge)

Cattle ticks are a serious economic pest of Queensland's cattle industry. If left unchecked, this external parasite can significantly reduce cattle live-weight gain and milk production. It is also responsible for transmitting three blood-borne tick fever organisms, which cause sickness and death in cattle. Cattle ticks can also infest other species such as sheep, horses, goats, camels, alpacas, llamas, vicunas, guanacos and deer. Queensland's cattle tick–infected zone comprises the coastal areas east of the Great Dividing Range and north of the Great Northern Rail Line (Townsville to Mount Isa).

A cattle tick–free zone is currently regulated in most of southern Queensland and provides numerous benefits to producers by allowing access to all available markets year round, particularly providing interstate market options. Failure to maintain this zone would impact on livestock businesses through increased management costs to control ticks (vaccination and chemical control), increased risk of tick fever (particularly in naive herds) and interference with breeding programs as producers would need to infuse more *Bos indicus* genetics into their herd.

### Kangaroos (challenge)

Kangaroos account for approximately 30% of the total grazing pressure in the western districts. This pressure hinders the effectiveness of pasture spelling, which is a desired management practice for producers in the area. Russia's recent ban on kangaroo meat (which was previously buying about 70% of Australia's kangaroo meat exports) may result in escalation of kangaroo numbers and jeopardise the sustainability and profitability of grazing enterprises.

### Pasture run-down (challenge)

Buffel grass can be highly productive on soils of good fertility and is extremely drought tolerant. However, its productivity can run-down with time as available nitrogen is tied up in its extensive root system. The main consequence of run-down is significantly lower productivity and carrying capacity, as well as reduced ground cover. A run-down buffel pasture can be renovated by cultivation (including blade ploughing) or by including an adapted legume. Blade ploughing can be an expensive exercise and there are few legumes well adapted to the heavier clay soils. Research in this area is focused on finding solutions to these problems.

### Pimelea (challenge)

Pimelea is found largely in south-west Queensland after autumn rainfall when pastures have been grazed heavily during drought. While pimelea is moderately toxic to sheep, lost production (through poisoning and other means) occurs more readily with cattle, and may be costing the Queensland beef industry up to $50 million per year according to industry sources. If pimelea is prevalent, producers are often forced to lock up country, which comes at a cost (i.e. mustering and agistment). Hand-feeding sick animals is an additional cost and is time consuming.

### Productive pastures (opportunity)

The establishment of adapted perennial sown pastures in marginal cropping lands will increase soil organic matter and soil carbon, provide good ground cover, break disease or pest cycles, and make the farming system more sustainable. Producers are beginning to plant leucaena in districts previously thought less suitable because of frequency of frost—including Wandoan, Chinchilla and even as far south as Goondiwindi and Inglewood.

Although the growing season is shorter in southern Queensland, well-managed leucaena with well established inter-row grass can provide better growth rates (about 1 kg per day) than other grass/legume or pure grass pastures in the district. These growth rates can allow cattle to reach target markets at a younger age.

### Regrowth vegetation (challenge)

Regulated regrowth vegetation on freehold, Indigenous and leasehold land for agricultural and grazing is protected. Even though compliance may limit carrying capacity, landholders must still comply with the *Vegetation Management Act 1999* and *Regrowth vegetation code*. These are available on the Department of Environment and Resource Management website at www.derm.qld.gov.au

Regulated regrowth vegetation is:

- identified on the regrowth vegetation map as high-value regrowth vegetation, or
- located within 50 m of a watercourse identified on the regrowth vegetation map as a regrowth watercourse, or
- contained in a category C area shown on a on a property map of assessable vegetation.

A guide to exemptions is also available at www.derm.qld.gov.au

### Technology (opportunity)

Technical innovations are being introduced to improve the efficiency of beef industry businesses, such the National Livestock Identification System and technology for monitoring individual beasts with regard to weight gain and performance.

The National Livestock Identification System and software capable of recording and analysing individual animal data can assist producers to identify and select the most productive and profitable animals. Additionally, the lifetime traceability of animals can be guaranteed and consumer expectations for safe, high quality beef can be more readily met.

Remote monitoring telemetry technology is being used to turn bores on and off and record water volumes used, and has reduced labour and fuel usage on larger properties.

Automated drafting and handling systems meet workplace health and safety requirements, require less labour and reduce stress when handling stock.

### Wild dogs (challenge)

Wild dogs, which have threatened the prosperity of the sheep industry for years, are becoming recognised as a threat to the beef industry. A report by AgForce (2009) revealed that the economic costs associated with wild dogs for Queensland cattle producers in 2008–09 was about $40 million. Costs assessed included wild dog management, calf losses, product loss due to dog-bitten cattle and disease problems with *Neospora caninum* and *hydatids*.

## Processing issues

### Australian dollar (challenge)

Since March 2009, the Australian dollar has appreciated over 40% against the US dollar, which has eroded hundreds of millions of dollars from export returns for our nation's beef sector. This in turn feeds back down the chain, with producers receiving lower prices for their product.

### Competitive advantage (challenge)

Processors need to place a greater emphasis on building competitive advantage by developing specific solutions for individual clients. The business models of individual processors should aim to forge robust market alliances and integrated processes that allow the flexibility to develop solutions for individual clients. Developing competitive advantage requires good communication all along the supply chain regarding product performance for individual clients in order to build flexibility and improve efficiency.

### Competition in international markets (challenge)

Queensland beef exporters will face increasing competition in key export markets from other beef-producing countries, particularly from the US and Brazil. As competition intensifies, there will be a need to move into other markets. While a bigger focus on marketing and promotion in traditional markets may be enough to maintain export volumes, the challenge should also be to reduce Queensland's dependence on the US and Japanese markets.

The uneven global economic recovery may provide new opportunities for Queensland processors to expand markets in Asia where economic growth is forecast to be strongest over the next five years. One strategy may be for processors to actively seek new clients in Asia with a view to developing specific solutions for specific Asian beef importers. As household wealth increases in Asian countries, developing new clients in those countries should be a priority for beef processors over the next five years.

## Industry consolidation (challenge)

Generally, vertically integrated, larger scale operations have more control and better opportunities to make cost savings along the supply chain. Increasing competition and cost pressures are expected to cause structural adjustments, with continued sector amalgamation and vertical integration as strategies to address productivity and increasing costs within the beef supply chain.

An added advantage of vertical integration is that downstream ownership generally improves flexibility for adapting products to changing consumer expectations and helps ensure the reliability of supply for key inputs.

Cost savings from vertical integration could also offset some of the costs associated with the increasing regulation of the meat processing sector, such as complying with new product standards.

## Industry regulation (challenge)

Queensland beef processors are likely to face greater regulatory restraints over the next few years, especially in relation to product labelling and food safety in response to lobbying by consumer groups and beef importers. The impact of tighter restrictions on meat manufacturers is likely to increase plant operating costs. In order to minimise regulatory costs, industry may consider more emphasis on co-management/co-regulation solutions. It is likely that small to medium-sized plants will feel cost impacts far more than the larger processors. Exporters have difficulty passing such cost increases on to consumers.

## Price competition for cattle (challenge)

The market for cattle is very competitive at present with restockers, lotfeeders and live cattle exporters all actively buying cattle in direct competition with processors. The large numbers of live cattle being exported out of Townsville is having a dramatic impact on the supply of cattle for some processors. Normally, interruptions to cattle supply are of a short duration, caused by climatic conditions affecting cattle mustering and transport.

However, the present problems being experienced by processors with cattle supply could be more long term in nature. In the past, processors were able to maintain buyer power in the domestic cattle market because of strong importer demand; however, this is currently not the case. Live cattle exporters are experiencing strong demand from importers and this allows them to offer good prices for cattle for live export.

Traditionally, when demand strengthens for beef imports, prices also increase and processors not only have more buying power in the cattle market but higher prices mean higher cattle producer revenue. It is possible, therefore, that the present strong demand for live cattle exports has underpinned the price of cattle and prevented a large-scale liquidation of the herd, which may have occurred as a result of the global financial crisis and its impact on the demand for Australian beef exports.

Therefore, the immediate challenge for Queensland beef processors is to survive the present period of sluggish demand for beef exports and preserve processing capacity for new opportunities as market conditions slowly improve for beef exports.

## Profitability and value adding (challenge)

To combat problems of over-capacity and declining profitability, Queensland beef processors may be able to focus more on transforming traditional meat cuts to into more complex products that sell for a higher price per unit, thus increasing overall returns and increasing flexibility to respond to changing consumer demand.

The introduction of ‘trim meats’ is a good example of value adding, as consumers seek more low-fat meats and become more educated on the health effects of increased meat consumption. Economic recovery will mean new opportunities to capitalise on increasing consumer spending on beef products. Consideration should be given to expanding the ranges of packaged fresh meals and the range of trim beef meals available.

### Marketing (challenge)

The success of lamb marketing campaigns in recent years in Australia and overseas suggests similar marketing campaigns for beef will also succeed. The beef industry, and especially the processing sector, should give a high priority to investing in beef marketing campaigns to arrest the trend in declining per capita beef consumption.

### Skilled labour (challenge)

An important challenge is how to establish a competitive award to attract and retain skilled and semi-skilled labour in the processing sector. The need to develop a competitive award for the processing sector has arisen because of the strong labour market in the resources sector. Also, there are many other occupations providing more attractive working conditions. While processors have used temporary skilled workers from overseas under the 457 Visa Scheme, access to this scheme is becoming increasingly difficult. These factors are making it more difficult for beef processors to attract and retain labour, and have resulted in increasing costs in meat processing.

One partial solution would be to increase investment to raise the level of automation in plants to reduce costs, particularly those associated with a high labour content. An automation strategy would have several other benefits such as improving product quality and working conditions, which may also improve labour retention.

## Other issues

### Animal welfare (challenge)

Consumer and community expectations regarding animal welfare issues continue to grow. The challenge for the beef industry will be to proactively communicate the world-leading animal welfare practices the industry undertakes.

Addressing global and community expectations regarding animal welfare will involve auditing animal welfare practices to ensure compliance and continuous improvement. There needs to be a commitment to improving animal welfare practices and technology. New science-based technologies need to be developed and best practice animal welfare practices adopted.

### Carbon Pollution Reduction Scheme (challenge)

The introduction the Carbon Pollution Reduction Scheme has been deferred until at least 2013. However, at some stage in the future, the beef industry will be subject to price signals on carbon.

Under the scheme the federal government had intended that the agricultural sector could offer carbon offsets into the market through activities that reduced agricultural greenhouse emissions and from bio-sequestration such as growth of woody vegetation classified as avoided deforestation.

Opportunities remain in the voluntary carbon market and the federal government has recently released the National Carbon Offsets Standard, which provides guidelines for the carbon market.

With the delay of the scheme, the interaction of the mandatory and voluntary markets remains unclear.

### Climate change (challenge)

The predicted impacts of climate change include increases in atmospheric carbon dioxide, temperature, evaporation rates and rainfall intensity. Rainfall is also predicted to reduce, particularly in the winter/spring period in southern inland Queensland. If so, beef cattle operations may be negatively impacted by reductions in total forage production (and subsequent carrying capacity) and forage quality, cattle suffering from heat stress (particularly in feedlots), increased grazing pressure at water points, greater concerns with water supply (particularly evaporation susceptible storages) and increased erosion due to less cover and high impact rainfall events.

### Climate variability (challenge)

Ongoing drought conditions in some parts of the region continue to impact negatively on land condition and potential pasture production. In late 2009, during one of the worst droughts on record, demand for molasses (a relatively cheap, routinely used drought supplement) caused a shortfall in the market, forcing producers to source more expensive alternatives.

### Education (opportunity)

Continual improvement in management skills and knowledge is essential for resilient and profitable businesses. Opportunities exist for producers to upskill in essential business areas. Workshops can help producers analyse their business performance, assess risk, analyse options and develop and implement improved management strategies. This will in turn improve profitability and sustainability.

### Food safety (challenge)

Suppliers of meat and meat products in Queensland have certain responsibilities under the food safety scheme for meat and meat products.

The Queensland beef industry needs to maintain its excellent food safety record and work in partnership with Safe Food Production Queensland and Queensland Health to ensure the continuing safe food reputation of Queensland beef.

For example, the industry has the opportunity to work with Safe Food Production Queensland on improving the implementation of food safety programs, monitoring hygiene and operating procedures in processing facilities, minimising food safety risks and adopting quality assurance measures. These are important considerations for meeting domestic consumer expectations and helping to maintain and gain market access in export markets.

### Oil, gas and coal exploration (challenge)

Expanding oil, gas and coal exploration on some of the most productive cropping and grazing lands is causing a sense of uncertainty among landholders. At the property level, the issues are directly related to farm security, ownership and shortages in skilled agricultural labour. More broadly, questions remain about the ability to successfully restore the land, food security and the effect of exploration on natural resources.

### Transport (challenge)

The future of transporting cattle by rail is uncertain, with the possibility of trains (previously used to move cattle and freight) being redirected to the resources sector.

There is an increase in the number of type I and II road trains transporting cattle between properties, saleyards, feedlots and abattoirs along the Warrego Highway. In addition, Queensland Rail has done away with a significant number of cattle train services, which is adding to the increased road transport of cattle.

This switch from rail to road might not be of a net economic benefit and may increase the overall community cost of providing road transport. For example, heavy road transport will result in significantly higher road and bridge replacement and maintenance costs, and road safety is likely to decline as will the public amenity of using roads in the state. There are strong arguments to suggest the need for serious economic analysis of this issue to determine the full costs and community impacts for Queensland.

The Australian Livestock Transporters Association are concerned about a widespread lack of awareness of good pre-transport stock preparation and a significant hidden cost for dirty truck crate washout due to poor preparation. They estimate that the total cost of washouts for the stock carrier industry is about $50.2 million annually and that the water consumed for the task is about 6 billion litres per year.

# Appendix 1: Key statistics tables

| **Eastern Young Cattle Indicator** (c/kg) | **2006–07** | **2007–08** | **2008–09** | **2009–10** |
|---|---|---|---|---|
| Average | 326.11 | 318.29 | 330.32 | 316.51 |
| Maximum | 381.75 | 347.75 | 363.50 | 345.00 |
| Minimum | 265.25 | 272.50 | 298.25 | 277.75 |

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed 11 February 2010.

| **Gross value of production** (cattle and calves slaughtered) | **Queensland** **$m** | **Share** **%** | **Australia** **$m** |
|---|---|---|---|
| 2002–03 | 2 878 | 44.9 | 6 411 |
| 2003–04 | 3 071 | 46.1 | 6 659 |
| 2004–05 | 3 616 | 46.2 | 7 829 |
| 2005–06 | 3 607 | 46.9 | 7 685 |
| 2006–07 | 3 802 | 47.6 | 7 988 |
| 2007–08 | 3 315 | 45.1 | 7 353 |
| 2008–09 | 3 460 | 46.4 | 7 452 |
| 2009–10[e] | 3 380 | 45.8 | 7 151 |

Source: Australian Bureau of Statistics, *7501.0 Value of principle agricultural commodities produced, Australia: preliminary,* Australian Bureau of Statistics, Belconnen (reports for 2002–03 to 2008–09).

[e] Department of Employment, Economic Development and Innovation 2010, *Prospects update: March 2010,* Department of Employment, Economic Development and Innovation, Brisbane.

**Employment In agricultural food production (2007–08)***

| (number of people employed) | **Queensland** | **Annual change** | **Share** | **Australia** |
|---|---|---|---|---|
| | no | % | % | no |
| Horticulture and fruit growing | 20 175 | -11.8 | 29.0 | 69 575 |
| Grain, sheep and beef cattle | 32 675 | 25.9 | 22.2 | 146 900 |
| Dairy cattle | 2 075 | -23.1 | 8.5 | 24 450 |
| Poultry | 975 | -60.2 | 14.4 | 6 750 |
| Other livestock | 1 800 | -28.7 | 20.7 | 8 675 |
| Other crop growing | 10 675 | 22.0 | 66.3 | 16 100 |
| Agriculture not fully defined | 3 675 | 0.0 | 11.5 | 32 000 |
| All agriculture | 72 050 | 4.5 | 23.7 | 304 450 |
| Marine fishing | 1 050 | 10.5 | 17.4 | 6 050 |
| Aquaculture | 450 | 0.0 | 8.9 | 5 075 |
| Fishing not fully defined | 1 225 | 36.1 | 30.1 | 4 075 |
| All fishing | 2 725 | 18.5 | 17.9 | 15 200 |

Source: Department of Agriculture, Fisheries and Forestry 2009, *Australian food statistics 2008,* Department of Agriculture, Fisheries and Forestry, Canberra.

* Includes proprietors and partners and employees working for farm businesses with an EVAO over $22 500.Excludes non-salaried directors, consultants, contractors and unpaid workers.

| Employment in meat and meat product manufacturing 2007–08 | | | |
|---|---|---|---|
| (people employed) | **Meat processing** | **Total food and beverage** | **%** |
| New South Wales | 15 275 | 58 125 | 26.3 |
| Victoria | 11 750 | 60 625 | 19.4 |
| Queensland | 14 575 | 40 375 | 36.1 |
| South Australia | 4 300 | 20 925 | 20.5 |
| Western Australia | 5 075 | 17 350 | 29.3 |
| Tasmania | 900 | 6 875 | 13.1 |
| Northern Territory | 100 | 675 | 14.8 |
| **Australia** | **52 075** | **205 925** | **25.3** |

Source: Monash University 2009, *Monash employment forecasts*, Office of Economic and Statistical Research, Queensland Treasury, Brisbane

| Number of businesses with agricultural activity*, by state (year ended 30 June 2009) | | | |
|---|---|---|---|
| **Industry** | **Queensland** | **% share** | **Australia** |
| Beef cattle plus beef cattle feedlots | 12 452 | 32 | 39 425 |
| Sheep and beef cattle | 517 | 8 | 6 690 |
| Grain and beef cattle | 1 382 | 10 | 13 778 |
| Sheep | 285 | 3 | 10 368 |
| Dairy cattle | 735 | 9 | 7 749 |
| Poultry (meat) | 93 | 12 | 765 |
| Poultry (eggs) | 35 | 11 | 309 |
| Pigs | 182 | 27 | 682 |
| All agriculture | 25 136 | 21 | 120 941 |

Source: Australian Bureau of Statistics 2010, *7121.0 Agricultural commodities Australia 2008–09*, Australian Bureau of Statistics, Belconnen.

* Primary agricultural activity

| **Beef cattle herd as at 30 June** (excludes milk cattle) | **Queensland** | **Share** | **Australia** |
|---|---|---|---|
| | (million head) | % | (million head) |
| **2003** | 10.7 | 40.1 | 26.7 |
| **2004** | 11.5 | 41.8 | 27.5 |
| **2005** | 11.6 | 41.7 | 27.8 |
| **2006** | 11.8 | 45.2 | 26.0 |
| **2007** | 11.4 | 45.1 | 25.4 |
| **2008** | 11.7 | 47.3 | 24.8 |

Source: Australian Bureau of Statistics, *7121.0 Agricultural commodities Australia*, Australian Bureau of Statistics, Belconnen (reports for 2002–03 to 2008-09).

| **Queensland feedlot activity** | | | | | |
|---|---|---|---|---|---|
| | **Dec 2008** | **Mar 2009** | **Jun 2009** | **Sep 2009** | **Dec 2009** |
| Capacity (head) | 635 260 | 633 062 | 627 873 | 627 204 | 625 317 |
| Numbers on feed (head) | 428 271 | 368 988 | 415 099 | 439 621 | 431 695 |
| Utilisation | 67% | 58% | 66% | 70% | 69% |

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed February 2010.

| **Meat Processing** (first-stage processing) | **2007–08** | **2008–09** | **2009–10** |
|---|---|---|---|
| | $m | $m | $m |
| **Value added** | 963 | 977 | 1 176 |

Source: Department of Employment, Economic Development and Innovation 2009, *Prospects for Queensland's primary industries: 2009–10,* Department of Employment, Economic Development and Innovation, Brisbane.
Note: The forecasts for the value of first-stage processing in 2009–10 should not be compared with the previous years due to the change in value-added ratios.

| **Adult cattle slaughter** ('000) | | **Queensland** | **Change on last year** | **Share** | **Australia** |
|---|---|---|---|---|---|
| | **2001–02** | 3 514 | -3.9% | 46.1% | 7 624 |
| | **2002–03** | 3 515 | 0.0% | 43.5% | 8 083 |
| | **2003–04** | 3 564 | 1.4% | 46.0% | 7 753 |
| | **2004–05** | 3 690 | 3.5% | 46.2% | 7 986 |
| | **2005–06** | 3 647 | -1.2% | 48.1% | 7 580 |
| | **2006–07** | 3 831 | 5.0% | 46.9% | 8 162 |
| | **2007–08** | 3 593 | -6.2% | 45.3% | 7 932 |
| | **2008–09** | 3 471 | -3.4% | 44.0% | 7 890 |

Source: Market Statistics Database, Meat & Livestock Australia, quarterly updating, accessed January 2010.

**Interstate cattle movements**

| **State of origin** | **State of destination** | **2007–08** | **2008–09** | **Difference on 2007–08** |
|---|---|---|---|---|
| Queensland | New South Wales | 158 311 | 168 383 | 10 072 |
| New South Wales | Queensland | 274 376 | 444 525 | 170 149 |
| Queensland | Northern Territory | 111 721 | 69 488 | -42 233 |
| Northern Territory | Queensland | 214 757 | 138 093 | -76 664 |
| Queensland | South Australia | 4 164 | 10 958 | 6 794 |
| South Australia | Queensland | 17 746 | 18 086 | 340 |
| Queensland | Tasmania | 36 | 33 | -3 |
| Tasmania | Queensland | 876 | 502 | -374 |
| Queensland | Victoria | 1 536 | 1 605 | 69 |
| Victoria | Queensland | 9 730 | 8 649 | -1 081 |
| Queensland | Western Australia | 1 050 | 833 | -217 |
| Western Australia | Queensland | 661 | 2 366 | 1 705 |
| **Total into Queensland** | | **518 146** | **612 221** | **94 075** |
| **Total out of Queensland** | | **276 818** | **251 300** | **-25 518** |
| **Net total** | | **241 328** | **360 921** | **119 593** |

Source: National Livestock Identification System Database, Meat & Livestock Australia, accessed 4 February 2010.

| **Beef and veal production** (tonnes carcase weight) | | **Queensland** | **% change on last year** | **% share** | **Australia** |
|---|---|---|---|---|---|
| | **1999–00** | 938 603 | 3.1 | 47.2 | 1 987 901 |
| | **2000–01** | 1 040 308 | 10.8 | 49.1 | 2 119 428 |
| | **2001–02** | 977 602 | -6.0 | 48.2 | 2 027 612 |
| | **2002–03** | 951 153 | -2.7 | 45.9 | 2 072 831 |
| | **2003–04** | 978 965 | 2.9 | 48.2 | 2 032 944 |
| | **2004–05** | 1 049 861 | 7.2 | 48.6 | 2 161 956 |
| | **2005–06** | 1 057 194 | 0.7 | 50.9 | 2 077 073 |
| | **2006–07** | 1 109 518 | 4.9 | 49.8 | 2 226 292 |
| | **2007–08** | 1 042 292 | -6.1 | 48.4 | 2 154 925 |
| | **2008–09** | 1 012 543 | -2.9 | 47.1 | 2 147 908 |

Source: Australian Bureau of Statistics 2010, 'Beef and veal exports 2001–02 to 2008–09 (volume)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

| **Beef and veal exports** (chilled and frozen) | | **Queensland** | **Change on last year** | **Share** | **Australia** |
|---|---|---|---|---|---|
| | | tonnes | | | tonnes |
| | **2001–02** | 532 702 | -8.40% | 55.19% | 965 155 |
| | **2002–03** | 584 608 | 9.7% | 59.8% | 977 090 |
| | **2003–04** | 539 438 | -7.7% | 58.2% | 927 109 |
| | **2004–05** | 602 994 | 11.8% | 57.3% | 1 051 782 |
| | **2005–06** | 597 871 | -0.8% | 60.7% | 985 270 |
| | **2006–07** | 621 562 | 4.0% | 58.3% | 1 066 498 |
| | **2007–08** | 588 405 | -5.3% | 58.0% | 1 014 731 |
| | **2008–09*** | 595 617 | 1.2% | 57.2% | 1 042 122 |

Source: Australian Bureau of Statistics 2010, 'Beef and veal exports 2001–02 to 2008–09 (volume)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

* Preliminary estimate

| **Beef and veal exports (value)** (chilled and frozen) | | **Queensland** | **Change on last year** | **Share** | **Australia** |
|---|---|---|---|---|---|
| | | $m | % | % | $m |
| | **2001–02** | 2 435 | 1.2 | 56.5 | 4 312 |
| | **2002–03** | 2 410 | -1.0 | 61.7 | 3 907 |
| | **2003–04** | 2 376 | -1.4 | 60.5 | 3 926 |
| | **2004–05** | 2 890 | 21.6 | 59.2 | 4 879 |
| | **2005–06** | 2 844 | -1.6 | 62.7 | 4 537 |
| | **2006–07** | 2 941 | 3.4 | 60.1 | 4 894 |
| | **2007–08** | 2 699 | -8.2 | 61.1 | 4 414 |
| | **2008–09*** | 3 063 | 13.5 | 60.6 | 5 052 |

Source: Australian Bureau of Statistics 2010, 'Beef and veal exports 2001–02 to 2008–09 (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

* Preliminary estimate

| Queensland co-product exports (volume) | 2003–04 | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008–09* |
|---|---|---|---|---|---|---|
| | tonnes | tonnes | tonnes | tonnes | tonnes | tonnes |
| Fresh or chilled edible offal of bovine animals | 4 012 | 3 819 | 3 355 | 3 484 | 3 463 | 4 763 |
| Frozen edible offal of bovine animals | 45 430 | 46 870 | 47 889 | 54 199 | 54 005 | 56 790 |
| Prepared or preserved meat and offal (excl. liver) of bovine animals | 7 209 | 7 557 | 5 724 | 4 243 | 2 458 | 1 457 |

Source: Australian Bureau of Statistics 2010, 'Co-product exports 2001–02 to 2008–09 (volume)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

* Preliminary estimate

| Queensland co-product exports (value) | 2003–04 | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008–09* |
|---|---|---|---|---|---|---|
| | $m | $m | $m | $m | $m | $m |
| Fresh or chilled edible offal of bovine animals | 32 | 59 | 55 | 50 | 39 | 50 |
| Frozen edible offal of bovine animals | 141 | 199 | 204 | 197 | 191 | 196 |
| Prepared or preserved meat and offal (excl. liver) of bovine animals, nes | 29 | 37 | 28 | 20 | 15 | 9 |

Source: Australian Bureau of Statistics 2010, 'Co-product exports 2001–02 to 2008–09 (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

* Preliminary estimate

| Value of live cattle exports | Queensland | Share | Australia |
|---|---|---|---|
| | $m | | $m |
| **2000–01** | 96.4 | 19.4% | 497.7 |
| **2001–02** | 95.4 | 17.0% | 561.3 |
| **2002–03** | 142.0 | 23.4% | 607.5 |
| **2003–04** | 45.1 | 9.8% | 461.2 |
| **2004–05** | 32.1 | 6.9% | 464.0 |
| **2005–06** | 25.3 | 6.3% | 404.0 |
| **2006–07** | 48.4 | 9.7% | 496.9 |
| **2007–08** | 40.2 | 7.4% | 540.7 |
| **2008–09*** | 125.2 | 19.2% | 651.9 |

Source: Australian Bureau of Statistics 2010, 'Live cattle exports 2001–02 to 2008–09 (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

* Preliminary estimate

| Queensland's top five beef and veal export destinations | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008–09 |
|---|---|---|---|---|---|
| | $m | $m | $m | $m | $m |
| Japan | 1 582 | 1 487 | 1 411 | 1 287 | 1 533 |
| United States | 807 | 704 | 699 | 512 | 581 |
| Korea, Republic of (South) | 277 | 389 | 534 | 478 | 362 |
| Russian Federation | 4 | 12 | 18 | 96 | 95 |
| Taiwan | 81 | 102 | 89 | 73 | 92 |
| **Total value all** | **2 890** | **2 844** | **2 941** | **2 699** | **3 063** |

Source: Australian Bureau of Statistics 2010, 'Queensland beef and veal exports by destination (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

| Queensland's top five beef and veal export destinations (by volume) | | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008–09 |
|---|---|---|---|---|---|---|
| | | tonnes | tonnes | tonnes | tonnes | tonnes |
| | Japan | 291 107 | 281 151 | 280 500 | 261 184 | 270 328 |
| | United States | 208 423 | 183 142 | 174 474 | 128 983 | 132 500 |
| | Korea, Republic of (South) | 60 241 | 82 954 | 106 695 | 103 741 | 79 044 |
| | Russian Federation | 1 051 | 2 590 | 3 810 | 25 775 | 22 406 |
| | Taiwan | 17 101 | 20 886 | 20 585 | 18 974 | 19 723 |
| | **Total volume all** | **602 994** | **597 871** | **621 562** | **588 405** | **595 617** |

Source: Australian Bureau of Statistics 2010, 'Queensland beef and veal exports by destination (volume)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

| Queensland's top five live cattle export destinations (by value) | | 2004–05 | 2005–06 | 2006–07 | 2007–08 | 2008–09 |
|---|---|---|---|---|---|---|
| | | $m | $m | $m | $m | $m |
| | Indonesia | 12 | 9 | 30 | 23 | 114 |
| | Japan | 15 | 15 | 14 | 14 | 10 |
| | Thailand | 0 | 1 | 0 | 0 | 0 |
| | Viet Nam | 1 | 0 | 0 | 0 | 0 |
| | Malaysia | 0 | 1 | 2 | 3 | 0 |
| | **Total value all** | **32** | **25** | **48** | **40** | **125** |

Source: Australian Bureau of Statistics 2010, 'Live cattle exports 2001–02 to 2008–09 (value)', unpublished data obtained from the Office of Economic and Statistical Research, Queensland Treasury, Brisbane.

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