

Wheat

The grains industry is a critical part of the Australian agricultural sector and more generally the Australian economy. Grain production in Australia averages approximately 35-40 million tonnes each year with an estimated value of AUD8-10 billion. Grain and oilseeds production accounts for 25% of the total value of agricultural production in Australia.

The grains industry can be broken into four distinct product groups:

- Wheat – which includes bread and noodle wheats; and durum wheat used in the production of pasta
- Coarse grains – which include barley, sorghum, oats and triticale
- Oilseeds – which include canola, cottonseed and sunflower seeds
- Pulses – which include lupins and field peas.

Wheat is easily the largest single component of the grains industry in Australia. With a total annual value of between AUD6-7 billion, the wheat industry outweighs all of the other sectors.

The Australian wheat industry has enjoyed a steady growth in production over the past decade. Much of this growth can be attributed to improvements in yield. However, growers have also been consistently choosing to plant increasing amounts of land to wheat.

Between 1993-84 and 2003-04, the area sown to all grains has increased by 32%, while productivity has increased by 45% during the same period. Australian farmers face a continuing decline in the real prices for grains on the world market. This decline in price has been the incentive to reduce costs and improve technology and farming practices growers employ in their current systems, creating increased productivity to match declining returns.

Australian crop production has trended upwards since the early 1990's. The total area sown to grains, oilseeds and pulses in Australia has increased from around 15.5 million hectares in 1993 to nearly 20.6 million hectares in 2003-04. This is mainly due to the switch in land use resulting from relative farm returns between arable enterprises and grazing based enterprise. The increase in grain production since the early 1990's has been largely due to mixed sheep and arable producers responding to low wool returns by reducing stock numbers in favour of an arable land use.

Recent increases in wool industry returns may encourage some farmers to increase stock numbers, but due to the capital outlay of machinery invested for arable farming and the issue concerned between swapping enterprise (stock procurement, fencing and other infrastructure requirements) a reduction if any in area planted to all grains will be minimal and occur slowly over time.

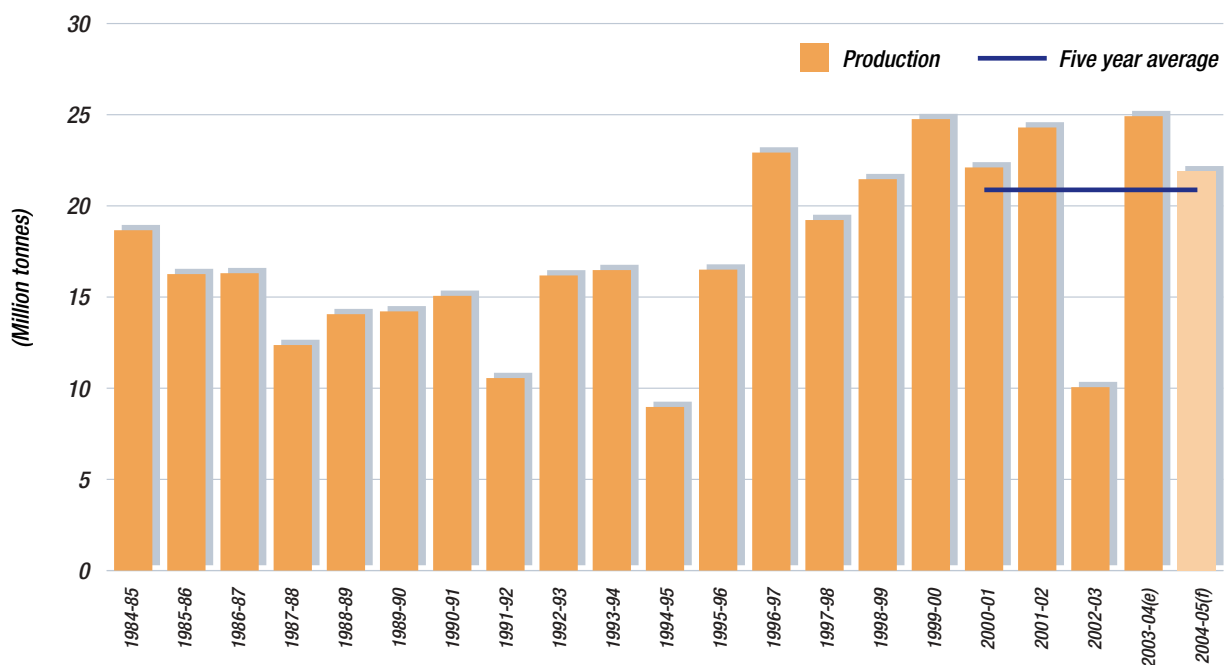
There are 36,000 farms regularly growing wheat in Australia which means that almost one-third of all Australian farms are involved in wheat production.

Australian wheat production

During the past 20 years (1984-85 to 2003-04), Australian wheat production has varied between nine million tonnes and 24.9 million tonnes per annum, with the average over this period being 17.5 million tonnes a year and annual growth of around 2%. Both the five and ten year average of Australian wheat production up to and including the 2004-05 forecast is 20.9 million tonnes.

(Note: These averages have been substantially impacted by the 2002-03 drought)

Australian wheat production over the last 20 years



(e) = estimate. (f) = forecast. Five year average up to and including 2003-04(f). Source: ABARE, 2004.

Australian wheat production rebounded following the 2002-03 drought to an estimated 24.9 million tonnes during 2003-04, and is forecast to decrease by 3.0 million tonnes to 21.9 million tonnes in 2004-05.

(Source: ABARE, 2004)

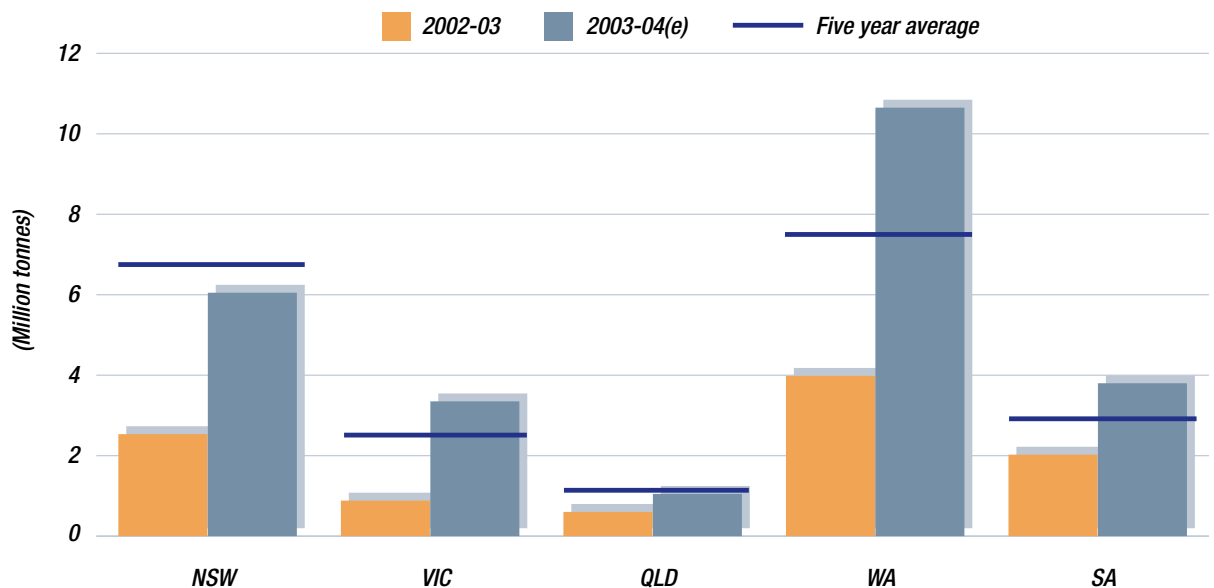
The main drivers behind Australian wheat production include:

- Area planted (which is influenced by competing prices of other grains)
- Seasonal conditions (influenced by the timing and intensity of the seasonal rain break, followed by the quantity and timing of precipitation throughout the growing season)
- Alternative land uses
- Adoption of new technology.

Australian wheat production by state

Western Australia is estimated to have produced approximately 10.7 million tonnes of wheat during 2003-04. This is 38% above its five year average and the largest crop ever produced in the region. Both New South Wales and Queensland are estimated to produce less than the five year average for wheat production, with ongoing drought impacting specific areas in the region.

Australian wheat production by State over the last two years and the five year average

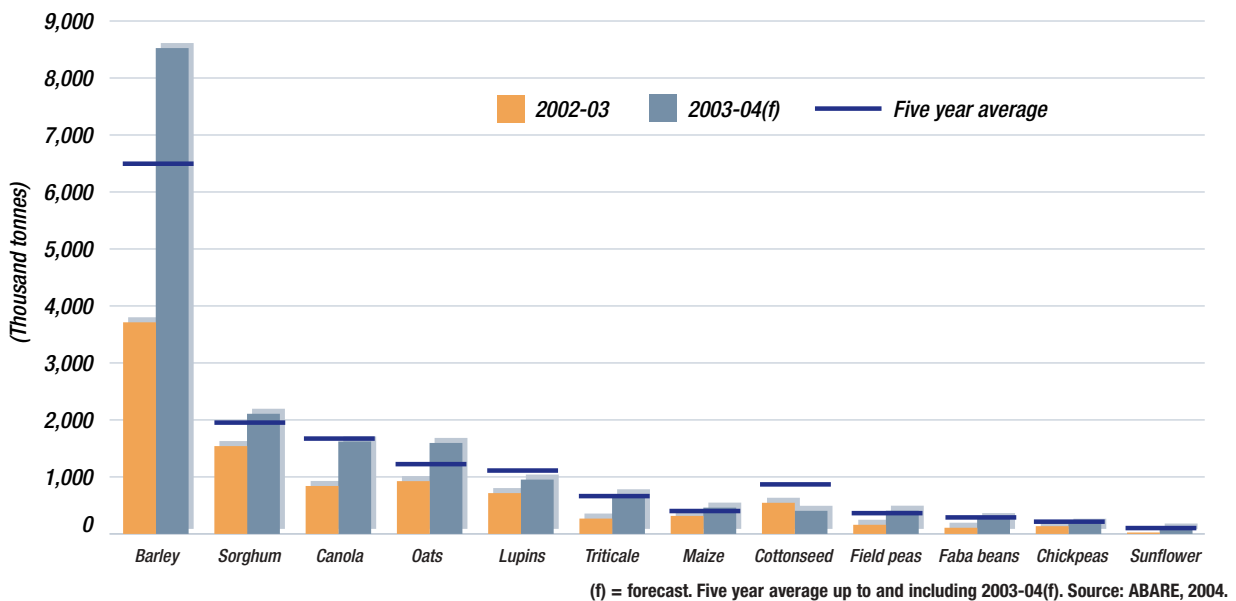


(e) = estimate. Five year average up to and including 2003-04(e). Source: ABARE, 2004

Other grain production

During the past 20 years (1984-85 to 2003-04), Australian other grain production (including coarse grains, oil seeds and pulses) has had steady growth as a result of increased area planted with others grains. Area sown to grains is forecast to decline slightly over the medium term.

Summary of other grain production over the last two years and the five year average



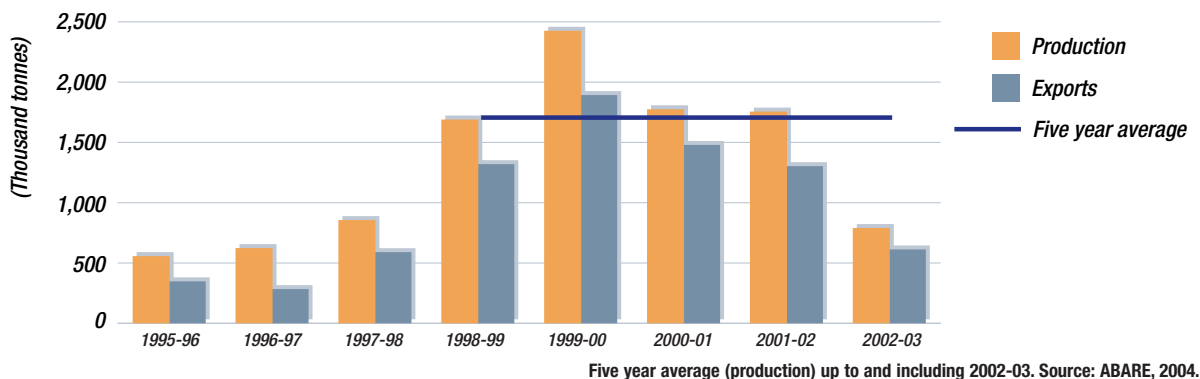
Canola

Canola has emerged as a significant crop in terms of the gross value of both oilseeds and total crop production. With improved genetic qualities and profitability canola has become an increasingly important crop in the rotation due to disease management and income diversity. It is now the fourth largest winter field crop in Australia in terms of area and production.

The area of canola harvested in Australia increased rapidly from around 400,000 hectares in the mid 1990's to a record 1.9 million hectares in 1999-00. The area planted to canola is estimated to be 1.0 million hectares in 2003-04.

(Source: ABARE, 2004)

Summary of canola exports, production and five year average



Domestic wheat consumption

The domestic market uses approximately 4.9 million tonnes of wheat annually, with the remaining production exported. Based on five year averages, wheat is consumed in Australia as:

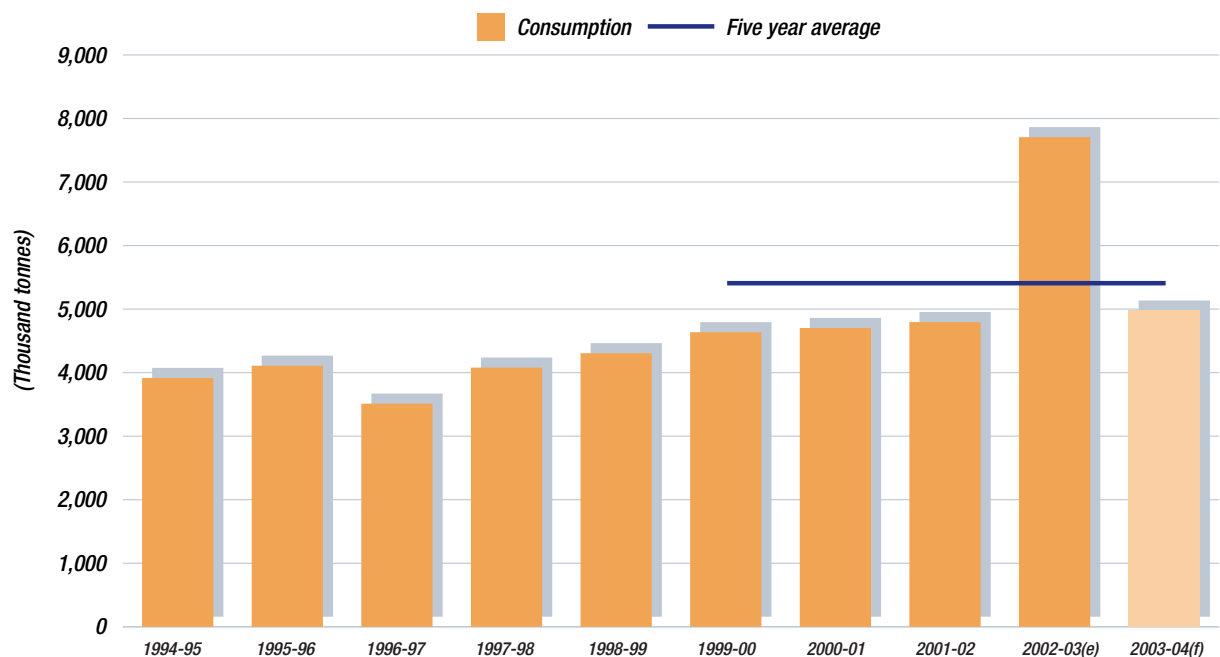
- Human and industrial consumption (2.2 million tonnes)
- Stockfeed (2.2 million tonnes)
- Seed for the following season’s crop (0.5 million tonnes).

Domestic consumption during 2003-04 is estimated to be 5.0 million tonnes.

(Source: ABARE, 2004)

Wheat accounts for around 60% of all winter grains sown, hence there will always be more wheat than other grains available even in a drought. Therefore, as the winter crop shrinks, the amount of wheat consumed domestically increases. In addition, there is more demand for feed grain in non traditional areas such as dairy, and feed grain to maintain them, with available pasture being scarce.

Summary of domestic wheat consumption over the last ten years and the five year average



(f) = forecast. (e) = estimate. Source: ABARE, 2004.

Livestock

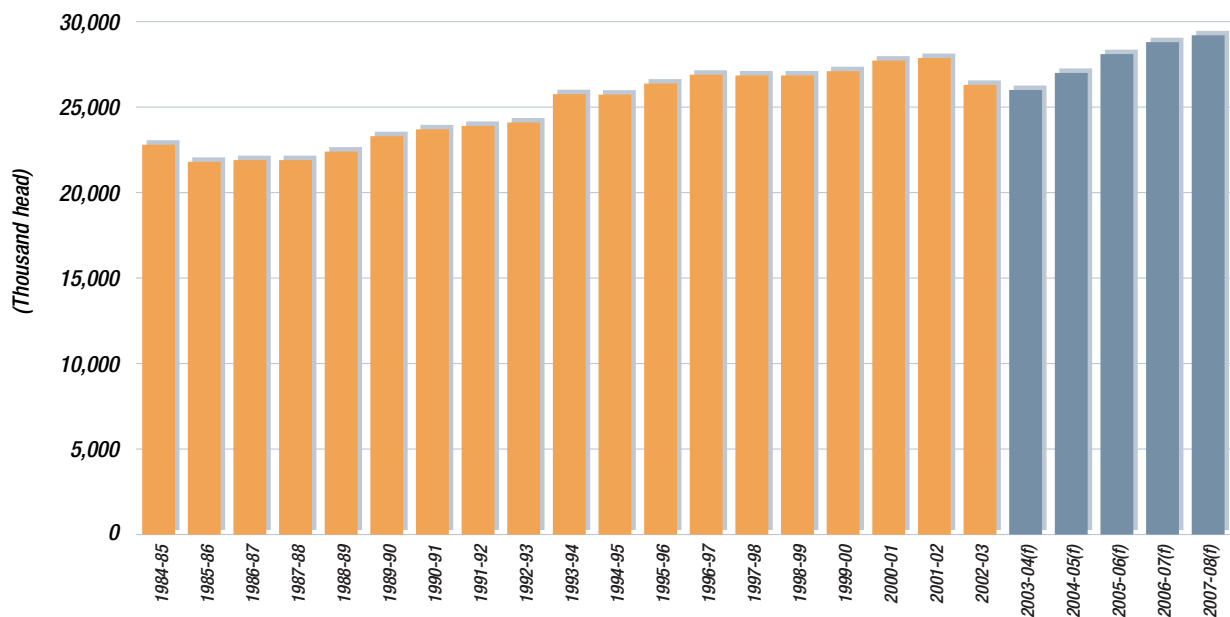
The cattle and sheep industries are major contributors to the rural economy, and are visibly Australia's two dominant livestock based industries.

Australian production

Cattle

Cattle numbers had been steadily building since the mid 1980s until 2002-03, when numbers decreased considerably as a result of the drought. Numbers are expected to again increase while producers try to rebuild their herds.

Australian cattle herd from 1984-85 to 2007-08



(f) = forecast. Source: Meat and Livestock Association, February 2004.

Australian cattle numbers are forecast to reach 26.0 million head during 2003-04, which is marginally lower than the previous year.

(Source: Meat and Livestock Association, February 2004)

The five year average for cattle numbers up to and including 1999-00 is 26.7 million head.

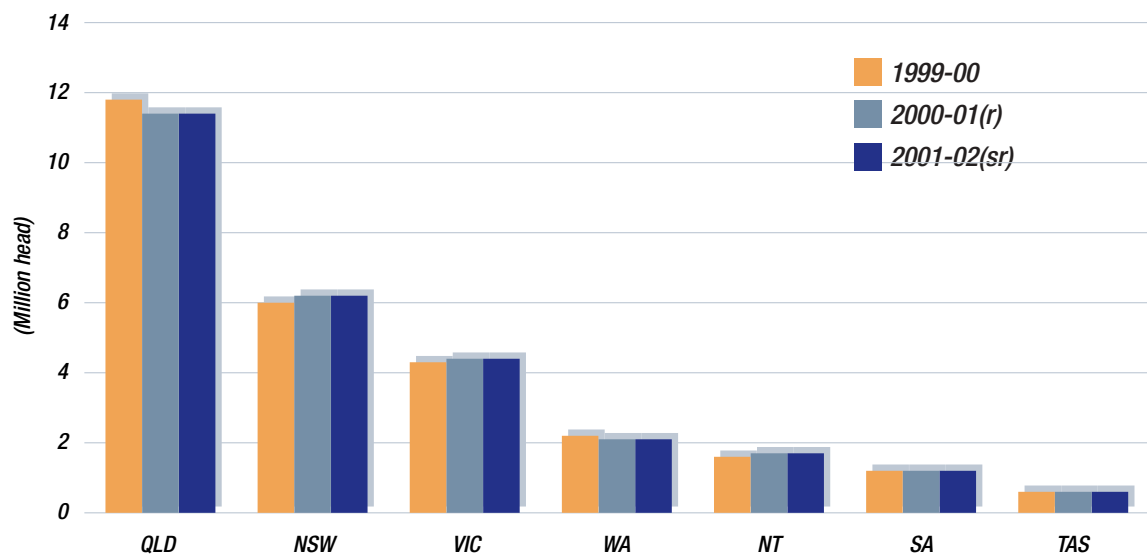
(Source: Meat and Livestock Association, October 2003)

Australian Agriculture Trends

Cattle numbers by State

The following graphs show cattle numbers by State from 1999-00 to 2001-02. Queensland has by far the largest cattle production, followed by New South Wales and Victoria.

Cattle numbers by State from 1999-00 to 2001-02

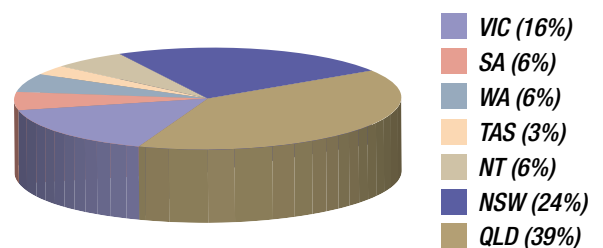
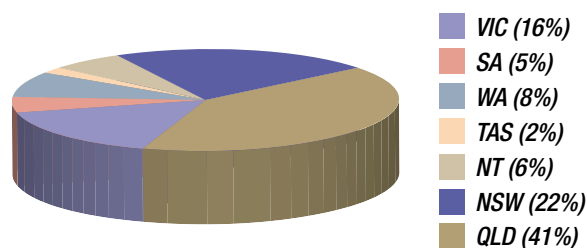


(r) = revised. (sr) = subject to revision. Source: Meat and Livestock Association, October 2003.

Cattle sourced from Queensland and New South Wales account for around 65% of total Australian cattle production, as illustrated below.

Cattle numbers by State in 2001-02(sr)

Cattle numbers by State - five year average

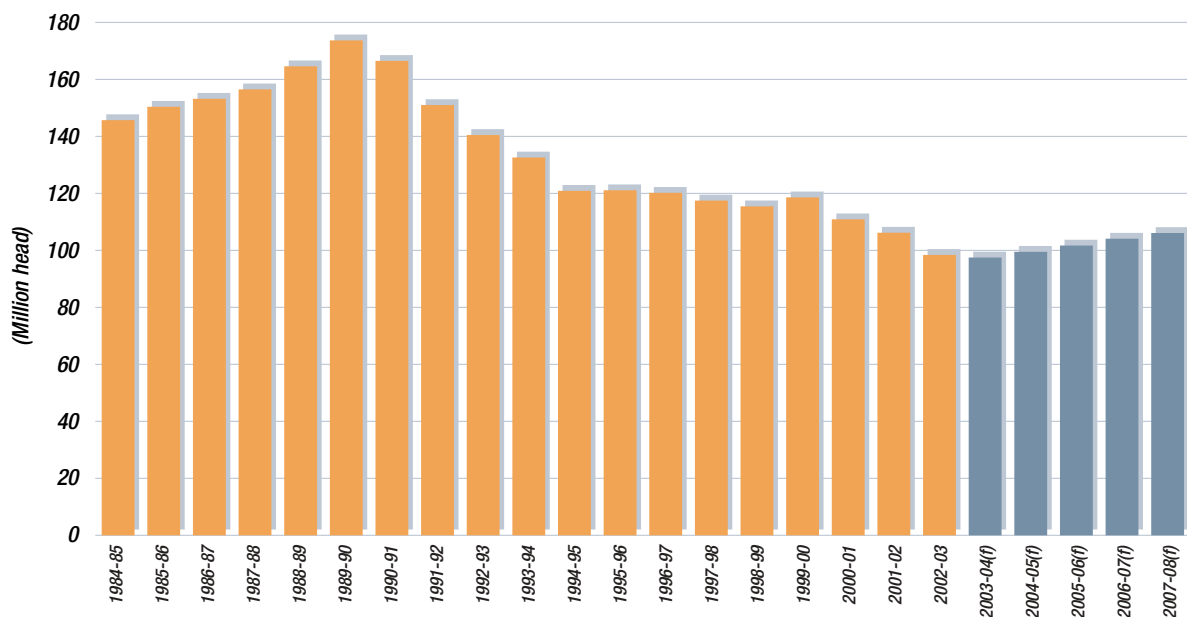


(sr) = subject to revision. Five year average up to and including 1999-00. Source: Meat and Livestock Association, October 2003.

Sheep

Sheep numbers have been steadily decreasing since the early 1990s, as sheep producers have switched to other enterprises due to low wool prices. Sheep numbers are projected to increase marginally as producers rebuild their flocks.

Australian sheep flock from 1984-85 to 2007-08



(f) = forecast. Source: Meat and Livestock Association, February 2004.

Australian sheep numbers are forecast to reach 97.5 million head during 2003-04, which is marginally lower than the previous year.

(Source: Meat and Livestock Association, February 2004)

The five year average for sheep numbers up to and including 1999-00 is 118.4 million head.

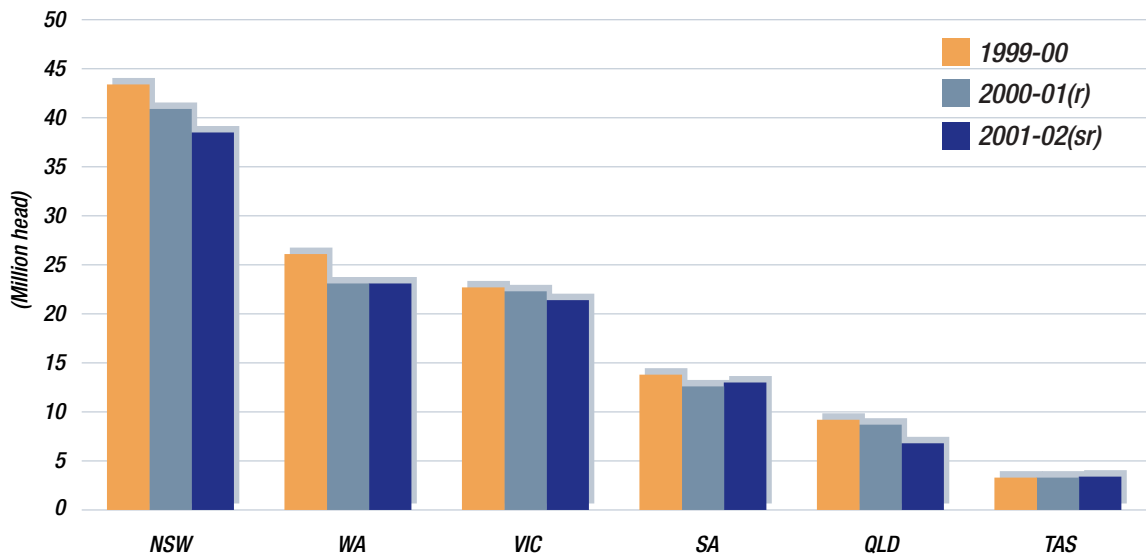
(Source: Meat and Livestock Association, October 2003)

Australian Agriculture Trends

Sheep and lamb by State

The following graphs show sheep numbers by State for the period 1999-00 to 2001-02. New South Wales has the largest sheep production, followed by Western Australia and Victoria.

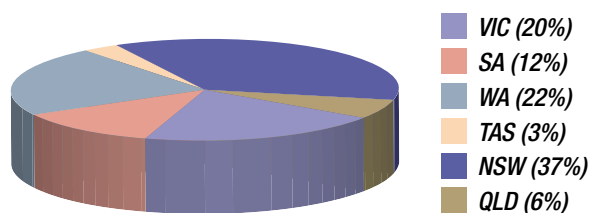
Sheep numbers by State from 1999-00 to 2001-02



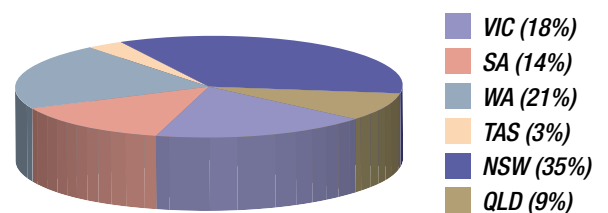
(r) = revised. (sr) = subject to revision. Source: Meat and Livestock Association, October 2003.

Sheep sourced from New South Wales and Western Australia account for around 60% of total Australian sheep production as illustrated below.

Sheep numbers by State in 2001-02(sr)



Sheep numbers by State - five year average



(sr) = subject to revision. Five year average up to and including 1999-00. Source: Meat and Livestock Association, October 2003.

Australian slaughtering volume

Cattle

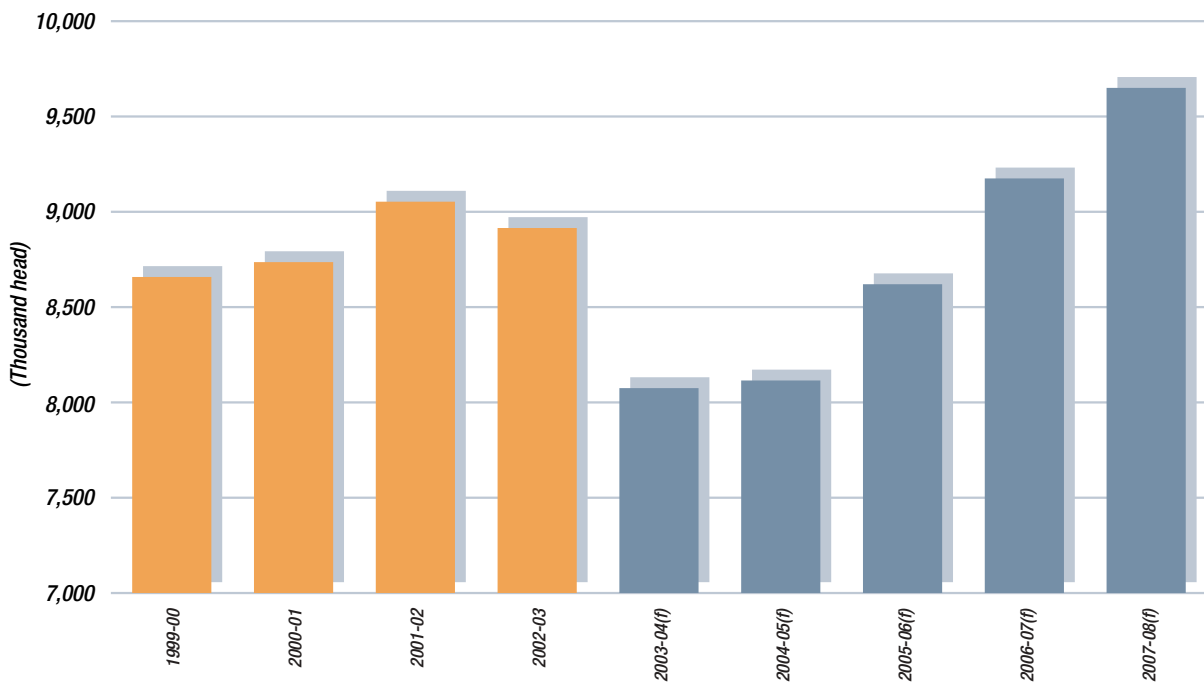
Australian cattle slaughtering is forecast to reach 8.1 million head during 2003-04, which is almost 10% lower than the previous year.

(Source: Meat and Livestock Association, February 2004)

The five year average for cattle slaughtering up to and including 2000 is 7.5 million head.

(Source: Meat and Livestock Association, October 2003)

Cattle and calves slaughtering volume from 1999-00 to 2007-08



(f) = forecast. Source: Meat and Livestock Association, February 2004.

Sheep and lamb

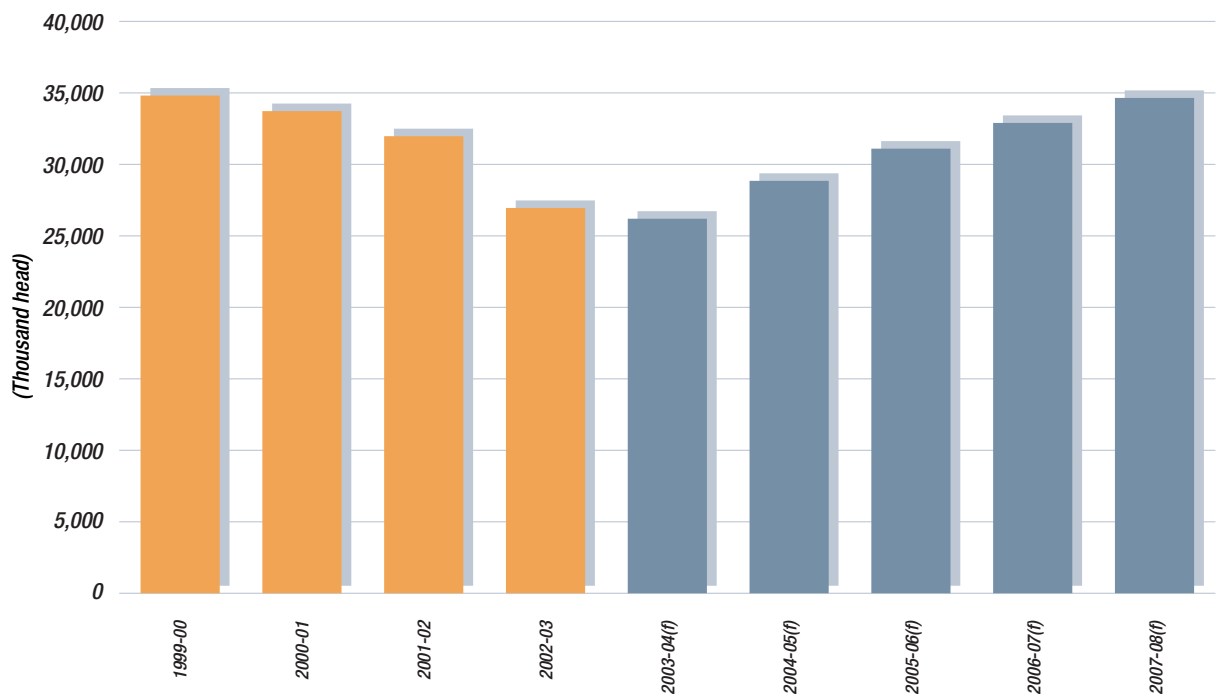
Australian sheep and lamb slaughtering is forecast to reach 26.2 million head during 2004, which is slightly lower than the previous year.

(Source: Meat and Livestock Association, February 2004)

The five year average for sheep and lamb slaughtering up to and including 2000 is 30.3 million head.

(Source: Meat and Livestock Association, October 2003)

Sheep and lamb slaughtering volume from 2000 to 2008



(f) = forecast. Source: Meat and Livestock Association, February 2004.

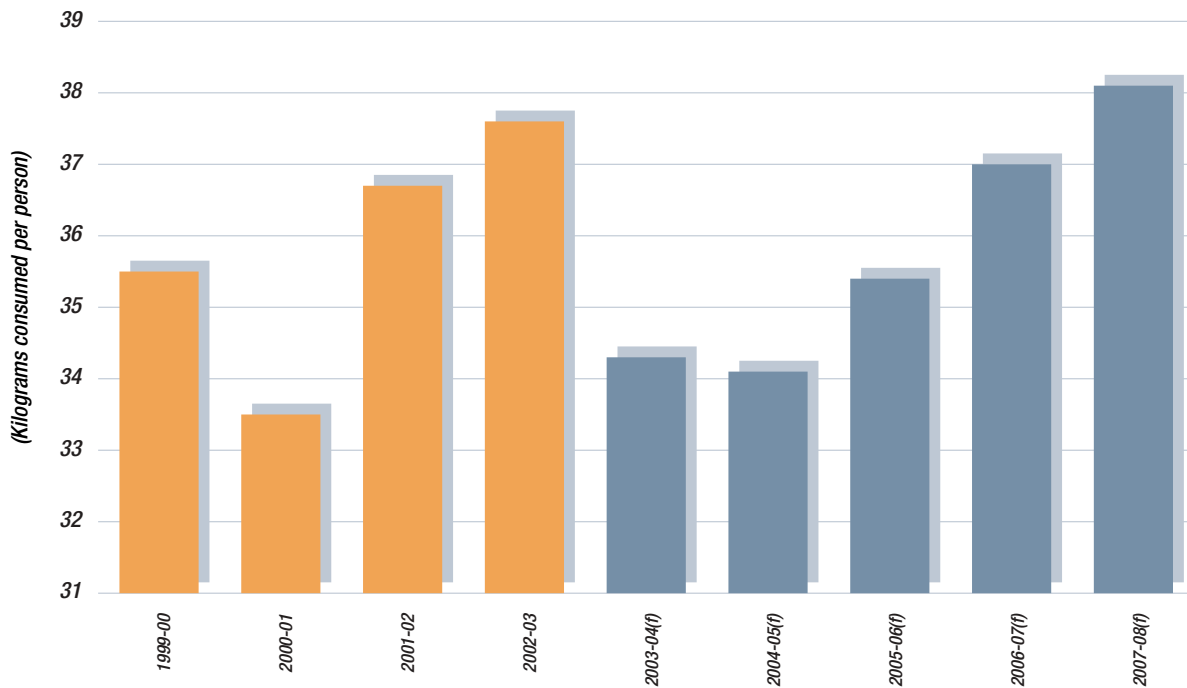
Australian consumption

The consumption of meat has recently been boosted by the phenomenon of the Atkins diet and other high protein diets, as well as growing acceptance for positive nutritional research on meat.

Beef

Beef consumption in Australian is forecast to be 34.3 kilograms per person for 2003-04.

Beef consumption in Australia from 1999-00 to 2007-08



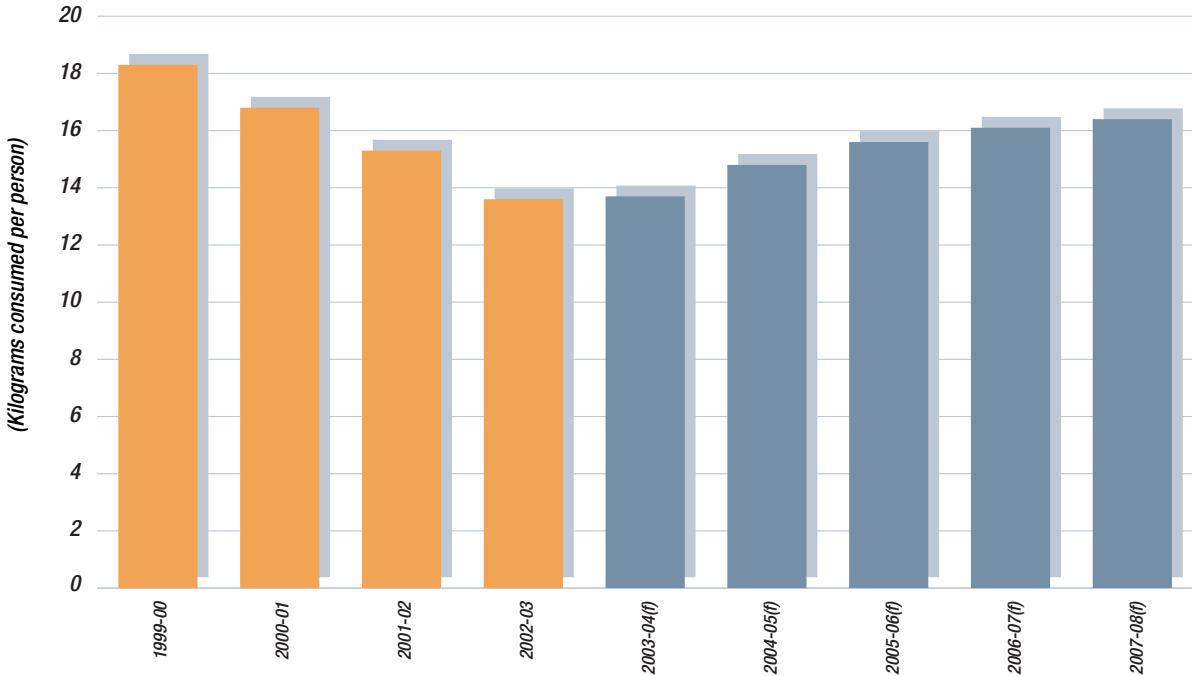
(f) = forecast. Source: Meat and Livestock Association, February 2004.

Lamb

Lamb and mutton consumption in Australian is forecast to be 11.2 kilograms and 2.5 kilograms respectively per person for 2003-04. This is amongst the highest consumption of lamb and mutton in the world.

(Source: ABARE, 2004)

Lamb and mutton consumption in Australia from 1999-00 to 2007-08



(f) = forecast. Source: Meat and Livestock Association, February 2004.

Livestock exports

Cattle

Approximately 65% of Australian produced beef is exported annually to over 100 countries.

(Source: Meat and Livestock Association, 2004)

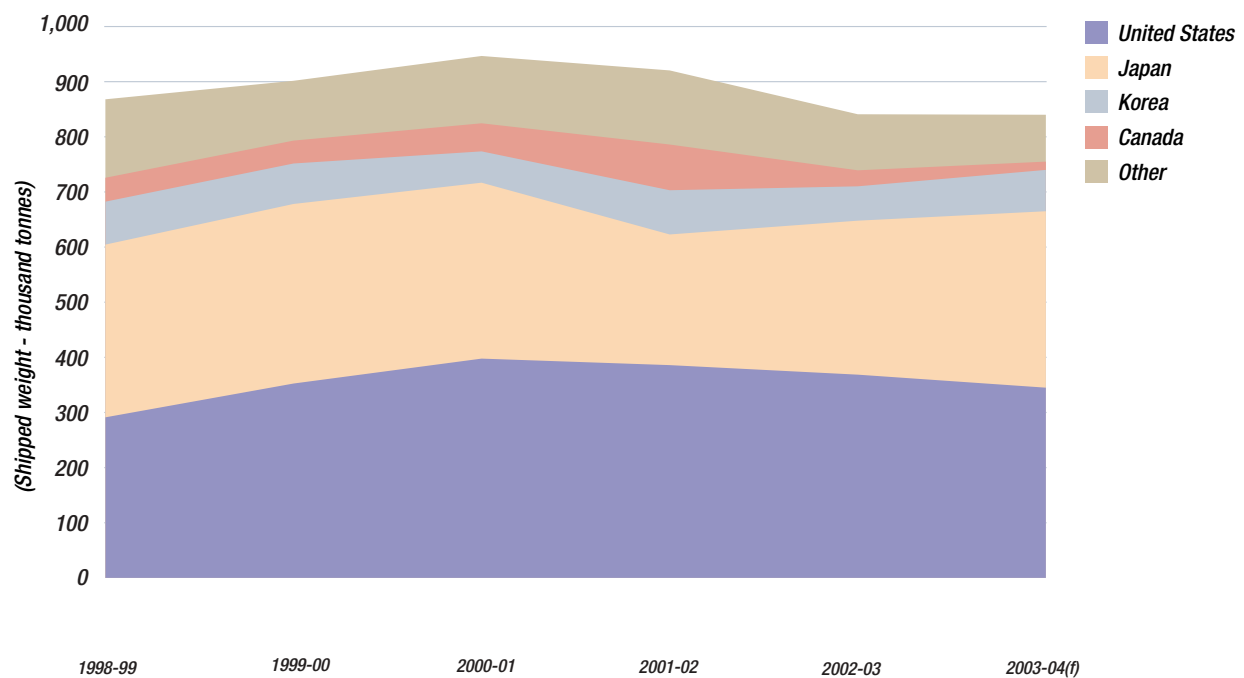
The value of total beef and veal exports during 2003-04 is forecast to be AUD3.9 billion.

Australia produces approximately 4% of world beef.

(Source: Meat and Livestock Association, 2002)

Other beef producing countries include the United States, the European Union, Brazil, China, Argentina and the Former Soviet Union. Whilst Australia is at the lower end of the top ten beef producing countries, it is measurably the world's largest exporter of beef. Australian exports to Japan and Korea are likely to increase as a result of the suspension of United States beef exports due to the discovery of a single case of Bovine Spongiform Encephalopathy or mad cow disease in the United States. However, the rising Australian dollar will have a negative impact on beef and veal export prospects.

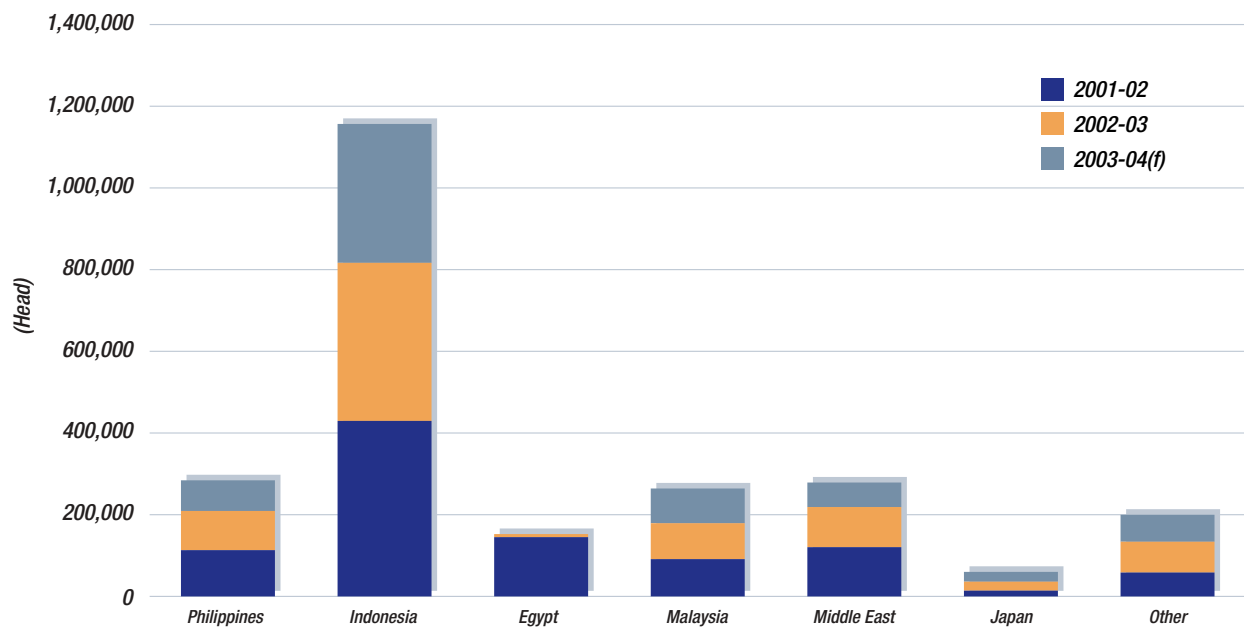
Australian beef and veal exports from 1998-99 to 2003-04



(f) = forecast. Source: Meat and Livestock Association, February 2004.

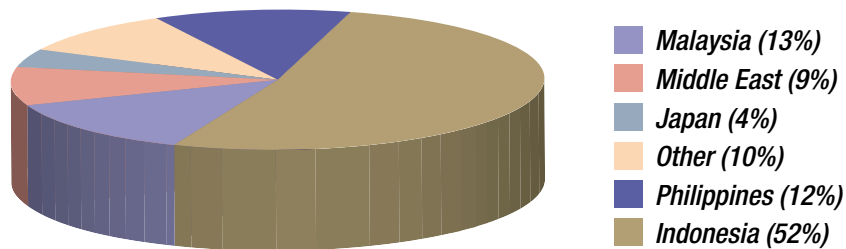
Live cattle exports to various destinations

Australian live cattle exports by destination from 2001-02 to 2003-04



(f) = forecast. Source: Meat and Livestock Association, February 2004.

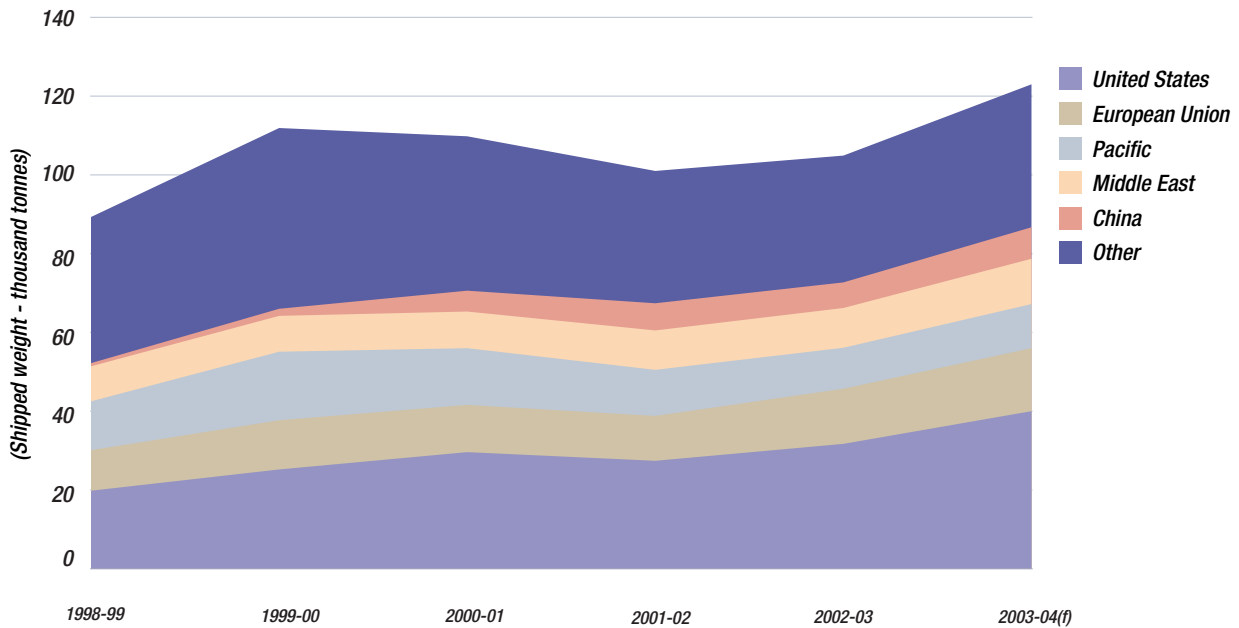
Share of Australian live cattle exports (head) by destination based on 2003-04(f)



(f) = forecast. Source: Meat and Livestock Association, February 2004.

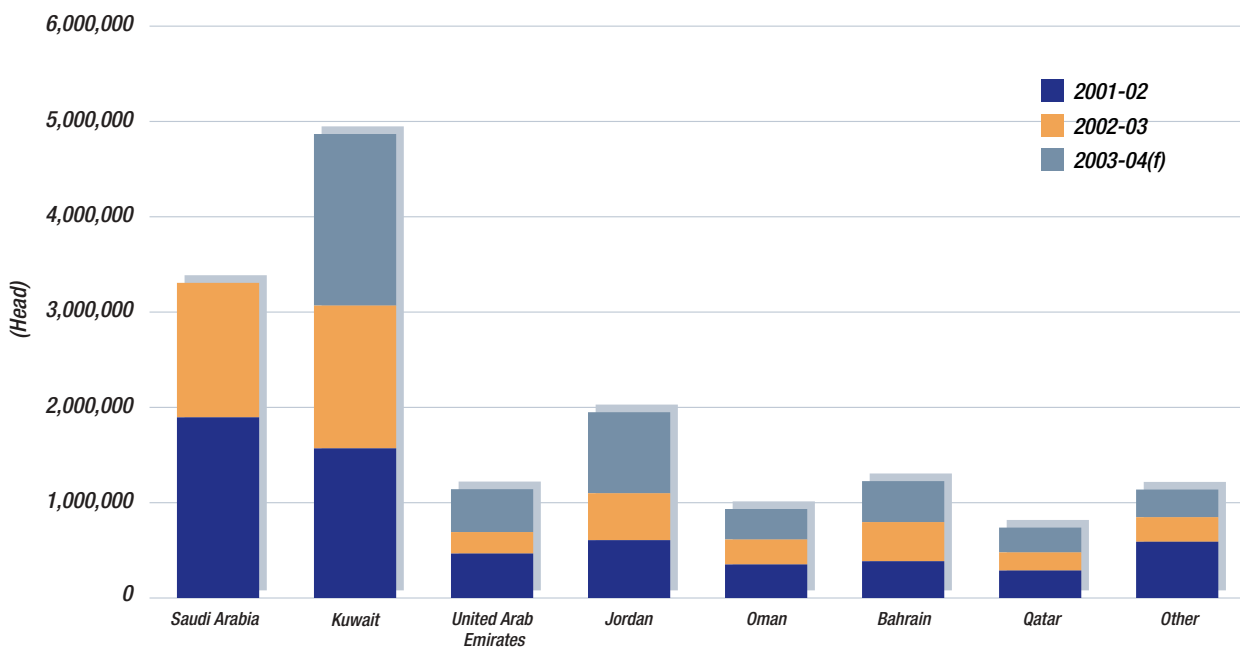
Sheep

Australian lamb exports from 1998-99 to 2003-04



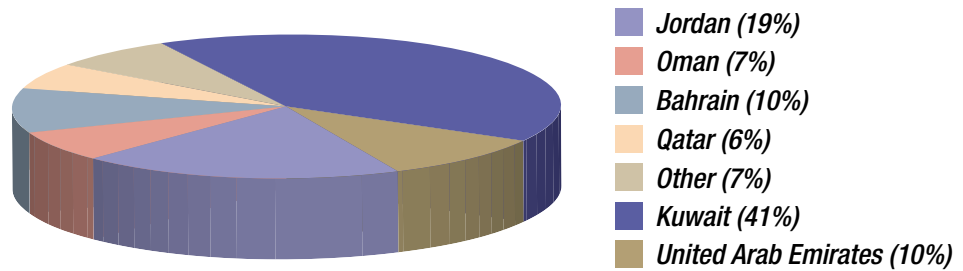
(f) = forecast. Source: Meat and Livestock Association, February 2004.

Australian live sheep exports by destination from 2001-02 to 2003-04



(f) = forecast. Source: Meat and Livestock Association, February 2004.

Share of Australian live sheep exports (head) by destination based on 2003-04(f)



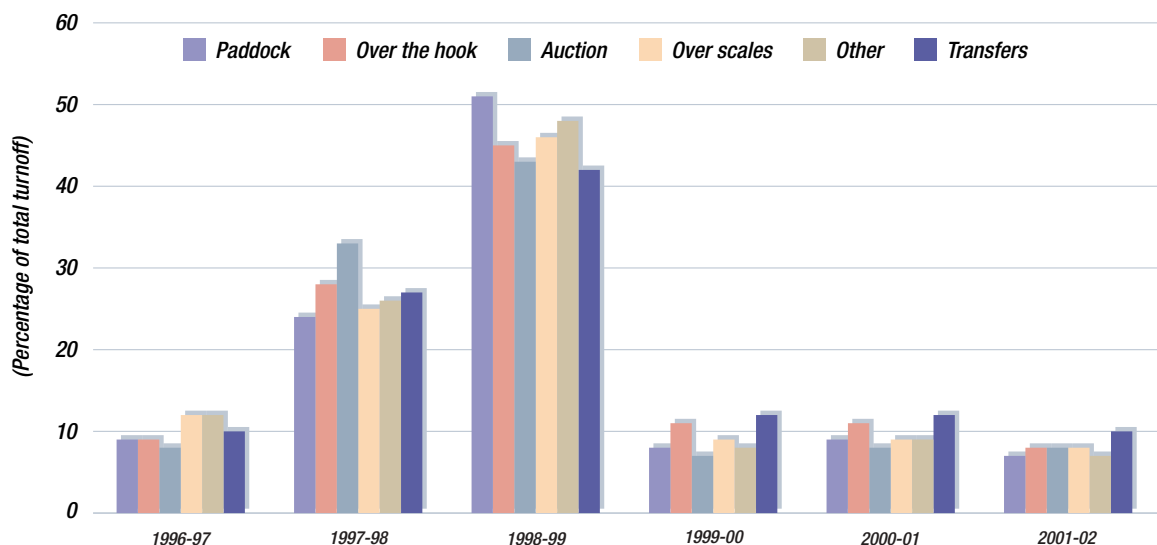
(f) = forecast. Source: Meat and Livestock Association, February 2004.

Cattle sale methods

Cattle producers have the following main methods of selling their livestock:

- selling at auction through sale yards
- on property private sale to another producer/feedlots/backgrounder
- on property direct sale to a livestock exporter
- on property sales direct to a processor
- internet sales via auctions and/or photographs on the internet.

Methods of selling beef cattle from 1996-97 to 2001-02



Source: ABARE, 2003.

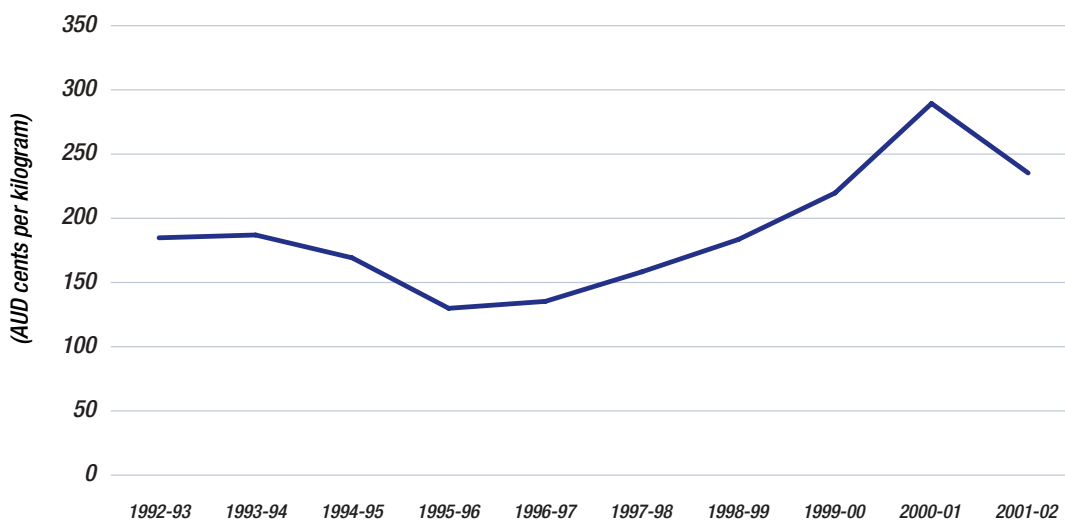
Pricing trends

Price for cattle and sheep are impacted by:

- livestock numbers (shortage or oversupply)
- seasonal conditions
- export demand and the Australian “clean and green”
- foreign exchange rates
- food safety.

Cattle

Australian cattle saleyard prices from 1992-93 to 2001-02



Source: ABARE, 2003.

Australian cattle saleyard prices from January 2002 to June 2003

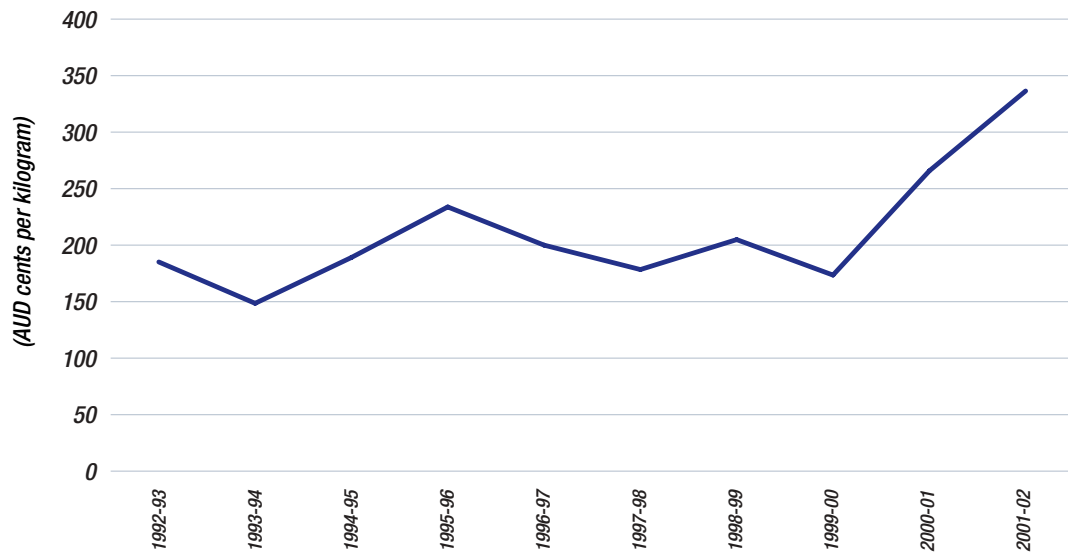


Source: ABARE, 2003.

Australian Agriculture Trends

Sheep

Australian lamb saleyard prices from 1992-93 to 2001-02



Source: ABARE, 2003.

Australian lamb saleyard prices from January 2002 to June 2003



Source: ABARE, 2003.

Wool

The wool industry contributes around 7% of Australia's gross value of agricultural production, and accounts for approximately 29% of the world's total wool production.

(Source: ABARE, 2003)

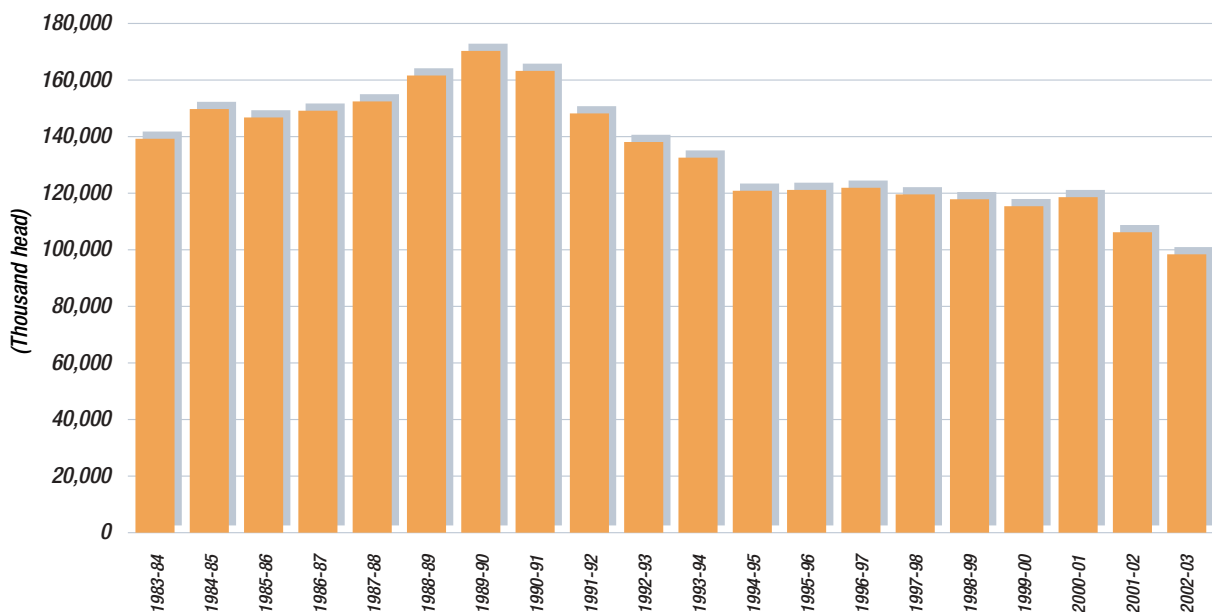
Domestic production

A variety of factors that have impacted wool production since 1990 include:

- end of the Reserve Price Scheme
- collapse of international wool prices
- statutory stockpile hanging over market
- relative attractiveness of alternative enterprises (cropping, beef)
- drought
- demand for sheep meat and live sheep.

The Australian Wool Production Forecasting Committee predicted that shorn wool production for 2002-03 was 490 million kilograms greasy, which is down 12% compared to 2001-02. The drought was extremely detrimental to the sheep population and wool production, reducing numbers and the subsequent quality of wool produced.

Australian sheep numbers from 1983-84 to 2002-03



Source: ABS and ABARE, 2003.

Australian Agriculture Trends

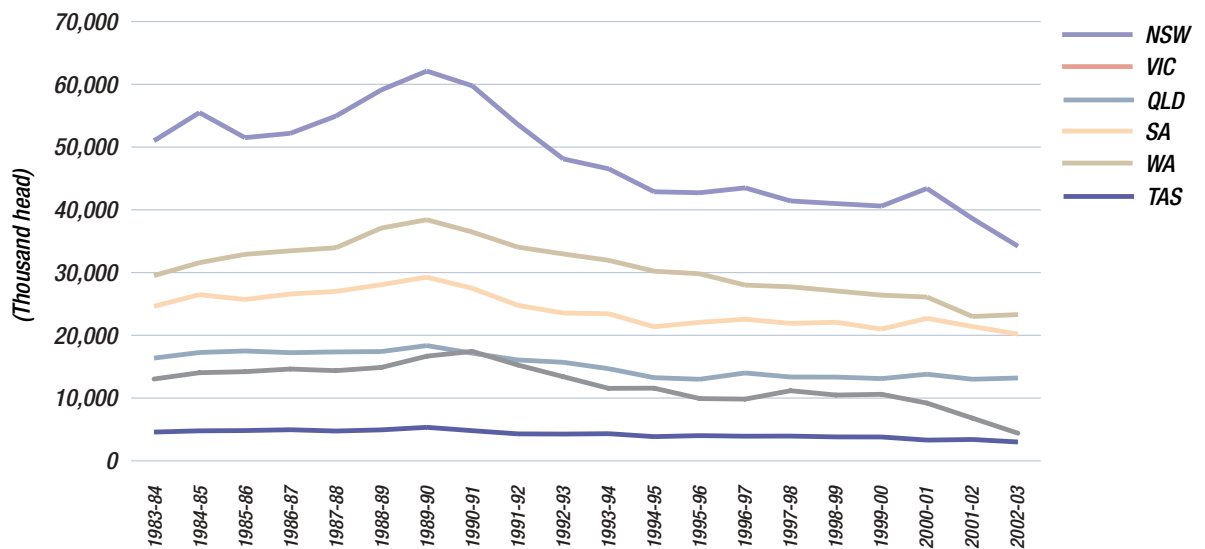
The forecast for opening sheep numbers for 2003-04 is 98.0 million head which is the lowest since the end of World War II.

(Source: Australian Wool Production Forecasting Committee, 2004).

Shorn wool production for 2003-04 is estimated to be 440 million kilograms greasy. Levels for wool production are not expected to improve as lambing percentages during the drought were significantly lower, leading to a reduced number of possible replacement stock.

The graph below shows the number of sheep by State.

Australian sheep numbers by State from 1984 to 2003



Source: ABS and ABARE, 2003.

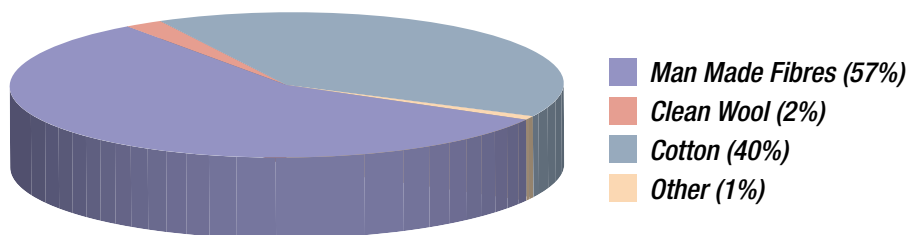
Global production

Low levels of wool production were not only an issue for the Australian wool industry as global wool production has fallen and is currently estimated to be 1.2 billion kilograms clean for the 2002-03 season. When compared to 1995-96, world wool production has declined 19%.

Whilst the world market for fibres has actually tripled over the last four decades, wool's share of the fibre market has declined significantly with synthetics accounting for most of the growth.

The impact of new technology for synthetic fibres such as nylon and polyester has improved economies of scale for those fibres and contracted the market share for natural fibres.

World production of various fibres

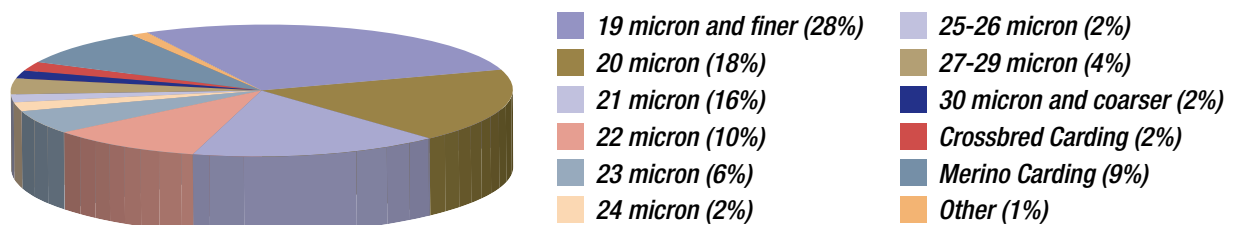


Source: The Woolmark Company, 2003.

Wool profile

The majority of Australian wool is Merino wool with a fibre diameter of between 19 and 24 microns. Over the last decade there has been a marked change in the profile of the wool clip. More specifically, there has been an increase in the proportion of fine wool as a result of higher fine wool prices relative to middle microns and on-farm fibre measurement assisting genetic gains. The increase in the proportion of 28 to 32 micron is due to higher numbers of crossbred sheep as a result of high sheep meat prices.

Composition and quantity of first hand greasy wool sold at auction during 2002-03

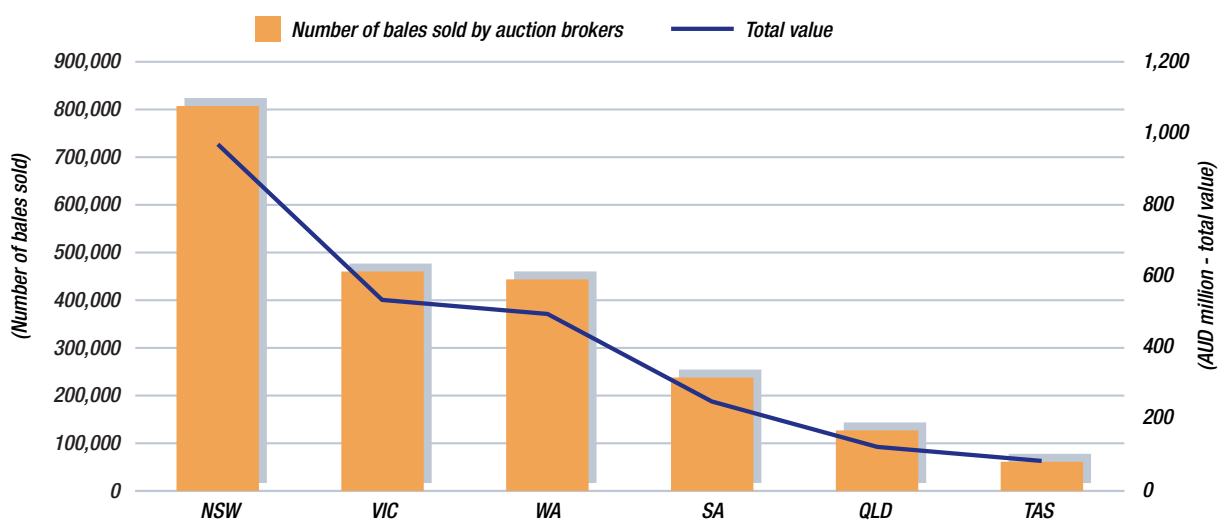


Source: Australian Wool Exchange, 2003.

Wool sold at auction

The graph below illustrates the number of wool bales sold at auction in each Australian State together with the total value of wool sold.

Wool bales sold at auction by State during 2002-03



Source: Australian Wool Exchange, 2003.

Pricing trends

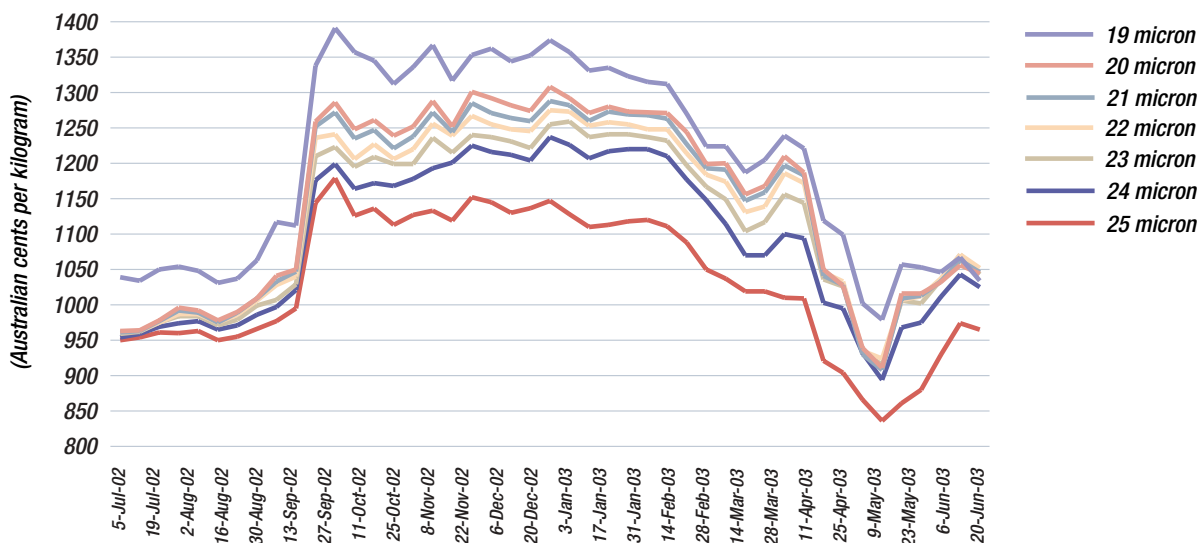
The competitive pressures of synthetic fibres, as well as other drivers, namely, production levels, have driven down the price for natural fibres.

The current strength in prices has been driven by the shortage of wool and pressure on early stage processors to keep plants operating. Wool prices are high in comparison to other fibres, and there is a divergence between strong greasy wool prices and prices for top and yarn.

2002-03 was a year for record price levels being achieved, especially for the medium to broad micron categories. These higher levels led to wool being less price competitive to other fibres such as cotton and synthetics, and fibre substitution occurred as many processors attempted to make the end product more affordable for consumers.

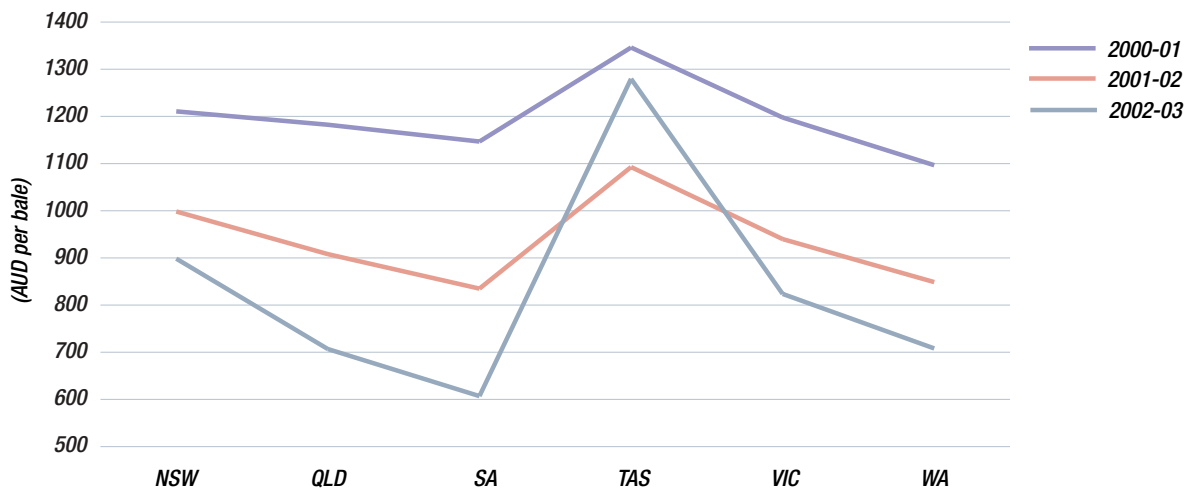
The following graph gives fortnightly closing quotations for northern and southern Australian Wool Exchange micron price guides.

Australian wool prices by micron during 2002-03



Source: Australian Wool Exchange, 2003.

Average price per wool bale sold at auction by State over the last three years

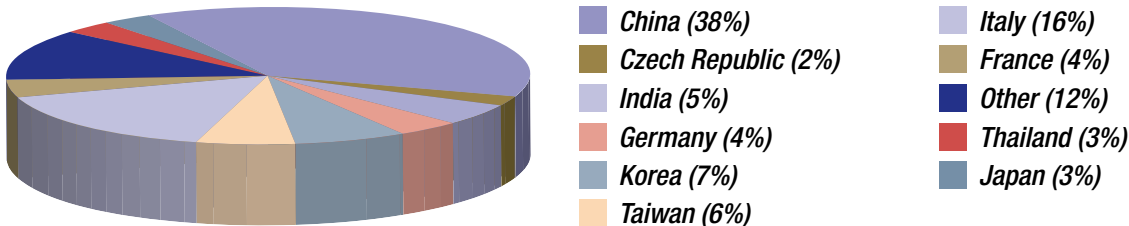


Source: Australian Wool Exchange, 2003.

Wool exports

Australia is the largest producer of raw wool. Australian wool exports are worth more than AUD3 billion each year. The chart below depicts the portion of Australian wool exported to various destinations during 2002-03.

Australian wool exports (tonnes) to various destinations during 2002-03



Source: Australian Wool Exchange, 2003.

The rising Australian dollar impacted the level of Australian wool exported during 2002-03, placing added pressure on struggling demand, especially for those countries which purchase in United States dollars.

Key market

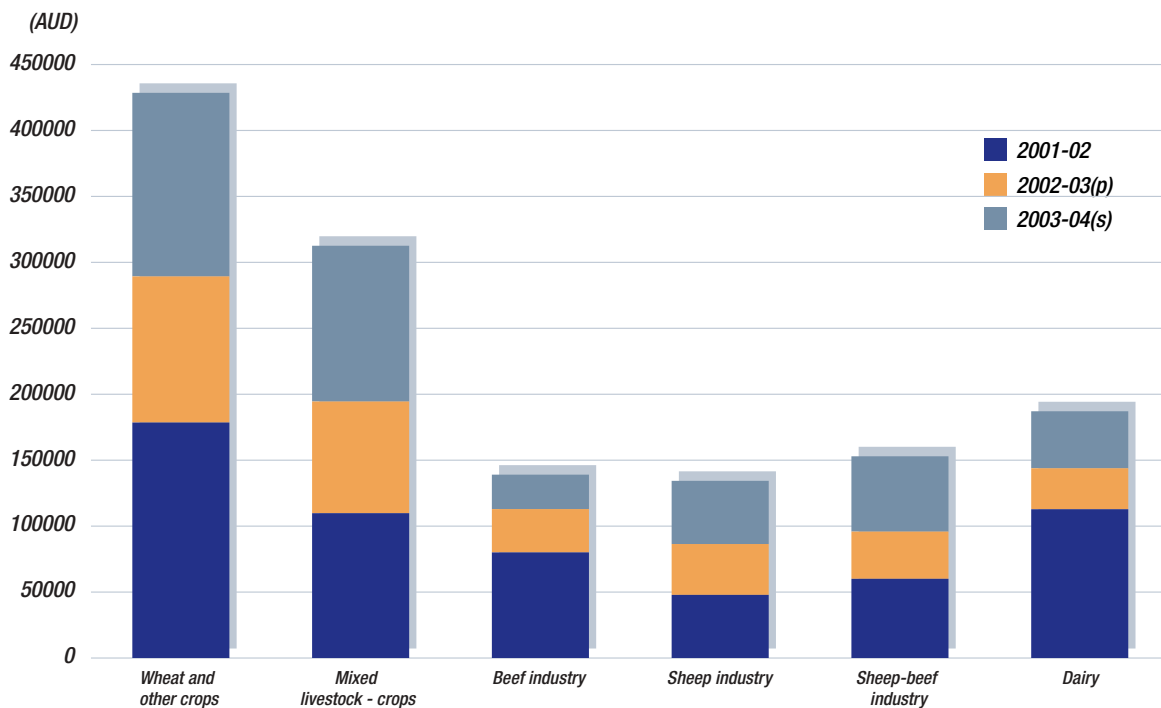
Traditionally Australia exported mostly medium and broad micron wool to China. However, now China purchases all wool types including superfine styles.

Farm performance

Farm cash income

Farm cash income is the calculation of total revenues received by the farmer business during the financial year less payments made for materials and services, as well as permanent and casual hired labour (excluding owner manager, partner and family labour).

Farm cash income for Australian farms over the last three years



(p) = estimate. (s) = forecast. Source: ABARE, 2004.

Environmental conditions

El Niño

The weather effect known as El Niño is a sustained warming of the central and eastern Pacific, which, together with changes to the atmosphere, causes drier conditions and drought within Australia.

El Niño is a natural part of the climate system, which has affected the Pacific Basin for thousands of years.

El Niño:

- occurs every four to seven years
- typically lasts for approximately 12 to 18 months
- mostly affects eastern Australia (does not affect WA – which accounts for 37% of all Australian wheat exports)
- is measured by the Southern Oscillation Index, changes in ocean temperature, and the impact on altered rainfall patterns.

Southern Oscillation Index

The Southern Oscillation Index (“SOI”) is calculated from the monthly or seasonal fluctuations in the air pressure difference between Tahiti and Darwin. Sustained negative values of the SOI are indicative of El Niño episodes.

Historically, trends indicate that reduced wheat crops can be linked to negative periods of the Southern Oscillation. There is a relationship between rural productivity, especially in Queensland and New South Wales, and changes to the behaviour of the Southern Oscillation.

(Source: Bureau of Meteorology, 2003)

Outlook

The current El Niño–Southern Oscillation status remains neutral. However, there remains a risk of an El Niño developing this year. The SOI has see-sawed dramatically in recent months in response to active and inactive phases of the Australian monsoon and fluctuations in the surface atmospheric pressure in the central Pacific.

- the overall state of the tropical Pacific climate remains neutral despite the SOI recording strong negative values during April
- sea-surface temperatures are mostly near average across the equatorial Pacific so far for April, although temperatures increased west of the dateline in the last half of April and decreased in the far east
- preliminary subsurface temperatures for April show an eastward propagation of warm anomalies in the western tropical Pacific, while negative anomalies have contracted to the east
- a westerly wind burst that caused the Trade Winds to weaken north of Australia earlier in the month has dissipated with easterly anomalies (that is, enhanced Trade Winds) now observed on and to the west of the dateline
- eight of eleven computer models predicting eastern Pacific conditions are in favour of neutral conditions by September 2004, and of the eight models that predict as far ahead as December, five indicate neutral conditions in the Pacific.

(Source: Bureau of Meteorology, 27 April 2004)