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Oilseeds and Products Annual

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Report Highlights:

Post forecasts 2019/20 canola production to rebound to 3.7 million metric tons (MMT). In 2019/20, cottonseed production is forecast at 0.66 MMT due to lower cotton production amid continuing drought conditions in western New South Wales (NSW) and Queensland. In 2019/20 olive oil production is forecast to be stable at 22,000 metric tons.

Commodities:

Oilseeds

EXECUTIVE SUMMARY

Australia normally produces around 3-5 million metric tons (MMT) of oilseed crops each year, with canola and cottonseed accounting for over 90 percent of total production. Relatively small quantities of other oilseeds such as soybeans, safflower, and linseed are also grown. Canola, which is widely grown across southeast and Western Australia (WA), is the country's third largest broad acre crop after wheat and barley.

Cottonseed is a by-product of cotton production and is typically crushed to produce oil for human consumption and seed for animal feed. However, the high price of canola for livestock feed due to the ongoing drought in western NSW and Queensland has led to the virtual cessation of cottonseed crushing in Australia. Cotton growers and cotton gin operators have increasingly been selling cottonseed directly as livestock feed.

In 2019/20, Australian canola production is forecast at 3.7 MMT, reflecting a more favorable outlook for the year, especially for WA. In 2019/20, cottonseed production is forecast at 0.66 MMT because of the continuing drought in many growing areas. Olive oil production is expected to be stable at 22,000 MT in 2019/20. There are few official statistics on other oilseeds, such as soybeans and sunflowers, but the production volume is very small.

Cottonseed, sunflower, and soybean are summer crops grown mostly in northern New South Wales (NSW) and Queensland. Canola, safflower, and linseed are winter crops grown in mid-northern NSW and across southern and eastern Australia. Western Australia is the largest canola producer whereas NSW and Queensland account for almost all cotton production.

SEASONAL OUTLOOK

Australia's varied seasonal conditions have a significant impact on the size of harvested crop areas and overall production. For the 2018/19 season, for example, the planted area for canola in NSW fell by over 70 percent because of drought and very low soil moisture at the time of planting. Similarly, unfavorable seasonal conditions in WA's growing areas led to a 10 percent decline in planted area and generated lower yields. Low rainfall in the eastern states in the 2018/19 season resulted in canola being cut for animal feed due to poor crop development and higher feed prices.

The Bureau of Meteorology (BOM) is now forecasting average rainfall for most oilseed growing areas until June 2019, but low soil moisture remains a significant problem in eastern Australia due to the drought. Rainfall in a number of regions during March 2019 such as southern Western Australia, has improved the outlook for oilseed production in this state. However, the drought has not yet broken in NSW and Queensland and significant and timely rainfall would be required to boost production. Overall, average temperatures are forecast to be warmer than average for most growing regions across Australia for this period (Chart 1 and 2 below).

Most of Australia's canola production is rain-fed whereas 80-95 percent of cotton production is irrigated, depending on seasonal conditions. Olive production is mostly located in Victoria, which has greater access to water and better rainfall than most other states. Dam storage levels throughout Queensland and NSW fell in 2018 and into early 2019 and consequently doubled water prices during this period to nearly A\$500 per megaliter in eastern Australia. The 2019/20 season for oilseeds in Australia depends crucially on timely and continued rainfall in most growing areas as stored water reserves have fallen, especially in eastern Australia.

Dry conditions in NSW and Queensland over 2018 reduced water levels in reservoirs that supply water to oilseed producers, especially cotton growers, and have contributed to higher prices for water. Levels for some major dams across NSW and Queensland have fallen to record lows such as the Keepit Dam in the Namoi Valley, which is now at only one percent of capacity.

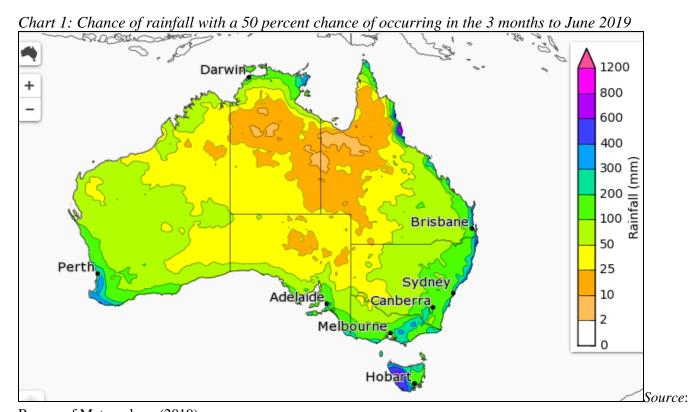
Table 1: Water levels for the Australian cotton industry, 2013-2019 (gigaliters)

| D | D. | Full | | Actual lev | vel (%) | | | | |
|----------------|---------------------|--------------|-----|------------|---------|-----|-----|------|------|
| Dam | Region | Capacit v | | | | | | | |
| | | J | 201 | 201 | 201 | 201 | 201 | 201 | 201 |
| | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Beardmore | Emerald | 82 | 82 | 60 | 84 | 82 | 15 | 100 | 81 |
| Leslie | Darling Downs | 106 | 74 | 36 | 27 | 18 | 15 | 12 | 7 |
| Glenlyon | Border Rivers | 250 | 94 | 37 | 28 | 28 | 60 | 57 | 14 |
| Pindari | Border Rivers | 312 | 63 | 17 | 14 | 36 | 81 | 60 | 6 |
| Copeton | Gwydir Valley | 1,362 | 73 | 32 | 18 | 17 | 45 | 29 | 12 |
| Split Rock | Namoi Valley | 397 | 87 | 21 | 7 | 22 | 30 | 16 | 3 |
| Keepit | Namoi Valley | 425 | 40 | 16 | 6 | 12 | 55 | 14 | 1 |
| Burrendon g | Macquarie Valley | 1,188 | 46 | 27 | 16 | 63 | 88 | 39 | 7 |
| Windamer e | Macquarie Valley | 368 | 56 | 49 | 44 | 40 | 50 | 43 | 34 |
| Wyangala | Lachlan Valley | 1,220 | 71 | 57 | 37 | 42 | 88 | 70 | 34 |
| Burrinjuck | Murrumbidge e | 1,026 | 67 | 85 | 32 | 38 | 73 | 42 | 31 |
| Total | | 8,037 | 66 | 43 | 39 | 30 | 55 | n.a. | n.a. |

Note: The assessment of water in storage does not include water in private farm storages.

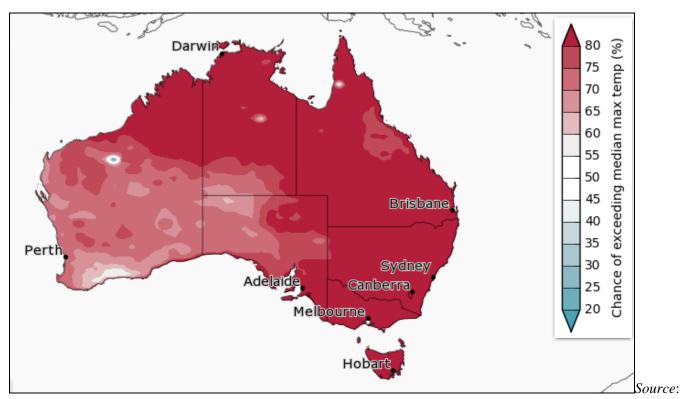
Source: Murray Darling Basin Authority and Post estimates for March of each year.

Water allocations are unavailable to cotton growers and other irrigated agriculture if water levels fall below a certain threshold. In southern Queensland, some farmers are reportedly preparing to plough dryland cotton crops that have failed to thrive. Table 1 shows current water levels for dams that are important for the Australian oilseed and especially the cotton industry.



Bureau of Meteorology (2019)

Chart 2: Chance of above median temperature in the three months to June 2019



Bureau of Meteorology (2019)

CANOLA

Production

Australian canola production is forecast at 3.7 MMT in 2019/20, with the harvested area expected to expand to 2.7 million hectares, up from 1.9 million hectares from the previous year. Soil moisture levels should support crop expansion as recent rains in southern Western Australian cropping regions and parts of NSW have improved prospects for the crop for 2019/20. While world canola prices have fallen slightly, strong domestic and international demand should encourage increased planting during late March to April.

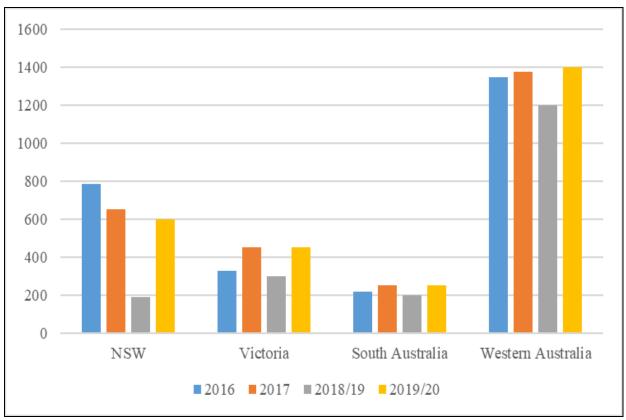
A significant recovery in the canola harvest for 2019/20 is expected for states such as NSW and Victoria where production was more than 60 percent less than the previous year due to drought and poor seasonal conditions across these states. Similarly, canola production in South Australia is forecast 20 percent higher in 2019/20, if average rainfall continues during the planting window, which was absent in 2018/19. In Western Australia, which accounted for almost 70 percent of the 2018/19 canola harvest, prospects are positive for the southern cropping zone, where significant rain has fallen in recent weeks. As a result, production could increase by more than 20 percent in 2019/20.

Canola is grown for edible oil for human consumption and meal for animal feed. It is generally a profitable winter crop and also a break crop for cereal production systems. Canola is Australia's third largest broad acre crop after wheat and barley and is the major oilseed grown across the higher rainfall regions of the grain belt, which stretches from southwest WA into northern NSW.

Canola yields are expected to be around 1.3 metric tons per hectare (MT/ha) in 2019/20, slightly higher than the previous year, which was badly affetced by the drought. Canola is normally grown in rotation with cereal and legume crops, with a pasture phase of two to three years.

The canola crop is usually sown in late autumn or early winter into moist soil. In the high rainfall zones it can be sown as late as early spring. The crop can be sown into dry soil to germinate after rain. In recent years, changing rainfall patterns, summer fallow management, and improved no-till seeding systems have enabled growers to make use of available soil moisture opportunities and sow canola earlier in the season, such as in early to mid-April. Early sowing of canola is less likely to be successful in some regions such as South Australia and northern NSW because of recent rainfall patterns. Chart 3 below shows major canola growing areas in Australia.

Flowering of the canola plant occurs from August to October, depending on the region, and harvest occurs from late October to December. Soil moisture is vital for both germination and emergence as Canola must absorb a high percentage of its weight in water before germination begins. It will usually germinate when the seed moisture content has risen to approximately 24 percent. Canola is grown in rotation with winter and summer crops (cereals, oilseeds, and grain legumes) depending on climate and water availability.



Source: Australian Department of Agriculture and Post estimates.

Canola was traditionally sown at 15 centimeter row spacing, but the adoption of stubble retention and no-till farming systems has led to wider row spacing and the possibility of inter-row sowing using GPS guidance systems. Frost damage of canola plants can be a major cause of lower production and yields. Canola is more difficult to store than grains, because of its oil content, which makes it more prone to deterioration in storage.

Canola growers in Australia have access to both conventional and genetically engineered (GE) seeds and each is grown under strict production protocols for different markets. The Gene Technology Regulator approved the use of GE canola varieties in 2003. GE canola varieties currently account for around one fifth of the canola planted in the States that allow it to be grown (Western Australia, Victoria and NSW). Other States (South Australia and Tasmania) maintain a moratorium on the commercial release of GE food crops. Non-GM Canola is certified as GM free to a maximum presence of 0.9 percent.

Consumption

In 2019/20, Post forecasts canola consumption in Australia to rebound to 925,000 MT as a result of higher production and improved seasonal conditions, especially in Western Australia. This matches consumption in 2017/18, but is an increase of over 65 percent on the previous year when low rainfall affected production. Only a relatively small proportion of canola directly enters the livestock feed market while crushing is used to produce canola oil and canola meal for domestic livestock feed.

Trade

In 2019/20, Australia's canola exports are forecast to reach 2.4 MMT, up around 29 percent from the previous year due to an expected higher canola production. Australia is a significant canola exporter with an estimated 15 average percent share of the global market. Table 2 details export volumes and prices for Australian canola to major markets for 2012 to 2018.

Table 2: Australian exports of canola by country, volume and value, 2012-2018 ('000 MT)

| Country 2012 2013 2014 2015 2016 | 2017 | 2018 |
|---|-------|-------|
| | | _010 |
| | | |
| Germany | | |
| ('000 MT) 221 296 369 278 884 | 1,135 | 863 |
| (US\$/MT) (558) (573) (472) (375) (436) | (456) | (433) |
| Belgium | | |
| ('000 MT) 809 784 544 724 648 | 787 | 614 |
| (US\$/MT) (594) (583) (520) (397) (428) | (445) | (447) |
| France | | |
| ('000 MT) 0 346 355 240 194 | 393 | 161 |
| (US\$/MT) 0 (633) (497) (415) (411) | (429) | (417) |
| Netherlands | | |
| ('000 MT) 870 460 60 388 191 | 82 | 125 |
| (US\$/MT) (611) (611) (522) (413) (417) | (375) | (422) |
| Japan | | |
| ('000 MT) 75 151 168 304 101 | 123 | 181 |
| (US\$/MT) (655) (661) (541) (445) (483) | (464) | (444) |
| China | | |
| ('000 MT) 0 969 484 409 63 | 56 | 20 |
| (US\$/MT) 0 (610) (512) (463) (432) | (431) | (342) |
| Pakistan | | |
| ('000 MT) 491 210 212 146 0 | 50 | 0 |
| (US\$/MT) (617) (611) (579) (472) 0 | (440) | |
| UAE | | |
| ('000 MT) 80 473 255 169 0 | 17 | 152 |
| (US\$/MT) (643) (604) (472) (433) 0 | (491) | (461) |
| World | ` / | , , |
| ('000 MT) 2,677 3,795 2,557 2,751 2,182 | 2,961 | 2,260 |
| (US\$/MT) (603) (606) (512) (423) (433) | (448) | (438) |

Note: Calendar years. Source: Global Trade Atlas

Nearly all canola produced in WA is exported, mainly to Asia for human consumption and to Europe for biofuel production. Western Australia accounts for over half of Australia's canola exports. Australian canola exports tend to be concentrated in the first few months of the new year, partly because of the high storage cost. In addition, the early period of the year can provide the best opportunity for Australian exporters, as it occurs between the North American and South American harvest periods.

The European Union (EU) is expected to remain Australia's major export market, accounting for around 60 percent of total canola exports in 2019/20. Other export markets include South Korea, Japan, and Malaysia. The main end-use for canola exported to the EU is as an input for biodiesel production. In Asian markets, canola is used to produce oil for human consumption as well as meal for livestock feed.

Australian canola growers sell into the European biofuel market by certifying their canola as sustainable. In January 2018, the EU accepted Australia's justification that its canola production process met its new greenhouse gas emissions savings requirement of 50 to 60 percent, up from 35 percent.

Australian canola exports to China have fallen significantly as prices in the EU market have been more attractive. In additon, Canadian canola exports have been more price competitive into the Chinese market.

Table 3: Australian canola production, supply and demand data statistics, 2017/18 to 2019/20

| Oilseed, Rapeseed | 2017/2018 | | 2018/20 | 2018/2019 | | 2019/2020 | |
|----------------------|-----------|---------------|----------|---------------|----------|---------------|--|
| Market Begin Year | December | December 2017 | | December 2018 | | December 2019 | |
| Australia | USDA | New | USDA | New | USDA | New | |
| | Official | Post | Official | Post | Official | Post | |
| Area Planted | 2,700 | 2,700 | 2,000 | 2,000 | 0 | 2,700 | |
| Area Harvested | 2,700 | 2,700 | 1,900 | 1,900 | 0 | 2,700 | |
| Beginning Stocks | 646 | 646 | 967 | 967 | 0 | 720 | |
| Production | 3,670 | 3,670 | 2,200 | 2,200 | 0 | 3,700 | |
| MY Imports | 1 | 1 | 1 | 1 | 0 | 1 | |
| MY Imports from U.S. | 0 | 0 | 0 | 0 | 0 | 0 | |
| MY Imports from EU | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Supply | 4,317 | 4,317 | 3,168 | 3,168 | 0 | 4,421 | |
| MY Exports | 2,425 | 2,425 | 1,900 | 1,900 | 0 | 2,400 | |
| MY Exp. to EU | 1,948 | 1,948 | 1,750 | 1,750 | 0 | 1,750 | |
| Crush | 800 | 800 | 750 | 480 | 0 | 800 | |
| Food Use Domestic | 0 | 0 | 0 | 0 | 0 | 0 | |
| Consumption | | | | | | | |
| Feed Waste Domestic | 125 | 125 | 68 | 68 | 0 | 125 | |
| Consumption | | | | | | | |
| Total Domestic | 925 | 925 | 818 | 548 | 0 | 925 | |
| consumption | | | | | | | |
| Ending Stocks | 967 | 967 | 450 | 720 | 0 | 1,096 | |
| Total Distribution | 4,317 | 4,317 | 3,168 | 3,168 | 0 | 4,421 | |
| CY Imports | 1 | 0 | 1 | 0 | 0 | 0 | |
| CY Imports from U.S. | 0 | 0 | 0 | 0 | 0 | 0 | |
| CY Exports | 2,260 | 2,260 | 1,900 | 0 | 0 | 0 | |
| CY Exports to U.S. | 0 | 0 | 0 | 0 | 0 | 0 | |
| Yield | 1.3593 | 1.3593 | 1.1579 | 1.1579 | 0 | 1.3704 | |

(1000 HA), (1000 MT), (MT/HA)

CANOLA MEAL

Production

Post expects canola meal production in 2019/20 to rebound to 432,000 metric tons (MT), assuming average seasonal conditions for the canola harvest and a crush of 800,000 MT. In 2018/19, drought in eastern Australia significantly affected canola production, which caused the canola crush to fall to 480,000 MT. Canola meal is the main by-product after the seed has been crushed and the oil extracted. Canola meal is used as a high-protein feed for intensive livestock, mainly in the pig, poultry, and dairy industries. It also supplements other feed grains such as wheat, barley, and sorghum.

Canola seed protein levels are affected by seasonal growing conditions, with drier seasons likely to result in higher protein levels. The protein content of canola meal varies each season and increases as the oil content decreases. Early sowings can maximize the yield potential and oil content if seasonal conditions are favorable. In 2018/19, the extraction rate for canola meal fell to around 54 percent reflecting an increase in the the oil recovery rate. This rate is assumed to also apply for 2019/20 given the hot and dry conditions forecast for eastern Australia. Expeller and solvent extraction plants are the two oilseed crushing processes used in Australia.

There are a number of Australian canola processors. GrainCorp has plants in Victoria, South Australia, and Western Australia, while Riverina Oil and BioEnergy, MSM Milling, and Cootamundra Oilseeds are located in NSW. Canola processing facilities in south-eastern Australia are close to dairy farms in Victoria and NSW. Low transport costs have supported demand for oilseed meal. In addition, poor pasture growth for livestock industries due to the drought in eastern Australia, significantly increased demand for canola meal for stock feed, resulting in a boost to domestic prices relative to the international market.

Consumption

Post forecasts domestic canola meal consumption in 2019/20 at 430,000 MT, assuming a recovery in the canola harvest with average seasonal conditions. Almost all canola meal is consumed domestically.

Trade

Canola meal competes with imported meal manufactured from a range of other oilseeds. Soybean meal has a price advantage over domestically produced canola meal and is also preferred as a feedstock by Australia's poultry and pig producers due to its higher protein content.

Table 4: Australian canola meal PS&D statistics, 2017/18 to 2019/20

| Meal, Rapeseed | 2017/2018 | | 2018/202 | 2018/2019 | | .0 |
|---------------------------|-----------|-------|------------|---------------|----------|------|
| Market Begin Year | December | 2017 | December 2 | December 2018 | | .019 |
| Australia | USDA | New | USDA | New | USDA | New |
| | Official | Post | Official | Post | Official | Post |
| Crush | 800 | 800 | 750 | 480 | 0 | 800 |
| Extraction Rate, 999.9999 | 0.575 | 0.575 | 0.573 | 0.542 | 0 | 0.54 |
| Beginning Stocks | 24 | 24 | 24 | 24 | 0 | 14 |
| Production | 460 | 460 | 430 | 260 | 0 | 432 |
| MY Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Supply | 484 | 484 | 454 | 284 | 0 | 446 |
| MY Exports | 0 | 0 | 0 | 0 | 0 | 0 |
| Food Use Domestic | 0 | 0 | 0 | 0 | 0 | 0 |
| Consumption | | | | | | |
| Feed Waste Domestic | 460 | 460 | 440 | 270 | 0 | 432 |
| Consumption | | | | | | |
| Total Domestic | 460 | 460 | 440 | 270 | 0 | 432 |
| Consumption | | | | | | |
| Ending Stocks | 24 | 24 | 14 | 14 | 0 | 14 |
| Total Distribution | 484 | 484 | 454 | 284 | 0 | 446 |
| | | | | | | |
| (1000 MT), (PERCENT) | | | | | | |

CANOLA OIL

Production

In 2019/20, Post forecasts canola oil production at 360,000 MT. Very hot and dry conditions in 2018/19 significantly reduced canola production, especially in eastern Australia. Canola oil is extracted by mechanically crushing the seed and the oil is then processed by using heat, chemicals or cold pressing. Canola seeds typically have an oil content of 35 to 45 percent. Industry sources have indicated that the oil recovery rate in 2018/19 was around 46 percent due to improved production techniques. A recovery rate of 45 percent is assumed to apply for 2019/20.

Consumption

In 2019/20, Post anticipates canola oil consumption to be stable at 195,000 MT, the same as the previous year. Canola oil is low in saturated fat, high in mono-unsaturated fat, has a high level of omega fatty acid, and is also a source of vitamin E. Recently, new high oleic canola varieties have been developed, which contain higher levels of mono-unsaturated fat, and lower levels of omega 3 fatty acid. These new traits are more suitable for commercial deep frying applications.

Virtually all domestic produced canola oil is used in the food industry, with a third used in spreads and cooking oil, and two-thirds for commercial food-service sector related processing. Several fast food enterprises in Australia have switched to canola oil from palm oil because of the apparent health benefits. Canola oil is also used as an ingredient in the manufacture of infant formula products.

Trade

Canola oil exports are forecast to recover to 170,000 MT in 2019/20 assuming a recovery in the canola harvest.

Table 5: Australian canola oil PS&D statistics, 2017/18 to 2019/20

| Oil, Rapeseed | 2017/2018 | | 2018/20 | 2018/2019 | | 20 |
|----------------------|-----------|--------|----------|---------------|----------|------|
| Market Begin Year | December | 2017 | December | December 2018 | | 2019 |
| Australia | USDA | New | USDA | New | USDA | New |
| | Official | Post | Official | Post | Official | Post |
| Crush | 800 | 800 | 800 | 480 | 0 | 800 |
| Extraction Rate, | 0.4125 | 0.4125 | 0.4125 | 0.4583 | 0 | 0.45 |
| 999.9999 | | | | | | |
| Beginning Stocks | 43 | 43 | 45 | 45 | 0 | 28 |
| Production | 330 | 330 | 310 | 220 | 0 | 360 |
| MY Imports | 17 | 17 | 18 | 18 | 0 | 18 |
| Total Supply | 390 | 390 | 373 | 283 | 0 | 406 |
| MY Exports | 153 | 153 | 145 | 60 | 0 | 170 |
| Industrial Domestic | 0 | 0 | 0 | 0 | 0 | 0 |
| Consumption | | | | | | |
| Food Use Domestic | 192 | 192 | 195 | 195 | 0 | 195 |
| Consumption | | | | | | |
| Feed Waste Domestic | 0 | 0 | 0 | 0 | 0 | 0 |
| Consumption | | | | | | |
| Total Domestic | 192 | 192 | 195 | 195 | 0 | 195 |
| Consumption | | | | | | |
| Ending Stocks | 45 | 45 | 33 | 28 | 0 | 41 |
| Total Distribution | 390 | 390 | 373 | 283 | 0 | 406 |
| | | | | | | |
| (1000 MT), (PERCENT) | | | | | | |

OLIVE OIL

Production

Australian olive oil production in 2019/20 is forecast to be unchanged at 22,000 MT. The harvested area is forecast at 36,000 hectares with around 4.6 million trees. Australia's olive industry produces table olives and olive oil for human consumption. The industry has around 900 growers with twenty farms over 80 hectares in size and sixty farms of 20 to 80 hectares. The largest olive producer in Victoria has over 2.2 million producing trees planted on over 6,000 hectares and is expanding production while smaller farms are exiting the industry. There are no recent official statistics on olive oil production.

Australia's olive and olive oil production season runs from mid-March to July, with the peak in May. There is a lag between harvesting and bottling of olive oil and the marketing year for 2019/20 begins in January 2020. Larger firms in the industry are gradually expanding their harvest area in Victoria and southern NSW, while some smaller operations have left the industry. Crushing and pressing of the fruit is the main method for extracting olive oil.

The most common varieties of olive trees planted are Arbequina, Barnea, Coratina, Frantoio and Picual, which represent around 85 percent of the harvested area. Other varieties include Manzanillo, Koroneiki, Hojiblanca, and Picholine. Most of these varieties have been chosen for their higher productivity and oil quality.

Ninety percent of Australia's olive oil production comes from a few large operations, who market their branded product through supermarkets and international markets. The other 10 percent consist of boutique-style olive oil production. The largest Australian olive oil producer, Boundary Bend, also operates olive oil processing facilities in California.

Globally, olive oil is categorized into several grades. Extra virgin olive oil is the highest grade and is solely mechanically extracted, whereas refined olive oils and olive pomace oils are produced with the use of heat, chemicals and/or solvents. Almost all of Australia's commercially produced olive oil is extra virgin olive oil.

Olives for oil production are harvested from April to June. Depending on the size of the grove, olives may be harvested mechanically or manually. Broadly, there are two types of mechanical harvesters. The first type is a tree shaker that shakes individual branches or vibrates the whole trunk, causing olives to fall into a canopy placed around the tree. The second type of harvester is an over-row or straddle harvester that has moving horizontal bars to cause the olives to fall into a catcher at the base of the machine.

Consumption

Olive oil consumption in 2019/20 is forecast to increase by 2 percent to 51,000 MT. Demand for olive oil is expected to gradually increase in Australia because of a growing preference for healthier oils, as they contain high levels of monounsaturated fats.

Australian consumption of olive oil has gradually increased to around 1.8 liters per person in 2018/19. Imported olive oil is typically sold in larger units for use in the food industry while domestically produced olive oil is sold in bottles for a higher unit price.

Trade

Olive oil imports in 2019/20 are forecast to be stable at 32,000 MT. Spain is the largest source of olive oil imports. Olive oil exports are forecast at 3,000 MT in 2019/20, the same as the previous year.

Table 6: Australian olive oil PS&D statistics, 2017/18 to 2019/20

| Cil Cil | | <u> </u> | | 10 | 2010/20 | 20 | |
|----------------------|-----------|----------|-----------|--------------|----------|--------------|--|
| Oil, Olive | 2017/2018 | | | 2018/2019 | | 2019/2020 | |
| Market Begin Year | January 2 | 018 | January 2 | January 2019 | | January 2020 | |
| Australia | USDA | New | USDA | New | USDA | New | |
| | Official | Post | Official | Post | Official | Post | |
| Area Planted | 0 | 0 | 0 | 0 | 0 | 0 | |
| Area Harvested | 36 | 36 | 36 | 36 | 0 | 36 | |
| Trees | 4,600 | 4,600 | 4,600 | 4,600 | 0 | 4,600 | |
| Beginning Stocks | 9 | 9 | 13 | 13 | 0 | 14 | |
| Production | 22 | 22 | 22 | 22 | 0 | 22 | |
| MY Imports | 33 | 33 | 32 | 32 | 0 | 32 | |
| MY Imports from U.S. | 0 | 0 | 0 | 0 | 0 | 0 | |
| MY Imports from EU | 32 | 32 | 28 | 28 | 0 | 28 | |
| Total Supply | 64 | 64 | 67 | 67 | 0 | 68 | |
| MY Exports | 3 | 3 | 3 | 3 | 0 | 3 | |
| MY Exports to EU | 0 | 0 | 0 | 0 | 0 | 0 | |
| Industrial Domestic | 0 | 0 | 0 | 0 | 0 | 0 | |
| Consumption | | | | | | | |
| Food Use Domestic | 48 | 48 | 50 | 50 | 0 | 51 | |
| Consumption | | | | | | | |
| Feed Waste Domestic | 0 | 0 | 0 | 0 | 0 | 0 | |
| Consumption | | | | | | | |
| Total Domestic | 48 | 48 | 50 | 50 | 0 | 51 | |
| Consumption | | | | | | | |
| Ending Stocks | 13 | 13 | 14 | 14 | 0 | 14 | |
| Total Distribution | 64 | 64 | 67 | 67 | 0 | 68 | |
| | | | | | | | |

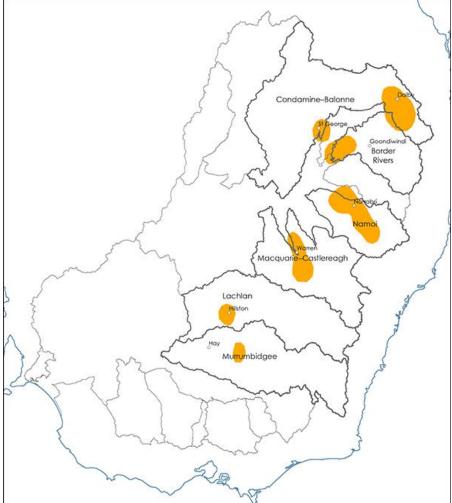
(1000 HA), (1000 TREES), (1000 MT)

COTTONSEED

Production

Australian cottonseed production in 2019/20 is forecast at 660,000 MT, 4.3 percent below the revised figure for the previous year, which was affected by continuing drought. The cotton harvested area for 2019/20 is expected to be stable. Cottonseed is a by-product of cotton production and can be used directly as a feed for livestock or crushed to produce cottonseed meal and cottonseed oil. Chart 4 shows the main cotton growing areas in Australia.

Chart 4: Cotton Growing Areas in Australia



Source: Australian Department of Agriculture

Cottonseed can be fed directly to livestock without crushing to produce meal, although the ration needs to be combined with other feeds. In recent years, the price of uncrushed cottonseed has increased sharply because of the ongoing drought. Growers and ginners have therefore tended to sell this product directly to livestock producers, instead of to crushing mills. As a result, the major cottonseed crushing facility in Australia closed in August 2018 and the cottonseed crush and production of both cottonseed meal and cottonseed meal has declined significantly. The estimated crush of cottonseed is forecast at only 25,000 MT in 2019/20.

Consumption

In 2019/20, Post forecasts cottonseed consumption at 0.625 million MT, with the crush falling sharply to only 25,000 MT in 2019/20 from an estimated 200,000 MT in the previous year. Australia's feedlot sector now consumes most of the cottonseed produced in Queensland and NSW, Australia's main cotton producing states. The high price for cottonseed as a feed for livestock has made crushing uneconomic. Cottonseed has a high proportion of oil and fiber content compared to some other feed grains, thus, is popular as a supplement ration in feedlots.

Trade

In 2019/20, cottonseed exports are expected to be stable at 160,000 MT, the same level as the previous year. Australia normally exports cottonseed to a number of countries, including Japan, Korea, China, and the United States.

Table 7: Australian cottonseed PS&D statistics, 2017/18 to 2019/20

| Oilseed, | 2017/2018 | | 2018/201 | 2018/2019 | | 2019/2020 | |
|--------------------|-----------|-------|-----------|-----------|------------|-----------|--|
| Cottonseed | | | | | | | |
| Market Begin Year | April 20 | 18 | April 201 | 9 | April 2020 | | |
| Australia | USDA | New | USDA | New | USDA | New | |
| | Official | Post | Official | Post | Official | Post | |
| Area Planted | 590 | 590 | 300 | 292 | | 300 | |
| (Cotton) | | | | | | | |
| Area Harvested | 530 | 530 | 300 | 292 | 0 | 300 | |
| (Cotton) | | | | | | | |
| Beginning Stocks | 127 | 127 | 279 | 279 | 0 | 209 | |
| Production | 1,442 | 1,442 | 751 | 690 | 0 | 660 | |
| MY Imports | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Supply | 1,569 | 1,569 | 1,030 | 969 | 0 | 869 | |
| MY Exports | 250 | 250 | 160 | 160 | 0 | 160 | |
| Crush | 840 | 840 | 680 | 200 | 0 | 25 | |
| Food Use | 0 | 0 | 0 | 0 | 0 | 0 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Feed Waste | 200 | 200 | 140 | 400 | 0 | 600 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Total Domestic | 1,040 | 1,040 | 820 | 600 | 0 | 625 | |
| Consumption | | | | | | | |
| Ending Stocks | 279 | 279 | 50 | 209 | 0 | 84 | |
| Total Distribution | 1,569 | 1,569 | 1,030 | 969 | 0 | 869 | |
| Yield | 2.72 | 2.72 | 2.50 | 2.36 | 0 | 2.20 | |
| | | | | | | | |

(1000 HA), (RATIO), (1000 MT), (MT/HA)

COTTONSEED MEAL

Production

Australian cottonseed meal production in 2019/20 is forecast at only 12,000 MT from a crush of 25,000 MT. Cottonseed meal is used as animal feed for dairy, beef, swine, poultry, and horse production and is typically processed into feed pellets. In recent years, a declining proportion of cottonseed has been crushed for meal and the whole seeds have been fed directly to cattle. Australian cottonseed crushing is now negligible.

Consumption

In 2019/20, Post forecasts Australian cottonseed meal consumption at 20,000 MT compared to 40,000 MT for the previous year. The decline in production of cottonseed meal has occurred because of the closure of almost all crushing facilities due to the higher domestic cottonseed prices and a shortfall of available cottonseed for crushing.

TradeExports and imports of cottonseed meal are forecast to be negligible in 2019/20.

Table 8: Australian cottonseed meal PS&D statistics, 2017/18 to 2019/20

| Meal, Cottonseed | 2017/2018 | | 2018/201 | 19 | 2019/2020 | | |
|---------------------------|-----------|------|-----------|------------|-----------|------|--|
| Market Begin Year | April 20 | 17 | April 201 | April 2018 | | 19 | |
| Australia | USDA | New | USDA | New | USDA | New | |
| | Official | Post | Official | Post | Official | Post | |
| Crush | 840 | 840 | 680 | 25 | 0 | 25 | |
| Extraction Rate, 999.9999 | 0.48 | 0.48 | 0.48 | 0.48 | 0 | 0.48 | |
| Beginning Stocks | 35 | 35 | 41 | 41 | 0 | 13 | |
| Production | 406 | 406 | 328 | 12 | 0 | 12 | |
| MY Imports | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Supply | 441 | 441 | 369 | 53 | 0 | 25 | |
| MY Exports | 10 | 10 | 10 | 0 | 0 | 0 | |
| Industrial Domestic | 0 | 0 | 0 | 0 | 0 | 0 | |
| Consumption | | | | | | | |
| Food Use | 0 | 0 | 0 | 0 | 0 | 0 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Feed Waste | 390 | 390 | 330 | 40 | 0 | 20 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Total Domestic | 390 | 390 | 330 | 40 | 0 | 20 | |
| Consumption | | | | | | | |
| Ending Stocks | 41 | 41 | 29 | 13 | 0 | 5 | |

| Total Distribution | 441 | 441 | 369 | 53 | 0 | 25 |
|----------------------|-----|-----|-----|----|---|----|
| (1000 MT), (PERCENT) | | | | | | |

Notes: (a) 'New Post' assessments are not official data.

COTTONSEED OIL

Production

In 2019/20, Post forecasts Australian cottonseed oil production at zero, following the closure of all major crushing facilities. Cottonseed oil is a pale yellow edible vegetable oil extracted from the seeds of the cotton plant, which is generally used for cooking. In recent years, cottonseed oil yield has been falling as a result of the use of new GE varieties, which are designed to increase the lint ratio. Australia's two major cottonseed crushing facilities (in Hay and Narrabri in NSW) have been mothballed. An end to the drought in eastern Australia could lead to the re-opening of these facilities.

Consumption

In 2019/20, Post forecasts Australian cottonseed oil consumption to decline to 30,000 MT, supplied from an increase in imports. Cottonseed oil is a popular oil used for human consumption, but the sharp decline in domestic supplies has led to the use of alternative oils such as canola to meet food industry requirements. Australia's food service sector uses the oil for deep frying in restaurants and fast food industries, as it has a relatively high smoke point. As cottonseed oil does not require hydrogenation, it is lower in cholesterol than many other oils and has virtually no trans-fats content. In addition, cottonseed oil reportedly contains a higher antioxidant content and can be stored for a comparatively long period.

As cottonseed oil is lower in cholesterol than many other oils, it is preferred for diets that require lowered intakes of saturated fats. The oil is widely used in preparing margarines and salad dressings, and for many commercially fried products. Cottonseed oil is commonly used in manufacturing potato chips and other snack foods for the domestic market.

Trade

There have been no exports of cottonseed oil in recent years. Cottonseed oil imports are forecast to increase to 30,000 MT in 2019/20.

Table 9: Australian cottonseed oil PS&D statistics, 2017/18 to 2019/20

| Oil, Cottonseed | 2017/2018 | | 2018/20 | 19 | 2019/2020 | | |
|---------------------------|------------|--------|----------|------------|-----------|------------|--|
| Market Begin Year | April 2018 | | April 20 | April 2019 | | April 2020 | |
| Australia | USDA | New | USDA | New | USDA | New | |
| | Official | Post | Official | Post | Official | Post | |
| Crush | 840 | 840 | 680 | 200 | 0 | 25 | |
| Extraction Rate, 999.9999 | 0.1667 | 0.1667 | 0.1662 | 0.165 | 0 | 0 | |
| Beginning Stocks | 29 | 29 | 44 | 44 | 0 | 0 | |
| Production | 140 | 140 | 113 | 33 | 0 | 0 | |
| MY Imports | 10 | 10 | 10 | 15 | 0 | 30 | |
| MY Imports from U.S. | 0 | 0 | 0 | 0 | 0 | 0 | |
| MY Imports from EU | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Supply | 179 | 179 | 167 | 92 | 0 | 30 | |
| MY Exports | 0 | 0 | 0 | 0 | 0 | 0 | |
| MY Exports to EU | 0 | 0 | 0 | 0 | 0 | 0 | |
| Industrial Domestic | 0 | 0 | 0 | 0 | 0 | 0 | |
| Consumption | | | | | | | |
| Food Use | 135 | 135 | 140 | 92 | 0 | 30 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Feed Waste | 0 | 0 | 0 | 0 | 0 | 0 | |
| Domestic | | | | | | | |
| Consumption | | | | | | | |
| Total Domestic | 135 | 135 | 140 | 92 | 0 | 30 | |
| Consumption | | | | | | | |
| Ending Stocks | 44 | 44 | 27 | 0 | 0 | 0 | |
| Total Distribution | 179 | 179 | 167 | 92 | 0 | 30 | |

(1000 MT), (PERCENT)