



**Australian Government**  
**Department of Agriculture,  
Fisheries and Forestry**

## **Australian Agriculture, Fisheries and Forestry**

AT A GLANCE | **2007**

with data to 2005-06



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**Welcome to Agriculture, Fisheries and Forestry**

> AT A GLANCE 2007

Against the backdrop of severe and ongoing drought, it is essential that our farmers continue to explore innovative ways of maintaining their competitive edge.

Australian agriculture helps sustain the nation by providing high quality food, and produce. It is important that we maintain our capacity to keep our rural industries and communities strong to contribute to greater national wealth.

This includes securing environmental sustainability, particularly water supply in a period of prolonged drought, the ability to adapt and respond to climate change and capitalising on international trade opportunities.

Given the ingenuity and resilience of the people who work in the agriculture and food sector, and the impressive long-term productivity improvements they have achieved in recent times, we have every reason to be optimistic about the future.

Thank you for your interest in Australia's agriculture, fisheries and forestry industries. We are sure you will find this publication informative and useful.



**The Hon. Peter McGauran MP,**  
Minister for  
Agriculture, Fisheries  
and Forestry



**Senator The Hon. Eric Abetz,**  
Minister for  
Fisheries, Forestry  
and Conservation



**The Hon. Sussan Ley MP,**  
Parliamentary Secretary to  
the Minister for Agriculture,  
Fisheries and Forestry

## CONTENTS

### OVERVIEW

Agricultural production	4
People in agriculture	6
Agricultural exports	8
Farm production	10
Farm incomes	12
Fisheries	14
Forestry	16
Climate	18
Natural resources	22

### SECTOR SUMMARIES

Wheat	26
Coarse grains	28
Rice	30
Cotton	32
Oilseeds	34
Sugar	36
Wool	38
Beef and veal	40
Pig meat	42
Sheep meat	44
Poultry meat	46

## > CONTENTS

### > SECTOR SUMMARIES *cont.*

Egg production	48
Dairy products	50
Horticulture	52
Wine	54
Food	56
Fisheries	60
Forests and forest products	64

### THE DEPARTMENT

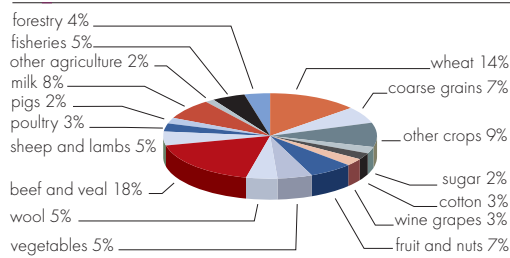
Australian Government Department of Agriculture, Fisheries and Forestry	68
Market access and border protection	71
Outreach	73
Research and development	74
Assistance programmes	76
Acknowledgments	79
Contacts	80



## AGRICULTURAL PRODUCTION

- > Australian agriculture is a vital sector occupying a significant place in global rural trade, with wool, beef, wheat, cotton and sugar being particularly important. Australia is also a significant exporter of dairy produce, fruit, rice and flowers.
- > In 2005-06, the gross value of farm production rose by more than 7 per cent to \$38.6 billion, while farm exports increased only marginally to \$27.7 billion.
- > Over the four years to the end of 2005-06, the gross value of Australian farm production increased by 6 per cent in real terms, from \$36.4 billion to \$38.6 billion, while the net value of farm production (the cash profits of farmers) rose by 46 per cent, from \$5.4 billion to \$7.9 billion.

### > Gross value of agricultural production, 2005-06



## > AGRICULTURAL PRODUCTION

- > In recent years, Australian agriculture has been affected by a marked increase in the degree of diversification and intensification of production; changing consumer preferences; improvements in handling, storage and distribution systems; enhanced breeding techniques; and improved management practices.

### > Agricultural gross value of production

	2002 -03	2003 -04	2004 -05	2005 -06
	\$m	\$m	\$m	\$m
<b>Agriculture</b>				
Wheat	2 692	5 636	4 317	5 727
Coarse grains	1 650	2 562	1 849	2 765
Other crops	3 374	4 225	3 303	3 853
Sugar	1 019	854	980	1 037
Cotton	844	671	1 222	1 105
Wine grapes	1 143	1 491	1 271	1 118
Fruit and nuts	2 408	2 350	2 770	2 862
Vegetables	2 126	2 356	2 134	2 200
Wool	3 318	2 397	2 196	1 970
Beef and veal	6 411	6 659	7 829	7 575
Sheep and lambs	2 037	2 039	1 949	2 158
Poultry	1 281	1 281	1 304	1 363
Pigs	911	879	906	867
Milk	2 795	2 809	3 194	3 340
Other agriculture	577	682	674	639
Total agriculture	32 586	36 888	35 894	38 581
<b>Fisheries</b>	2 314	2 210	2 091	2 150
<b>Forestry (logs removed)</b>	1 483	1 569	1 639	1 696
<b>Total portfolio</b>	36 384	40 667	39 624	42 427

## PEOPLE IN AGRICULTURE

- > There were 194 838 farmers and farm managers in Australia in 2001, compared with 198 948 in 1996. Around 65 per cent of all farmers and farm managers are located in inland and remote areas of Australia.
- > Overall 672 140 people (or 3.6 per cent of Australia's population) are either employed in agricultural, fisheries and forestry industries or are dependent on someone who is employed in this sector. The highest proportions are in Tasmania (5.9 per cent) and South Australia (5.1 per cent).
- > Employment in agriculture, fisheries and forestry accounts for 2.5 per cent of all employment of 15–24 year olds Australia-wide.

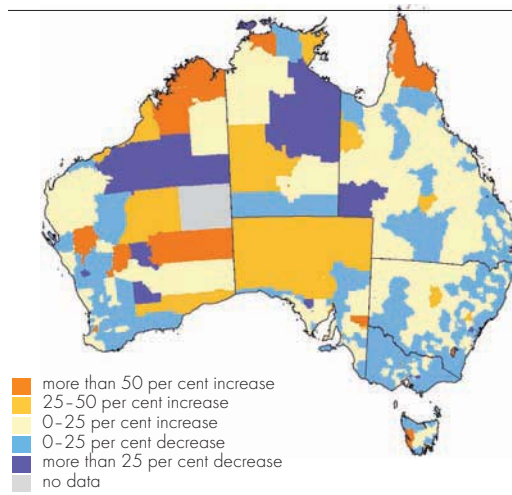
### > Number of farmers/farm managers

	census data <sup>a</sup>		% change
	1996	2001	1996 –2001
A - Metro/capital city	19 734	19 097	-3.2
B - Metro/other	3 512	3 214	-8.5
C - Coastal	47 831	46 321	-3.2
D - Inland	108 634	106 065	-2.4
E - Remote	19 237	20 141	4.7
Total	198 948	194 838	2.1

<sup>a</sup> Census data for 2006 not available yet.

> PEOPLE IN AGRICULTURE

> Change in number of farmers/farm managers, 1996-2001

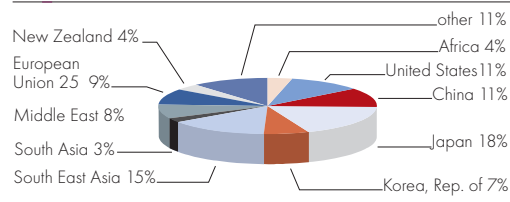


Source: Australian Bureau of Statistics Census of Population and Housing, 1996-2001 based on 1338 Statistical Local Areas (SLA). Census data for 2006 not available yet.

## AGRICULTURAL EXPORTS

- > Australian agriculture is strongly export oriented, with around two thirds of the commodities produced on farms exported each year. Among the larger industries the average proportion of production exported ranges from 98 per cent for wool to 51 per cent for dairy products.
- > Over the past twenty years, exports of beef, wine and dairy products have increased dramatically in response to growing overseas demand for higher value products.
- > The relative importance of different export markets for Australia's agricultural products has been changing over time. There has been a shift in emphasis from European to Asian markets from the early 1990s to the present.
- > As Australia has a comparatively small population, most future growth in Australian agriculture will depend on exports.

### > Australian agricultural exports, 2005-06



## > AGRICULTURAL EXPORTS

- > The total value of Australian farm exports in 2005-06 represented 3 per cent of world agricultural exports and around 73 per cent of Australia's total agricultural output.
- > Australia's major agricultural export markets in 2005-06 were in Asia, the United States and the European Union.

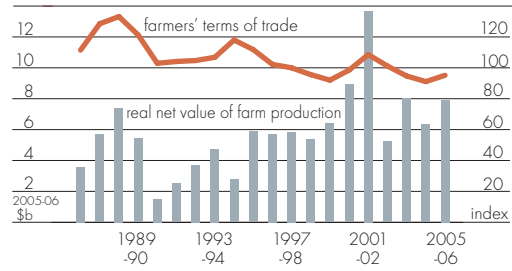
### > Agricultural export summary

	2002 -03	2003 -04	2004 -05	2005 -06
	\$m	\$m	\$m	\$m
Barley	954	1 239	1 274	1 108
Beef and veal	3 756	3 793	4 584	4 272
Canola	289	453	397	331
Cheese	800	738	875	835
Cotton	1 153	982	770	1 137
Cottonseed	82	62	55	53
Dairy	2 493	2 290	2 488	2 570
Horticulture	850	694	790	764
Lamb	554	636	700	782
Live cattle	567	318	374	358
Live sheep	408	266	207	291
Mutton	346	379	418	431
Pig meat	256	181	150	140
Rice	371	145	173	172
Sugar	1 220	982	1 098	1 550
Wheat	3 109	3 475	3 488	3 296
Wine	2 386	2 494	2 715	2 756
Wool	3 545	2 778	2 838	2 544
Other	4 025	4 334	4 221	4 264
Total farm exports	27 164	26 240	27 615	27 653

## FARM PRODUCTION

- > The net value of farm production rose by 29 per cent to \$7.9 billion in 2005-06, up from \$6.1 billion in 2004-05, due largely to near record winter grains harvest and strong grain prices.
- > After an 18 per cent decrease in 2002-03 to \$32.2 billion, the gross value of farm production increased by 18 per cent to \$38.6 billion in 2005-06.
- > Total farm costs increased by 3 per cent to \$30.6 billion in 2005-06, as a result of increased labour, materials and services costs.
- > The total value of Australian farm exports free on board (fob) increased marginally to \$27.7 billion in 2005-06.

> **Australian net value of farm production and terms of trade**



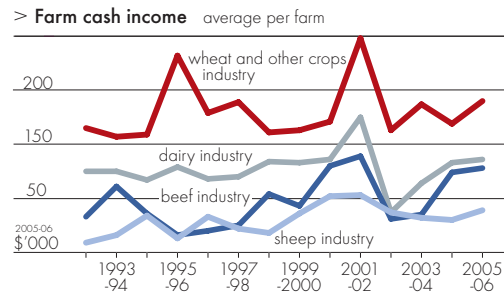
## > FARM PRODUCTION

### > Farm sector indicators

		2002 -03	2003 -04	2004 -05	2005 -06
<b>Gross value of farm production</b>					
Crops	A\$m	15 428	20 377	18 070	20 858
Livestock	A\$m	17 158	16 511	17 824	17 723
Total	A\$m	32 586	36 888	35 894	38 581
Farm costs	A\$m	27 766	29 292	29 768	30 658
Net cash income	A\$m	10 786	12 235	11 442	11 728
Net value of farm production	A\$m	4 820	7 596	6 126	7 923
<b>Value of farm exports (fob)</b>					
Crops	A\$m	13 241	13 354	13 508	13 965
Livestock	A\$m	13 924	12 885	14 108	13 688
Total	A\$m	27 164	26 240	27 615	27 653
<b>Farm price indexes</b>					
Prices received by farmers	index	123	117	115	125
Prices paid by farmers	index	121	123	126	131
Farmers' terms of trade	index	101	95	91	95
<b>Crop area and livestock numbers</b>					
Grains and oilseeds area	'000 ha	20 777	23 201	23 808	22 983
Sheep	million	99	101	101	100
Cattle	million	27	27	28	29
<b>Employment</b>					
Agriculture	'000	326	320	312	305
Forestry and logging	'000	10	12	12	11
Commercial fishing	'000	17	16	14	12
Total portfolio, incl. services	'000	377	374	363	355
Total Australia	'000	9 323	9 431	9 536	9 858

## FARM INCOMES

- > Increased broadacre production and higher wheat prices caused Australian farms income to rise in 2005-06.
- > Average farm business profit for broadacre industries in 2005-06 increased to around \$11 000. At an industry level, the best farm business profit result was recorded by the wheat and the other crops industry due to the favourable seasonal conditions and strong grain prices.
- > Average rates of return to farm capital for broadacre producers (adjusted to a full equity basis) rose in 2005-06 after having been relatively low in 2004-05.



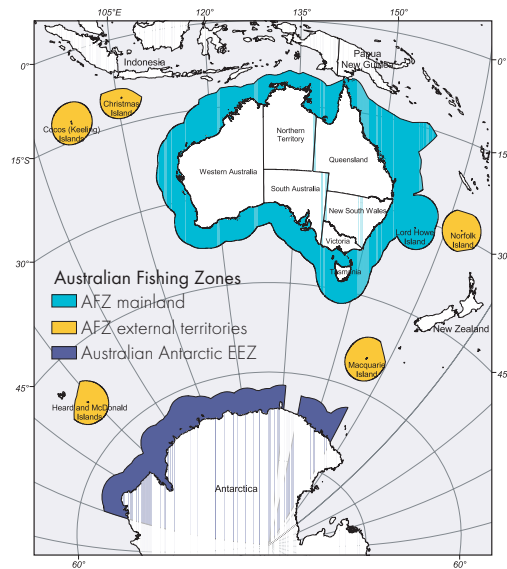
## > FARM INCOMES

### > Farm performance – summary statistics

	2002	2003	2004	2005
	-03	-04	-05	-06
	\$'000	\$'000	\$'000	\$'000
<b>Farm cash income</b>				
Wheat and other crops	113	137	95	140
Mixed livestock-crops	71	87	64	76
Beef industry	31	35	51	78
Sheep industry	37	32	26	39
Sheep-beef industry	23	48	62	70
All broadacre industries	56	68	59	81
Dairy	37	64	83	86
<b>Farm business profit</b>				
Wheat and other crops	1	55	1	54
Mixed livestock-crops	- 16	20	- 11	1
Beef industry	- 49	19	- 8	6
Sheep industry	- 34	- 25	- 24	- 16
Sheep-beef industry	- 49	- 9	- 2	14
All broadacre industries	- 29	5	- 8	11
Dairy	- 50	- 14	21	19
<b>Rate of return</b>				
Wheat and other crops	1.5	3.9	1.7	3.1
Mixed livestock-crops	0.5	2.4	0.7	1.1
Beef industry	- 1.7	- 0.1	0.4	1.0
Sheep industry	- 1.1	- 0.4	- 0.5	0.4
Sheep-beef industry	- 1.4	0.7	0.6	0.9
All broadacre industries	- 0.4	1.4	0.7	1.3
Dairy	- 1.1	0.9	2.5	2.3

## FISHERIES

- > The Australian Exclusive Economic Zone (EEZ) is the world's third largest, spanning the tropics to sub-Antarctic waters and covering around 8 million square kilometres. Australia has also claimed a significant area of waters within its Antarctic EEZ.



## > FISHERIES

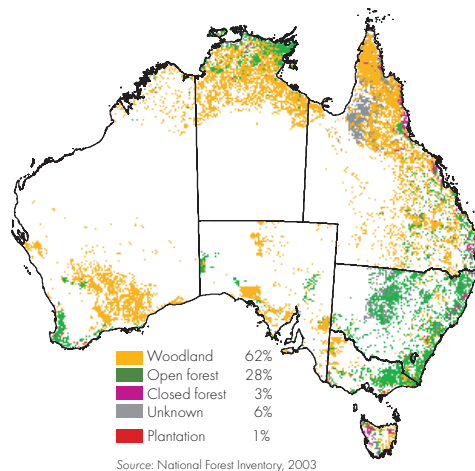
- > The gross value of Australian fisheries production in 2005-06 was \$2.0 billion. Australian exports of fisheries products totalled almost \$1.5 billion in 2005-06.
- > By value, over 30 per cent of Australia's edible fish exports go to Hong Kong, with Japan, China and the United States also important markets.
- > Rock lobster, abalone, tuna and prawns were Australia's main edible fisheries exports in 2005-06.
- > Australia's fisheries span oceanic, coastal, estuarine and freshwater regions and involve commercial, Indigenous and recreational aspects. Fishing activities are managed under Commonwealth legislation or under state/territory legislation; some are jointly managed. Australia is also party to a range of international fisheries management regimes.
- > Nearly 20 per cent of Australians fish at least once a year for recreation, catching approximately 136 million fish and other aquatic species, with around half being crustaceans, molluscs and small baitfish. Indigenous non-commercial fisheries in northern Australia harvest more than 3 million fish and aquatic species.

## FORESTS

- > Australia's forest estate comprises 164.4 million hectares, covering about 21 per cent of the continent. Native forests cover 162.7 million hectares (99 per cent of total forest) and plantations 1.7 million hectares (1 per cent of total forests). Eucalypt forests make up 78 per cent of Australia's native forests. Almost 70 per cent of native forests are on privately managed land; state, territory and other government agencies manage the remainder.

### > Forest cover

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Source: National Forest Inventory, 2003

## > FORESTS

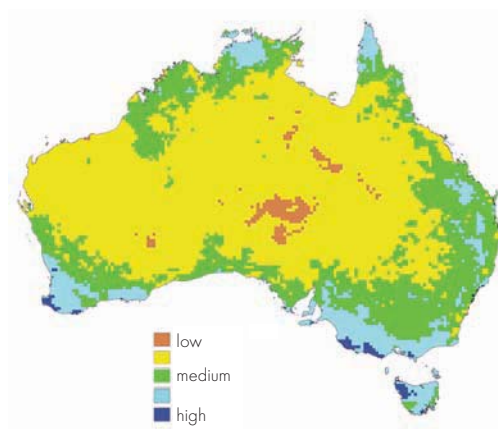
- > At the last national assessment in 2003, twenty-six per cent of native forest was legally restricted from timber harvesting. The remaining 74 per cent was available for timber harvesting, but this does not occur on a large proportion of this area because of environmental and economic restrictions. The annual removal of wood from public native forests is estimated to be well within the sustainable level with significantly less than 1 per cent Australia's native forests being harvested annually.
- > The gross value of forestry log production was \$1.7 billion in 2005-06.
- > The value of Australian forest product exports, including paper and paperboard products, was an estimated \$2.1 billion in 2005-06.
- > In 2005-06 there were 83 000 people employed in Australia's forestry and logging industry.
- > Australia has over 1.7 million hectares of plantations, comprised of 57 per cent softwood species (mainly *Pinus radiata*) and 43 per cent hardwood species (mainly *Eucalyptus globulus*).
- > Forests in Australia store an estimated 10.5 billion tonnes of carbon.

## CLIMATE

> Australia is a dry continent where rainfall is unreliable compared with Europe and North America. This means that recurring droughts and floods are a natural feature of the landscape. The Australian continent has a number of distinct climatic zones, broadly: the summer dominant subtropics and tropics to the north; the Mediterranean climates to the south; the arid and semi-arid regions in the middle of the

### > Rainfall reliability

Index of reliability of long term annual rainfall



## > CLIMATE

continent, and areas of high rainfall on coastal fringes and in the ranges of the east of Australia.

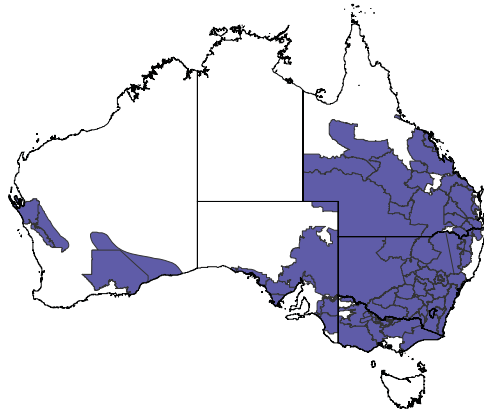
- > Agricultural land use is heavily influenced by this climatic regime. Generally, the tropical north is suited to grazing (principally cattle) as well as the production of fruit and sugar cane. The major land uses in the subtropical and Mediterranean climates, in the south, are cereal cropping as well as sheep and cattle grazing. The Murray Darling Basin in the south-east of the continent has a large irrigation infrastructure, supporting the production of fruit, vegetables, rice and many other intensive agricultural activities. Agriculture in the arid zone involves extensive grazing, where sheep and cattle are reared at relatively low densities. The higher rainfall zones are suitable for dairying, as well as more intensive grazing enterprises that produce meat.
- > This diverse climatic regime creates many opportunities and risks for Australian agriculture. Producers try to avoid losses by protecting themselves against drought, as well as capitalising on good years. Recurring drought means that downturns in agricultural production occur from time to time, resulting in loss of crops, downsizing of the national sheep flock and cattle herd and reduced water allocations for irrigators.

## CLIMATE

- > The recent drought has had a significant impact on rural Australia and has been one of the most severe in the past hundred years.

### Drought assistance

- > In recognition of the particular severity and extent of the drought, the Australian Government has committed more than \$2 billion in drought funding to Australian farmers.
- > As at 19 January 2007 more than 45 350 applications from Australian farmers have been
- > **Regions receiving Exceptional Circumstances Assistance as of February 2007**

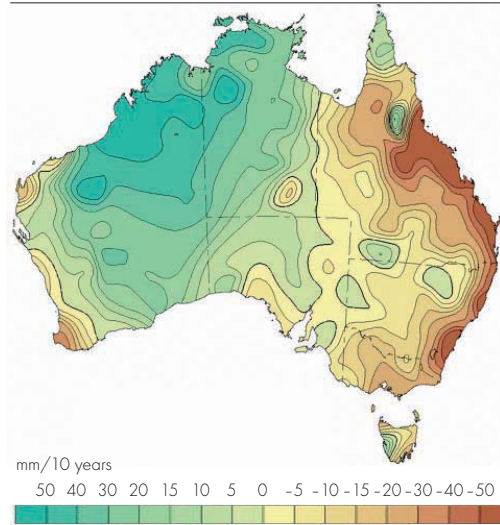


> CLIMATE

approved for income support and about 28 900 farm businesses have been approved for interest rate subsidies.

- > A significant proportion of the land used for agricultural production has been drought declared for the purposes of accessing Exceptional Circumstances assistance.

> Trend in annual total rainfall in Australia, 1950-2005



## NATURAL RESOURCES

- > Australia has 4.6 million square kilometres of agricultural land, 0.5 million square kilometres of which is arable.
- > In contrast to many northern hemisphere countries, sunlight hours and cold temperatures are not limiting factors for Australian agriculture.

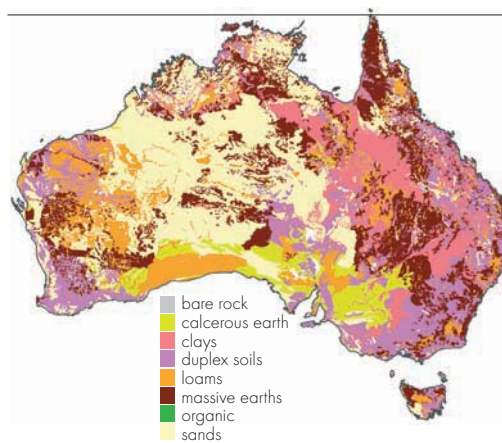
### Soil types and management

- > Australia has a large range of soil types, ranging from old, deeply weathered and infertile, to younger, more fertile soils derived from volcanic rocks and alluvium. Approximately 50 per cent of soils are sandy, 37 per cent are earths and loams and 13 per cent are clay textured. All types are used for agriculture, with the main limitations being rainfall, topography and transport distance for produce.
- > Many Australian soils have low levels of phosphorus and other nutrients. Australian grasses, shrubs and trees are naturally adapted to such soils, and crop and pasture cultivars are continually developed to suit soil conditions.
- > Soils are managed by maintaining ground cover and wind breaks, avoiding disturbance on steep slopes, applying fertilisers (mainly phosphorus and nitrogen), and using soil ameliorants (lime and gypsum).

## > NATURAL RESOURCES

- > Important soil management issues include erosion (wind and water), salinisation (dryland and irrigation), acidification and compaction. The range of possible agricultural uses in an area is heavily influenced by soil type.

### > Soils



## NATURAL RESOURCES

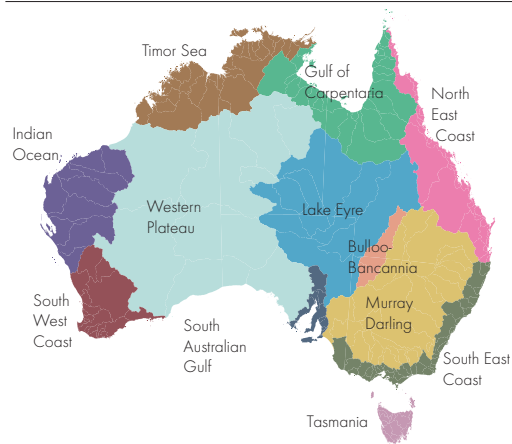
### Water and irrigated agriculture

- > In Australia, irrigation efficiency has increased and water use has stabilised. For example, in the rice industry, water use has decreased by 72 per cent from 2000-01 to 2004-05.
- > Total water used by agriculture was 11 923 gigalitres in 2004-05, down by around 20 per cent from 2000-01.
- > In 2004, surface water accounted for 74 per cent and groundwater 23 per cent of the water used in agriculture.
- > Since 1983-84, surface water use across Australia has increased by 59 per cent, and ground water use by 58 per cent, mainly for irrigated agriculture.
- > About 75 per cent of water is used for irrigation (with 90 per cent of this in the Murray Darling Basin), 21 per cent for urban and industrial use and 9 per cent for other uses.
- > The gross value of irrigated agricultural production was \$9.1 billion and contributed 23 per cent of the total gross value of agricultural commodity production in 2004-05.
- > Irrigated agriculture uses around 0.4 per cent of agricultural land.

## > NATURAL RESOURCES

- > Pasture uses about 35 per cent of irrigation water in Australia, followed by horticulture (16 per cent), cotton (15 per cent), cereals (13 per cent), sugar (12 per cent) and rice (6 per cent).
- > The majority of irrigation in Australia (by area) is by surface/flood irrigation (62 per cent) and sprinklers (28 per cent) with 9 per cent of farmers using drip irrigation.

### > Drainage basins



## WHEAT

### Location

Wheat is grown in all states, but primarily in the 230–500 mm rainfall belt of south east and south west Australia, often in conjunction with livestock and other grain production.

### Harvest

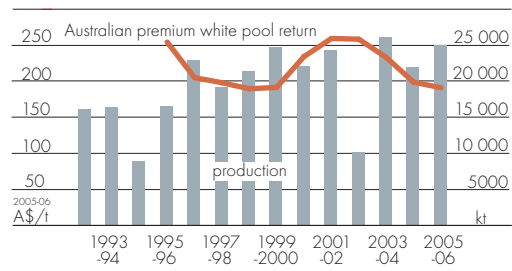
In the temperate climatic zones wheat growing begins with autumn sowing from April to July, depending on rainfall. The wheat crop is harvested in spring and summer.

### Production since 1980-81

**Highest:** 26.1 million tonnes, 2003-04

**Lowest:** 8.9 million tonnes, 1982-83

### > Wheat



> WHEAT

> Wheat

		2002	2003	2004	2005
		-03	-04	-05	-06
<b>World</b>					
Production	Mt	566	556	629	618
China	Mt	90	87	92	98
European Union	Mt	103	106	136	123
India	Mt	72	65	72	69
Russian Federation	Mt	51	34	45	48
United States	Mt	44	64	59	57
Consumption	Mt	600	588	616	622
Closing stocks	Mt	165	125	138	135
Trade	Mt	107	103	110	107
Price	US\$/t	160	160	154	176
<b>Australia</b>					
Area	'000 ha	11 170	13 067	13 399	12 980
Production	kt	10 132	26 132	21 905	25 090
Exports	kt	10 845	15 073	15 779	15 168
Egypt	kt	602	2 534	752	1 818
Indonesia	kt	1 686	2 647	2 720	3 016
Iraq	kt	1 037	1 111	1 550	715
Japan	kt	1 134	1 250	1 171	1 106
Korea, Rep. of	kt	1 014	1 065	1 213	1 002
- value	A\$m	3 109	3 475	3 488	3 296
Australian premium white					
- pool return	A\$/t	258	233	199	191

## COARSE GRAINS

### Location

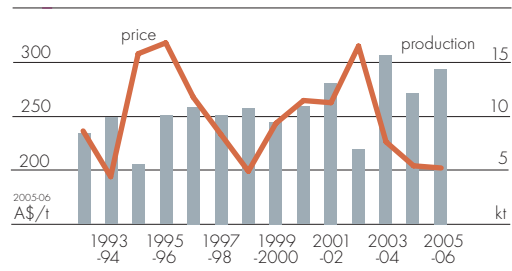
Barley, triticale and oats are winter crops grown primarily in the wheat belt. Sorghum is a summer crop grown in northern New South Wales and southern and central Queensland. A small amount of maize is also grown in Australia.

### Production since 1980-81

**Highest:** 15.6 million tonnes, 2003-04

**Lowest:** 4.0 million tonnes, 1982-83

### > Coarse grains



> COARSE GRAINS

> Coarse grains

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production	Mt	874	916	1 014	974
Consumption	Mt	901	943	975	984
Closing stocks	Mt	167	135	172	162
US corn price (fob Gulf, Oct-Sept)	US\$/t	106	116	97	106
<b>Australia</b>					
<b>Barley</b>					
Area	'000 ha	3 864	4 477	4 645	4 739
Production	kt	3 865	10 382	7 740	9 869
Exports	kt	3 462	5 308	6 499	5 315
- value	A\$m	954	1 239	1 274	1 108
Price - feed barley	A\$/t	238	182	169	187
<b>Sorghum</b>					
Area	'000 ha	667	734	755	889
Production	kt	1 465	2 009	2 011	2 019
Exports	kt	70	289	513	173
- value	A\$m	17	61	96	33
<b>Oats</b>					
Area	'000 ha	911	1 089	894	859
Production	kt	957	2 018	1 282	1 416
<b>Triticale</b>					
Area	'000 ha	408	445	389	347
Production	kt	327	826	611	676
<b>Maize</b>					
Area	'000 ha	50	70	72	76
Production	kt	310	395	418	380

## RICE

### Location

Australian rice is produced in the New South Wales Riverina region, which includes the Murrumbidgee and Coleambally irrigation areas and in the Murray Valley irrigation district of northern Victoria.

### Nature

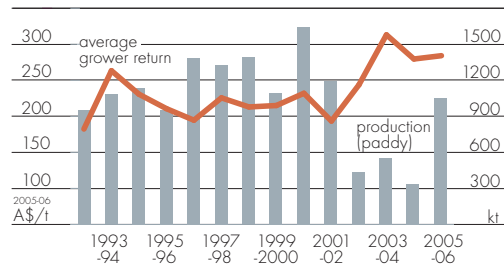
Rice production has generally increased over the past 40 years but production fell between 2002-03 and 2004-05.

### Production since 1980-81

**Highest:** 1.6 million tonnes, 2000-01

**Lowest:** 0.3 million tonnes, 2004-05

### > Rice



> RICE

> Rice

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production (milled)	Mt	378	392	400	416
China	Mt	122	112	125	126
India	Mt	72	88	83	91
Indonesia	Mt	33	35	35	35
Bangladesh	Mt	25	26	26	29
Vietnam	Mt	22	22	23	22
Consumption	Mt	405	410	406	412
Closing stocks	Mt	107	85	78	81
Trade	Mt	28	27	29	28
Prices					
Thailand	US\$/t	199	220	278	301
United States	US\$/t	327	533	404	484
<b>Australia</b>					
Area	'000 ha	46	66	51	105
Production (paddy)	kt	438	553	339	1 048
Production value	\$m	153	180	101	379
Exports (Apr-Mar)	kt	664	216	299	167
- value	\$m	371	145	173	172
Average grower return	A\$/t	244	313	280	284

## COTTON

### Location

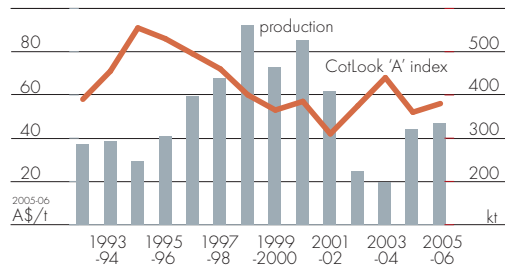
Grown under both irrigated and dryland conditions, around 70 per cent of Australia's cotton is produced in New South Wales. The major production area stretches south from the Macintyre River and embraces the Gwydir, Namoi and Macquarie valleys, as well as regions along the Barwon and Darling Rivers and smaller areas south. The remaining cotton is grown in southern and central Queensland.

### Lint production since 1980-81

**Highest:** 819 000 tonnes, 2000-01

**Lowest:** 99 000 tonnes, 1980-81

### > Cotton



> COTTON

> Cotton

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production	kt	19 215	20 741	26 250	24 884
Brazil	kt	847	1 310	1 285	1 023
China	kt	4 921	4 855	6 314	5 704
India	kt	2 308	3 048	4 137	4 180
Pakistan	kt	1 698	1 687	2 426	2 145
United States	kt	3 747	3 975	5 062	5 201
Consumption	kt	21 234	21 175	23 720	25 260
Closing stocks	Mt	10	9	12	12
Stocks to					
consumption ratio	%	45	44	50	46
Cotlook 'A' index	USc/lb	55.4	68.3	52.4	56.0
<b>Australia</b>					
Area harvested	'000 ha	224	198	321	336
Lint production	kt	387	349	645	597
Exports	kt	596	459	410	650
China	kt	30	80	62	285
Chinese Taipei	kt	14	3	4	9
Indonesia	kt	184	147	130	141
Japan	kt	94	52	45	35
Korea, Rep. of	kt	96	56	64	54
Thailand	kt	87	59	65	93
- value	A\$m	1 153	982	770	1 137

## OILSEEDS

### Crops

Canola (60 per cent) and cottonseed (35 per cent), are the main oilseeds grown in Australia. Linola, linseed, peanuts, soybeans, safflower and sunflower seeds are also grown in smaller quantities.

### Location

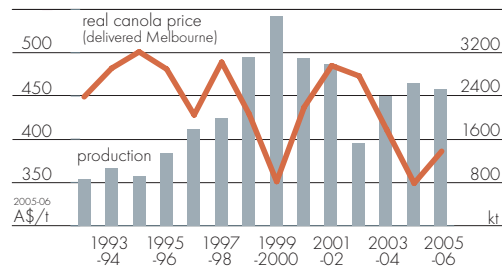
Oilseeds are grown principally in the wheat belt; however, cottonseed is grown in the cotton producing regions and the majority of Australia's peanut crop is produced in Queensland's South Burnett region.

### Production since 1980-81

**Highest:** 3.9 million tonnes, 1999-2000

**Lowest:** 0.3 million tonnes, 1982-83

#### > Oilseeds



> OILSEEDS

> Oilseeds

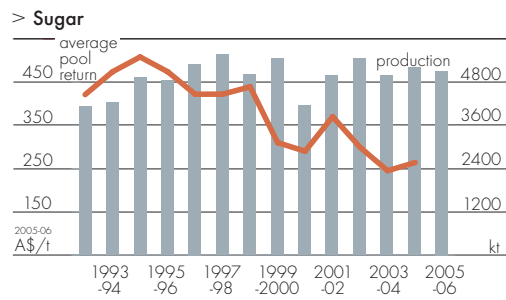
		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production	Mt	329	335	381	390
Consumption	Mt	325	337	367	382
Closing stocks	Mt	24	21	36	44
Soybeans indicator price	US\$/t	245	321	275	261
<b>Australia</b>					
Total production	kt	1 523	2 400	2 641	2 521
winter	kt	906	1 731	1 580	1 479
summer	kt	617	669	1 061	1 042
<b>Canola</b>					
Production	kt	871	1 703	1 542	1 441
Exports (Nov-Oct)	kt	517	1 202	892	919
- value	A\$m	289	453	397	330
Price (Nov-Oct)					
(delivered Melbourne)	A\$/t	437	389	338	372
<b>Cottonseed</b>					
Area	'000 ha	224	198	321	336
Production	kt	546	494	912	844
Exports (Nov-Oct)	kt	259	167	214	204
- value	A\$m	82	62	55	53
<b>Soybeans</b>					
Area	'000 ha	10	33	26	24
Production	kt	18	74	54	55
Price (Nov-Oct)	A\$/t	384	365	283	269

## SUGAR

### Location

Around 94 per cent of Australia's sugar output comes from Queensland, about 5 per cent from northern New South Wales and almost 1 per cent from Western Australia's Ord River region. Sugar cane is grown along 2100 kilometres of coastline between Mossman in far north Queensland and Grafton in northern New South Wales.

By virtue of its location, the sugar industry is often affected by cyclones. In March 2006 sugar cane production was severely affected by cyclone Larry but has since recovered.



> SUGAR

**Production since 1980-81**

Highest: 5.6 million tonnes, 1997-98

Lowest: 3.0 million tonnes, 1991-92

> Sugar

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production	Mt	149	142	142	150
Brazil	Mt	24	26	28	27
China	Mt	11	11	10	9
India	Mt	22	15	14	21
Mexico	Mt	5	5	6	6
Thailand	Mt	7	7	5	5
Consumption	Mt	138	139	148	151
Change in stocks	Mt	6	- 1	0	- 1
Stocks to consumption ratio	%	47	45	42	40
Price	USc/lb	8.0	7.9	10.5	15.8
<b>Australia</b>					
Area	'000 ha	448	448	434	415
Production	kt	5 461	4 994	5 196	5 108
Average pool return	A\$/t	277	232	256	315
Exports	kt	4 167	4 060	4 153	4 038
Indonesia	kt	170	156	364	532
Japan	kt	729	518	435	493
Korea, Rep. of	kt	795	980	1 003	1 067
Malaysia	kt	799	1 016	1 027	469
- value	A\$m	1 220	982	1 098	1 550

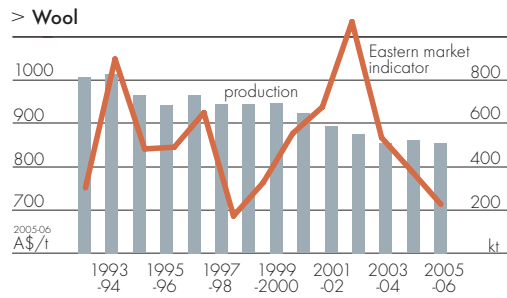
## WOOL

### Location

Wool production is the second most common enterprise on Australian farms, with around 95 per cent of sheep in Australia run on broadacre establishments. Around 55 per cent of Australia's wool clip is produced in New South Wales and Victoria, with a significant proportion also produced in Western Australia. A large amount of Australia's superfine wool is produced in Tasmania.

### Nature

The majority of Australian wool is merino wool with a fibre diameter of 19-22 microns. In 2005-06 Australia exported about 467 000 tonnes of greasy wool, valued in excess of \$2.25 billion.



### Production since 1980-81

Highest: 1.0 million tonnes, 1989-90

Lowest: 0.5 million tonnes, 2005-06

#### > Wool

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Wool production	kt	1 227	1 221	1 228	1 230
Argentina	kt	68	79	80	na
Australia	kt	551	509	520	509
Central Asian Republics	kt	95	97	95	na
China	kt	338	374	379	na
New Zealand	kt	228	218	231	na
Wool exports	kt	567	533	578	567
<b>Australia</b>					
Sheep numbers	million	99	101	101	100
Sheep shorn	million	105	106	104	103
Wool production - greasy					
shorn	kt	502	466	475	456
other	kt	49	43	45	53
Total	kt	551	509	520	509
Total closing stocks - greasy	kt	105	156	157	158
Wool exports - balance of payments basis					
volume - greasy equiv.	kt	505	475	515	498
value	A\$m	3 545	2 778	2 838	2 544
Market indicator - clean					
eastern	Ac/kg	786	758	654	738
western	Ac/kg	1 051	821	747	692
Auction price - greasy	Ac/kg	682	533	467	436

## BEEF AND VEAL

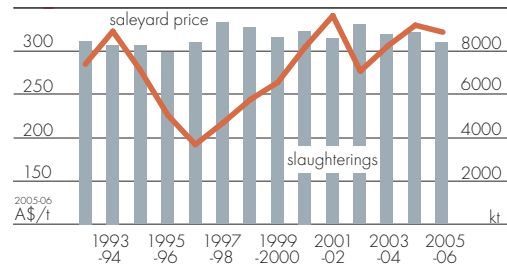
### Location

Beef production is widespread across Australia, occurring on large, unimproved properties in northern Australia and on smaller properties with a high degree of pasture improvement in the southern states.

### Nature

An increasing number of cattle are being fattened in feedlots, concentrated in the major agricultural regions with access to adequate supplies of store cattle, grain and other feedstuffs. The majority of feedlots are in southern Queensland and New South Wales.

### > Beef and veal



## > BEEF AND VEAL

Australia is one of the world's largest beef exporters, although producing only 3.9 per cent of the world's beef supply.

### Production since 1980-81

**Highest:** 2.2 million tonnes, 2004-05

**Lowest:** 1.3 million tonnes, 1984-85

### > Beef and veal

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production					
Argentina	kt	2 800	3 130	3 200	3 100
Brazil	kt	7 385	7 975	8 592	8 850
China	kt	6 305	6 759	7 140	7 500
European Union	kt	8 061	8 007	7 770	7 880
United States	kt	12 039	11 261	11 317	11 897
<b>Australia</b>					
Cattle numbers	million	27	27	28	29
- on feed, 30 June	'000	668	711	879	940
Slaughterings	'000	9 228	8 779	8 853	8 401
Production	kt	2 073	2 033	2 162	2 077
Exports (shipped weight)					
United States	kt	350	361	363	295
Japan	kt	277	331	419	388
Korea, Rep. of	kt	82	75	91	121
total	kt	902	860	948	892
- value	A\$m	3 756	3 793	4 584	4 272
Live cattle	'000	973	581	574	549
- value	A\$m	567	318	374	358
Saleyard price	Ac/kg	256	290	320	322

## PIG MEAT

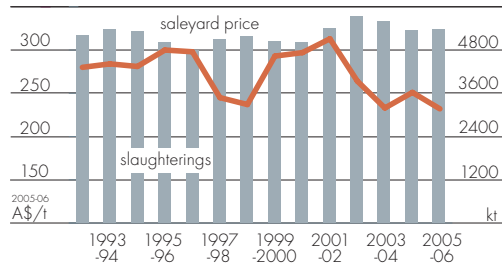
### Location

Pig raising is highly dispersed within grain producing regions in each state. The quantity of pork produced by each state is linked to major grain growing regions but is also influenced by proximity to the major population centres of Australia.

### Nature

Australian pig meat prices have been increasingly influenced by international price movements as a result of increased exposure to the global market. Exchange rate movements play a significant role in both import and export volumes. Feedgrain is a significant input into pig meat production, with variations in feed costs affecting profitability.

#### > Pig meat



> PIG MEAT

**Production since 1980-81**

Highest: 420 000 tonnes, 2002-03

Lowest: 228 000 tonnes, 1981-82

> Pig meat

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production					
China	kt	45 186	47 016	50 106	53 000
European Union	kt	21 150	21 192	21 102	21 450
United States	kt	9 056	9 312	9 392	9 543
Brazil	kt	2 560	2 600	2 800	2 745
Canada	kt	1 882	1 936	1 915	1 885
Russian Federation	kt	1 710	1 725	1 735	1 800
<b>Australia</b>					
Breeding sows	'000	353	318	329	305
Slaughterings	'000	5 742	5 591	5 342	5 370
Production	kt	420	406	389	389
Exports	kt	63	51	43	43
Japan	kt	15	10	6	2
New Zealand	kt	8	9	9	11
Singapore	kt	29	23	20	21
- value	A\$m	256	181	150	140
Imports	kt	47	60	81	72
Price					
- saleyard	Ac/kg	244	221	243	232
- US national indicator	USc/kg	107	133	160	138

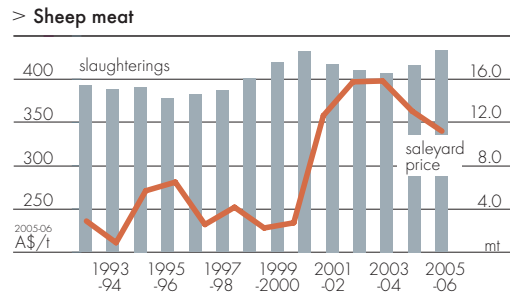
## SHEEP MEAT

### Location

Sheep meat production was once mainly undertaken as an adjunct to wool growing. Now, almost half of the farms that carry sheep receive some revenue from prime lamb sales. The prime lamb industry is concentrated in New South Wales, Western Australia and Victoria.

### Nature

Australia is the second largest sheep meat producing country, after China.



> SHEEP MEAT

**Production since 1980-81**

Highest: 715 000 tonnes, 2000-01

Lowest: 465 000 tonnes, 1983-84

> Sheep meat

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production					
Australia	kt	543	573	616	669
China	kt	1 892	2 240	2 420	na
New Zealand	kt	546	509	520	na
Spain	kt	236	231	235	na
United Kingdom	kt	306	314	310	na
<b>Australia</b>					
Slaughterings					
Sheep	'000	13 657	10 421	11 443	11 830
Lamb	'000	16 870	16 562	17 331	18 666
Production					
Mutton	kt	268	220	237	244
Lamb	kt	329	341	354	382
Exports (shipped weight)					
Mutton	kt	119	120	138	146
Lamb	kt	98	109	123	144
- to United States	kt	28	32	36	38
Export lamb value	\$m	554	636	700	782
Live sheep	'000	5 843	3 843	3 233	4 248
Live sheep value	\$m	408	266	207	291
Saleyards prices					
Mutton	Ac/kg	167	199	166	172
Lamb	Ac/kg	367	377	352	340

## **POULTRY MEAT**

### **Location**

Chicken meat production by state (at 30 June 2005, ABS) was: New South Wales (36 per cent), Victoria (28 per cent), Queensland (16 per cent), South Australia (8 per cent), Western Australia (11 per cent) and Tasmania (1 per cent). Production/processing is located around capital cities and in regional clusters near Tamworth, Griffith and Newcastle in New South Wales, Geelong and Bendigo in Victoria and Murray Bridge in South Australia.

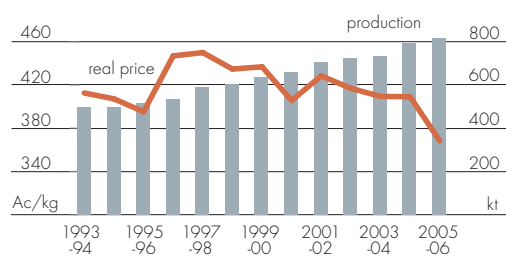
### **Nature**

The chicken meat industry is highly integrated and dominated by three major processors producing 80 per cent of all hatchlings and 75 per cent of meat.

Most chickens (80 per cent) are grown under the contract system, with processors supplying growers with day-old chicks and rearing specifications. Other chickens are grown on company farms.

> POULTRY MEAT

> Poultry meat



> Poultry meat

		2000	2001	2002	2003	2004	2005
		-01	02	-03	-04	-05	-06
Production	kt	657	705	726	732	792	817
Consumption	kg/person	32	35	35	35	378	38.5
Exports	kt	21	21	23	20	19.8	21.6
Retail price							
- nominal	Ac/kg	354	384	385	387	396	366

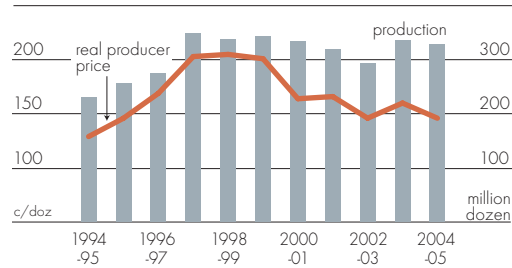
a In 2006-07 Australian dollars

## EGG PRODUCTION

### Location

The largest egg producing State (as at 30 June 2005, ABS) was New South Wales (30 per cent of production), followed by Victoria (25 per cent), Queensland (27 per cent), Western Australia (8 per cent), South Australia (8 per cent) ACT (2 per cent), Tasmania (2 per cent) and Northern Territory (1 per cent). Historically the industry has evolved near urban centres and many smaller operators still remain on these fringes. However, planning and associated environmental regulations, as well as scale economies have resulted in much larger, automated operations establishing in key grain growing areas, where a larger scale offsets transport costs and land prices are generally cheaper.

### > Eggs



## > EGG PRODUCTION

### Nature

The egg industry is dominated by three major producer/marketers, accounting for around 70 per cent of industry capacity. Backyard production accounts for 10 per cent.

Of the eggs sold in the grocery/retail market (half of total production), approximately 75 per cent are produced from cage systems, 20 per cent free range and 5 per cent barn laid. Shell eggs are not permitted to be imported into Australia, under quarantine restrictions.

### > Eggs

		1995	1996	1997	1998	1999
		-96	-97	-98	-99	-00
Production	million doz.	175	177	190	189	182
Gross value of production	\$	257	275	348	337	344
Real producer price	c/dozen	146	169	203	205	201
Farm no.		507	506	519	580	507
Consumption	eggs/person	159	159	156	152	167
		2000	2001	2002	2003	2004
		-01	-02	-03	-04	-05
Production	million doz.	203	187	191	193	203
Gross value of production	\$	333	320	294	336	328
Real producer price	c/dozen	164	166	146	160	146
Farm no.		522	481	457	474	423
Consumption	eggs/person	154	159	150	164	164

## DAIRY PRODUCTS

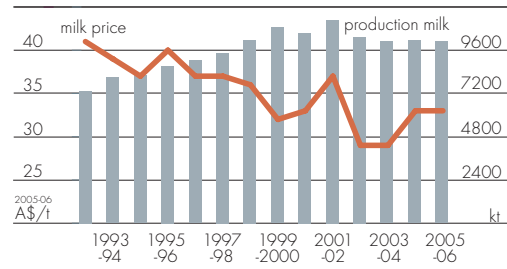
### Location

Dairying is a well-established industry in many areas of Australia with most production occurring in coastal regions with rain-fed pasture, particularly in Victoria. However, about 25 per cent of milk is produced in the irrigation areas of northern Victoria and southern New South Wales.

### Nature

The dairy industry is a major rural industry ranking third behind beef and wheat in 2004-05. It operates in a completely deregulated environment in which farmgate prices are determined largely by international markets and production is highly competitive and cost efficient. Around half of Australia's milk production is exported

### > Dairy



## > DAIRY PRODUCTS

and Australia is the third largest milk exporting nation in the world after New Zealand and the European Union.

### Milk production since 1980-81

Highest: 11.3 ggalitres, 2001-02

Lowest: 5.2 ggalitres, 1980-81

#### > Dairy products

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Production					
Butter	kt	6 567	6 627	6 854	7 298
Skim milk powder	kt	3 655	3 318	3 416	3 498
Exports					
Butter	kt	865	904	800	809
Skim milk powder	kt	1 172	1 165	1 048	1 067
Prices					
Butter	US\$/t	1 186	1 621	2 208	1 998
Cheese	US\$/t	1 775	2 358	2 856	2 792
Skim milk powder	US\$/t	1 587	1 862	2 210	2 175
<b>Australia</b>					
Cow numbers	'000	2 050	2 038	2 076	2 050
Milk yields	L/cow	5 037	4 943	4 877	4 923
Production					
Total milk	ML	10 326	10 075	10 125	10 092
- market sales	ML	1 924	1 992	2 022	2 065
- manufacturing	ML	8 402	8 083	8 103	8 027
Butter	kt	165	149	147	146
Cheese	kt	379	384	388	373
Milk powder					
- whole	kt	198	187	189	158
- skim	kt	206	186	191	212
Milk price	A¢/L	27	28	32	33
Value of exports	A\$m	2 493	2 290	2 488	2 570

## HORTICULTURE

### Location

Production occurs across the range of tropical, subtropical and temperate zones, with the greatest concentration in the Goulburn Valley of Victoria; the Murrumbidgee Irrigation Area of New South Wales; the Sunraysia district of Victoria; the Riverland region of South Australia; northern Tasmania; south west Western Australia and the coastal strip of both northern New South Wales and Queensland. Nursery production generally occurs close to the capital cities.

### Nature

Australian horticulture is a labour intensive industry, employing over 60 000 people, seasonal in nature and characterised by small scale, family farms, many of which grow a range of crops. A sizeable amount of horticultural produce in the southern states is directed to processing, while Queensland typically supplies the southern states during the cooler June–October months. Australian horticulture is counterseasonal to northern hemisphere markets.

> HORTICULTURE

> Horticulture – export statistics

	2002 -03	2003 -04	2004 -05	2005 -06
	\$m	\$m	\$m	\$m
<b>Australia</b>				
Oranges	146	107	118	109
Grapes	96	85	109	115
Mandarins	49	43	41	30
Carrots	48	39	37	41
Apples	41	20	17	12
Cut flowers/nursery	40	31	36	32
Asparagus	34	22	27	22
Plums	26	13	16	14
Onions	25	24	21	22
Macadamias	88	106	146	120
Cauliflowers	23	13	6	2
Nectarines	23	12	15	16
Pears	23	12	12	9
Melons	17	15	16	16
Broccoli	13	10	9	8
Other	157	142	165	195
<b>Total</b>	<b>850</b>	<b>694</b>	<b>790</b>	<b>764</b>

> Horticulture – gross value of production

	2002 -03	2003 -04	2004 -05	2005 -06 s
	\$m	\$m	\$m	\$m
Vegetables	2 126	2 356	2 134	2 200
Fruit and nuts	2 408	2 350	2 770	2 862
Wine grapes	1 143	1 491	1 271	1 118
<b>Total</b>	<b>5 677</b>	<b>6 196</b>	<b>6 174</b>	<b>6 180</b>

## WINE

All states of Australia produce wine grapes, with South Australia the largest producer, followed by Victoria and New South Wales.

### Nature

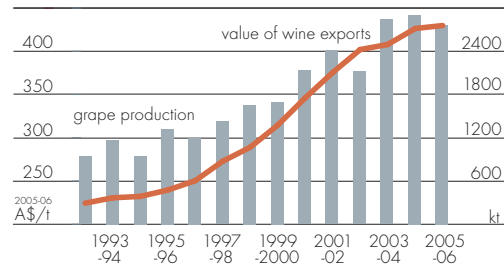
The industry is based on about 5000 grape growers supplying over 1400 wineries. In 2000 the largest five wine businesses produced 67 per cent of total Australian production and the top twenty produced 82 per cent.

### Grape production since 1980-81

**Highest:** 1.9 million tonnes, 2004-05

**Lowest:** 0.8 million tonnes, 1980-81

### > Wine



> WINE

> Wine

		2002	2003	2004	2005
		-03	-04	-05	-06
<b>Australia</b>					
Total bearing area	'000ha	140	146	156	159
Grape production	kt	1 411	1 895	1 937	1 844
White	kt	519	683	773	746
Red	kt	804	1 093	1 071	1 008
<b>Exports</b>					
Table wine	ML	498	571	655	704
Dry red	ML	307	365	421	445
White	ML	191	206	234	259
Sparkling wine	ML	7	10	12	14
Carbonated	ML	1	1	1	1
Fortified wine	ML	2	3	2	3
Other wine	ML	1	1	1	1
Total	ML	508	584	670	722
Value	A\$m	2 386	2 494	2 715	2 756
Unit value	A\$/L	4.7	4.3	4.1	3.8
Major destination, by value					
United Kingdom	A\$m	857	860	967	960
United States	A\$m	858	906	897	902
Canada	A\$m	175	205	247	249
Germany	A\$m	21	29	31	38
<b>Australian wine sales</b>	ML	402	417	430	431
<b>Imports</b>					
Table wine	ML	12	12	15	20
Sparkling wine	ML	4	5	5	6
Fortified wine	ML	0	1	0	0
Other	ML	2	1	2	2
Total imported wine	ML	17	19	22	27
Total wine available for consumption	ML	420	436	452	458

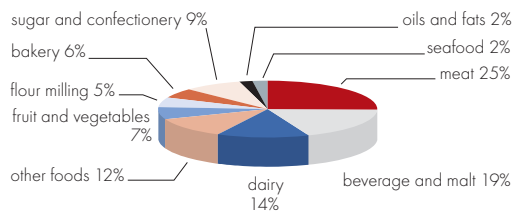
## FOOD

- > Total food and liquor retail spending increased by 6 per cent in 2005-06 to \$97.4 billion.
- > The processed food and beverage industry is Australia's largest manufacturing industry, with a turnover of \$69.8 billion (excluding spirits) in 2004-05, contributing around \$17.4 billion, or 2.1 per cent to Australia's gross domestic product.
- > The food and beverage sector accounts for 18 per cent of employment in Australia's manufacturing sector.
- > The industry comprises around 3400 firms and employs 189 000 people. Around half of the food processing organisations and 40 per cent of employees are located in rural and regional areas.
- > In 2005-06, supermarkets and grocery stores accounted for 62 per cent of food and beverage sector retail turnover by value, cafes and restaurants 12 per cent, takeaway food outlets 10 per cent, other food retailing 10 per cent and liquor retail outlets 6 per cent.
- > In 2005-06, the value of Australia's food exports was \$23.8 billion. In the same period, Australia imported \$6.8 billion worth of food products. This represents an export trade surplus of \$17.0 billion. Australia continues to be a significant exporter of food products. Food exports account for over 15 per cent of total Australian merchandise exports.

> Food industry overview

		2002 -03	2003 -04	2004 -05	2005 -06
<b>World</b>					
Value of food trade	US\$m	461 586	537 191	615 435	649 132
<b>Australia</b>					
Food production	\$m	18 423	24 737	24 652	25 755
- share of GDP	%	2	3	3	3
Food processing	\$m	16 214	16 480	17 448	na
- share of GDP	%	2	2	2	na
GDP	\$m	782 798	838 251	894 665	961 920
<b>Retail</b>					
Food and liquor	\$m	81 891	88 735	91 829	97 425
- share of total retail	%	46	46	46	46
Total	\$m	178 501	193 520	201 235	209 806
<b>Exports</b>					
Value of food exports	\$m	22 284	22 093	23 788	23 813
Export share	%				
unprocessed	%	6	6	5	4
processed	%	13	14	13	11
- share of merchandise trade	%	19	20	19	15
Value of total merchandise trade	\$m	115 803	109 459	127 867	154 383

> Processed food and beverage industry turnover



## FOOD

### > Food industry exports summary

	2002	2003	2004	2005
	-03	-04	-05	-06
	\$m	\$m	\$m	\$m
<b>Minimally transformed</b>				
Live animals except fish	993	598	555	668
Fish or shellfish	772	676	584	657
Horticulture	730	568	616	596
Grains	3 873	4 654	4 672	4 305
Oilseeds	400	549	492	411
Food (other)	72	45	44	47
<b>Substantially transformed</b>				
Meat	5 729	5 826	7 028	6 779
Seafood	711	640	652	577
Dairy	2 490	2 282	2 482	2 565
Fruit and vegetables	528	508	502	547
Oil and fat	144	146	150	148
Flour mill and cereal food	471	419	435	468
Bakery products	99	109	117	115
Other food	2 405	2 197	2 354	2 851
Beverages and malt	2 867	2 872	3 066	3 080
<b>Total food and beverage</b>				
Minimally transformed	6 840	7 093	7 002	6 684
Substantially transformed	15 083	14 657	16 454	16 850
Elaborately transformed	360	342	332	279
<b>Total</b>	22 284	22 093	23 788	23 813

> FOOD

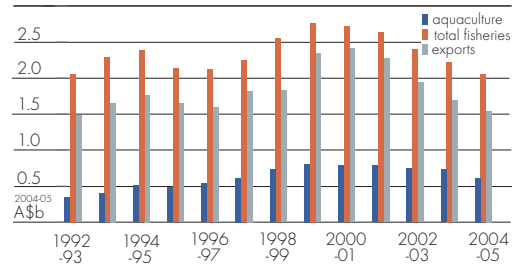
> Food industry imports summary

	2002	2003	2004	2005
	-03	-04	-05	-06
	\$m	\$m	\$m	\$m
<b>Minimally transformed</b>				
Live animals except fish	0	0	1	1
Fish or shellfish	41	46	46	47
Vegetables	27	34	32	41
Fruit and nuts	115	135	158	184
Grains	65	1	1	1
Oilseeds	61	50	25	20
Food (other)	72	45	44	47
<b>Substantially transformed</b>				
Meat	211	264	387	333
Seafood	923	868	928	997
Dairy	331	330	384	432
Fruit and vegetables	899	914	999	1 016
Oil and fat	357	345	339	362
Flour mill and cereal food	277	319	358	362
Bakery products	180	199	224	247
Other food	1 298	1 237	1 361	1 424
Beverage and malt	1 005	1 096	1 218	1 334
<b>Total food and beverage</b>				
Minimally transformed	382	311	306	341
Substantially transformed	5 278	5 355	5 970	6 249
Elaborately transformed	204	217	228	259
<b>Total</b>	<b>5 863</b>	<b>5 883</b>	<b>6 503</b>	<b>6 848</b>

## FISHERIES

- > By value, 61 per cent of Australian fisheries products exported in 2005-06 were high value crustaceans and molluscs, 19 per cent fish products and 20 per cent non-edible fisheries products.
- > Imports are more evenly divided between fish, crustaceans and molluscs and non-edible products. The per unit value of imports is a third of that for exports, but volume is much higher.
- > The volume of Australia's catch ranks about fiftieth in the world.

### > Fish



> FISHERIES

> Fisheries production

	2001	2002	2003	2004
	-02	-03	-04	-05
	\$m	\$m	\$m	\$m
<b>Fisheries</b>				
Wildcaught				
State	1 288	1 238	1 150	1 154
Commonwealth	481	415	342	323
Aquaculture	731	709	713	611
<b>Total value</b>	2 430	2 284	2 168	2 049
<b>Fish</b>				
Tuna	323	317	280	172
Other	546	561	554	532
Total	869	878	833	705
<b>Crustaceans</b>				
Prawns	429	364	358	304
Rock lobster	502	461	405	415
Other	65	62	64	58
Total	996	886	827	778
<b>Molluscs</b>				
Abalone	247	216	196	230
Scallops	23	35	25	46
Oysters	57	62	77	73
Pearl	175	124	122	123
Other	42	64	73	70
Total	544	501	494	541
Other	21	19	14	25
<b>Total value</b>	2 430	2 284	2 168	2 049

## FISHERIES

### > Fisheries exports summary

	2002	2003	2004	2005
	-03	-04	-05	-06
	\$m	\$m	\$m	\$m
<b>Edible</b>				
Fish				
Live	47	39	35	40
Fresh, chilled or frozen				
Whole				
- tuna	320	272	162	177
- other	57	39	47	31
Fillets	24	17	19	15
Canned	5	6	7	7
Smoked, dried or salted	19	19	20	14
Other fish preparations	13	17	15	12
Total fish	485	410	304	295
Crustaceans and molluscs				
Rock lobster	463	427	440	489
Prawns	208	161	163	134
Abalone	216	238	263	246
Scallops	29	35	33	39
Oysters	2	1	2	2
Crabs	21	17	18	18
Other	61	31	13	15
Total	1 000	909	932	943
Total edible	1 485	1 319	1 236	1 237
<b>Nonedible</b>				
Pearls	332	310	291	290
Other nonedible	28	22	15	20
<b>Total fisheries products</b>	<b>1 844</b>	<b>1 652</b>	<b>1 542</b>	<b>1 547</b>

> FISHERIES

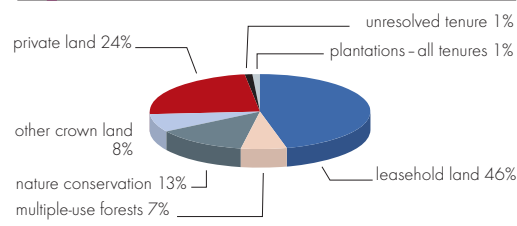
> Fisheries imports summary

	2002 -03	2003 -04	2004 -05	2005 -06
	\$m	\$m	\$m	\$m
<b>Edible</b>				
Fish				
Live	0	0	0	0
Fresh, chilled or frozen				
Fresh or chilled whole	29	34	34	36
Frozen whole	24	21	20	19
Fresh or chilled fillets	2	2	3	5
Frozen fillets	204	194	187	197
Other	25	23	19	16
Canned	219	186	189	229
Smoked, dried or salted	26	30	34	36
Other fish preparations	62	55	62	64
Total fish	591	545	547	602
Crustaceans and molluscs				
Fresh, chilled or frozen				
Prawns	175	184	201	201
Lobster	11	7	8	10
Scallops	24	22	27	31
Oysters	7	7	7	6
Mussels	9	8	9	9
Other	60	61	72	80
Canned	30	28	31	36
Extracts and pastes	0	0	0	0
Other	44	44	56	54
Total	360	360	412	426
Total edible	950	905	959	1 028
<b>Nonedible</b>				
Pearls	163	145	146	159
Other	89	56	67	77
<b>Total fisheries products</b>	<b>1 202</b>	<b>1 106</b>	<b>1 172</b>	<b>1 265</b>

## FORESTS AND FOREST PRODUCTS

- > The value of turnover in forest products industries was \$18 billion in 2003-04.
- > Eucalypts have evolved under a wide range of climatic conditions and now dominate most native forests. The diverse eucalypt forests range from the multistemmed mallee of the desert through to the tallest flowering plants on earth.
- > 7 per cent of Australia's native forests are publicly owned forests managed for timber production and other uses. Some leasehold and private forests are potentially available for timber production.
- > Plantations provide more than two thirds of the sawlogs produced in Australia, yet comprise 1 per cent of area.

### > Native forest area, by ownership



Source: NFI 2003 State of the Forests report.

## > FORESTS AND FOREST PRODUCTS

### > Australian forest area, by type

	'000 ha	% of area
<b>Native forest - as at 2003</b>		
Acacia	16 488	10.0
Callitris	2 330	1.4
Casuarina	2 039	1.2
Eucalypt	127 024	77.3
Mangroves	749	0.5
Melaleuca	7 056	4.3
Other	2 780	1.7
Rainforest	4 214	2.6
Total native forest	162 680	99.0
<b>Plantation - as at 2005</b>		
Hardwood plantation	740	0.5
Softwood plantation	990	0.6
Other plantation	9	0.0
Total plantation	1 739	1.1
<b>Total forest</b>	<b>164 419</b>	<b>100.0</b>

## FORESTS AND FOREST PRODUCTS

### > Forests products production

		2002	2003	2004	2005
		-03	-04	-05	-06
<b>Logs removed</b>					
<b>Quantity</b>	'000 m <sup>3</sup>	26 032	26 621	27 207	26 977
Gross value - mill door	\$m	1 483	1 569	1 639	1 696
<b>Sawnwood</b>					
Coniferous	'000 m <sup>3</sup>	3 088	3 415	3 456	3 596
Broadleaved	'000 m <sup>3</sup>	1 323	1 253	1 231	1 188
Total	'000 m <sup>3</sup>	4 411	4 668	4 687	4 784
<b>Wood based panels</b>					
Plywood	'000 m <sup>3</sup>	219	146	156	145
Particleboard	'000 m <sup>3</sup>	1 025	1 048	944	1 002
Medium density fibreboard	'000 m <sup>3</sup>	786	795	794	798
Total	'000 m <sup>3</sup>	2 030	1 989	1 894	1 944
<b>Paper and paperboard</b>					
Newsprint	kt	412	422	423	na
Printing and writing	kt	564	585	604	na
Household and sanitary	kt	194	200	195	na
Packaging and industrial	kt	1 892	1 956	1 885	na
Total	kt	3 061	3 164	3 107	na

## > FORESTS AND FOREST PRODUCTS

### > Forest products trade summary

	2002	2003	2004	2005
	-03	-04	-05	-06
	\$m	\$m	\$m	\$m
<b>Exports</b>				
Roundwood	107	114	73	82
Sawnwood	69	72	99	118
Railway sleepers	4	4	4	4
Miscellaneous				
forest products	53	49	65	60
Wood based panels	185	148	150	151
Paper and paperboard	626	630	622	592
Paper manufactures	157	136	116	116
Wastepaper	50	53	97	140
Pulp	2	1	4	5
Woodchips	808	794	858	839
Total	2 060	2 002	2 089	2 108
<b>Imports</b>				
Roundwood	2	1	1	0
Sawnwood	505	502	492	419
Miscellaneous				
forest products	589	583	586	528
Wood based panels	206	193	219	231
Paper and paperboard	2 111	2 102	2 138	2 149
Paper manufactures	410	375	442	464
Wastepaper	8	5	2	1
Pulp	254	235	225	225
Woodchips	2	1	2	2
Total	4 086	3 998	4 107	4 020

## THE DEPARTMENT

### **Australian Government Department of Agriculture, Fisheries and Forestry (DAFF)**

The Department's mission is to increase the profitability, competitiveness and sustainability of Australian agriculture, fisheries, forestry and food industries and enhance the natural resource base to achieve greater national wealth and stronger rural and regional communities.

The Department is responsible for many different activities that:

- > enhance the natural resource base on which our portfolio industries rely
- > promote a profitable, competitive and sustainable business environment
- > assist Australia's entire food supply chain, from producer to processor to consumer to become more globally competitive
- > maintain and improve access to overseas markets
- > minimise the impacts of pests, diseases and contaminants on portfolio industries and contribute to the health and welfare of farm animals
- > keep Australia free of exotic pests and diseases, and ensure export standards
- > deliver scientific advice, assessments and tools for decision making
- > deliver economic advice, forecasts and analysis.

## > THE DEPARTMENT

### **ABARE**

The Australian Bureau of Agricultural and Resource Economics provides economic research, policy analysis, forecasts and advice on current and emerging economic issues affecting the portfolio's industries to enhance the competitiveness of Australia's agriculture and resource industries and the quality of the Australian environment.

+61 2 6272 2100      [www.abareconomics.com](http://www.abareconomics.com)

### **BRS**

The Bureau of Rural Sciences is the scientific agency of the Department. The Bureau provides scientific advice for evidence-based policy and decision making by DAFF, the Australian Government and stakeholders.

+61 2 6272 4282      [www.brs.gov.au](http://www.brs.gov.au)

### **AQIS**

The Australian Quarantine and Inspection Service provides quarantine inspection for the arrival of international passengers, cargo, mail, animals and plants or their products into Australia, and inspection and certification for a range of animals and plant products exported from Australia.

+61 2 6272 3933      [www.aqis.gov.au](http://www.aqis.gov.au)

## THE DEPARTMENT

### **Biosecurity Australia**

Biosecurity Australia undertakes science-based risk assessments and provides quarantine policy advice to protect Australia's animal and plant health status and natural environment. It also provides technical advice to enhance Australia's access to international markets and participates in international organisations that set biosecurity standards.

+61 2 6272 3933 [www.biosecurityaustralia.gov.au](http://www.biosecurityaustralia.gov.au)

## > MARKET ACCESS AND BORDER PROTECTION

### Exports

- > Australia exports on average around 65 per cent of its agricultural production. Around one in four jobs in regional Australia depends on exports. Maintaining and increasing export market access is increasingly important to the continued expansion of Australian agriculture.
- > Multilateral processes, in particular the World Trade Organisation's Doha Round of negotiations and bilateral and regional free trade agreement negotiations, are used to improve the trading environment, open new markets, create new opportunities and reduce barriers in existing markets for Australian exporters.
- > Australia participates in international standard setting organisations to influence decisions on animal and plant health and food standards based on sound science and works closely with other governments to develop export standards, audit requirements and certification to ensure compliance with importing country requirements.
- > Pest and disease threats to Australia's agriculture and fisheries and their markets are managed through a coordinated approach and in partnership with industry, states and territories and our trading partners, which is focused on preparation for emergencies and threats.

## BORDER PROTECTION

### Imports

- > Australia uses a scientifically based risk assessment process to develop protocols for the importation of animals, plants and their products to help protect agriculture industries, the unique environment and human health from exotic pest and disease risks.
- > Australia intervenes with more than 81 per cent of arriving passengers and their luggage and 100 per cent of mail, cargo and shipping for exotic pest and disease risks, using detector dogs, X-ray units and inspections.
- > Australia's Northern Australia Quarantine Strategy helps protect Australia's animal and plant health status and the environment from quarantine threats arising from Australia's unique northern border. This is achieved through monitoring and surveillance activities on the northern coastline and in the countries to our immediate north, as well as through border control activities in the Torres Strait.
- > Australia operates comprehensive quarantine awareness programmes targeting international visitors, travelling Australians and importers to explain and encourage compliance with its strict quarantine requirements.

### **Overseas network**

Australia has fifteen agricultural officers placed in key overseas markets. As part of the Department's International Food and Agriculture Service, they:

- play a major role in Australia's efforts to remove or lower market access barriers and facilitate trade;
- monitor emerging international issues;
- help resolve quarantine issues; and
- provide briefings and assist with visiting delegations.

The overseas posts are located in Bangkok, Beijing (2 officers), Brussels (2 officers), Dubai, Jakarta, New Dehli, Paris, Rome, Seoul, Tokyo (2 officers) and Washington (2 officers).

## RESEARCH AND DEVELOPMENT

- > Research and development (R&D) is essential to maintain the international competitiveness and sustainability of Australia's agricultural, forestry, fishing and food industries.
- > Under the Research and Development Corporation (RDC) model, the 15 RDCs are a partnership between the Australian Government and industry, with the Government matching, dollar for dollar, industry funding up to a limit of 0.5 per cent of an industry's gross value of production. This funding formula acknowledges the fact that there is a mixture of public and private good in a rural R&D program.
- > To fulfill their role the RDCs identify the needs of industry and the Australian Government, commission and manage targeted R&D and foster uptake and adoption. In 2005-06 the RDC partnership invested more than \$542 million in rural R&D.
- > RDCs cover the cotton, fish, forests, grains, grape and wine, and sugar industries. There are another two RDCs with a more general approach – the Rural Industries RDC supports the R&D needs of new, small and emerging industries and deals with generic issues affecting the rural sector, while Land & Water Australia focuses on natural resource management issues.

## > RESEARCH AND DEVELOPMENT

- > There are also seven industry owned RDCs that provide the dairy, meat, pork, horticultural, eggs, live cattle export and wool industries with R&D and marketing support.

### > Income and expenditure 2005-06

	Contribution		Expend- iture \$m
	Industry \$m	Cwllh \$m	
<b>R&amp;D Corporation/Council</b>			
Cotton	7	5	13
Dairy	15	15	40
Fisheries	11	16	27
Forest and wood products	4	3	7
Grains	61	43	127
Grape and wine	14	12	25
Horticulture	35	34	67
Land and water resources		13	33
Meat and livestock	40	40	81
Pig	4	4	7
Sugar	5	5	10
Egg	1	1	2
Wool	39	11	83
Rural industries	2	15	22
<b>Total</b>	<b>237</b>	<b>217</b>	<b>542</b>

## ASSISTANCE PROGRAMMES

The Australian Government Department of Agriculture, Fisheries and Forestry administers a range of funding programmes to assist primary producers in agriculture, fishing, forestry and processed food industries become more competitive, sustainable and profitable. They include:

- > New Industries Development Programme
  - encourages and supports Australian agribusinesses as they commercialise innovative market driven products, services and technologies.

web address: [www.daff.gov.au/agribiz](http://www.daff.gov.au/agribiz)

- > Agriculture - Advancing Australia (AAA) –a package of programmes designed to help primary producers and rural businesses face the challenges of the future by becoming more competitive, sustainable and profitable. Since 1997, AAA has focused on improving the business and risk management skills of primary producers and helping farm families in serious financial difficulty improve their long term financial prospects.

web address: [www.daff.gov.au/aaa](http://www.daff.gov.au/aaa)

- > The Industry Partnerships Programme – focuses on improving the self-reliance and resilience of Australian agriculture, fisheries and forestry industry sectors. There are three components:

- Taking Stock and Setting Directions – provides industry with the opportunity to undertake and

## > ASSISTANCE PROGRAMMES

learn the skills to evaluate current performance and develop customised strategies for their future.

- Action Partnerships – provides grants for customised projects that focus on major industry issues or opportunities. Grants are short term and goal focused.
- Pathways for Participation – assists woman and young people to further develop their skills and knowledge and provide opportunities to increase their participation in agriculture, fisheries and forestry industries.

web address: [www.daff.gov.au/industrypartnerships](http://www.daff.gov.au/industrypartnerships)

- > Food Processing in Regional Australia Programme – provides grants for small to medium sized agri-food businesses proposing a food processing or value-adding project that will benefit rural and regional Australia.

web address: [www.daff.gov.au/regionalfood](http://www.daff.gov.au/regionalfood)

- > Natural Heritage Trust – set up in 1997 to help to restore and conserve Australia's environment and natural resources. The trust was extended in 2001 and is the largest environmental rescue plan ever undertaken in Australia. The four main programmes of the Trust are Landcare, Bushcare, Rivercare and Coastcare.

web address: [www.nht.gov.au](http://www.nht.gov.au)

- > National Action Plan for Salinity and Water Quality targets 21 regions across Australia most affected by salinity and poor water quality. It aims to help

## ASSISTANCE PROGRAMMES

communities, in partnership with governments, take responsibility for planning and implementing natural resource management strategies.

web address: [www.napswq.gov.au](http://www.napswq.gov.au)

- > National Food Industry Strategy – a government and industry partnership offering a package of programmes to build the global competitiveness and profitability of the Australian food industry.

web address: [www.nfis.com.au](http://www.nfis.com.au).

- > YARN.gov.au is an interactive website designed for young people in rural industries. It is an Australian Government initiative which aims to provide people with a place to interact and share information with others around Australia.

web address: [www.yarn.gov.au](http://www.yarn.gov.au)

- > The DAFF Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry encourages young people working, employed or studying in rural industries to carry out a project using science, technology and innovation to advance the future of agriculture, fisheries, forestry, food and natural resource management industries. Further information can be obtained by contacting the Science Awards Coordinator by phone on (02) 6272 4197 or by email on [ScienceAwards@brs.gov.au](mailto:ScienceAwards@brs.gov.au).

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## > **ACKNOWLEDGMENTS**

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