



Australian Government
Department of Agriculture
and Water Resources
ABARES

The Brazilian sugar industry

Natasha Frawley

Research by the Australian Bureau of Agricultural
and Resource Economics and Sciences

Agricultural Commodities report

JUNE QUARTER 2016





This article was first published as part of *Agricultural Commodities: June 2016* on 21 June 2016.

For the full report, visit:
agriculture.gov.au/abares/publications/publications and
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Cataloguing data

This publication (and any material sourced from it) should be attributed as ABARES 2016, *Agricultural commodities: June quarter 2016*. CC BY 3.0.

ISBN: 978-1-74323-289-7 (online)

ISSN: 1839-5627 (online)

ISBN: 978-1-74323-290-3 (printed)

ISSN: 1839-5619 (printed)

ABARES project 43506

Internet

Agricultural commodities: June quarter 2016 is available at agriculture.gov.au/abares/publications.

Contact

Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

Postal address GPO Box 858 Canberra ACT 2601

Switchboard +61 2 6272 3933

Email info.abares@agriculture.gov.au

Web agriculture.gov.au/abares

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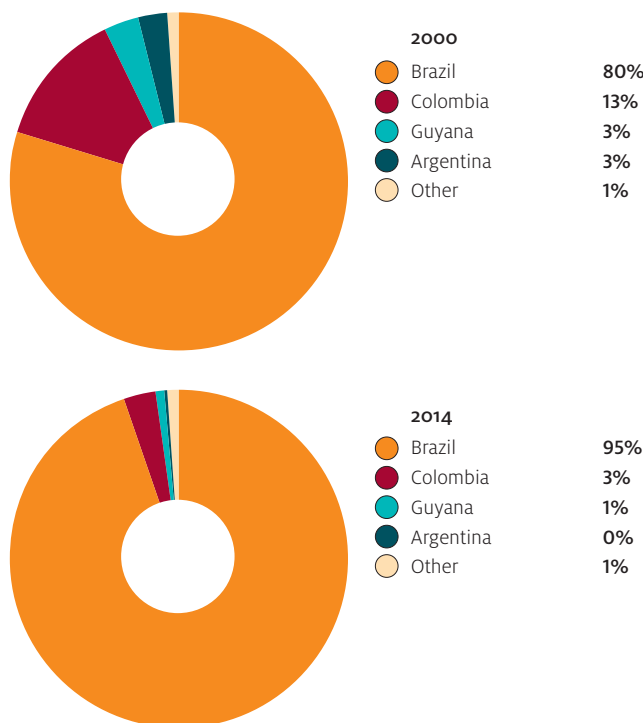
The Brazilian sugar industry

Natasha Frawley

In 2014 South America produced nearly a third of the world's sugar and supplied more than 40 per cent of the world's sugar trade (ISO 2015). Brazil is by far the largest producer and exporter in South America.

Brazil accounted for 82 per cent of South American sugar production and 95 per cent of exports in 2014.

Sugar export shares, South America, 2000 and 2014



Note: Exports in raw value equivalent.

Source: International Sugar Organization (ISO 2011, 2012, 2013, 2014, 2015)

Sugarcane production

Large-scale growth in Brazil's sugarcane production stems from 1975, when soaring oil prices and a supply shortage in the international sugar market led the Brazilian Government to implement ProÁlcool (National Programme of Alcohol). This programme was designed to promote the use of alcohol from sugar cane—sugarcane ethanol—as an alternative fuel for motor vehicles (OECD–FAO 2015).

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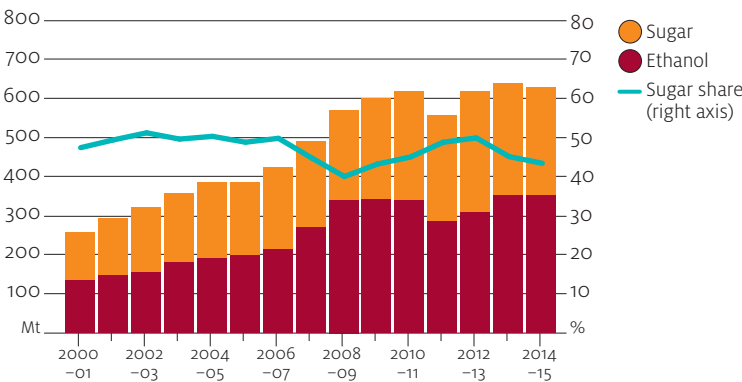
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To encourage the production of ethanol the government offered a range of subsidies to the industry. These included guaranteed purchases of ethanol by the state-owned oil company Petrobras, low-interest loans to agro-industrial ethanol firms, lower excise taxes on ethanol than on petrol and the fixing of hydrous ethanol prices at 59 per cent of the government-set gasoline price at the pump (Agbenyegah 2014).

These policies—combined with a relatively favourable climate, land availability and abundant low-cost labour—encouraged the expansion of sugarcane production (Valdes 2011). Higher-yielding varieties with increased resistance to pests and diseases, as well as varieties with changed plant structures that allowed closer plantings and facilitated mechanised cutting, were introduced (Valdes 2011). From 1975 to 2014 cane yields increased by 52 per cent to more than 70 tonnes a hectare (FAOSTAT 2016). By 2014 Brazil was not only the world’s largest producer of sugar cane but also the largest producer of raw and refined sugar and the second-largest ethanol producer (second to the United States).

Sugar cane is grown in most Brazilian states. However, most of the crop is grown in the south-central region, which has suitable soils and climate for its cultivation (UNICA 2016; Valdes 2011). In the 2014–15 harvest season, 90 per cent of Brazil’s sugar cane was produced in the south-central region. The state of São Paulo produced more than 50 per cent of all Brazil’s sugar cane (UNICA 2016).

Sugarcane production and allocation, Brazil, 2000–01 to 2014–15



Note: Data are presented by Brazilian crop year (April to March). This reflects crop year in south-central region, where most of the crop is grown.
Sources: ABARES; Brazilian Sugarcane Industry Association (UNICA 2016)

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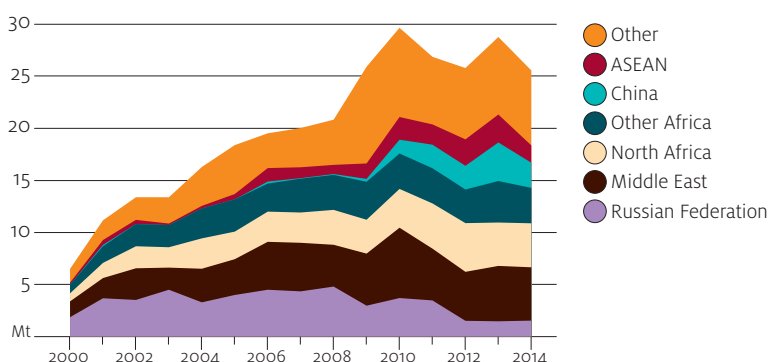
Brazil is the world’s largest producer of sugar. From 2000 to 2014 Brazil’s sugar production more than doubled, from 16 million tonnes (raw value equivalent) to more than 35 million tonnes. In 2014 Brazil accounted for 26 per cent of the world’s sugar production. This was close to the combined production of China and India, the world’s second-largest and third-largest sugar producers (ISO 2015).

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Brazil is also the world's largest exporter of sugar. Exports tripled between 2000 and 2014 (ISO 2015). In 2014 Brazil exported to 85 countries and the top five markets accounted for around 40 per cent of the total by volume. China and the United Arab Emirates each accounted for around 9 per cent of Brazil's sugar exports, and Bangladesh, India and Algeria each had about 7 per cent. Most of the remaining 80 countries had 5 per cent or less of Brazil's export share (ISO 2015).

Brazilian sugar exports, by destination, 2000 to 2014



Note: Exports in raw value equivalent.

Source: International Sugar Organization (ISO 2011, 2012, 2013, 2014, 2015)

China is a relatively new and important market for Brazilian sugar. China is the third-largest producer of sugar, but its production has not kept pace with growing demand from the rapidly expanding processed food, beverage and catering sectors (USDA–FAS 2010, 2011). Domestic production costs have also risen in recent years as a result of higher wages and low rates of mechanisation (USDA–FAS 2015). These factors have reduced the competitiveness of Chinese domestic sugar production relative to imported sugar. Imports doubled between 2009 and 2014 as a result.

By 2014, 60 per cent of China's sugar imports were from Brazil. Chinese sugar consumption is expected to rise further, and imports will be increasingly important to meet the higher domestic demand (Hamshire et al. 2014).

Issues facing the Brazilian sugar industry

Brazil is a large producer of a range of agricultural commodities that span a sizeable expanse of arable land. Its poor land transport and port infrastructure compared with those of more developed countries limits Brazil's ability to move commodities to its domestic markets, neighbouring countries and especially through its ports for export.

The south and south-east regions of Brazil have traditionally produced most of its agricultural products. Road, rail and port infrastructure is therefore more developed in these regions than in the rest of Brazil. Brazilian agriculture has expanded in other regions, including the Cerrado in central Brazil, where large amounts of oilseeds,

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grains and beef are produced. The Cerrado is closer to the northern ports, but most of its production is exported through the more developed southern ports. This has contributed to delays and bottlenecks around ports in the south and south-east regions and strained existing infrastructure in the main sugar-producing regions (USITC 2012).

Brazil has many ports along its long coastline. However, harbour capacity is limited and dredging depths limit the number and size of ships. In 2010 a backlog of vessels waiting to be loaded with sugar at ports caused long delays. This backlog contributed to a significant rise in the price of global sugar futures contracts, which reached a seven-month high (USITC 2012). Despite the high costs associated with insufficient port infrastructure, Brazil has benefited from the sharp fall in ocean freight rates on long-haul sugar trade routes to the Middle East and Asia since 2008 (Informa Agra 2016a).

From 2008 to 2015 unfavourable economic conditions, high levels of debt in the industry and rising labour costs led to the closure of many mills (Informa Agra 2015; OECD–FAO 2015). Investment has also waned despite the government's efforts to encourage producers to update ageing equipment. This may hinder the industry's ability to process the increasing cane crop in the future (Informa Agra 2016b).

Brazil is expected to remain a relatively low-cost sugar producer despite its infrastructure challenges and rising production costs. Its abundant arable land and relatively favourable climate will support the industry into the future and allow it to respond to the expected rise in global demand for sugar.

The recent significant decline in world crude oil prices is expected to have a limited effect on ethanol production in Brazil, the world's largest cane-based ethanol producer. The Brazilian Government is not expected to change its ethanol policies in the short term.

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