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Report Highlights:

Australian oilseed production, dominated by canola, is expected to be strong again in marketing year (MY) 2022/23, after big crops in MY 2021/22. Canola production is forecast in MY 2022/23 at 4.7 million metric tons (MMT), down from the record-busting crop estimated at 6.35 MMT in MY 2021/22, but if realized would still be the second largest crop in history. Canola yields are expected to decline in the forecast year after setting a record in the previous year, in part due to the high price and tight supply of fertilizers. Canola exports are forecast at 3.6 MMT in MY 2022/23, down from the previous year but still among the highest historical export levels. Olive and olive oil production is forecast to increase in MY 2022/23, mainly as a result of a natural biennial affect in yield after a low previous crop. Cottonseed production and exports are forecast to rise to near records in MY 2022/23 after further improvement in irrigation water reserves.

EXECUTIVE SUMMARY

Australian oilseed production, dominated by canola, is expected to be strong again in marketing year (MY) 2022/23, after big crops in MY 2021/22. Canola production is forecast in MY 2022/23 at 4.7 million metric tons (MMT), down from the record-busting crop estimated at 6.35 MMT in MY 2021/22, but if realized would still be the second largest crop in history. Although soil moisture levels are good, and prices are very high in the lead up to canola planting for the forecast year, planted area is expected to decline due to less available area fitting into crop rotations after a big planting in MY 2021/22. Canola yields are also expected to decline in the forecast year after setting a record in the previous year, in part due to the tight supply and high price of fertilizers. Canola exports are forecast at 3.6 MMT in MY 2022/23, down from the previous year but still among the highest historical export levels.

Olive and olive oil production, although a small contributor to overall Australian oilseed production, is forecast to increase in MY 2022/23. The long-term trend in Australia is for expanding olive production as young trees commence bearing fruit and increase yields, and the forecast year is expected to rise because of a natural biennial affect in yield after a low previous crop.

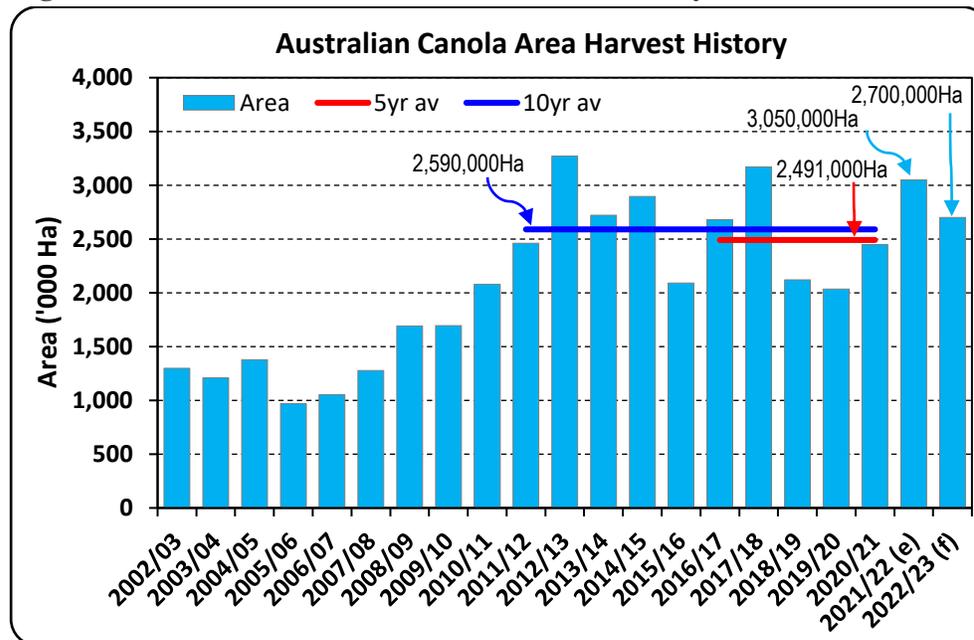
Cottonseed production is forecast to rise to record levels in MY 2022/23 after an expected bumper cotton crop. The anticipated increase in production in the forecast year is due to the further improvement in irrigation water reserves after an extraordinary 2021/22 irrigation season. This year, irrigation storage dam levels have increased to be at near capacity at the tail end of the summer crop irrigation season and levels are well above those at the start of planting. This is anticipated to result in higher water allocations in the lead up to crop planting for next year's crop, encouraging an increased irrigation planted area.

CANOLA

Production

FAS/Canberra forecasts canola production to decline significantly to 4.7 million metric tons (MMT) in marketing year (MY) 2022/23, but if realized still achieve the second largest crop ever, following an estimated record-breaking 6.35 MMT in MY 2021/22. This crop smashed the previous production record, set in MY 2020/21, of 4.5 MMT by over 40 percent. Although soil moisture conditions in the canola growing regions are generally good and prices are very high in the lead up to sowing, there is an expectation that there will be a reduction in planted area. This is due to farmers having less suitable area available in their crop rotations for canola after the previous two years of big planted area. In addition, the three major input cost items of fertilizer, chemicals, and diesel all have skyrocketed in recent months, and the supply of some of these items is also proving to be challenging. Area for canola is forecast to decline by 10 percent to 2.7 million hectares (MHa) from the previous record production breaking season of 3.05 MHa. The forecast area is still 110,000 Ha above the previous 10-year average and even further above the previous 5-year average (see Figure 1). Yields are also forecast to decline by 16 percent from the record set in MY 2021/22, but still remain 18 percent above the previous five-year average.

Figure 1 – Australian Canola Area Harvest History



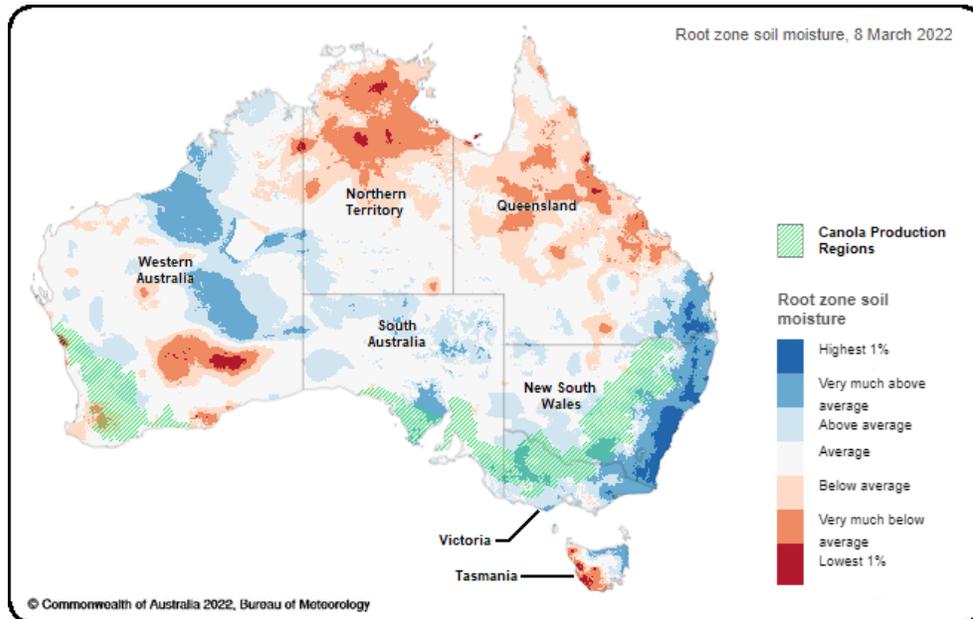
Source: PSD Online / FAS/Canberra

Notes: (e) = estimate, (f) = forecast

Canola is typically planted from March to May and harvested from October to December. The more northern production areas generally have earlier planting and earlier harvest compared to the more temperate climate in the southern areas. As planting time approaches, most of the canola growing regions have average to above average soil moisture this year, especially in the eastern growing regions(see Figure 2). Of the major winter crops, wheat and barley have a lower production risk and have lower input costs compared to canola. But with good soil moisture and the backing of the previous two years of strong winter crop production and price results, this will allow growers to optimize their returns by taking a degree of risk with large canola planted area in MY 2022/23.

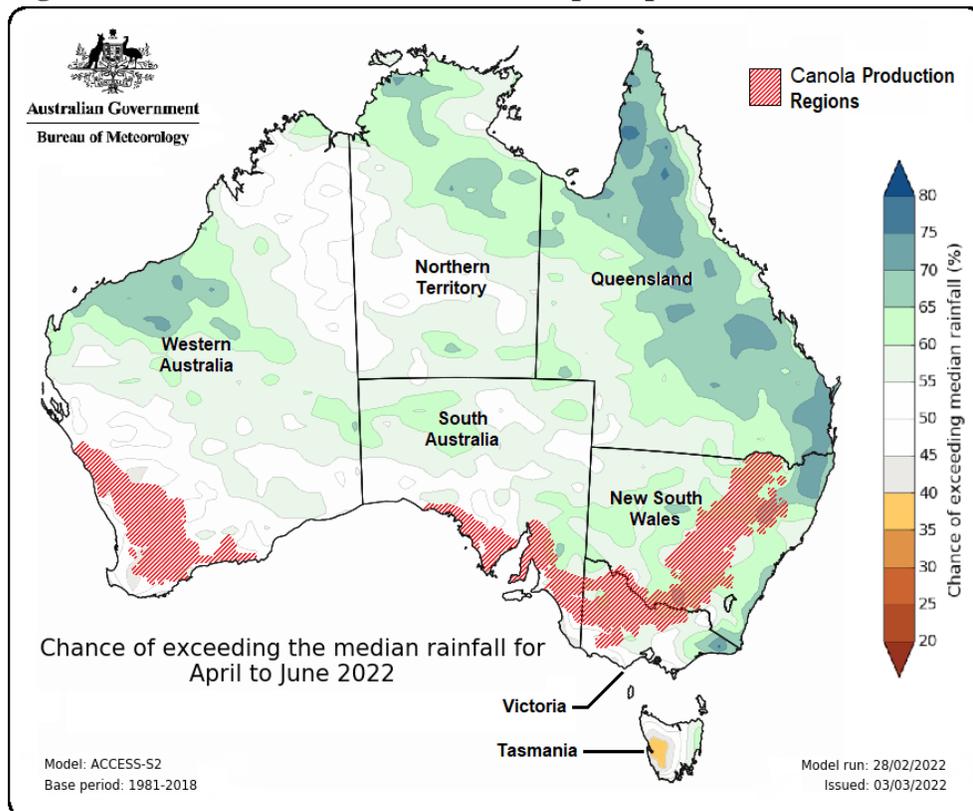
Soil moisture conditions in Western Australia are not as favorable compared to eastern Australia, and Western Australia on average accounts for nearly half of Australia’s total production. Because of its importance in overall production, any variance in planting and yield in Australia has a substantial bearing on national canola production. Due to generally sandy soils in Western Australia’s canola growing region, soil moisture in the lead up to planting is not as important as rainfall around planting and in-crop rains. Farmers in Western Australia will be somewhat encouraged by the forecast an average chance of exceeding median rainfall over the April to June 2022 period during planting and early growth stages of the crop (see Figure 3).

Figure 2 – Australia Soil Moisture Map – March 08, 2022



Source: Australian Bureau of Meteorology / FAS/Canberra

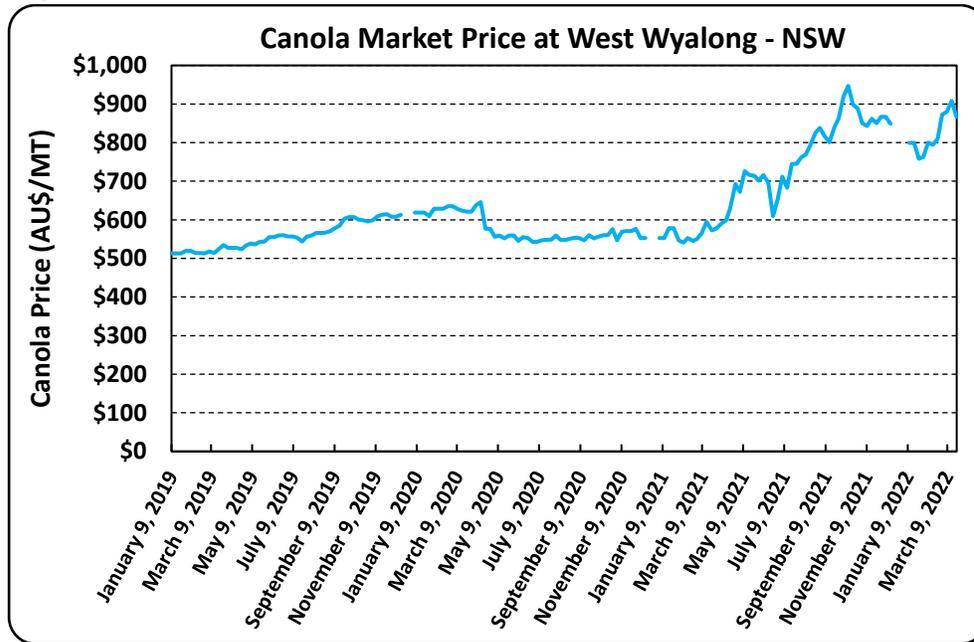
Figure 3 - Australia Rainfall Forecast Map – April to June 2022



Source: Australian Bureau of Meteorology / FAS/Canberra

A further key positive towards the forecast crop production is the very high prices currently available for canola. Since the start of 2021 the canola price has risen by around 60 percent, with the peak price even higher (see Figure 4). After prices started to decline around the start of harvest from mid-October 2021, they started to rally from mid-February 2022, leading up to the Russian invasion of Ukraine. Futures prices for late 2022 at harvest for Australian producers are currently strong relative to historical prices.

Figure 4 – Canola Market Price



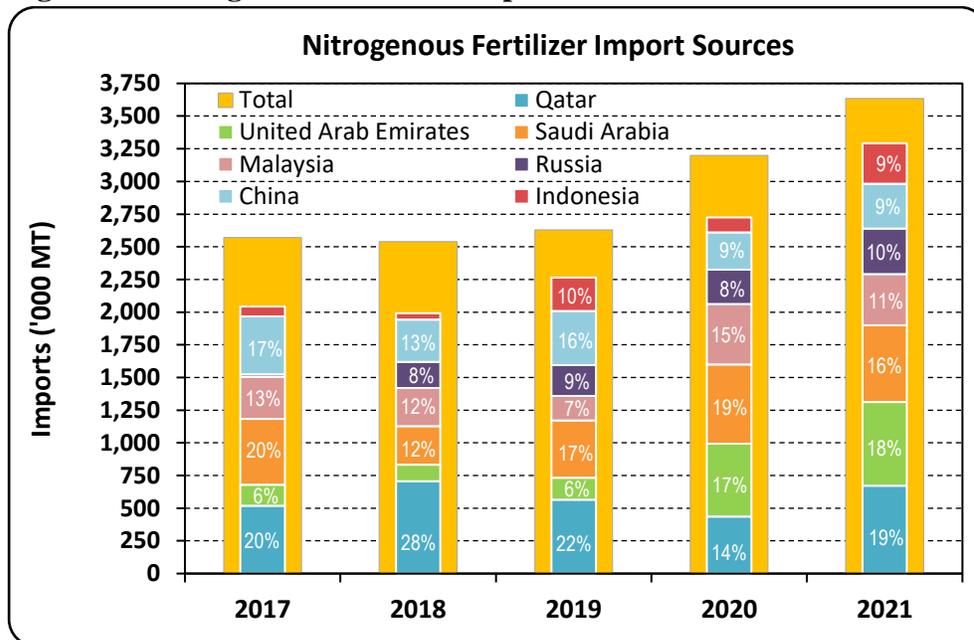
Source: *The Land newspaper*

As mentioned, despite positive factors, planted area of canola is still expected to decline. Canola requires high nitrogen inputs relative to the other major winter grains, wheat and barley, and with the current challenges sourcing fertilizer and its high price this will discourage some canola planting. A key concern for winter crop producers for the MY 2022/23 season is the escalation in the price of nitrogen-based fertilizer and chemicals (mainly herbicides) which have increased by two to three-fold in recent months. Of further concern is the escalation in world crude oil prices, triggered by the Russian invasion of Ukraine, which has led to a large increase in the cost of diesel for producers.

A key trigger for the escalation in nitrogen-based fertilizer prices has been due to Chinese state-owned producers in September 2021 being banned from exporting fertilizer, which appears to be for the purpose of reducing their own domestic prices. However, non-state-owned fertilizer producers at this point are reportedly free to continue to export their products. In addition to the Chinese ban on fertilizer exports, is the impact of the Russian invasion of Ukraine. Russia is a major exporter of fertilizers, in particular nitrogenous fertilizers, and with shipping disruptions from the Black Sea region during hostilities there are likely to be shortage of fertilizer on the world market which is evident by the recent large escalation in price.

A positive for Australia is that for many years its primary source of nitrogenous fertilizer is from the Middle East and around only 10 percent or less is sourced from each of Russia and China (see Figure 5). With a strong spread of nitrogenous fertilizer sources, Australia is reasonably well placed to secure most of its requirements in the lead up to the MY 2022/23 winter cropping season.

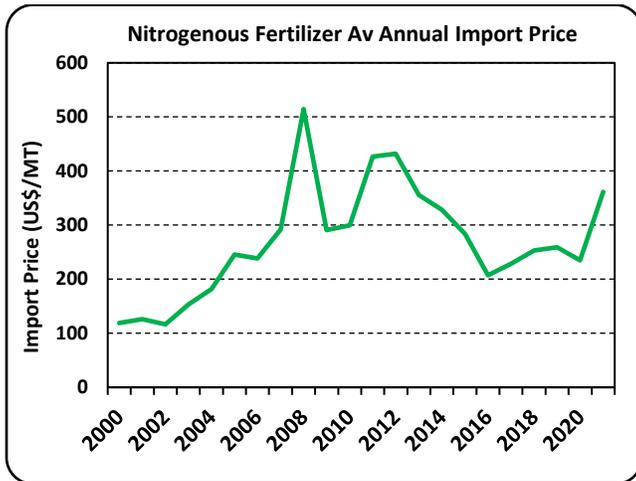
Figure 5 – Nitrogenous Fertilizer Import Sources



Source: Australian Bureau of Statistics

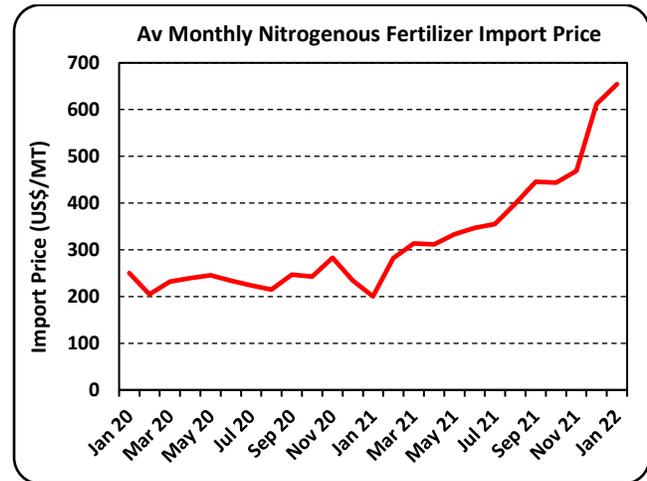
The average import price of nitrogenous fertilizers escalated dramatically from US\$235 per metric ton (MT) in 2020 to US\$362 per MT in 2021. Interestingly the average import prices in 2008, 2011 and 2012 were far higher (see Figure 6). An average price in 2022 similar to that of 2021 would be manageable but the monthly trend of import prices over the last two years would suggest that prices in 2022 will be far higher than in 2021. Monthly prices were broadly flat across 2020 at around US\$235 per MT but rapidly escalated from February 2021 to November 2021. Import prices further accelerated in December 2021 and January 2022 reaching US\$654 per MT (see Figure 7). These increases are attributed to the rising energy costs in 2021 and the restriction of supply from China. The impact in prices due to the reduced supply from Russia and Ukraine are yet to be seen in the data but is unlikely that there will be any relief for Australian producers at planting and the early stages of crop growth.

Figure 6 – Nitrogenous Fertilizer Average Annual Import Price



Source: Australian Bureau of Statistics

Figure 7 – Average Monthly Nitrogenous Fertilizer Import Price



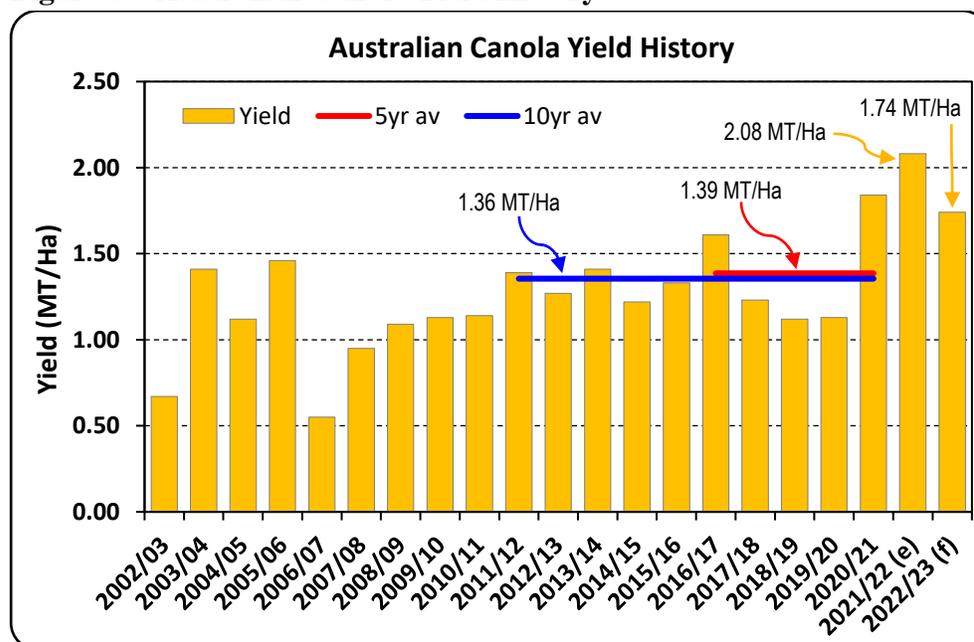
Source: Australian Bureau of Statistics

An important chemical used in cropping programs is glyphosate, much of which is sourced from China. The cost of producing glyphosate has reported to have increased by up to three-fold over the last year due to the rise in the cost of source ingredients and the increasing energy costs in China. Chemical costs will be a further consideration for winter crop producers when choosing the balance of planted area between the higher risk canola crop and lower risk wheat and barley crops.

With fertilizer and chemicals being the two major costs for Australian producers there has been a great deal of discussion on how best to plan for the MY 2022/23 winter crop. With good soil moisture and very high canola prices on the one hand, but escalating fertilizer, chemical and diesel costs on the other, it is forecast that there will be some reduction in planted area and that some growers will be a little more frugal with their inputs. This is expected to result in an above-average yield but significantly lower than the record achieved in the past year.

Canola production for MY 2021/22 is estimated to have reached 6.35 MMT and is in line with the official USDA estimate and the Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES) estimate, finishing well above earlier expectations at the commencement of harvest. This was far higher than the record set in the previous year of 4.5 MMT, due to both an increase in planted area and achieving a record national average yield. The estimated average yield of 2.08 MT/Ha is 50 percent higher than the previous five-year average (see Figure 8). Unusually, despite the diverse area in which canola is grown in Australia, nearly all regions had particularly good growing conditions throughout the season which supported such an extraordinary high average yield.

Figure 8 – Australian Canola Yield History



Source: PSD Online / FAS/Canberra

Notes: (e) = estimate, (f) = forecast

Consumption

FAS/Canberra forecasts domestic canola crush to decline to 1 MMT in MY 2022/23, from an upward revised estimate of 1.1 MMT in MY 2021/22. Crush volume had been stable for several years at around 800,000 MT as cooking oil consumption in Australia is fairly stagnant and merely increasing with population growth. But with another large harvest, albeit well below MY 2021/22, the crush is expected to again be above past levels. With strong international canola oil prices, domestic crushers are forecast to be encouraged to produce at near capacity, but at a slightly lower level than the MY 2021/22 record canola production year.

Canola production in Western Australia and South Australia is almost entirely for exports, while canola from eastern Australia is typically destined for domestic crush with any surpluses sold on the export market. Western Australia only accounts for around 10 percent of Australia’s total crush even though almost half of the national crop is produced there. This is in part due to the demand for the byproduct, canola meal being in greater demand in the eastern states where the majority of the beef feedlots, dairy, swine and poultry users are located.

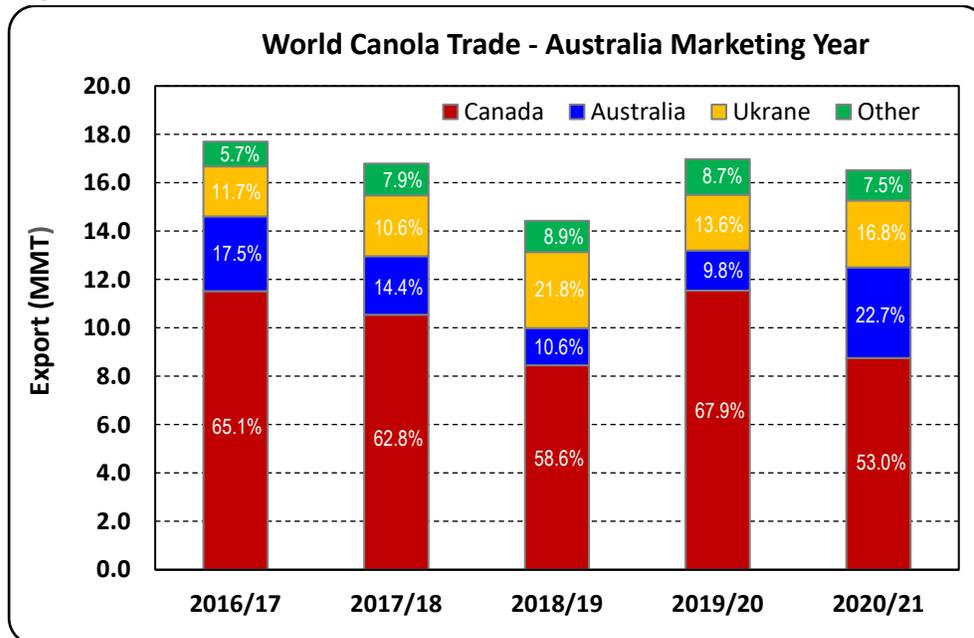
In most years domestic canola prices are closely correlated to international prices due Australia typically consuming only around one-quarter of production and exporting the balance. Although in MY 2021/22 Australia is expected to crush only around 17 percent of production making it even more reliant on the international market this year. With canola crushing capacity at around 1.1 to 1.2 MMT, crush is at around capacity providing no further scope to reduce dependence on the export market.

MY 2021/22 canola consumption for crushing has been revised upwards by FAS/Canberra to 1.1 MMT, compared to the official USDA estimate of 900,000 MT. Industry analysts report that the record crop and high world canola oil prices are encouraging crushers to produce at capacity.

Trade

MY 2022/23 canola exports are forecast to be 3.6 MMT, a 1.2-MMT decline from the upward revised estimate for MY 2021/22. This forecast decline is largely due to the anticipated lower canola production after the record-smashing result in MY 2021/22. Despite the forecast decline in exports, if realized it would still be the third largest on record. Australia is a significant world exporter of canola, on average accounting for around 15 percent of global trade and about in line with Ukrainian exports. However, they are both typically a distant second to Canada, who generally accounts for around two-thirds of world trade (see Figure 9).

Figure 9 – World Canola Trade – Australia MY 2016/17 to 2020/21



Source: Trade Data Monitor

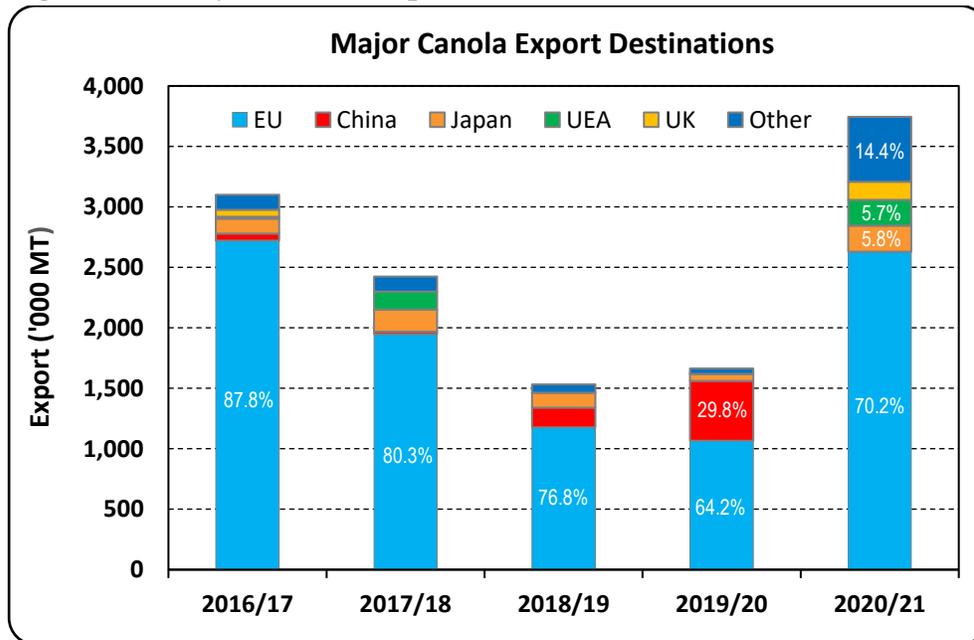
Note: Australia Marketing Year is December to November (eg MY 2020/21 = Dec 2020 to Nov 2021)

The small Canadian canola crop from 2021, at around three-quarters of the usual volume, had an impact on the tail end of Australian exports in MY 2020/21 and is expected to continue to support Australian exports in MY 2021/22 until a larger Canadian crop starts to be exported in the latter half of the marketing year. In the first two months of MY 2021/22 (Dec 2021 and Jan 2022) Australia has exported 1.1 MMT of canola, around 30 percent above the same time the previous year. Also in question at

present is the impact on world trade of exports from Ukraine (which are primarily shipped from July to November) due to Russia’s invasion of Ukraine.

Over the last five years on average around 75 percent of Australia’s exports have gone to the European Union (EU), primarily for the biodiesel market. However, trade with China, Japan, United Arab Emirates and the United Kingdom varies from year to year (see Figure 10). Interestingly, in MY 2020/21 an increasing spread of export destinations emerged with shipments to other nations increasing to 14 percent when past results have been below five percent. With Canada exporting vastly more canola than either Australia or Ukraine, changes to Canadian production have a significant bearing on Australian canola trade. Exports of canola from Canada were lower than usual in MY 2020/21, and this along with the improved supply from Australia is attributed to the increased spread of export destinations.

Figure 10 – Major Canola Exports Destinations – MY 2016/17 to 2020/21

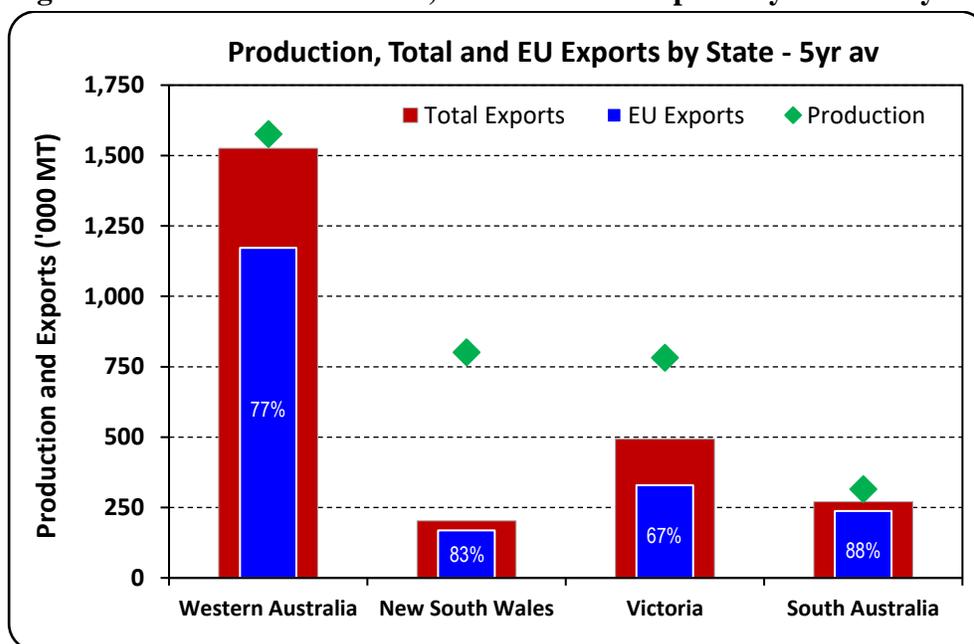


Source: Australian Bureau of Statistics

A major difference between Canadian and Australian supplies to the EU is that most of Canada’s canola is GM, whereas most of what is exported to the EU by Australia is non-GM. Even though the primary use of Australian canola in the EU is for the biodiesel market, importer preference is for non-GM canola. This enables the meal by-product to be used in their livestock industries. However, if the premium for non-GM canola climbs too high, EU importers reportedly have some flexibility in sourcing GM canola to meet their demands. With increasing energy market prices and the primary purpose of exports to the EU being for biodiesel production, it is anticipated that the EU market will remain strong for Australia.

Over the last five years, Western Australia has on average produced almost half of the national canola crop but accounted for two-thirds of overall exports. In fact, about 97 percent of Western Australian production is exported of which 77 percent has been to the EU (see Figure 11). South Australia, although a smaller producer, has similarly been focused on the EU export market. This is due to the relatively small populations and limited crushing facilities in these states. The opposite is true of New South Wales, however, which has a sizeable population base and robust crushing facilities. Because of this, although New South Wales on average accounts for one-quarter of production, over the last five years it has only accounted for five percent of total exports. Victoria produces a similar amount of canola to New South Wales but exports almost two-thirds of its production but also has a more diverse export destination being less reliant on the EU market.

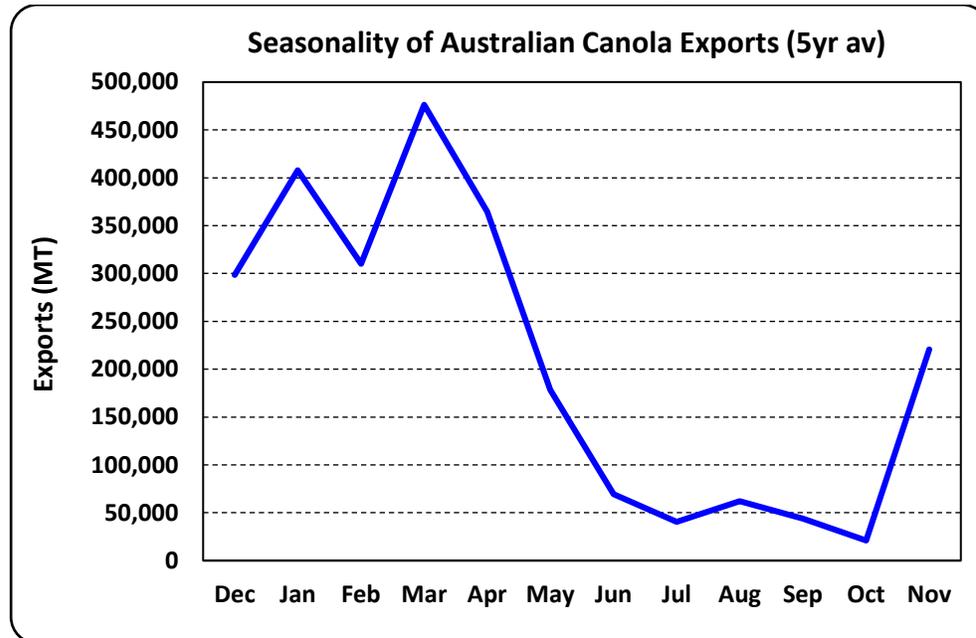
Figure 11 – Canola Production, Total and EU Exports by State – 5-year average



Source: Australian Bureau of Statistics / Australian Bureau of Agriculture Resource Economics and Sciences

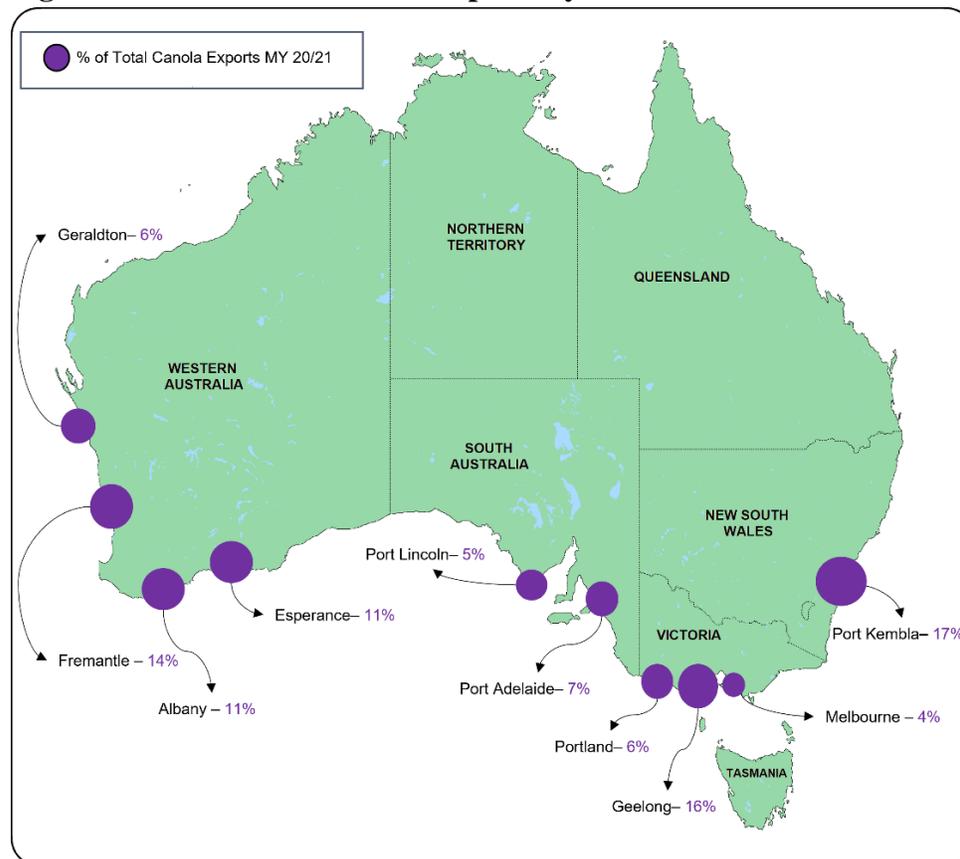
Canola exports in MY 2021/22 are estimated by FAS/Canberra to reach 4.8 MMT and in line with the official USDA estimate. For the first two months (December 2021 to January 2022) of MY 2021/22 - which is the start of the peak export period for Australia (see Figure 12), the volume has been high at 1.1 MT. This is up 30 percent compared the same period the previous year where the full year shipment was 3.7 MMT. However, a key issue for exporters is that the major canola exporting ports (see Figure 13) are the same ports that are handling Australia's record winter crop including much larger volumes of wheat and barley. This is limiting any further monthly increases in shipments. It is anticipated that ports will run at capacity throughout the year but manage to cope with the estimated record winter crop export.

Figure 12 – Seasonality of Australian Canola Exports – 5-year average



Source: Australian Bureau of Statistics

Figure 13 – Australian Canola Exports by Port



Source: Australian Bureau of Statistics/ FAS/Canberra

Stocks

FAS/Canberra forecasts ending stocks of canola to decline to around 380,000 MT in MY 2022/23 after a higher than usual level in MY 2021/22 following record production. According to industry sources most of the canola is typically sold by the end of June each year and very little stock is held prior to the start of harvest at the beginning of November.

Oilseed, Rapeseed Market Year Begins	2020/2021		2021/2022		2022/2023	
	Dec 2020		Dec 2021		Dec 2022	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Australia						
Area Harvested (1000 HA)	2450	2450	3050	3050	0	2700
Beginning Stocks (1000 MT)	723	723	330	330	0	530
Production (1000 MT)	4500	4500	6350	6350	0	4700
MY Imports (1000 MT)	1	1	1	1	0	1
Total Supply (1000 MT)	5224	5224	6681	6681	0	5231
MY Exports (1000 MT)	3746	3745	4800	4800	0	3600
Crush (1000 MT)	900	900	900	1100	0	1000
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	248	249	275	251	0	251
Total Dom. Cons. (1000 MT)	1148	1149	1175	1351	0	1251
Ending Stocks (1000 MT)	330	330	706	530	0	380
Total Distribution (1000 MT)	5224	5224	6681	6681	0	5231
Yield (MT/HA)	1.8367	1.8367	2.082	2.082	0	1.7407
(1000 HA) ,(1000 MT) ,(MT/HA)						

CANOLA MEAL

Production

Canola meal production is forecast to decline in MY 2022/23 to 575,000 MT from the upward revised estimate of 630,000 MT in MY 2021/22. These are the two largest ever results for the Australian canola crush. Canola meal production is driven by the crushing demand for canola oil and the strength of the canola meal byproduct price also has a bearing on the merits of crushing to produce canola oil.

Industry sources report that canola meal prices so far in MY 2021/22 are strong which is supporting a big crush at around the national capacity. Canola meal is a high-quality protein rich supplement, high in rumen undegradable protein which is sought after in supplementary feeds for performance. It is used as an ingredient in a range of livestock industries, the largest of which is the beef cattle industry and behind this the dairy industry. Very high beef cattle prices and near record milk prices are encouraging higher use of supplementary feeds to increase productivity.

Although canola production is forecast to decline by 26 percent in MY 2022/23, canola meal production is forecast to fall by only nine percent. MY 2020/21 canola meal production was elevated due to crushers taking advantage of strong world canola oil prices in part driven by the much smaller Canadian canola crop in 2021, and now also the uncertainty of canola oil along with sunflower oil supply from Ukraine, who is a very significant supplier to the world market.

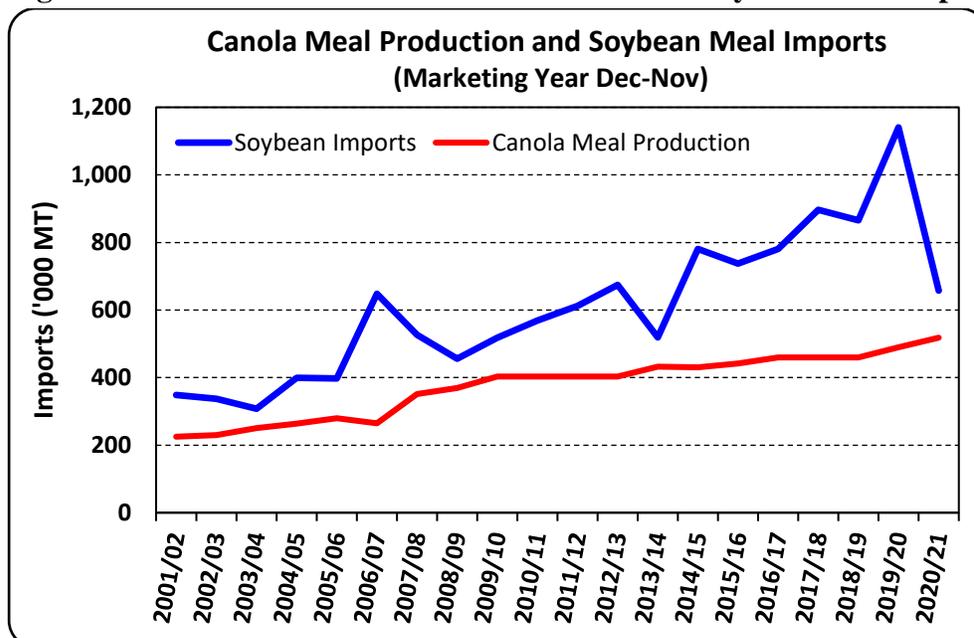
FAS/Canberra has upward revised the canola meal production estimate for MY 2021/22 by 22 percent to 630,000 MT, compared to the official USDA estimate of 518,000 MT. This large increase is due to the record-busting canola crop and high world canola oil prices driving crushers to process at capacity, and it is estimated to achieve highest canola meal production on record.

Consumption

All canola meal produced in Australia is consumed domestically by the livestock industries, primarily in the eastern states. The major crushing facilities in these eastern states are near major users of meal including the pig, poultry, and dairy industries. Canola meal competes to some degree with imports of soybean meal, which have been steadily increasing over the last two decades. Although soybean meal is the nearest direct competitor to canola meal, they do have differing characteristics and meet different livestock nutritional needs for ruminant and monogastric livestock industries.

The import of soybean meal is almost entirely from Argentina which has in general been increasing over the last two decades, but in MY 2019/20 there was a large spike in imports followed by an even larger fall in MY 2020/21 (see Figure 14). There was no supply shortage issue from Argentina as their overall exports increased in MY 2020/21. Industry sources indicate that soybean meal can store for extended periods and that the spike was likely due to importers overestimating demand in Australia and then carrying large stocks into MY 2020/21. They then their imports that year after also considering the expectation of an increased canola crush.

Figure 14 – Australian Canola Meal Production & Soybean Meal Imports



Source: Australian Bureau of Statistics / FAS/Canberra

Although Australia produces ample canola to increase its crush, the demand for canola meal is only slowly increasing from year to year. Without this demand driving a firm price for the canola meal by-product, the economics of increasing canola oil production can be challenging for Australian producers. As a result, any surplus canola production over the domestic demand for crushing is all exported.

Trade

There are typically no exports of Australian canola meal, and no imports by Australia.

Stocks

Canola meal is a product that spoils and needs to be used within a matter of weeks. For this reason, ending stocks remain low and stable from year to year.

Meal, Rapeseed Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Dec 2020		Dec 2021		Dec 2022	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	900	900	900	1100	0	1000
Extr. Rate, 999.9999 (PERCENT)	0.5756	0.5756	0.5756	0.5727	0	0.575
Beginning Stocks (1000 MT)	19	19	27	27	0	22
Production (1000 MT)	518	518	518	630	0	575
MY Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	537	537	545	657	0	597
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	0	0	0	0	0	0
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	510	510	520	635	0	570
Total Dom. Cons. (1000 MT)	510	510	520	635	0	570
Ending Stocks (1000 MT)	27	27	25	22	0	27
Total Distribution (1000 MT)	537	537	545	657	0	597
(1000 MT) ,(PERCENT)						

CANOLA OIL

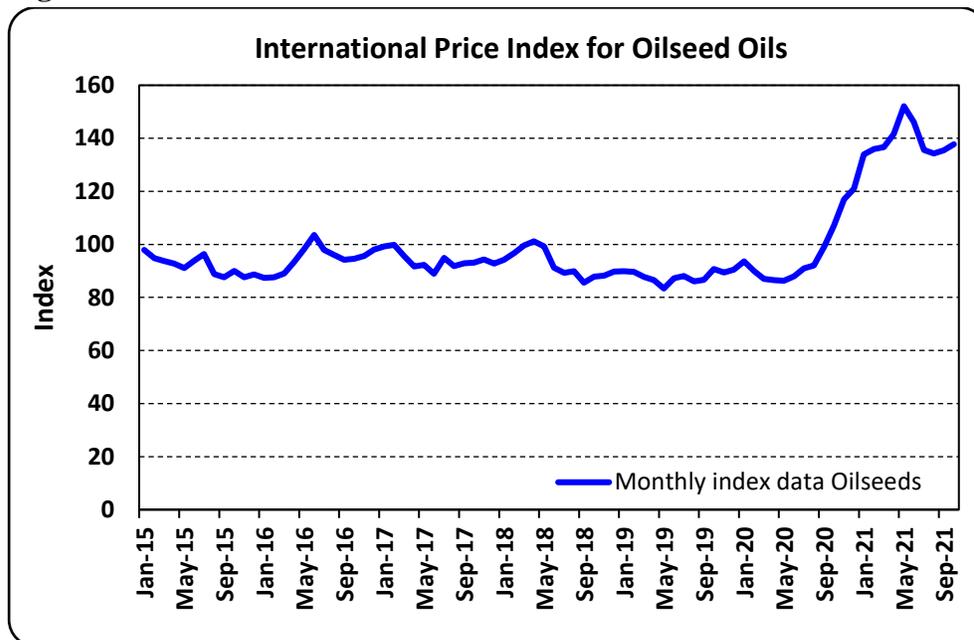
Production

With total canola crush forecast to decline in MY 2022/23, canola oil production is forecast to fall to 410,000 MT, 10 percent below the upward revised estimate of 455,000 MT in MY 2021/22. Crushers in MY 2021/22 have been encouraged to produce at capacity due to the very high world oil prices which escalated from late 2020 (see Figure 15). The rise in canola oil prices is largely attributed to the large drop in Canadian canola production in 2021 which had driven canola prices up and with it the price of vegetable oils. A further current factor is that Ukraine is, similar to Australia, a large producer of canola but also a much larger producer of canola oil (along with sunflower oil) and the current situation is expected to significantly disrupt their production and exports. Even with the expectation that Canadian canola oil production will return to typical levels in 2022, the disruption to oilseed supplies from Ukraine is expected to keep canola oil prices high throughout 2022.

Australia has five canola crushing facilities in New South Wales and Victoria, the two most populated states with the greatest domestic demand for canola oil. There are a further two small crushing plants in Western Australia. Industry sources indicate that total combined crushing capacity is around 1.1 to 1.2 MMT.

MY 2021/22 canola oil production has been revised upwards by FAS/Canberra to 455,000 MT, compared to the official USDA estimate of 371,000 MT. This increase is partly driven by the bumper crop, but also due to the very high world canola oil prices encouraging crushers to produce at capacity and increase exports.

Figure 15 – International Price Index for Oilseed Oils



Source: Food and Agriculture Organization of the United Nations

Note: Time Period is from a larger data set from 1961-2021 and indexed to 100 in 2014-2016

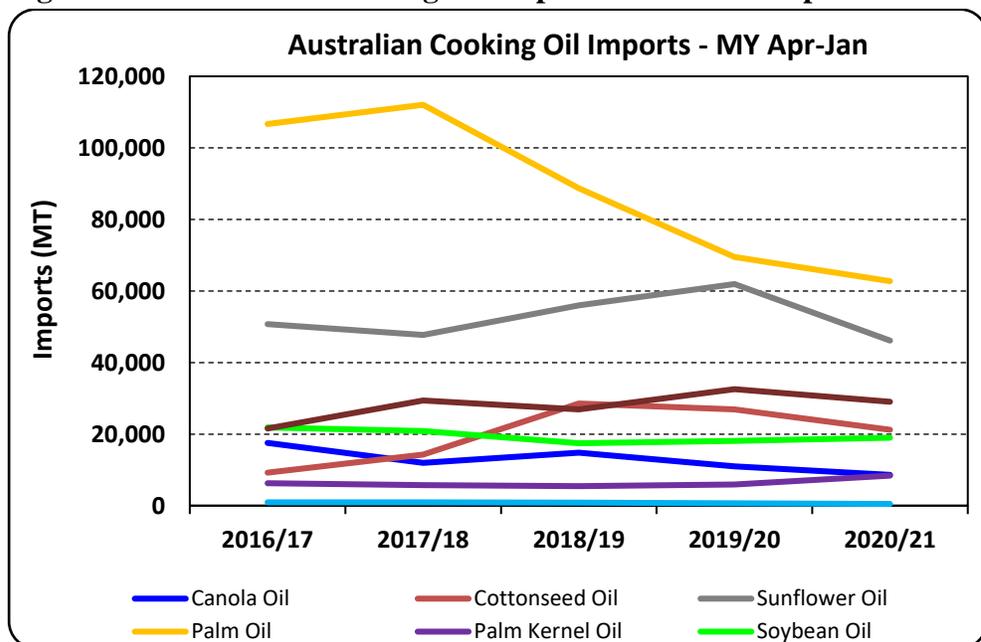
Consumption

Canola oil consumption in MY 2022/23 is forecast to be unchanged from the previous year at 200,000 MT. Canola oil is the most consumed vegetable oil in Australia, and demand is relatively stable. There is an estimated rise of 5,000 MT from MY 2020/21 to MY 2021/22. This is due to a consideration for the transition out of pandemic-related restrictions for most states in Australia from late 2021, which is expected to stimulate greater activity in the food service sector, and with it a rise in canola oil consumption.

Until MY 2017/18 palm oil was the second most consumed oil, and by far accounted for the largest percentage of cooking oil imports (see Figure 16). Since then, imports of palm oil have declined rapidly, and this trend is expected to continue due to the increasing awareness of the environmental impacts of

palm oil production, although there is now some palm oil production certified as sustainably grown. For a range of other cooking oils there has essentially been little change in imports so overall imports of cooking oils has declined in recent years. Canola oil is by far the largest domestically produced cooking oil in Australia. The decline in cooking oil imports has only in small part been met by increasing canola oil production, but it does offer the opportunity for further increases in canola oil production in Australia. However, this would require continued growth in demand for canola meal and further industry investment to increase production capacity.

Figure 16 – Australian Cooking Oil Import Trend – MY April to January



Source: Australian Bureau of Statistics

Biodiesel production from canola in Australia is practically non-existent, with no federal biodiesel mandate and only small mandates in two Australian states. Industry sources also indicate that it is more cost effective to produce biodiesel from tallow in Australia.

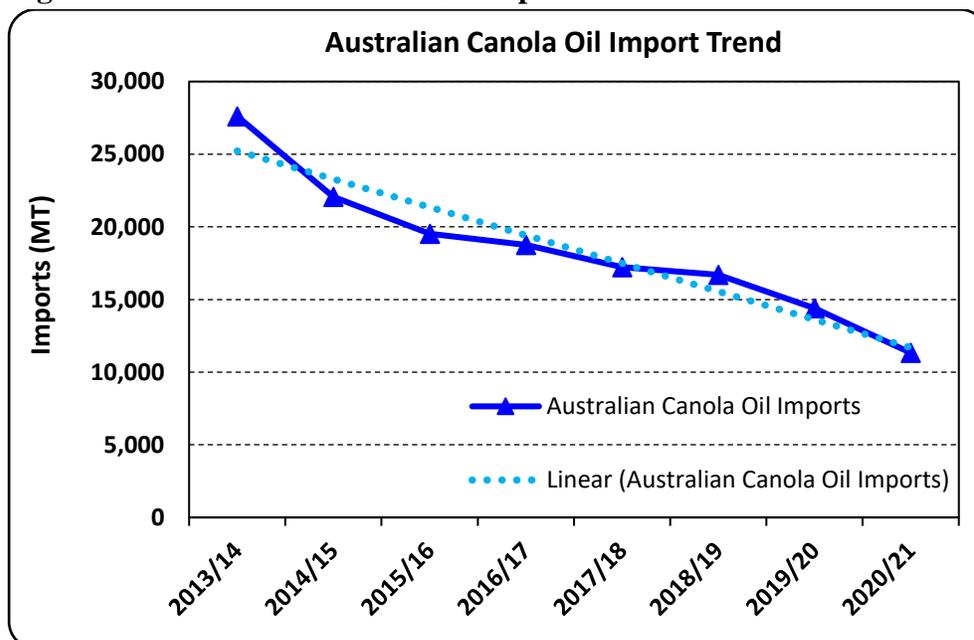
Trade

Australia’s canola oil exports are forecast at 220,000 MT in MY 2022/23 a decline of 17 percent from the upward revised estimate of 265,000 MT in MY 2021/22. With relatively stable domestic consumption, changes in canola oil production typically flow through to export volumes. As mentioned earlier, production of canola oil is forecast to decline partly due to the expectation of a smaller canola crop, but still remain high with the support of elevated world canola oil prices. China, New Zealand, and Taiwan have typically been largest markets for Australian canola oil exports, but recently Malaysia has become a significant export destination.

FAS/Canberra revised the MY 2021/22 canola oil export estimate upward to 265,000 MT, compared to the official USDA estimate of 195,000 MT. As mentioned earlier this is driven by crushers seeking to take advantage of the record-busting canola production and very strong world vegetable oil prices.

Australian canola oil imports are relatively low and have been gradually trending downwards since peaking at 27,610 MT in MY 2013/14, but there was a 21-percent decrease of imports in MY 2020/21 (see Figure 17). With a substantial increase in domestic canola oil production estimated for MY 2021/22, which is expected to remain relatively high for MY 2022/23, imports are expected to be even lower than past levels.

Figure 17 – Australian Canola Oil Import Trend



Source: Australian Bureau of Statistics

The import forecast for MY 2022/23 is for 10,000 MT, the same as the downward revised estimate for MY 2021/22. FAS/Canberra revised the MY 2021/22 estimate down to 10,000 MT from the official USDA estimate of 15,000 MT. Canola oil imports for MY 2020/21 declined to 11,000 MT and for the first two months of MY 2021/22 (Dec 2021 to Jan 2022) imports are lower than for the same period in the previous year. With a bumper canola harvest and crushing running at capacity in MY 2021/22 it is unlikely that canola oil imports will be any greater than 10,000 MT.

Stocks

With stable domestic demand for canola oil along with low imports and a range of other cooking oil import options, ending stocks of canola oil remain consistent from year to year.

Oil, Rapeseed Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Dec 2020		Dec 2021		Dec 2022	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	900	900	900	1100	0	1000
Extr. Rate, 999.9999 (PERCENT)	0.4122	0.4122	0.4122	0.4136	0	0.41
Beginning Stocks (1000 MT)	48	48	49	45	0	45
Production (1000 MT)	371	371	371	455	0	410
MY Imports (1000 MT)	15	11	15	10	0	10
Total Supply (1000 MT)	434	430	435	510	0	465
MY Exports (1000 MT)	190	190	195	265	0	220
Industrial Dom. Cons. (1000 MT)	0	0	0	0	0	0
Food Use Dom. Cons. (1000 MT)	195	195	200	200	0	200
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	195	195	200	200	0	200
Ending Stocks (1000 MT)	49	45	40	45	0	45
Total Distribution (1000 MT)	434	430	435	510	0	465
(1000 MT) ,(PERCENT)						

OLIVE OIL

Production

Australian olive oil production is forecast to increase to 24,000 MT in MY 2022/2023, a 50 percent increase from the FAS/Canberra MY 2021/22 estimate of 16,000 MT. The primary reason for the large forecast increase is accounting for the natural biennial effect of olive yields increasing following a down year. This increase is also in small part due to more new olive trees coming into production, and others increasing yields as they mature.

The Australian olive oil industry typically produces 90 to 95 percent Extra Virgin Olive Oil (EVOO) which is processed via a cold press technique and is known as a premium product. Further olive oil can be extracted from the post cold pressed olives via chemical extraction methods and is sold as olive oil or used in other products. The chemically extracted olive oil is a lower quality and lower value product.

Industry sources report that in Australia the EVOO average annual extraction rate is typically around 16.5 percent, largely driven by some producers commencing harvest prior to optimal oil content for logistics purposes and also smaller producers with less-than optimal extraction equipment.

Many of the large producers have expanded tree plantings, with estimates of up to 40 percent of trees being less than five years old and which do not bear any olives or have very low production. Typically, olive trees gradually increase production between year six and 14 after which they reach mature production levels. These larger producers are estimated to have 30 percent of their trees in the year six to 14 profile and 30 percent of trees at maturity. Mature trees of these large producers achieve approximately 15 MT/ha of harvested olives based on traditional tree spacing. Small areas of high-density hedge plantings are reported to achieve well in excess of 20 MT/ha.

As the number of olive trees in Australia progress towards mature production the expectation is that the industry will achieve relatively consistent year on year production growth over the next 15 years. Larger producers have reported plans for substantial increases in plantings over the next five years primarily in the most optimal temperate growing regions of southern New South Wales, northern Victoria, and the south-west corner of Western Australia.

Industry sources report that the seasonal conditions for the MY 2021/22 crop to be harvested from mid-March to July 2022 have been favorable. Above-average rainfall and mild conditions in the lead up to flowering and fruit set are reported to have produced variable fruit set results. Since the fruit set period, seasonal conditions have generally remained mild with above average rainfall and less heat than optimal for fruit and oil development, also resulting in higher fruit moisture content. This may cause some challenges in optimizing oil extraction, but less so for large commercial producers with modern extraction equipment. In the lead up to the start of harvest, industry sources estimate olive production of around 95,000 MT. This equates to olive oil production of around 16,000 MT for MY 2021/22 to which the FAS/Canberra estimate has been downward revised from the official USDA estimate of 20,000 MT.

Consumption

FAS/Canberra forecasts consumption of olive oil in Australia at 53,000 MT in MY 2022/23, slightly above the MY 2021/22 estimate of 52,000 MT. As Australia transitions away from COVID-19 related restrictions and with international borders reopened in early 2022 it is anticipated that there will be some growth in consumption via the food service sector.

In Australia, EVOO is not perceived as a cooking oil and is not considered interchangeable with canola and vegetable oils for cooking. The majority of Australian EVOO is expected to continue to be sold through domestic retail outlets.

FAS/Canberra has revised the consumption estimate for MY 2021/22 from the official USDA estimate of 60,000 MT to 52,000 MT.

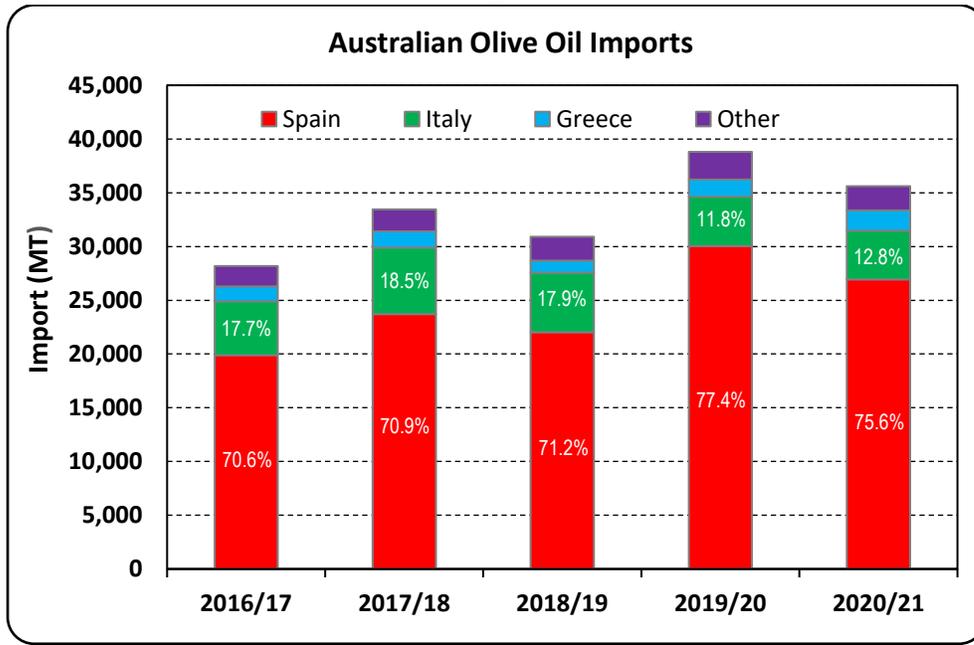
Trade

FAS/Canberra forecasts Australia to import 35,000 MT of olive oil in MY 2022/23 a 3,000-MT decrease from the MY 2021/22 estimate. The decrease in forecast imports is in part due to the higher production and a typical build-up of stock in the high production biennial year. This is a planned strategy from the major domestic suppliers to ensure adequate supply of olive oil during the low production year.

Industry sources indicate that of the olive oil imported, approximately 40 percent is sold via the retail network of which a proportion is EVOO and the balance lower-quality olive oil. Approximately 60 percent of imported olive oil is sold to the food industry sector and predominantly lower quality oil.

Spain is by far the major supplier of olive oil to Australia at around three quarters of overall supply followed by Italy and Greece (see Figure 18). These three countries have consistently supplied around 95 percent of overall imports to Australia for over the last 20 years.

Figure 18 – Australian Olive Oil Imports



Source: Australian Bureau of Statistics

Note: Australia Marketing Year is January to December (eg MY 2020/21 = Jan 2021 to Dec 2021)

FAS/Canberra has downward revised the import estimate for MY 2021/22 to 38,000 MT from the official USDA estimate of 46,000 MT. Imports do not vary greatly from year to year to make up for the variance in domestic production caused by the biennial production affect. Instead, as mentioned earlier domestic suppliers store greater amounts of olive oil after a high production year to ensure adequate supply after a low production year to consistently meet their domestic supply commitments.

FAS/Canberra forecasts exports of Australian olive oil in MY 2022/23 at 2,000 MT, in-line with the prior year estimate. Australia is expected to remain a net importer of olive oil in the foreseeable future, although export volumes are expected to increase in the coming years after existing olive groves mature and a sustainable overall increase in production is achieved.

Stocks

Ending stocks are forecast at 13,000 MT in MY 2022/23, up 4,000 MT from the MY 2021/22 estimate of 9,000 MT. Stocks are expected to build up in what is forecast to be a high production year. The FAS/Canberra ending stock for MY 2021/22 is 9,000 MT.

Oil, Olive Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Jan 2021		Jan 2022		Jan 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Planted (1000 HA)	36	36	36	36	0	0
Area Harvested (1000 HA)	36	20	36	21	0	22
Trees (1000 TREES)	4600	4600	4600	4600	0	4600
Beginning Stocks (1000 MT)	4	4	14	9	0	9
Production (1000 MT)	23	23	20	16	0	24
MY Imports (1000 MT)	48	36	46	38	0	35
MY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
MY Imp. from EU (1000 MT)	46	33	42	36	0	33
Total Supply (1000 MT)	75	63	80	63	0	68
MY Exports (1000 MT)	3	2	2	2	0	2
MY Exp. to EU (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	0	0	0	0	0	0
Food Use Dom. Cons. (1000 MT)	58	52	60	52	0	53
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	58	52	60	52	0	53
Ending Stocks (1000 MT)	14	9	18	9	0	13
Total Distribution (1000 MT)	75	63	80	63	0	68
(1000 HA) ,(1000 TREES) ,(1000 MT)						

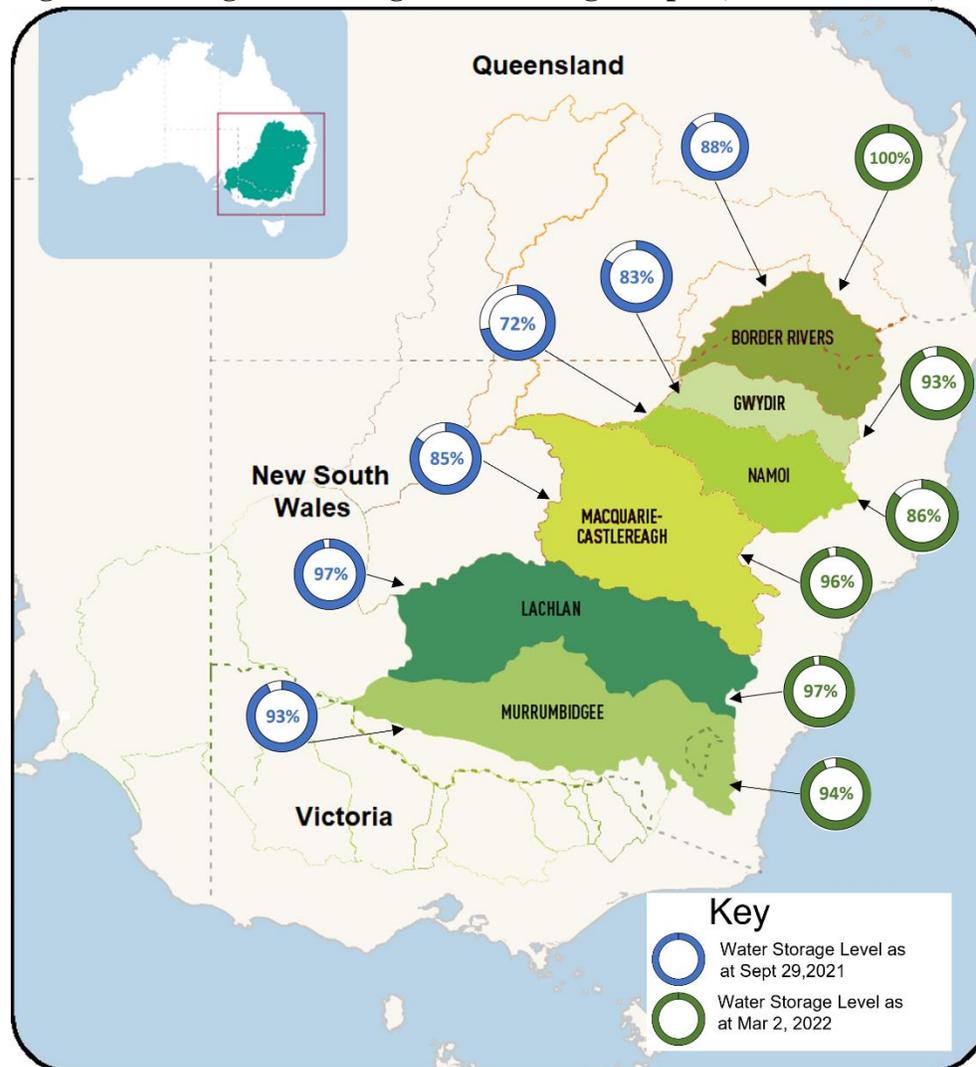
COTTONSEED

Production

FAS/Canberra forecasts cottonseed production to rise to 1.565 MMT in MY 2022/23 from estimated production of 1.435 MMT in MY 2021/22. The forecast increase in production is due to anticipated further improvements in irrigation water allocations in the lead up to planting of the MY 2022/23 cotton crop, starting around October 2022. This will help boost irrigated cotton area planting which typically accounts for 90 percent or more of overall production.

Rainfalls across the cotton growing season for MY 2021/22 have been so good that irrigation storage dam levels have actually increased between the end of September 2021 (at the start of the main cotton planting period) to the start of March 2022 (nearing the end of summer crop irrigation demands). In fact, the irrigation storage dams at the start of March 2022 are at capacity or near capacity (see Figure 19). This is very unusual as irrigation storage dams typically rely on winter and spring rainfalls to increase their storage levels. There have been much higher-than-average rainfalls across the irrigated cotton regions in New South Wales (where most of the irrigated cotton is produced) since the start of this season's planting which has led to much reduced irrigation water use combined with high inflows into the irrigation storage dams. The last time that irrigation storage dam levels in New South Wales which support cotton production had risen during the cotton growing period, and been at or near capacity near the end of the cotton growing season was, 10 years ago in 2011/12.

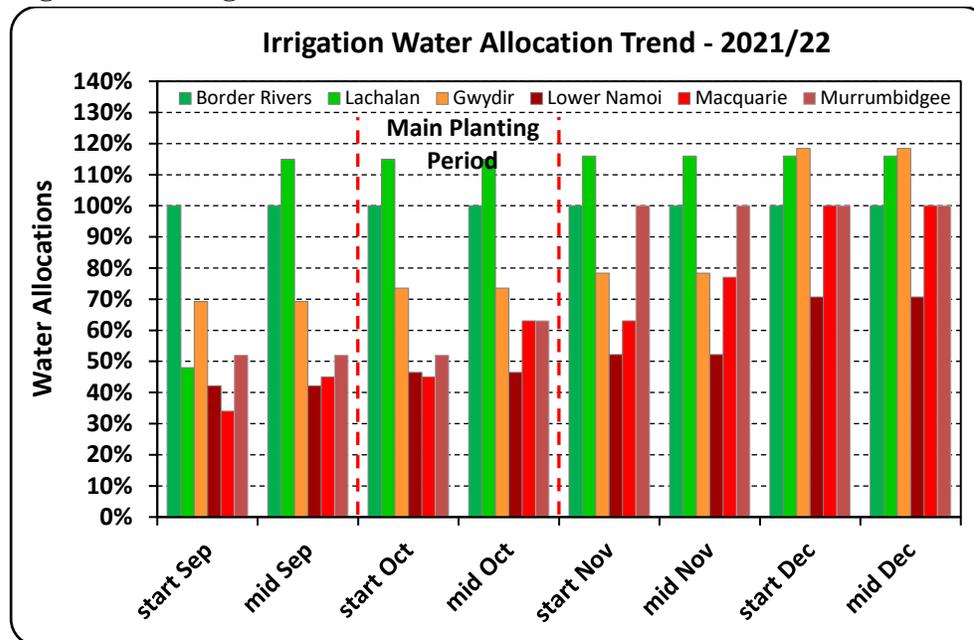
Figure 19 – Irrigation Storage Level Changes Sep 29, 2021 to Mar 2, 2022



Source: Murray Darling Basin Commission

Available water allocations are announced by the major cotton related irrigation schemes at the start and middle of each month during the irrigation season, which has a large bearing on cotton planting programs. At the start of October 2021, only in two of the six main irrigation regions (Border Rivers and Lachlan) did cotton producers have the security of a 100-percent allocation of their water entitlements. Cotton producers in the other four main irrigation systems at the start of October had water allocations ranging from 45 percent to 74 percent of their entitlement, with little or no increase in mid-October which is half-way through their planting period (see Figure 20). In these circumstances cotton producers typically limit their irrigated cotton crop planting to ensure the crop can be fully irrigated, based on water use per hectare in a typical season. Any increase in water allocations in November may encourage some to increase their planting area, more so for those in the southern areas, but announcements at this point are generally too late to support any significant increase in cotton planting.

Figure 20 – Irrigation Water Allocation Trend – 2021/22



Source: WaterNSW

With irrigation storage levels already at or near capacity at this point prior to the typical winter/spring inflows, growers are confident that they will have irrigation water allocations at or near 100 percent of their entitlements at the start of planting in October 2022. If this is realized as anticipated, and if cotton prices remain strong, growers have already indicated that they will increase their planted area of irrigated cotton.

The Australian cotton industry has a mix of both dryland and irrigated cropping. However, both are typically located in the same growing regions as the water holding capacity of soils and the climatic conditions are well suited to cotton production there. Irrigated cotton yields are typically 2-3 times higher than that of dryland cotton. Irrigated cotton areas are thus by far the primary driver of overall cotton production in Australia, and this in turn is driven by irrigation water availability.

Irrigation water is derived from a combination of sources, one of which is water harvested and stored in on-farm dams from overland flows. This can occur after high rainfall events more typical in the more northern cotton production regions. Water is also harvested and stored from waterways during high flow periods also after high rainfall events which occurs across the northern and central cotton production regions. Underground water is also a source of irrigation water although relatively small compared to the combination of other sources. The main source of irrigation water, that has a large bearing on cotton plantings, is multiple irrigation schemes based on large storage dams. The southern cotton production region is almost entirely dependent upon these dams whereas the central region and most northern regions have a high dependence on them.

FAS/Canberra has revised down the production estimate for MY 2021/22 for cottonseed from the official USDA estimate of 1.652 MMT to 1.435 MMT. Although FAS/Canberra and the official USDA estimate for cotton production in MY 2021/22 is the same at 5.5 million bales the cottonseed yield differs. The cotton industry in Australia has determined that over time with improved varieties and growing techniques that the ratio of cottonseed to cotton lint has decreased. FAS/Canberra has applied the same ratio as used by Cotton Australia and ABARES to estimate cottonseed production. FAS/Canberra has on the same basis revised down the cottonseed production for MY 2020/21 to 730,000 MT.

Consumption

FAS/Canberra forecasts total domestic cottonseed consumption to remain stable at 720,000 MT in MY 2022/23 from the prior year. Much of this is anticipated for domestic livestock feed use. Despite the large increase in cottonseed production anticipated in MY 2022/23 and the prior year, there is no indication that the only major cottonseed crushing facility will reopen after being mothballed in late 2018 due to drought causing low supply and high cost of cottonseed.

Cottonseed is a high-quality feed supplement primarily used in the livestock cattle industries and can be fed whole without any processing. It is a sought-after product for its high protein and oil content. It is typically used as part of a feed ration in beef feedlots but is also used by beef producers in the dairy industry in a partial mixed ration with other gains and fiber sources as a supplement to pastures.

The cotton industry in Australia has only one major crushing facility based in Narrabri in New South Wales which has been mothballed over recent years due to the previous drought. Even though cottonseed production will recover strongly in the upcoming MY 2021/22 cotton ginning season (mainly April to June 2022), at this point there is no formal announcement in regard to any intention to recommence crushing for the current year and beyond into the MY 2022/23 forecast year. There is one other small crushing plant focused on supplying byproducts to an associated livestock feed processing mill rather than for cottonseed oil production. Their crush demand of around 20,000 MT is unlikely to change significantly even with a large increase in cottonseed supply.

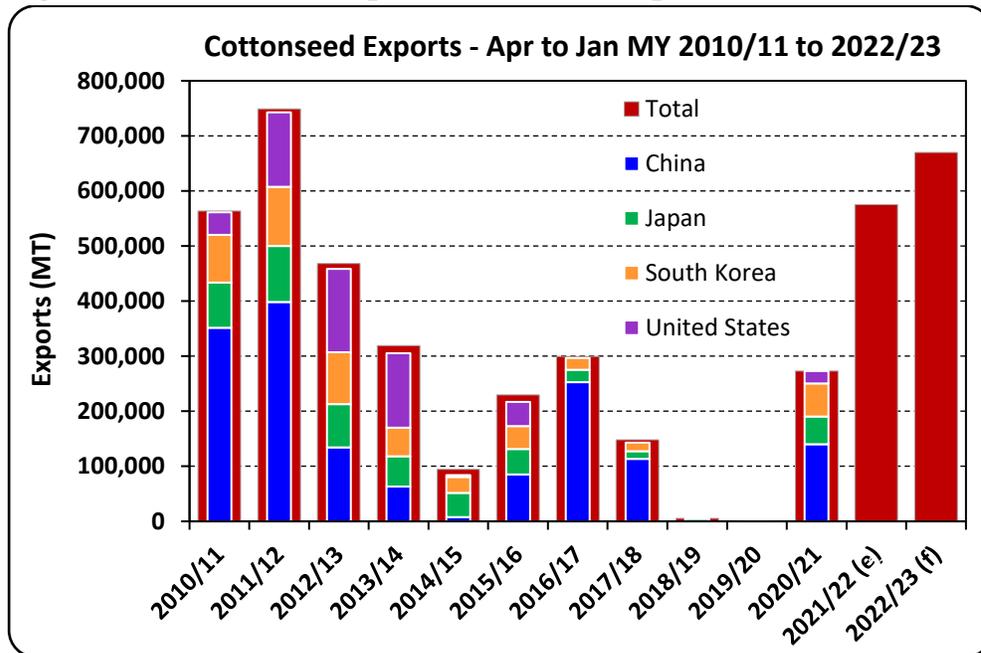
FAS/Canberra has revised down the cottonseed consumption estimate for MY 2021/22 from the official USDA estimate of 1.12 MMT to 720,000 MT. This revised estimate is already at the high end of the livestock industry consumption capacity, particularly considering that there is no major drought in the livestock grazing industries. Although the wet season rains have been poor in many parts of far north Queensland and the Northern Territory, these beef cattle producing regions are not large users of cottonseed due to their large-scale extensive grazing operations.

Trade

FAS/Canberra cottonseed exports are forecast to increase by 17 percent to 700,000 MT in MY 2022/23 from an estimated 600,000 MT in MY 2021/22. These higher exports are driven by the increase in cottonseed supply and the likelihood that crush demand will remain very low.

FAS/Canberra has revised the cottonseed export estimate for MY 2021/22 to 600,000 MT, the largest since MY 2011/12, from the official USDA estimate of 325,000 MT. With domestic crush still largely non-existent, traders are expected to have to sell more on the export market. In the past almost all Australian cottonseed exports have gone to China, Japan, South Korea and United States (see Figure 21), averaging 263,000 MT over the last 10 years. However, it has been 10 years since Australia has exported over 600,000 MT, so it may take some effort to re-establish trader relationships and manage the logistics issues, particularly considering the current shipping container and shipping challenges around the world.

Figure 21 – Cottonseed Export Destinations - Apr to Jan MY 2010/11 to 2022/23



Source: Australian Bureau of Statistics

Notes: (e) = estimate, (f) = forecast

Stocks

FAS/Canberra forecasts an increase in cottonseed ending stocks in MY 2022/23 after two successive years of anticipated large cottonseed production. Stocks cannot build up to high levels as there are limited cottonseed storage facilities and it is more challenging to store than for instance cereal grains. This creates a greater imperative to offer cottonseed at a price that attracts buyers before the product spoils and goes to waste.

Oilseed, Cottonseed Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Apr 2021		Apr 2022		Apr 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (Cotton) (1000 HA)	275	275	600	600	0	650
Seed to Lint Ratio (RATIO)	0	0	0	0	0	0
Beginning Stocks (1000 MT)	6	6	67	66	0	181
Production (1000 MT)	841	730	1652	1435	0	1565
MY Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	847	736	1719	1501	0	1746
MY Exports (1000 MT)	250	280	325	600	0	700
Crush (1000 MT)	20	20	380	20	0	20
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	510	370	740	700	0	700
Total Dom. Cons. (1000 MT)	530	390	1120	720	0	720
Ending Stocks (1000 MT)	67	66	274	181	0	326
Total Distribution (1000 MT)	847	736	1719	1501	0	1746
Yield (MT/HA)	3.0582	2.6545	2.7533	2.3917	0	2.4077

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

COTTONSEED MEAL

Production

FAS/Canberra forecasts cottonseed meal production to remain very low and stable at 9,000 MT in MY 2022/23. As mentioned earlier the only major crushing facility in Australia remains mothballed. The forecast production relates to a small facility producing cottonseed cake used as one of the ingredients to produce pellets for ruminant livestock industries.

FAS/Canberra has made a major downward revision to the MY 2021/22 cotton meal production estimate to 9,000 MT from the official USDA estimate of 183,000 MT. This as mentioned is due to the primary facility being mothballed.

Consumption

FAS/Canberra forecasts total cottonseed meal consumption to remain stable at 9,000 MT in MY 2022/23. With no import or export of cottonseed meal and the short storage life of wet meals, the forecast and estimated consumption are equivalent to production. All cottonseed meal is used in the domestic livestock industries.

Similar to production, and for the same reason, FAS/Canberra has made a large downward revision to the MY 2021/22 cotton meal consumption estimate to 9,000 MT from the official USDA estimate of 183,000 MT.

Trade

Australia does not typically import or export cottonseed meal.

Stocks

Due to the short shelf life of wet cottonseed meal no stocks are carried over from year to year.

Meal, Cottonseed Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Apr 2021		Apr 2022		Apr 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	20	20	380	20	0	20
Extr. Rate, 999.9999 (PERCENT)	0.45	0.45	0.4816	0.45	0	0.45
Beginning Stocks (1000 MT)	0	0	0	0	0	0
Production (1000 MT)	9	9	183	9	0	9
MY Imports (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	9	9	183	9	0	9
MY Exports (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	0	0	0	0	0	0
Food Use Dom. Cons. (1000 MT)	0	0	0	0	0	0
Feed Waste Dom. Cons. (1000 MT)	9	9	183	9	0	9
Total Dom. Cons. (1000 MT)	9	9	183	9	0	9
Ending Stocks (1000 MT)	0	0	0	0	0	0
Total Distribution (1000 MT)	9	9	183	9	0	9
(1000 MT) ,(PERCENT)						

COTTONSEED OIL

Production

FAS/Canberra forecasts cottonseed oil production to remain stable at a very low level of 3,000 MT in MY 2022/23. As mentioned earlier the forecast crush of cottonseed through one small facility focused on producing cottonseed meal cake as an ingredient for ruminant livestock pellet feed products. With no indication of any further crushing beyond this facility, cottonseed oil production is expected to remain very low.

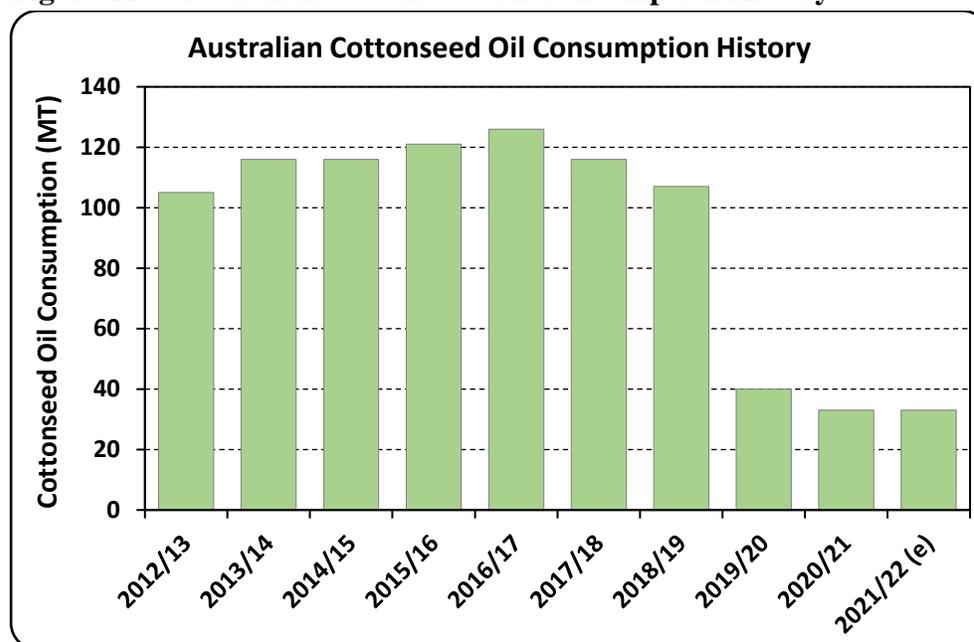
As per the case for cottonseed meal, FAS/Canberra has made a large downward revision to cottonseed oil production to 3,000 MT for MY 2021/22 from the official USDA estimate of 63,000 MT.

Consumption

FAS/Canberra forecasts total cottonseed oil consumption to remain stable at 33,000 MT in MY 2022/23. With no anticipated changes to domestic production there is no driver for any significant change to consumption.

After the major cottonseed crushing plant was mothballed in late 2018, imports of cottonseed oil increased somewhat but by nowhere near enough to maintain past consumption levels. Consumption levels had reached over 120,000 MT but have plummeted to around a quarter of that level since domestic production all but ceased (see Figure 22).

Figure 22 – Australian Cottonseed Oil Consumption History



Source: PSD Online / FAS/Canberra

Note: (e) = estimate

Note: Australia Marketing Year is April to March (eg MY 2020/21 = Apr 2021 to Mar 2022)

FAS/Canberra has revised down the estimated domestic consumption for MY 2021/22 to 33,000 MT from the official USDA estimate of 82,000 MT. With almost no domestic production of cottonseed oil anticipated, consumption is not expected to change.

Trade

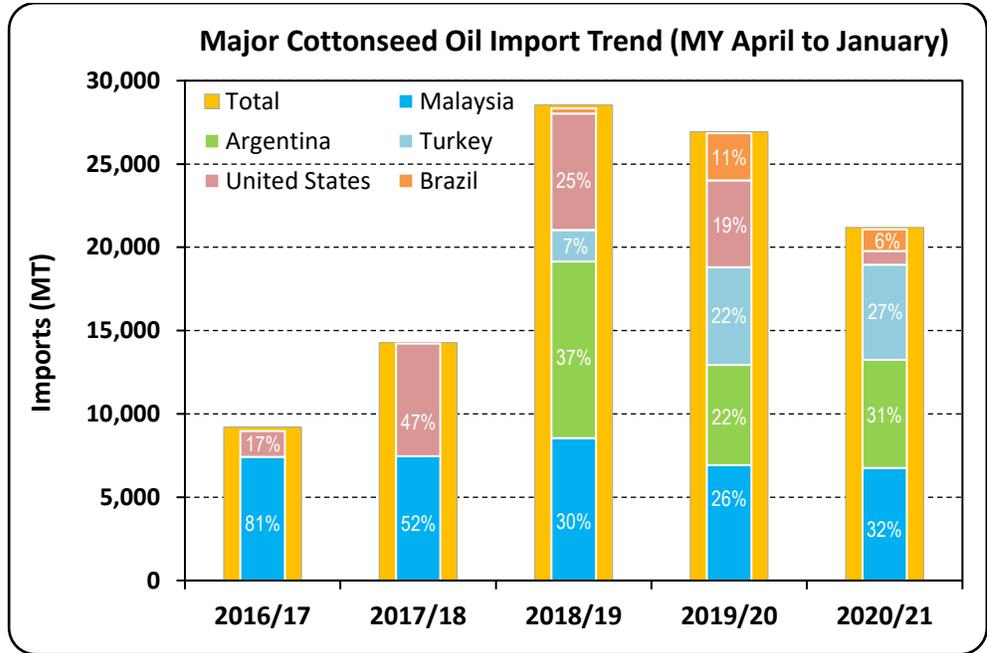
FAS/Canberra forecasts cottonseed oil imports to remain stable at 30,000 MT in MY 2022/23 from the prior year estimate. This is due to there being no anticipated shift in domestic production of cottonseed oil or in the relative price compared other cooking oils. Although it is possible the increase of domestic production of canola oil may place some downward pressure on cottonseed oil imports.

In the five years prior to the major cottonseed crushing facility being mothballed in late 2018, imports of cottonseed oil ranged from 5,000 MT to 15,000 MT. After domestic production of cottonseed oil all but ceased, imports almost doubled but have since declined somewhat and the source of the imports changed considerably. Australia is a substantial producer and exporter of canola oil and with increases in production after recent bumper harvests of canola, the decline in cottonseed oil imports is considered to be related to some substitution of cottonseed oil for canola oil.

In the two years prior to the cottonseed crushing plant being mothballed imports of cottonseed oil were almost entirely from Malaysia and the United States. Since that time Argentina and Turkey have become

significant sources for cottonseed oil imports and to a lesser extent Brazil, while imports from the United States have diminished considerably (see Figure 23).

Figure 23 – Major Cottonseed Oil Import Trend (MY April to January)



Source: Australian Bureau of Statistics

FAS/Canberra has revised up the estimated import of cottonseed oil to 30,000 MT for MY 2021/22 from the official USDA estimate of 20,000 MT as a result of the lack of domestic crushing.

Australia in recent years has not produced enough cottonseed oil to meet its own domestic demand and consequently does not export any product.

Stocks

With almost no cottonseed oil production, stocks have been very low in recent years, which primarily consist of imported stock and there is no expectation of any change in this position.

Oil, Cottonseed Market Year Begins Australia	2020/2021		2021/2022		2022/2023	
	Apr 2021		Apr 2022		Apr 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush (1000 MT)	20	20	380	20	0	20
Extr. Rate, 999.9999 (PERCENT)	0.15	0.15	0.1658	0.15	0	0.15
Beginning Stocks (1000 MT)	1	1	1	1	0	1
Production (1000 MT)	3	3	63	3	0	3
MY Imports (1000 MT)	30	30	20	30	0	30
MY Imp. from U.S. (1000 MT)	0	0	0	0	0	0
MY Imp. from EU (1000 MT)	0	0	0	0	0	0
Total Supply (1000 MT)	34	34	84	34	0	34
MY Exports (1000 MT)	0	0	0	0	0	0
MY Exp. to EU (1000 MT)	0	0	0	0	0	0
Industrial Dom. Cons. (1000 MT)	0	0	0	0	0	0
Food Use Dom. Cons. (1000 MT)	33	33	82	33	0	33
Feed Waste Dom. Cons. (1000 MT)	0	0	0	0	0	0
Total Dom. Cons. (1000 MT)	33	33	82	33	0	33
Ending Stocks (1000 MT)	1	1	2	1	0	1
Total Distribution (1000 MT)	34	34	84	34	0	34
(1000 MT) ,(PERCENT)						

Attachments:

No Attachments