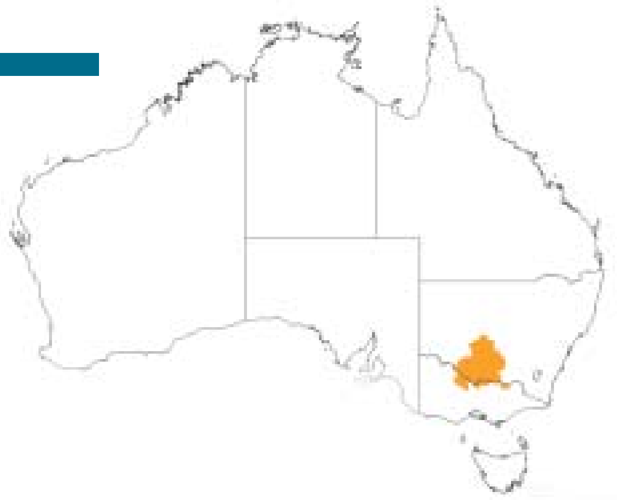
8 Rice



Location

Rice is produced under irrigation, mainly in the Riverina region of New South Wales, which includes the Murrumbidgee and Coleambally irrigation areas and the Murray Valley. Small volumes of rice are also produced in northern Victoria.

Between 1993–94 and 2003–04, the area of rice grown expanded by nearly 30 per cent to a maximum of 177 000 hectares in 2000–01. However, areas were severely constrained following the severe drought of 2002–03.

Industry features

Table 14 shows the major features of the Australian rice industry, including its size, output, market orientation and position in the global market.

Table 14 **Overview of rice production and trade**

	Unit	1983–84	1993–94	2003–04
World				
Production [a]	Mt	307	355	389
Trade	Mt	12	21	26
Australia				
Area planted	’000 ha	119	133	65
Average yield	t/ha	5.3	8.2	8.2
Production	kt	634	1 082	535
Share of world output	%	0.2	0.3	0.1
Gross value [b]	$m	196	373	162
Domestic consumption	kt	51	99	na
Exports				
Volume	kt	241	586	108
Value [b]	$m	203	419	68
Share of world trade	%	2.0	2.8	0.4
Imports	kt	na	30	88

a Milled equivalent.
b In 2003–04 dollars.
na Not available.

Sources: ABARE 2004, 2005; ABS 1990, 2001b.

Markets

In farm-gate value terms, 63 per cent of the rice produced in Australia in 1999–2000 was exported.

Major rice exporters around the world include China, Vietnam, Pakistan, Thailand and the United States. Thailand is the largest exporter by volume.

- Australia also imports rice, the largest share of which (70 per cent) is from Thailand.

The international rice market is complicated by subsidies and tariffs in many countries, including the United States, Japan, Korea and the European Union.

- The OECD estimates that in 2003 the monetary value of transfers from consumers and taxpayers to support US rice growers as a result of policy measures was equivalent to 34 per cent of producers' gross incomes; for Japanese growers, the figure was 83 per cent; for Korean growers, 74 per cent; and for EU growers, 36 per cent (OECD 2004).
- Australian growers received assistance equivalent to an estimated 6 per cent of their gross incomes in 2003. This support was largely in such forms as matching grants for industry research and development programs.
- The Australian rice industry has single-desk marketing arrangements. Sales of paddy rice and milled product are controlled by the Rice Marketing Board, which was established by the New South Wales Government.

Farm businesses

Principal features of Australian rice-producing farm businesses are shown in Table 15.

Table 15 **Features of Australian rice-producing farm businesses** Average per farm

	Unit	1983–84	1993–94	2003–04[a]
Number of businesses	no.	1 737	1 544	974
Average performance				
Area operated	ha	760	907	1 338
Area cropped	ha	204	287	437
Area under rice	ha	71	77	48
Rice produced	t	358	644	390
Rice sales [b]	$	136 391	191 893	105 746
Wheat sales [b]	$	39 847	25 538	114 953
Total crop sales [b]	$	190 436	289 102	354 360
Beef cattle sales [b]	$	13 557	18 034	14 341
Sheep sales [b]	$	22 130	28 943	21 428
Wool sales [b]	$	23 895	30 191	14 728
Net farm cash income [b]	$	71 091	129 201	139 024
Farm business profit [b]	$	1 604	54 195	53 221
Capital investment [b]	$'000	1 448	1 085	2 757
Farm debt [b]	$'000	212	255	260
Off-farm income [b]	$	na	15 528	7 726
Return on capital [c]	%	1.6	8.4	3.2

a Rice production in 2003–04 was adversely affected by a shortage of irrigation water; farmers responded by producing less water-intensive crops, such as wheat.

b In 2003–04 dollars.

c Adjusted to full equity by adding interest paid to farm business profit and excluding capital appreciation.

na Not available.

Source: ABARE Farm Surveys.

Productivity gains in the rice industry will be important for international competitiveness and for determining the farm-level allocation of resources between rice and other enterprises.

Water availability and cost are significant longer term issues for Australian rice growers.

- Drought and associated limits on available irrigation water have had a severe effect on the amount of rice grown in Australia in the past two years, with output well below the previous five-year average of 1.2 million tonnes a year.

Crop management

Current crop yields average approximately 10 tonnes per hectare, which is very high by world standards. Understanding and managing genetic diversity in rice is important for future productivity gains. Genetic improvement is focused on adaptation to temperature variability, salt tolerance and grain quality attributes.

Natural resource management

Water is a critical natural resource for rice production.

- Priorities for the industry include increasing water-use efficiency, reducing net recharge of water tables and preventing salinisation.

Other issues include:

- nutrient management strategies to produce high yield and marketable grain quality and to improve the quality of drainage water
- biodiversity conservation in the irrigation channels to protect species such as the threatened southern bell frog.

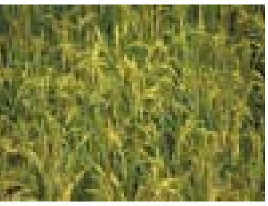
Employment and infrastructure

Industry information indicates that there are between 2000 and 2500 rice farms in Australia, most of which are family-operated farm businesses.

- Production is concentrated in the Murrumbidgee Valley of New South Wales and the Murray Valley of New South Wales and Victoria, with an average farm size of 400 hectares.
- Grower cooperatives are a significant feature of the industry, both in production and in the marketing of rice and rice-based food.

The rice industry, which originated around Leeton and Griffith in New South Wales, has become a more broadly based regional activity centred on major rice-producing areas in the Murray Valley and Colleambally.

Institutional arrangements



Peak bodies

The Ricegrowers' Association of Australia is the peak industry organisation for growers.

- The Rice Marketing Board of New South Wales was established under that state's *Marketing of Primary Products Act 1983* to control the purchase and sale of all rice grown in New South Wales, effectively establishing a single-desk selling system. The board has delegated these powers to the Ricegrowers' Co-operative Limited (RCL), which was established under the *Co-operatives Act 1992*.

Marketing and research and development arrangements

Marketing is undertaken by the RCL, which purchases paddy rice directly from growers and trades under the 'SunRice' brand. In order to grow and sell rice in New South Wales, producers must be members of the RCL.

The Rural Industries Research and Development Corporation undertakes research and development activities for the rice industry. In 2003–04, the corporation spent $3 million on rice research and development, equal to 2 per cent of the industry's gross value of production. The key priorities for these activities were:

- varietal improvement and pure seed maintenance
- agronomy and crop physiology
- crop nutrition
- harvesting, storage, handling and transport
- milling and processing.

Industry outlook

Key factors for the future include the following:

- water availability and access
- water use efficiency, which can be expected to affect productivity
- the degree to which policies in major producing, exporting and importing countries continue to distort world rice markets.
- industry success in overcoming genetic constraints affecting crop performance
- salinity, which will remain a significant factor to keep under attention in rice growing areas.