NFF Farm Facts: 2012
Introduction.

The Australian Year of the Farmer, 2012, is shaping up to be a positive year for Australian farmers. With improved seasonal conditions across much of the country, favourable commodity prices and a forecast that the value of farm exports is expected to rise some six percent, this is a good time to be an Australian farmer.

And the story of Australian agriculture reflects this. The growth in the farm sector over the past 20 years has consistently outperformed other sectors, and was a key reason Australia avoided a recession during the global financial crisis.

Agriculture has an enormous uptake of new technology, we have thousands of jobs available, we contribute $32 billion in export income to the economy and we produce the clean, healthy, fresh food that families enjoy.

The prospects for agriculture are huge, with the need to feed, clothe and house a booming world population. World population growth will continue to expand to over nine billion by 2050, driving demand for both quality and quantity of food and fibre, as well as the availability of arable land and water.

In just eight years time, it is predicted that half of the world’s population will be on Australia’s northern doorstep. Four billion people across Asia, enjoying economic growth of around 10 percent per year, represent unparalleled opportunities for Australia’s economy, especially its dynamic farm sector.

Expanding Asian societies need food and fibre like never before and, due to their growing affluence, are demanding produce of the highest quality: a domain where Australian farmers, because of our clean and natural production systems, have a clear competitive advantage. We are entering the Asian century - and we are well placed to capitalise on this. As the Prime Minister, the Hon. Julia Gillard, recently said in a video address to the NFF Members’ Council: “We have the potential for a new golden era of Australian agriculture, given the rise of Asia.”

The challenge for Australian agriculture and our farmers will, of course, be in meeting this booming world need for food and fibre through increasing production - at a time when we have less arable land, less water and less human resources.

This 2012 Farm Facts is designed to bring together the most up-to-date facts and figures about Australian farm activity and its important contribution to the nation, and the global marketplace. The information in Farm Facts comes from a range of respected sources, including the Organisation for Economic Cooperation and Development (OECD), the Australian Bureau of Statistics (ABS), the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and the Australian Farm Institute (AFI), among others.

We trust that you find this publication of use in understanding the Australian agricultural sector.

Jock Laurie, NFF President.
Farmers & Agriculture:
Agriculture in Australia.

Agriculture plays a vital role in Australia, contributing to our social, economic and environmental sustainability.

Social >
There are approximately 134,000 farm businesses in Australia, 99 percent of which are Australian owned. Each Australian farmer produces enough food to feed 600 people, 150 at home and 450 overseas. Australian farmers produce almost 93 per cent of Australia’s daily domestic food supply.

As of 2010-11, there were 307,000 people employed in agriculture. The complete agricultural supply chain, including the affiliated food and fibre industries, provide over 1.6 million jobs to the Australian economy.

Economic >
The agricultural sector, at farm-gate, contributes 3 percent to Australia’s total gross domestic product (GDP). The gross value of Australian farm production in 2009-10 was $48.7 billion.

Yet this is only part of the picture. When the vital value-adding processes that food and fibre go through once they leave the farm are added in, along with the value of all the economic activities supporting farm production through farm inputs, agriculture’s contribution to the GDP averages out at around 12 percent (or $155 billion).

Australian farmers export around 60 percent of what they grow and produce. Australia’s farm exports earned the country $32.5 billion in 2010-11, up from $32.1 billion in 2008-09, while the wider agriculture, fisheries and forestry sectors earn the country $36.2 billion in exports. The value of our farm exports, and indeed the future of Australian agriculture, depends largely on conditions in overseas markets, due to our high level of exports.

Australian farmers continue to face the challenge of declining terms of trade in agriculture, yet remain internationally competitive through efficiencies and productivity growth. The growth in the farm sector had increased steadily over the 30 year period from 1974-75 to 2003-04 at an average rate of 2.8 percent, consistently out-performing other sectors. In more recent times, agricultural productivity growth has slowed to 1 percent per annum, illustrating the need for an increased spend on research and development to ensure the industry can meet the food and fibre needs of the growing world population.

Environmental >
Australian farmers are environmental stewards, owning, managing and caring for 61 percent of Australia’s land mass. Farmers are at the frontline of delivering environmental outcomes on behalf of the Australian community, with 94 percent of Australian farmers actively undertaking natural resource management. The NFF was a founding partner of the Landcare movement.
Australian Farmers.

The median age of farmers in 2006 was 52 years, much higher than the median age of 40 years in all other occupations.

- Australian Bureau of Statistics, Australian Social Trends, March 2009, Catalogue No. 4102.0

Farmer population by age group:

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65+     30,000
60-64   20,000
55-59   10,000
50-54   5,000
45-49   3,000
40-44   2,000
35-39   1,000
30-34   500
25-29   200
20-24   100
15-19   50
```

Average age of Australian farmers:

- Australia 2020 Summit, The Future of Rural and Regional Australia, April 2008
Australian Farms.

Australian farms and their closely related sectors generate $155 billion-a-year in production - underpinning 12.1 percent of gross domestic product.


There are 134,148 farms in Australia – including those for whom farming is not their primary business. However, there are 120,112 farms solely dedicated to agricultural production:

<table>
<thead>
<tr>
<th>State</th>
<th>No. of farms</th>
<th>Percentage of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>38,554</td>
<td>32.1 percent</td>
</tr>
<tr>
<td>VIC</td>
<td>29,638</td>
<td>24.7 percent</td>
</tr>
<tr>
<td>QLD</td>
<td>24,726</td>
<td>20.6 percent</td>
</tr>
<tr>
<td>SA</td>
<td>12,464</td>
<td>10.4 percent</td>
</tr>
<tr>
<td>WA</td>
<td>10,889</td>
<td>9.1 percent</td>
</tr>
<tr>
<td>TAS</td>
<td>3,348</td>
<td>2.8 percent</td>
</tr>
<tr>
<td>NT</td>
<td>437</td>
<td>0.4 percent</td>
</tr>
<tr>
<td>ACT</td>
<td>56</td>
<td>0.04 percent</td>
</tr>
</tbody>
</table>

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No. 7121.0

99 percent of Australia’s agricultural businesses and 89 percent of agricultural land is Australian owned

- Australian Bureau of Statistics, Agricultural Land and Water Ownership, December 2010, Catalogue No. 7127.0

Size of Australian farms:

Australian Agriculture: Feeding Australia and the world.

Australian farmers produce enough food to feed 60 million people.


The average Australian farmer grows enough food to feed 600 people every year, 150 of these are Australians with the remaining 450 overseas.

- Keogh M, Australian Farm Institute, 2009, “Australia’s response to world food security concerns”, Address to the 1st NFF Annual Congress

Australian farmers produce almost 93 per cent of Australia’s daily domestic food supply and export 60 per cent (in volume) of total agricultural production.

- PMSEIC (2010). Australia and Food Security in a Changing World. The Prime Minister’s Science, Engineering and Innovation Council, Canberra, Australia

Domestic expenditure on food and liquor grew 6 percent in 2009-10, to around $125 billion.

- Department of Agriculture, Fisheries and Forestry, Australian Food Statistics 2009-10.

Australia’s farm exports earned the country $32.5 billion in 2010-11, up from $32.1 billion in 2008-09. This represents 11.9 percent of total exports and 12.7 percent of all Australian merchandise exports.


The wider agricultural, fisheries and forestry sectors accounted for $36.2 billion in export income in 2010-11.

- Department of Agriculture, Fisheries and Forestry, Snapshot of Agriculture, Fisheries & Forestry, Annual Report 2010-11

Australia’s major agricultural export markets are China (14 percent), Japan (13 percent), ASEAN (21 percent), other Asia (16 percent), European Union (8 percent), Middle East (8 percent), United States (7 percent) and other (17 percent).

- ABARES, Australian Commodities, December Quarter 2011.
Australian Agriculture: Exports.

In terms of export earnings for Australia, each of these top eight commodities make a massive contribution to the national economy - accounting for over 60 percent of the total $32.5 billion value of agricultural exports in 2010-11.

- Wheat $5,526 million
- Beef and veal $4,328 million
- Wool $2,376 million
- Wine $1,957 million
- Dairy (excl. cheese) $1,614 million
- Sugar $1,492 million
- Barley $1,295 million
- Lamb $1,026 million

- ABARES, Australian Commodity Statistics, 2011

Agricultural Exports:

- Department of Foreign Affairs and Trade, Trade at a Glance 2011
Australian Agriculture: State by State.

The gross value of Australian farm production (at farm-gate) totals $48.7 billion a year. The top three agricultural commodities produced nationally (ranked by gross $ value) are:

> Cattle and calves $7.3 billion  
> Wheat $4.8 billion  
> Whole Milk $3.4 billion

On a State by State basis, the top three agricultural commodities produced (ranked by gross $ value) are:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Value</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$1.5 billion</td>
<td>475,000 tonnes</td>
</tr>
<tr>
<td>Wheat</td>
<td>$1.2 billion</td>
<td>10,700,000 tonnes</td>
</tr>
<tr>
<td>Wool</td>
<td>$641 million</td>
<td>112.72 kilo tonnes</td>
</tr>
<tr>
<td>VIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>$2.0 billion</td>
<td>5.914 billion litres</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$1.3 billion</td>
<td>361,000 tonnes</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>$1.0 billion</td>
<td>N/A</td>
</tr>
<tr>
<td>QLD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$3.2 billion</td>
<td>1,002,000 tonnes</td>
</tr>
<tr>
<td>Sugar cane for crushing</td>
<td>$1.3 billion</td>
<td>29,330,000 tonnes</td>
</tr>
<tr>
<td>Fruit and nuts</td>
<td>$1.0 billion</td>
<td>N/A</td>
</tr>
<tr>
<td>SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>$839 million</td>
<td>6,060,000 tonnes</td>
</tr>
<tr>
<td>Vegetables</td>
<td>$480 million</td>
<td>N/A</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>$448 million</td>
<td>N/A</td>
</tr>
<tr>
<td>WA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>$1.8 billion</td>
<td>4,999,000 tonnes</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$537 million</td>
<td>111,000 tonnes</td>
</tr>
<tr>
<td>Sheep and lambs</td>
<td>$461 million</td>
<td>43,700 tonnes</td>
</tr>
<tr>
<td>TAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td>$233 million</td>
<td>722 million litres</td>
</tr>
<tr>
<td>Vegetables</td>
<td>$233 million</td>
<td>N/A</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$143 million</td>
<td>48,000 tonnes</td>
</tr>
<tr>
<td>NT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$285 million</td>
<td>21,000 tonnes</td>
</tr>
<tr>
<td>Fruit/nuts (excl. grapes)</td>
<td>$45 million</td>
<td>N/A</td>
</tr>
<tr>
<td>ACT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>$3.4 million</td>
<td>N/A</td>
</tr>
<tr>
<td>Cattle and calves</td>
<td>$2.3 million</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- Australian Bureau of Statistics, Value of Agricultural Commodities Produced, 2009-2010, Catalogue No. 7503.0
- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0
- ABARES, Australian Commodity Statistics, 2011
Australian Farmers: Employers.

As of 2010-11, there were 307,000 people employed in Australian agriculture, down from 325,000 in 2009-10.

Australian agriculture has important linkages with other sectors of the economy and, therefore, contributes to these follow-on industries.
- Department of Agriculture Fisheries and Forestry, Australian Food Statistics 2009-10.

The farm dependent economy - the agricultural sector plus the farm-output sector and farm input sector - employs 1.6 million people, or 17.2 percent of the labour force.
- Australia’s Farm Dependent Economy: Analysis of the role of Agriculture in the Australian Economy. Modelling undertaken by Econtech.

As of May 2011, 236,200 people were directly employed on-farm, full-time, in the Australian farm sector.

The number of people employed in direct farm jobs in each State and Territory are as follows:
> NSW: 63,400
> QLD: 56,300
> VIC: 51,000
> WA: 29,700
> SA: 23,800
> TAS: 8,800
> NT: 3,000
> ACT: 200

These numbers are rounded by the Department, so do not add up exactly with the total numbers above

Agriculture is a knowledge intensive sector, with a strong demand for skilled professionals. Estimates indicate a potential demand for 6000 tertiary qualified graduates per year in the sector. However, the sector faces a significant undersupply of graduates, with Australian universities graduating fewer than 800 graduates per year in agriculture.
- Australian Council of Deans of Agriculture, Pratley and Hay 2010, The job market in agriculture in Australia
Australian Farmers: Environmental stewards.

Farmers occupy and manage 61 percent of Australia’s landmass, as such, they are at the frontline in delivering environmental outcomes on behalf of the broader community.

- Australian Government Department of Agriculture, Fisheries and Forestry, At a Glance, 2010

Australian primary industries have led the nation in reducing greenhouse gas emissions – a massive 40 percent reduction between 1990-2006.

- Australian Government Department of Climate Change, National Inventory by Economic Sector 2006

Natural Resource Management (NRM) is a fundamental activity on Australian farms. In fact, 94 percent of Australian farms actively undertake natural resource management.


Of the 417.3 million hectares of land managed by agricultural businesses, 9.2 million hectares have been set aside specifically for conservation/ protection purposes by 36 percent of the land managers.

- Australian Bureau of Statistics, Year Book Australia 2009-10

In 2009-10, 65 percent of agricultural businesses reported native vegetation on their property, with 55 percent actively preserving native vegetation for conservation purposes.

- Australian Bureau of Statistics, Land Management and Farming in Australia, 2009-2010, Catalogue No. 4627.0

In 2009-10, 52 percent of agricultural businesses undertook activities to protect native vegetation, 45 percent wetland protection and 49 percent river or creek bank protection.

- Australian Bureau of Statistics, Year Book Australia 2009-10

Estimates suggest that the management of soil resources, water resources and biodiversity costs $3.5 billion annually, or 10 percent of agriculture’s GDP. For every government dollar invested, farmers are estimated to have invested $2.60 in NRM and environmental protection.

- OECD (2008), Environmental Performance of Agriculture in OECD Countries Since 1990: Australia Country Section

Environmental pressure from agricultural nutrients and pesticides are very low in Australia compared to most OECD countries.

- OECD (2008), Environmental Performance of Agriculture in OECD Countries Since 1990: Australia Country Section, Paris, France
Australian Farmers: Environmental stewards.

The consultation draft of Australia’s Biodiversity Conservation Strategy 2010-2020 has identified climate change, invasive species, loss/degradation of habitat, unsustainable use of natural resource, changes to the aquatic environment and inappropriate fire regimes as key threats; all of which will impact significantly on farmers and farming.

- Australian Bureau of Statistics, Year Book Australia 2009-10

The impact and control of weeds costs Australian agriculture more than $4 billion per year. Farmers consider weed control as one of their highest priorities in preventing long-term land degradation.

- Department of Agriculture, Fisheries and Forestry, At a glance 2010

The cost to agriculture from wild dogs, rabbits, foxes, pigs, pest birds and mice is estimated at approximately $745 million in 2009.

- Department of Agriculture, Fisheries and Forestry, At a glance 2010

During 2009-10, 19 million hectares of farmland nationally was prepared using zero-till methods.

- Australian Bureau of Statistics, Land Management and Farming in Australia, 2009-2010, Catalogue No. 4627.0

Some 70 percent of arable farmers have adopted both direct drilling and minimum tillage practices over the period 1974-75 to 2004-05.

- OECD (2008), Environmental Performance of Agriculture in OECD Countries Since 1990: Australia Country Section

Of the 399 million hectares of agricultural land in Australia in 2008-09, less than one percent was irrigated.

- Australian Bureau of Statistics, Water Use on Australian Farms 2009-10, Catalogue No.4618

Australia’s total agricultural water use in 2009-10 rose one percent from 2008-2009, to 7,359 gigalitres, largely driven by improved water availability over the previous few years.

- Australian Bureau of Statistics, Water Use on Australian Farms 2009-10, Catalogue No.4618

Australian agricultural businesses spent $1.4 billion on irrigation related expenditure in 2008-09.

- Australian Bureau of Statistics, Water Use on Australian Farms 2008-09, Catalogue No.4618
Australian Farmers: Animal carers.

The animal welfare system in Australia aims to ensure all animals receive a standard level of care and treatment. The level of care requires that all animals be provided with adequate housing or habitat, handling, sanitation, nutrition, water, veterinary care, and protection from extreme weather conditions and other forms of natural disasters.


The animal industries, the animal welfare bodies, the veterinary profession and the research community are all engaged in the development of animal welfare policy and legislation.


Australia’s State and Territory governments have primary responsibility for animal welfare and laws to prevent cruelty. The Australian Government is responsible for trade and international agreements relating to animal welfare.


The Australian Animal Welfare Strategy (AAWS) is an agreed blueprint for animal welfare in Australia that aims to enhance welfare outcomes for all animals. It has been developed with extensive stakeholder consultation and has been endorsed by the Primary Industries Ministerial Council. The Federal Government has allocated $6 million towards AAWS.


Industry bodies, like the NFF, and animal welfare bodies, like the RSPCA, are among the participants in AAWS, sitting on both the AAWS Advisory Committee and the Livestock and Production Animals Committee.

- Australian Animal Welfare Strategy, Strategy and Implementation Plan 2010-14

Livestock production and related industries have initiated a number of arrangements aimed at ensuring the humane treatment of animals. Industry has assumed an increased responsibility for managing a continuous improvement process.


The principle responsibility for good animal welfare in the livestock production sector rests with the primary carer for the animals. This is not a formal arrangement, however the vast majority of people in this position of responsibility accept this fact. Good animal management means good animal welfare and better economic outcomes from livestock production.


Animal welfare is regarded by the industry as an outcome from sound animal management and handling practices, and has not usually been treated as a discrete discipline in its own right. Each sector has responded to the fundamental need for animals to be treated humanely and all have implemented initiatives to assist in achieving this outcome.

Australian Farmers: Research, development and technology.

Australian farming is world-leading and ultra-competitive. In fact, despite a 50 percent fall in agricultural terms of trade since 1960, Australian farmers have tripled their production, as well as quadrupled the real gross value of their produce (from $10,557 million in 1960-61, to $48,330 million in 2009-10).

- ABARES, Australian Commodity Statistics, 2011

In 2008-09 Australian farmers invested $244 million-a-year in research and development through the Rural Research and Development Corporations (RDCs). This is over and above the $218 million co-contribution made through the Federal Department of Agriculture, Fisheries and Forestry.

- DAFF June 2010, Submission to the Productivity Commission inquiry into the Australian Government Rural Research and Development Corporations Model

It is estimated that $1.5 billion-a-year is spent on agricultural related research in Australia by Government and private investors. The total investment made by through the Rural RDCs is approximately $470 million-a-year.

- Council of Rural Research and Development Corporations June 2010, Submission to the Productivity Commission Inquiry, Research and Development Corporations Model

Innovation is a vital to the growth, profitability and sustainability of Australia's rural industries. Agencies investing and working on rural R&D are spread across Commonwealth and State/Territory Governments, and include the 16 Rural RDCs, Co-operative Research Centres (CRCs), Universities funded through the Australian Research Council, and the CSIRO.


Productivity growth in Australian agriculture has been strong relative to other sectors of the economy and comparable to other OECD countries. Broadacre and dairy industries, accounting for 65 percent of agricultural gross value of production, have achieved long-term productivity growth of 1.4 percent and 0.8 percent respectively per year for the period 1977-78 to 2007-08.

- Department of Agriculture, Fisheries and Forestry, At a glance 2010
Australian Farmers: Research, development and technology.

Efficiency gains through new technologies and farm management practices, achieved on the back of research and development, have enabled Australian agriculture to stay a step ahead of our international competitors – returning average productivity growth of 2.8 percent-a-year over the 30-year period from 1974-75 to 2003-04.

Key to this productivity growth has been advances in knowledge and technology, improved use of available technologies and management practices, and structural changes that have seen increased farm size and shifts in enterprise mixes.

- Australian Government Productivity Commission, Trends in Australian Agriculture 2005

However: productivity growth in Australian agriculture has slowed over the past decade, most notably in the broadacre cropping and dairy industries. For example, broadacre productivity growth has averaged - 1 percent a year since 2000-01.

It is likely that a variety of factors are behind this decline, with major influences likely to include extended drought conditions and a long-term reduction in public investment in research and development.

- Department of Agriculture, Fisheries and Forestry, At a glance 2010

Total factor productivity in Australian broadacre grew at an average of 1.4 percent annually between 1977-78 and 2007-08. In the period 1977-78 to 2000-01, productivity grew at 2 percent a year in trend terms, but has since reversed to contract at 1 percent a year in trend terms. Productivity growth in the dairy industry has similarly proceeded more slowly after 2000-01.

Australian Farmers: Self-reliant.

Despite common misconceptions, Government support for Australian farms represents just four percent of farming income. By comparison, according to the Organisation for Economic Cooperation and Development (OECD), in Norway it is 61 percent, Korea 52 percent, European Union 23 percent, Canada 17 percent, and United States 9 percent.

In fact, Australian farmers are among the most self-sufficient in the world.


Producer Support Estimates as a percentage of gross farm receipts, 2007-09 average:

- OECD, Agricultural Policies in OECD Countries: At a Glance 2010.
Commodities:
Australian Beef.

There are 43,763 farms in Australia producing beef cattle, with a national herd of 26.6 million head. The breakdown by State and Territory is as follows:

- QLD: 11.4 million cattle
- VIC: 3.7 million cattle
- NT: 2.1 million cattle
- TAS: 0.6 million cattle
- NSW: 5.5 million cattle
- WA: 2.3 million cattle
- SA: 1 million cattle

-Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

In total, Australian beef cattle farmers produce 2.1 million tonnes of beef and veal each year.

- ABARES, Australian Commodity Statistics, 2011

The Australian beef industry (including live cattle) contributes 17 percent to total Australian farm exports.


The beef industry accounts for 50 percent of all farms with agricultural activity.


Between 2010 and 2015 adult cattle processing is forecast to rise 13 percent to 9.5 million. Production is projected to reach 2.4 million tonnes by 2015.

- Meat & Livestock Australia, Industry Projections, Mid-year update, June 2010

Assuming better returns (largely from export beef markets) and average seasonal conditions, the Australian cattle herd is expected to increase to 29.7 million head by 2015, 11.9 percent higher than the recent low point in 2010.

- Meat & Livestock Australia, Industry Projections, Mid-year update, 2011

The gross value of Australian cattle and calf production in 2009-10 was $7.27 billion. Across each State and Territory the breakdown sees the following gross value ($M):

- QLD: $3,229
- VIC: $1,276
- NT: $285
- TAS: $143
- NSW: $1,488
- WA: $537
- SA: $308
- ACT: $2.3

-Australian Bureau of Statistics, Value of Agricultural Commodities Produced, 2009-2010, Catalogue No. 7503.0
Australian Beef: At home and abroad.

Australians eat an average 33kg of beef and veal per person, per year. This has remained relatively constant for the last 15 years.


Historically, beef and veal consumption peaked at 70kg per person in 1976-77 – coinciding with record production level and low prices.


Total consumption of beef in Australia is projected to rise 4 percent over the next 5 years.


Over the last recorded 12 months, Australians spent $6.7 billion on beef. In terms of volume, beef is the second most popular fresh meat consumed through the food service industry after chicken.


The consumption of beef accounts for 24.7 percent of world meat consumption.


Australia exported 937,301 tonnes of beef and veal in 2010-11, worth $4.5 billion. The major export markets for beef and veal are Japan (37 percent), the United States (17 percent) and Korea (15 percent).


Australian live cattle exports are worth $660 million in 2010-11 – predominantly exported to Indonesia (57 percent), Turkey (13 percent) and Israel (7 percent)


Australia is a small producer of beef, but is the second largest beef exporter behind Brazil.

Australian Cotton.

There are 361 cotton farms in Australia. Of these, 150 are in NSW and 211 are in QLD.
- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

The average Australian cotton farm is medium-sized, family-owned and operated farming operation, with 362 hectares of cotton and creates jobs for eight people.

The value of Australian raw cotton exports in 2009-10 was $755 million, due to drought. In 2010-11, with improved seasonal conditions for cotton growers, this figure equalled $1,369 million.
- ABARES, Australian Commodity Statistics, 2010

The gross value of Australian cotton production (both lint and seed) in 2009-10 was $876.1 million. In 2010-11 this had jumped to $2.5881 billion.

The Australia cotton harvest for 2010-11 is expected to produce a record crop of more than 3.5 million bales of cotton from 420,000 hectares of land.
- 2010-2011 Australian Cotton Production Forecast, Cotton Australia, September 2010.

The last time the Australian Cotton industry grew a crop in excess of 3.5 million bales was from an area of more than 540,000 hectares. Efficiency gains means cotton growers can now produce the same cotton on 420,000 hectares.
- Cotton Australia 2010

The Australian Cotton industry is gearing up for a record breaking crop with more than 583,000 hectares expected to be planted with cotton for the 2011-12 season, making it the largest cotton crop ever planted in this country.
- Cotton Australia 2011

In a normal year, Australia's cotton growers produce enough cotton to clothe 500 million people.
Australian Cotton: Technology & the environment.

Over the last 10 years, the Australian cotton industry has reduced pesticide use by over 90 percent, through a combination of biotechnology and Integrated Pest Management practices.

- Cotton Australia, Fact Sheets 2008

Australian cotton growers have doubled their water efficiency during the last 10 years, through a combination of better water monitoring and irrigation scheduling, evaporation control and improved irrigation practices. The industry target is to double water efficiency again within the next five years.

- Cotton Australia 2010

Cotton uses less water than dairy farming, livestock production and most horticultural operations.

- Cotton Australia 2011

Internationally, Australian cotton growers are three times more water efficient than the global average.

- Cotton Australia 2010

In 2008-09, Australia recorded cotton lint yields of 1.857 tonnes per hectare. This is approximately two and a half times the global average.

- ABARES, Australian Commodity Statistics, 2010
There are 8,594 dairy farms in Australia, with a national dairy herd of 1.6 million cows. The breakdown by State and Territory is as follows:

> VIC: 5,295 farms, herd of 997,000 cattle
> QLD: 764 farms, herd of 91,000 cattle
> SA: 286 farms, herd of 86,000 cattle
> NSW: 1,425 farms, herd of 198,000 cattle
> TAS: 459 farms, herd of 118,000 cattle
> WA: 183 farms, herd of 64,000 cattle


Australian dairy farmers produce 9,102 million litres of whole milk per year with the farmgate value of milk production being $4 billion.


Milk production for the 2009/10 year by State is as follows.

> VIC: 5.914 billion litres
> QLD: 487 million litres
> SA: 572 million litres
> NSW: 1.044 billion litres
> TAS: 722 million litres
> WA: 362 million litres


Dairy farming employs 27,500 people throughout Australia. The level of employment per State and Territory follows.

> VIC: 15,750
> QLD: 2,250
> SA: 2,250
> NSW: 4,500
> TAS: 1,000
> WA: 1,000

- Department of Agriculture, Fisheries and Forestry, Australian Food Statistics 2009-10.

In terms of the utilisation of Australian milk in 2008-09, the share of volume produced is as follows: Cheese (34 percent), Skim milk, Powder, Butter (24 percent), Milk (25 percent), Whole milk powder (11 percent), Casein/butter (3 percent) and Other (3 percent).

- Dairy Australia, Australian Dairy Industry In Focus 2010.

Australians eat an average of 12.9 kg of cheese, 7.1 kg of yoghurt and 102.4 litres of market milk per person, per year.

- Dairy Australia, Australian Dairy Industry In Focus 2010.

The average herd size in Australia is 220 cows, with an average annual milk production of 5,445 litres per cow.

- Dairy Australia, Australian Dairy Industry In Focus 2010.
Australian Dairy: Abroad.

Australia exports around 45 percent of its annual milk production.

- Dairy Australia, Australian Dairy Industry In Focus 2010.

Dairy is the third largest agricultural industry in Australia, worth $2.4 billion in exports, comprised of the following:

> Cheese: $713m
> Skim milk powder: $352m
> Butter: $210m
> Wholemilk powder: $422m
> Milk: $70m
> Other dairy products: $625m

- Dairy Australia, Australian Dairy Industry In Focus 2010.

The Top 10 Australian export destinations for dairy products are as follows:

> Japan: $459m, 19 percent
> China: $229m, 10 percent
> Singapore: $204m, 9 percent
> Indonesia: $148m, 6 percent
> Malaysia: $124m, 5 percent
> New Zealand: $108m, 5 percent
> Philippines: $103m, 4 percent
> Thailand: $96m, 4 percent
> South Korea: $92m, 4 percent
> Saudi Arabia: $86m, 4 percent

- Dairy Australia, Australian Dairy Industry In Focus 2010.

Australia accounts for 10 percent of the world trade in dairy products, behind New Zealand (35 percent) and the European Union (32 percent).

- Dairy Australia, Australian Dairy Industry In Focus 2010.
Australian Dried Fruits.

Australian dried fruit growers are predominantly dotted along the Murray River in the Sunraysia Region (around Mildura) and Swan Valley Region (around Swan Hill) in VIC and NSW, and the Riverland Region (around Waikerie and Renmark) in SA, with a relatively small group in the Bindoon Region of WA.


The total number of dried grape growers in Australia, by state is:

<table>
<thead>
<tr>
<th>State</th>
<th>Growers</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIC</td>
<td>480</td>
</tr>
<tr>
<td>NSW</td>
<td>80</td>
</tr>
<tr>
<td>WA</td>
<td>20</td>
</tr>
<tr>
<td>SA</td>
<td>20</td>
</tr>
</tbody>
</table>


98 percent of Australia’s dried fruit is produced in the Mildura Region of VIC and NSW. Its success is attributable to the dry climate, soil type and irrigation systems in the region.

- Mildura Region Economic Profile, June 2010.

As at 2004-05, Australia produced around 30,000 tonnes of dried fruit per year, with annual production valued at $88 million. This made Australia the seventh largest producer of dried fruits – behind Turkey (250,000 tonnes), the United States (190,000), Iran (120,000), India (56,000), Afghanistan (45,000), Chile (45,000) and South Africa (37,000).


The drought had a significant effect on dried grape production. As of 2006, the total Australian dried grape production volume equalled 18,481 tonnes, split among the following dried grape varieties:

<table>
<thead>
<tr>
<th>Variety</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sultanas</td>
<td>13,124</td>
</tr>
<tr>
<td>Sunmuscats</td>
<td>1,794</td>
</tr>
<tr>
<td>Natural Sultanas</td>
<td>722</td>
</tr>
<tr>
<td>Currants</td>
<td>1,794</td>
</tr>
<tr>
<td>Raisins</td>
<td>909</td>
</tr>
<tr>
<td>Others</td>
<td>143</td>
</tr>
</tbody>
</table>


As of 2010-11, total Australian dried fruit exports totalled 1,800 tonnes and was valued at $17 million. This is considerably lower than the value of dried fruit exported in 1996-97 totalling $62 million.

- Department of Agriculture, Fisheries and Forestry, Australian Food Statistics 2004.

On average, each Australian eats 2.75kg of dried fruit per year.

- Department of Agriculture, Fisheries and Forestry, Australian Food Statistics 2009-10.
Australian Grains.

In Australia, 40,281,000 tonnes of coarse grain were produced in 2010-11 (cereal crops primarily including barley, grain sorghum, maize, oats, triticale and wheat), covering 19,283,000 hectares of land.

The total production and area planted of each crop, nationally and on a State-by-State basis is listed below.

<table>
<thead>
<tr>
<th>Cereal For Grain</th>
<th>NSW</th>
<th>VIC</th>
<th>QLD</th>
<th>SA</th>
<th>WA</th>
<th>TAS</th>
<th>AUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>2,249</td>
<td>1,954</td>
<td>158</td>
<td>2,158</td>
<td>1,589</td>
<td>33</td>
<td>8,145</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>886</td>
<td>806</td>
<td>105</td>
<td>808</td>
<td>1,124</td>
<td>10</td>
<td>3,740</td>
</tr>
<tr>
<td>Grain Sorghum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>823</td>
<td>1</td>
<td>1,245</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>2,068</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>213</td>
<td>1</td>
<td>459</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>674</td>
</tr>
<tr>
<td>Maize</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>202</td>
<td>6</td>
<td>139</td>
<td>-</td>
<td>4</td>
<td>-</td>
<td>351</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>24</td>
<td>1</td>
<td>35</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>61</td>
</tr>
<tr>
<td>Oats</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>477</td>
<td>237</td>
<td>8</td>
<td>125</td>
<td>286</td>
<td>7</td>
<td>1,141</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>322</td>
<td>169</td>
<td>13</td>
<td>67</td>
<td>258</td>
<td>3</td>
<td>833</td>
</tr>
<tr>
<td>Triticale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>300</td>
<td>200</td>
<td>3</td>
<td>150</td>
<td>25</td>
<td>7</td>
<td>685</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>113</td>
<td>93</td>
<td>1</td>
<td>92</td>
<td>29</td>
<td>2</td>
<td>330</td>
</tr>
<tr>
<td>Wheat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production ('000 t)</td>
<td>10,700</td>
<td>4,493</td>
<td>1,605</td>
<td>6,060</td>
<td>4,999</td>
<td>27</td>
<td>27,891</td>
</tr>
<tr>
<td>Area ('000ha)</td>
<td>3,823</td>
<td>1,821</td>
<td>937</td>
<td>2,357</td>
<td>4,698</td>
<td>9</td>
<td>13,645</td>
</tr>
</tbody>
</table>

Production of the major winter grains in 2011 is estimated at over 27 million tonnes for wheat, 2.4 million tonnes for barley and 2.4 million tonnes for canola.

Australian Grains.

The total gross value for all grains and oilseeds in Australia in 2009-10 is approximately $9 billion-a-year. The gross values of cereals (selected) for grain per crop nationally and across the States/Territories are listed below:

<table>
<thead>
<tr>
<th>Cereal Grain</th>
<th>NSW $m</th>
<th>VIC $m</th>
<th>QLD $m</th>
<th>SA $m</th>
<th>WA $m</th>
<th>TAS $m</th>
<th>ACT $m</th>
<th>AUS $m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barley</td>
<td>330.0</td>
<td>332.5</td>
<td>24.1</td>
<td>313.7</td>
<td>447.9</td>
<td>8.0</td>
<td>-</td>
<td>1,356.1</td>
</tr>
<tr>
<td>Sorghum</td>
<td>123.7</td>
<td>-</td>
<td>171.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>295.7</td>
</tr>
<tr>
<td>Oats</td>
<td>40.8</td>
<td>57.2</td>
<td>1.3</td>
<td>15.7</td>
<td>69.5</td>
<td>1.2</td>
<td>-</td>
<td>185.6</td>
</tr>
<tr>
<td>Rice</td>
<td>88.9</td>
<td>0.1</td>
<td>0.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>89.9</td>
</tr>
<tr>
<td>Wheat</td>
<td>1,154.7</td>
<td>648.2</td>
<td>301.1</td>
<td>839.3</td>
<td>1815.3</td>
<td>6.8</td>
<td>0.1</td>
<td>4,765.4</td>
</tr>
<tr>
<td>Other</td>
<td>43.3</td>
<td>17.1</td>
<td>25.2</td>
<td>13.8</td>
<td>13.2</td>
<td>0.7</td>
<td>-</td>
<td>113.2</td>
</tr>
</tbody>
</table>


Globally, 1,100 million tonnes of coarse grain were produced in 2010-11, covering over 306 million hectares of land.
- ABARES, Australian Commodity Statistics 2011.

Australia’s annual export volume of coarse grains in 2010-11 was 5,337,000 tonnes, with an export value of $1.493 billion.
- ABARES, Australian Commodity Statistics 2011.

Australia exported 4,625,000 tonnes of barley in 2010-11, worth $1.295 billion. Exports of sorghum for the same period were valued at $146 million, and totalled 553,000 tonnes.
- ABARES, Australian Commodity Statistics 2011.
Australian Rice.

Traditionally, Australian farmers produced around 1.2 million tonnes of rice each year. Over the past few years, production levels have severely plummeted due to drought and water restrictions.


The 2008 rice crop of 19,400 tonnes was the lowest in the Australian rice sector’s history (since 1928), representing just over 1 percent of normal production. This is not surprising given rice is an opportunistic crop in its fifth year of drought.

- SunRice 2008.

In 2009-10 the area sown to rice grew by almost tenfold, from 7,000 hectares in 2008-09 to 75,000 hectares.

- ABARES, Australian Commodities, 2011.

In 2010, there were 197 farms growing rice.


By 2010-11, the rice harvest had more than tripled to 726,000 tonnes, the largest crop in four years with yields of 9.7 tonnes per hectare.

- ABARES, Australian Commodities, 2011

In 2010-11, 65,000 tonnes of rice were exported, with a total export value of $61 million.

- ABARES, Australian Commodity Statistics 2011.

Rice is the main source of nutrition for more than half the world’s population and, in a normal production year, Australian rice provides the staple diet of around 40 million people every day.

- Ricegrowers’ Association of Australia, Our Australian Rice Facts 2005.

Annual world production totals 600 million tonnes with only 25 million tonnes traded outside the country of origin. Australian rice growers are the most efficient in the world, operating with zero production or export subsidies.

- Ricegrowers’ Association of Australia, Our Australian Rice Facts 2005.
**Australian Rice: Water use efficiencies**

Over the last 10 years, Australian rice growers have improved their water use efficiency by 60 percent.


Australian rice growers use up to five times less water to produce a kilo of rice than overseas growers.

- *International Rice Research Institute, Manila, Philippines, 2004.*

Australian rice growers surpassed the international average production of 5.4 tonnes per hectare 45 years ago. The Australian rice industry averages 8.6 tonnes per hectare – although drought has severely impact on recent yields.

- *Australian Bureau of Statistics, Agricultural Commodities, 2008-2009, Catalogue No. 7121.0*

In Australia, chemical usage on rice is the lowest in the developed world due to a unique rotation system that uses natural biological controls.

- *Ricegrowers' Association of Australia, Our Australian Rice Facts 2005.*

Direct investment into research and development helps maintain Australia's competitive advantage in areas such as irrigation, crop breeding, crop protection and product development.

- *Ricegrowers' Association of Australia, Our Australian Rice Facts 2005.*

The rice industry is the first Australian agricultural industry to initiate a regional biodiversity plan and a greenhouse reduction strategy.

- *Ricegrowers' Association of Australia, Our Australian Rice Facts 2005.*
As at 30 June 2010, there were 10,705 specialised sheep farms in Australia. The breakdown by State and Territory is as follows:

- NSW: 4,144
- SA: 1,559
- TAS: 471
- ACT: 15
- VIC: 3,338
- WA: 959
- QLD: 249
- Nationally: 10,705

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

As at 30 June 2010, Australia had an estimated national flock of 68,085,000 sheep and lambs.

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

In 2010, Australia produced 574,310 tonnes (carcase weight) of sheep meat, made up from 412,536 tonnes of lamb and 161,774 tonnes of mutton.


In 2009-10, the annual gross production value of Australian sheep and lambs (excluding the value of wool on skins but including live exports) is $2.627 billion. The gross value ($M) on a State and Territory basis is:

- NSW: $584.3
- SA: $448.4
- TAS: $41.1
- ACT: $1.7
- VIC: $1045.6
- WA: $460.9
- QLD: $45.1

- Australian Bureau of Statistics, Value of Agricultural Commodities Produced, 2009-2010, Catalogue No. 7503.0

In 2010, Australians, on average, ate 11.2 kg of mutton and lamb per person.

Australian Sheepmeat: At home and abroad.

The consumption of sheep meats accounts for 4.6 percent of world meat consumption.

Australian sheep meat production in 2010 accounted for approximately 8 percent of world production.

In 2009, Australian lamb exports totalled 160,000 tonnes (shipped weight), and mutton exports totalled 107,000 tonnes.
- ABARES, Australian Commodity Statistics 2011.

The principal markets for Australian lamb exports are the United States (33,600 tonnes), China (18,300 tonnes) and the United Arab Emirates (12,500 tonnes).
- ABARES, Australian Commodity Statistics 2011.

The main markets for Australian mutton exports are China (12,200 tonnes), Saudi Arabia (12,100 tonnes) and the United States (8,900 tonnes).
- ABARES, Australian Commodity Statistics 2011.

The main markets for Australian live sheep exports are Kuwait (1,076,000 sheep), Bahrain (499,000 sheep) and Qatar (321,000 sheep).
- ABARES, Australian Commodity Statistics 2011.

In 2010-11, the gross value of Australian exports of sheep meat and live sheep was approximately $1.794 billion.
- ABARES, Australian Commodity Statistics 2011.

In 2011, approximately 50 percent of the sheep meat Australia produced was exported, with the remaining used for domestic consumption.
- ABARES, Australian Commodity Statistics 2011.

Domestic expenditure on lamb and mutton in 2010 totalled around $2.3 billion.
Australian Sugar.

Australian sugar is predominately grown in QLD, with this state accounting for 90 percent of Australia’s production. The remaining 10 percent is grown in NSW. There are 3,359 sugar farms in QLD and 374 in NSW.

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

In 2009-10, the national production of sugar cane for crushing reached 31,235 million tonnes. QLD produced 29,330,000 tonnes, and NSW 1,905,000 tonnes.

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

The area planted in Australia to sugar cane for crushing in 2009-10 was 389,000 hectares. 370,000 hectares were planted in QLD, 19,000 hectares in NSW.

- Australian Bureau of Statistics, Agricultural Commodities 2009-2010, Catalogue No.7121.0

The sugar industry directly employs some 22,000 people and about 110,000 in ‘upstream’ and ‘downstream’ economic sectors dependent on the industry.


The gross value of Australia’s sugar cane for crushing in 2009-10 equated to $1.38 billion.

- Australian Bureau of Statistics, Value of Agricultural Commodities Produced, 2009-2010, Catalogue No. 7503.0

Australia’s processed sugar production is expected to be around 4.4 million tonnes in 2010-11.

- CANEGROWERS Australia 2010.

The world’s principal sugar exporters in 2008-09 were Brazil, the European Union, Thailand, the United States and Australia.


In 2010-11, Australian sugar exports were worth $2,366 billion. The major markets for raw sugar in bulk (by volume) are:

> The Republic of Korea: 713,100 tonnes
> Indonesia: 578,000 tonnes
> Malaysia: 341,000 tonnes
> Japan: 316,000 tonnes
> New Zealand: 156,000 tonnes

Australian Wool.

The total wool produced in Australia is 368,330 tonnes (greasy). The breakdown by State and Territory follows:

- NSW: 112,720 tonnes
- VIC: 103,910 tonnes
- WA: 79,070 tonnes
- SA: 53,810 tonnes
- TAS: 10,620 tonnes
- QLD: 8,210 tonnes

- ABARES, Australian Commodity Statistic, 2011.

The gross value of Australian wool (includes value of dead wool and wool on skins) is $1.9 billion. The gross value per State and Territory ($M) is:

- NSW: $641.1
- VIC: $435.1
- WA: $415.4
- SA: $284.0
- TAS: $64.6
- QLD: $87.2
- ACT: $0.1

- Australian Bureau of Statistics, Value of Agricultural Commodities Produced, 2009-2010, Catalogue No. 7503.0

Wool production for 2011-12 is forecast to increase by 3 percent, to 355 million kilograms (greasy) from the estimated 2010-11 production period.

- Australian Wool Innovation Limited, Australian Wool Production Forecast Report, August 2011

In 2010-11, the value of Australian wool exports was $3.047 billion. The major markets for Australian wool (by value) are China ($2.235 billion), India ($209 million) and Italy ($178 million).


The demand for wool has been adversely affected by the global financial downturn over recent years, although improved economic conditions and a lack of stocks within the wool pipeline have seen the market indicator remain steady during 2010. With the vast majority of Australian wool exported, the strength of the Australian dollar against the US currency has continued to impact on grower’s returns.

Lower sheep numbers, drought and high meat prices have constrained production. Improved seasonal conditions in the east of Australia are likely to increase production as wool cut per sheep increases and flock numbers rise; however, this has been offset by continuing poor seasonal conditions in the wool growing regions of Western Australia.
