

Rural Migration News

Blog 316

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Australia Agriculture and Labor

Australia is a net food exporter, sending \$30 billion worth of crops and livestock commodities a year abroad and importing farm commodities worth \$15 billion. Australia exports 70 percent of its farm commodities by value, led by beef and wheat. The major destinations for Australian farm exports are China, Japan, other Asian countries, and Europe.

Agriculture employs about 2.5 percent of Australians, and agricultural output is dominated by crop commodities such as wheat and livestock commodities such as beef and lamb.

Production

Australia has a large land area, but less than 10 percent of the land is arable. Most of Australia's farm land is used to graze sheep and other animals on native vegetation, and there is twice as much improved pasture as cropped farm land such as that used to grow wheat or barley. Less than 500,000 hectares is devoted to horticultural crops.

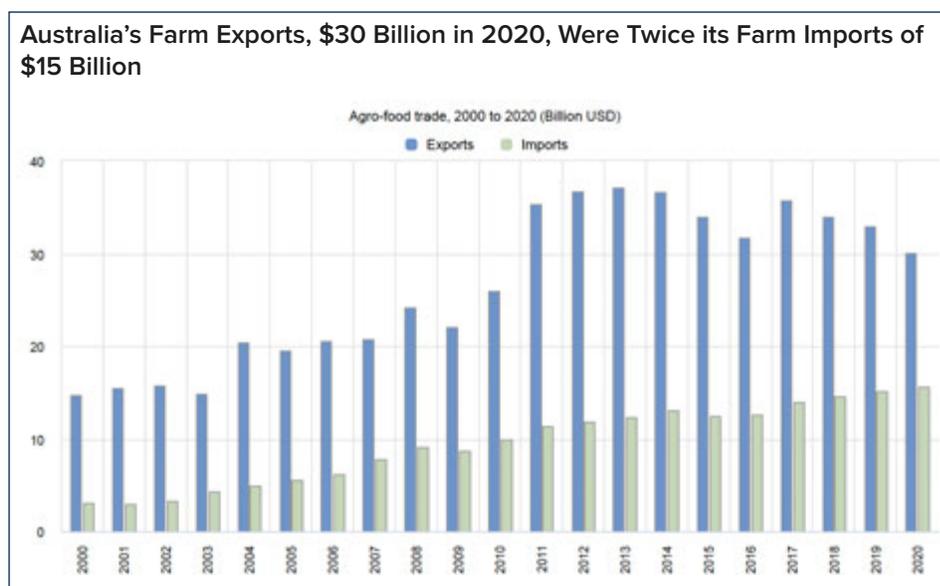
The value of Australian farm commodities was A\$75 billion (\$50 billion) in 2020-21, about the same as California's annual farm sales. Australia's two leading commodities account for a third of farm sales, with beef accounting for 17 percent and wheat 14 percent of farm sales. Fruits, vegetables, and other horticultural commodities account for 16 percent of farm sales, and sheep, dairy, and non-wheat grains each account for six percent of farm sales. Wine grapes are two percent of farm sales.

The A\$12 billion value of horticultural crops was 16 percent of Australia's farm sales, and included nuts, seven percent of farm sales, vegetables, six percent, and other horticultural commodities, three percent. California farm sales of \$50 billion a year are dominated by fruits and nuts, \$21 billion, vegetables, \$8 billion, and floriculture and related nursery commodities, \$6 billion, making California horticultural crops worth \$35 billion or 70 percent of the state's farm sales.

The share of each Australian commodity that is exported varies from over 80 percent for sugar to six percent for pork and chicken. Almost 80 percent of the beef and veal produced in Australia, and two-thirds of the wheat, is exported. China takes a quarter of Australia's farm exports.

California exports 40 percent of its farm commodities by value, led by \$5 billion worth of almonds, \$2 billion worth of pistachios, \$2 billion worth of dairy products, and over \$1 billion each of wine and walnuts. California's major farm exports are not labor intensive. The most valuable labor-intensive California exports are table grapes, whose exports are worth \$750 million a

Australia's Farm Exports, \$30 Billion in 2020, Were Twice its Farm Imports of \$15 Billion



year, oranges, \$500 million, strawberries, \$400 million, and lettuce, \$300 million. Most exports of labor-intensive commodities go by truck to neighboring Canada and Mexico.

Australia has almost 88,000 farms with sales of at least A\$40,000 a year, including two-thirds that raise livestock, a quarter that produce crops, and 10 percent dairies. Farming in Australia is an 15-60 sector, meaning that the 13,000 or 15 percent of farms with annual sales of A\$1 million or more account for 60

percent of the value of Australia's farm output.

US and California farm production is more concentrated on large farms. The five percent of US farms with sales of \$1 million or more accounted for 60 percent of the value of US farm output in 2020. California had 70,000 farms in 2017, and the 3,100 or four percent that each had sales of \$1 million or more accounted for \$40 billion or 90 percent of the state's \$45 billion in farm sales.

Australia produces about seven million metric tons of horticultural commodities a year, including nuts, which are the most valuable horticultural commodity per pound. Of the 500,000 tons of horticultural commodities exported, oranges are a third and grapes 30 percent by weight. More valuable almonds (50,000 tons) and macadamias (15,000 tons) are only a seventh of horticultural exports by weight.

Labor

An average 318,000 residents of Australia are employed in agriculture, plus an additional 35,000 guest workers. California agriculture, which has similar farm sales of \$50 billion a year, is more labor intensive, with average employment of 425,000 hired workers, including unauthorized and guest workers.

Horticultural farms employed a peak 138,000 workers in 2020-21, including 70,000 hired Australian workers, 30,000 family members of farm operators, 27,000 WHMs, and 9,000 PALM guest workers. The 2,500 largest horticultural farms employ 95,000 or 70 percent of the total horticultural workforce.

Policy

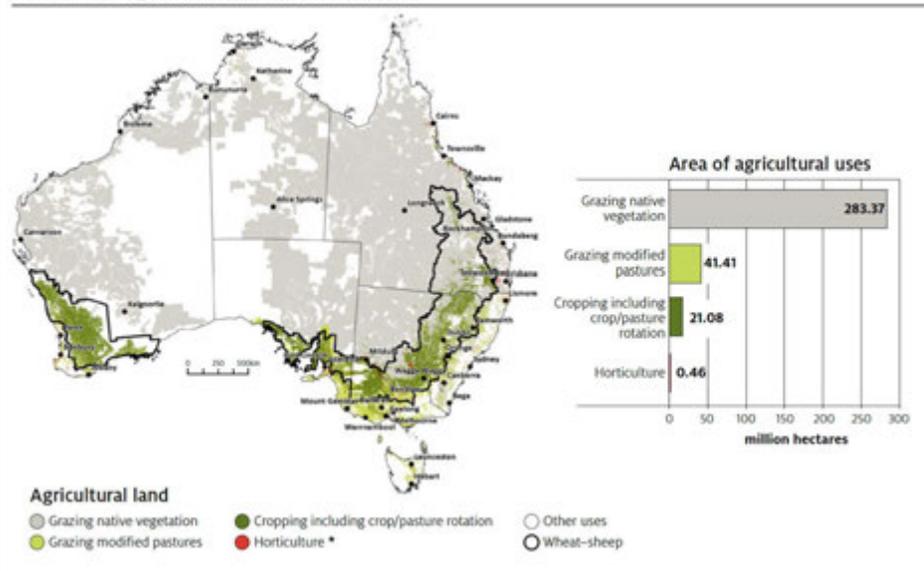
Australia is the driest inhabited continent, and rising temperatures and reduced rainfall may curb the production of some farm commodities, especially in western Australia. The government provides limited support to farmers, contributing about three percent of gross farm receipts, below the average 15 percent in OECD countries. Note that Argentina taxes agriculture by levying taxes on farm exports. US farm subsidies are concentrated in the Big 5 crops, corn, soybeans, wheat, cotton, and rice. The US government provides subsidized insurance to protect growers of these commodities from low prices, subsidizes the export of these com-

Farm Commodities are 12% of Australian Exports; AUS Ag is 55-45 Crops & Livestock

	Australia		International comparison	
	2000*	2020*	2000*	2020*
Economic context				
Share in total of all countries				
GDP (billion USD in PPPs)	539	1 404	1.3%	1.3%
Population (million)	19	26	0.4%	0.5%
Land area (thousand km ²)	7 682	7 682	9.4%	9.3%
Agricultural area (AA) (thousand ha)	455 469	362 477	15.1%	12.3%
All countries¹				
Population density (inhabitants/km ²)	2	3	53	63
GDP per capita (USD in PPPs)	28 305	54 654	9 281	20 929
Trade as % of GDP	17	16	12.3	14.0
Agriculture in the economy				
All countries¹				
Agriculture in GDP (%)	3.8	2.4	2.9	4.9
Agriculture share in employment (%)	4.8	2.5	-	-
Agro-food exports (% of total exports)	23.1	12.3	6.2	8.5
Agro-food imports (% of total imports)	4.3	7.4	5.5	7.7
Characteristics of the agricultural sector				
All countries¹				
Crop in total agricultural production (%)	55	54	-	-
Livestock in total agricultural production (%)	45	46	-	-
Share of arable land in AA (%)	5	8	32	34

Australia has Less than 500,000 Hectares Devoted to Fruits, Nuts, and Vegetables

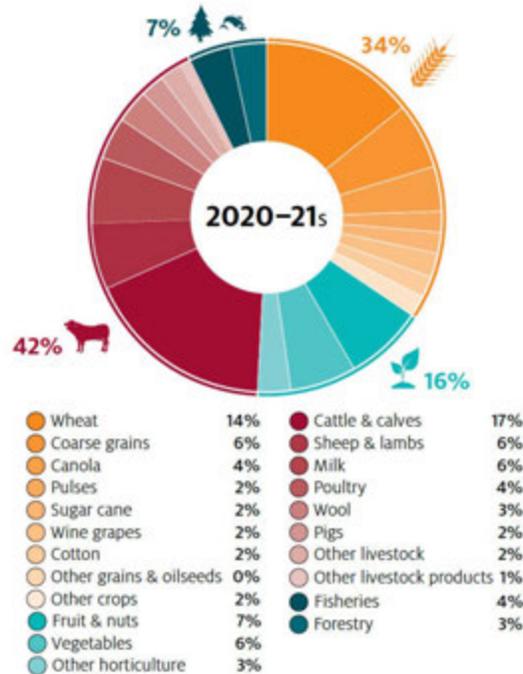
FIGURE 2 Agricultural production zones



modities, and often makes ad hoc payments to farmers if natural disasters or trade conflicts disrupt production or reduce prices. Fruit and vegetable producers are eligible for crop insurance and export promotion funds, but most US government support to horticulture is indirect, as with water projects that provide irrigation water at low prices and the toleration of unauthorized migration that holds down farm wages.

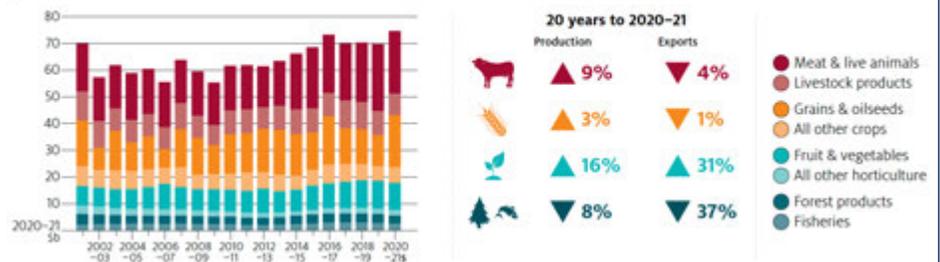
Beef and Wheat Account for a Third of Australian Farm Sales

FIGURE 3 Agriculture, fisheries and forestry value of production, by commodity, 2020–21s



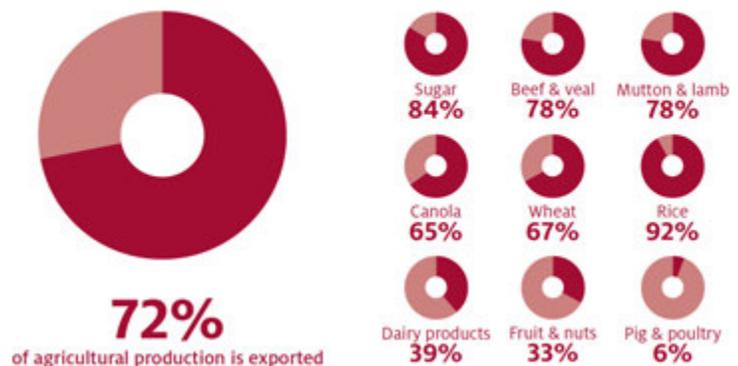
Horticultural Production and Exports have Risen Since 2000

FIGURE 4 Agricultural, fisheries and forestry production, 2001–02 to 2020–21s



80% of Australian Beef, and 2/3 of Australian Wheat, is Exported

FIGURE 10 Australian agriculture is export oriented



NZ Exports 2/3 of its Horticultural Products, Versus Less Than 10% for Australia

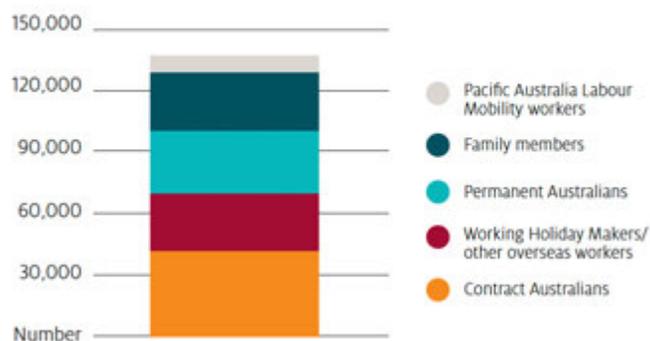
Horticulture products by country

	Australia	New Zealand	U.S.	Philippines	Brazil
Estimated total quantity produced	c.7Mt	c.5.2Mt (c.1.4Mt fruit c. 3.8Mt vegetables)	c.55-65MT	c.30-40Mt	c.50-60Mt
Estimated direct export %	c.7%	c.66%	c.10-20%	c.34%	<c.5% (excl. fruit juices)
Potential produce groups to compare	Potatoes, tomatoes, bananas, melons, oranges, mangos	"table staples" e.g. potatoes, tomatoes, carrots, onions	"table staples", citrus and berries	Tropical fruits (e.g. bananas, mangos, pineapples)	Citrus, tropical fruits (e.g. bananas, mangos, pineapples)
Mode of transport	Mainly road and rail	Mainly road	Mainly road and rail	Road	Mainly road and rail
Data availability / feasibility for deep dive	Industry data available	High proportion of exports, could compare staples	Good data availability from U.S. department of agriculture, should focus on particular state (e.g. Florida)	Mixed data availability	Mixed data availability

Source: <https://www.freightaustralia.gov.au/sites/default/files/documents/sectoral-report--horticulture.pdf>

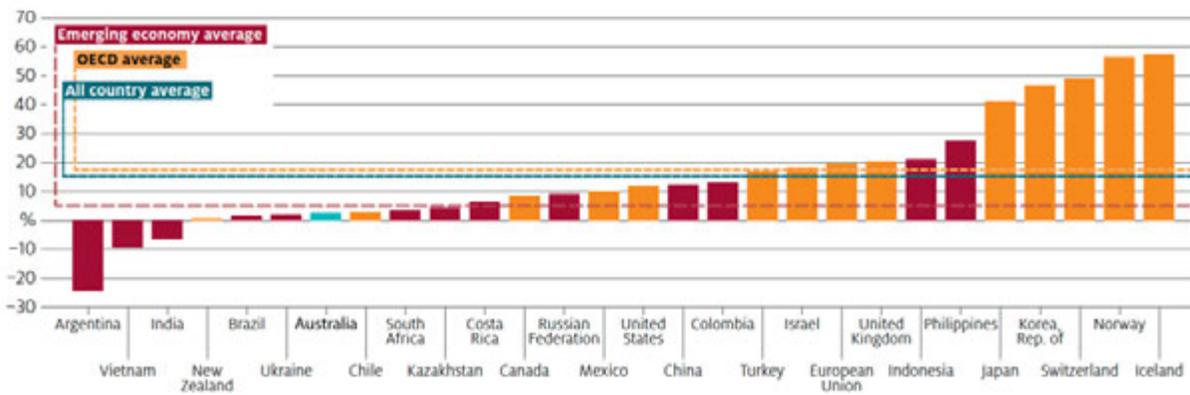
Most Horticulture Workers are Australian Residents

FIGURE 9 Farm workforce by type of employment, horticulture, Australia, 2020–21



Note: Permanent refers to workers employed on a full-time or part-time agreement. Contract refers to workers employed on a casual or contract agreement. Australian refers to Australian or New Zealand resident workers.

80% of Australian Beef, and 2/3 of Australian Wheat, is Exported



Note: The all-country average includes all OECD countries, non-OECD EU Member States, and the 13 Emerging Economies. The OECD average does not include the non-OECD EU Member States. The 13 Emerging Economies include Argentina, Brazil, China, Colombia, Costa Rica, India, Indonesia, Kazakhstan, the Philippines, Russian Federation, South Africa, Ukraine and Vietnam.

Source: <https://www.awe.gov.au/sites/default/files/images/ag-snapshot-2022-16-01.jpg>

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