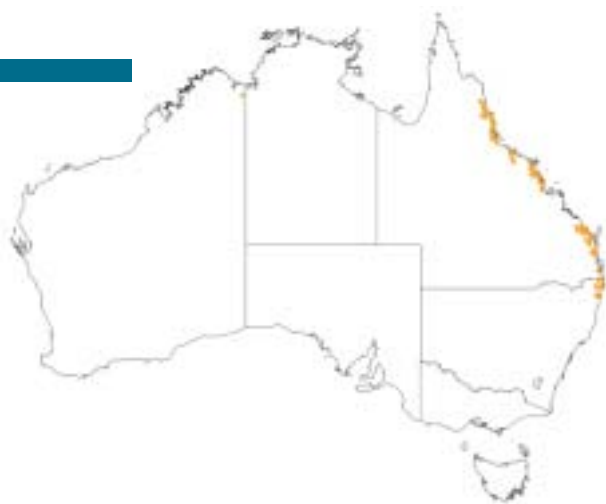


# 10 Sugar



## Location

Australian sugarcane growing and milling is concentrated in high-rainfall coastal plains from Mossman in Queensland to Grafton in northern New South Wales, with small plantings in the Ord in Western Australia. Sugarcane production is predominantly in Queensland (93.3 per cent of production in 2000–01) and northern New South Wales (6.6 per cent), where the industry is an important regional activity.

## Industry features

Table 18 shows the major features of the Australian sugar industry, including its size, output, market orientation and position in the global market.

Table 18 Overview of sugar production and trade

	Unit	1983–84	1993–94	2003–04
<b>World</b>				
Production	Mt	98.0	111.4	144.4
Trade	Mt	29.6	34.1	40.7
<b>Australia</b>				
Area harvested	'000 ha	307	340	415
Average cane yield	t/ha	79	94	89
Raw sugar production	kt	3 073	4 234	4 994
Share of world output	%	3.1	3.8	3.5
Gross value <sup>a b</sup>	\$m	1141	1239	848
Domestic consumption	kt	na	780	1 112
<b>Exports</b>				
Volume	kt	2 357	3 456	3 882
Value <sup>a</sup>	\$m	1371	1602	1 029
Share of world trade	%	8.0	10.1	9.5
Imports	kt	na	2	10
<b>Employment <sup>c</sup></b>				
Cane growing	'000			9.8
Processing	'000			5.6

a In 2003–04 dollars.

b Sugarcane cut for crushing.

c ABS 2001a.

na Not available.

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

## Markets

In farm-gate value terms, 76 per cent of the sugarcane produced on Australian farms in 1999–2000 was exported as raw and refined sugar.

Principal export markets for sugar are Malaysia (366 000 tonnes in 2002–03), Korea (352 000 tonnes), Japan (152 000 tonnes) and Canada (138 000 tonnes).

- There are very significant quantitative or tariff barriers to the import of Australian sugar in several overseas markets of interest to Australian producers.

Brazil, which over the past two decades has become the world's largest producer and exporter, can be expected to expand its operations further and be a major driver of price movements in world markets.

- Because a substantial part of Brazil's sugarcane production is used to produce ethanol, the demand for which is affected by movements in global oil prices, variations in the amount of ethanol produced (and hence in the amount of cane going into the production of sugar) add volatility to world sugar prices.

Apart from barriers to trade with large markets such as Japan, the European Union and the United States, substantial subsidies to domestic producers in those countries also help to depress prices in the global market, to the detriment of low-subsidising or non-subsidising exporting countries such as Australia.

- The OECD estimates that in 2003 the monetary value of transfers from consumers and taxpayers to support US sugar producers as a result of policy measures was equivalent to 61 per cent of the producers' gross incomes; for Japanese growers the figure was 41 per cent, and for EU growers it was 63 per cent (OECD 2004).
- Australian sugar producers received assistance equivalent to an estimated 11 per cent of their gross incomes in 2003 (OECD 2004). This support was partly in the form of matching grants for industry research and development programs.

Under state legislation, all raw sugar produced in Queensland is vested in Queensland Sugar Limited (QSL), which markets it domestically and internationally under a single-desk trader arrangement. Sugar refiners are able to export freely, but must source their raw sugar through QSL at export parity prices.

### Farm businesses

The last full ABARE survey of sugarcane producers was in 1996 and hence available data on current farm performance is limited. It is apparent, however, that productivity gains in the sugarcane producing and raw sugar milling sectors will be important for international competitiveness and for determining the farm-level allocation of resources between sugar growing and other enterprises.

- A range of studies in recent years have consistently found that there is room for improvement in areas along the supply chain.
- Areas of the industry where there are likely to be considerable efficiency gains to be made include growing, harvesting, transporting, milling and pricing.

### Crop management

Declining sugar yields over recent years have focused efforts on the development of improved varieties and management practices to increase productivity.

### Natural resource management

The area of cane harvested increased rapidly during the 1990s, stabilising at about 445 000 hectares. This increase has required industry interaction with adjacent wetlands and associated ecosystems and has led to an industry emphasis on managing landscapes to conserve biodiversity.

Harvesting cane green and leaving the trash (leaf matter) on the soil surface can increase long-term yields and improve soil and air quality compared with systems in which the trash is burnt. Take-up of this practice is greatest in Queensland (67 per cent of the 2003 crop). Burning is still predominant in New South Wales and the Ord River area.

The availability of water resources is an important long-term issue, thereby raising the issue of scope for more efficient methods of using and managing water.

The quality of water leaving sugar farms has substantially improved in recent years through:

- more effective and efficient nutrient, fertiliser and pesticide use
- improvements in the management of acid sulfate soils
- the maintenance of riparian vegetation.

Industry codes of practice have been developed covering natural-resource management practices; grower awareness of these codes is high.

- In Queensland, 88 per cent of farmers were aware of the codes of practice in 2003, rising from 79 per cent in 2000. The level of adoption of most recommendations from the codes was 64 per cent in 2003 (C4ES Pty Ltd 2004).

## Employment and infrastructure

Employment in sugarcane production accounted for 3 per cent of all employment in the agriculture sector in 2001. However, this proportion is much greater in the sugarcane-growing areas. For example, almost 50 per cent of all farmers/managers in the Bundaberg district were engaged in sugarcane production in 2001. The sugar industry also provides substantial employment in processing, harvesting and transport activities.

- Employment is concentrated within sugar-producing regions, indicating high levels of regional dependence on the industry (particularly in areas of northern Queensland with fewer alternative industry activities), with up to 30 per cent of all employment in some sugar regions directly related to the industry. Population is also declining in a number of these regions.
- Most cane farms are family owned, with product deliveries dominated by a mix of cooperative, regulatory and voluntary arrangements.
- Sugarcane is crushed at 29 Australian mills (25 in Queensland, three in New South Wales and one in Western Australia). Farmer cooperatives or companies predominantly owned by growers currently produce approximately 40 per cent of Australia's raw sugar.

The industry uses freight facilities at a number of regional ports, some of which are either dedicated sugar facilities or largely dependent on sugar for commodity throughput.

## Institutional arrangements

### *Peak bodies*

The industry is supported by a network of structures and organisations in areas such as marketing, infrastructure, and research and development:

- Australian Cane Growers' Council
- Australian Cane Farmers Association
- Australian Sugar Milling Council Pty Ltd.

### *Marketing and research and development arrangements*

Under Queensland legislation, marketing of sugar produced in that state is vested in QSL. Marketing is deregulated in New South Wales and Western Australia. The New South Wales Sugar Milling Cooperative markets all sugar for growers in that state.

The Sugar Research and Development Corporation (SRDC) is the statutory authority that undertakes research and development for the sugar industry. The SRDC's income is based on levies paid by the sugar industry (growers and millers) and matching funding from the Australian Government (up to a maximum of 0.5 per cent of industry gross value of production) for eligible research and development expenditures. In 2003–04, the corporation spent \$8.9 million on research and development, equal to about 1.1 per cent of the industry's GVP. Emphasis was on developing more integrated operations across the value chain, including improved systems for growing, harvesting, transport and milling. There was also a strong focus on building human capacity for implementation of beneficial change.



## Industry outlook

Key factors for the future include:

- improving productivity, and international competitiveness at the growing, harvesting, transporting and milling stages of the supply chain
- maximising the degree to which major producing and consuming countries reduce trade-distorting domestic support payments, remove export subsidies, and improve market access
- managing land-use pressures, including effectively managing diversification and alternative cropping while maintaining cane supply
- meeting changing community expectations about farming practices and environmental protection
- developing alternative products, including cane trash for use in co-generation fuel plants.