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# Australia

# **Oilseeds and Products Annual**

# **April 2017**

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## **Report Highlights:**

Post forecasts 2017/18 canola production at 3.5 million MT, down almost 15 percent from the record 2016/17 harvest, despite an increase in the area planted. Australian olive oil production is slowly expanding to a forecast 21,000 MT in 2017/18 and this trend is supported by increased plantings of olive trees. In 2017/18, production of cottonseed is forecast at 1.5 million MT due to an expanded harvested area, coupled with lower yields arising from an increase in the proportion of dryland cotton. Post notes that a cyclone impacted north Queensland in late March 2017, but damage to the cotton industry is not significant according to first reports.

## **EXECUTIVE SUMMARY**

Australia normally produces around 5 million MT of oilseed crops each year, with canola and cottonseed accounting for over 90 percent of the total. In 2017/18, Australian production of canola is forecast by Post at 3.5 million MT, reflecting an expansion in area but less favorable seasonal conditions over the year. In 2017/18, production of cottonseed is forecast by Post at 1.55 million MT, due to an expanded harvested area that will be accompanied by lower yields due to a higher proportion of dryland cotton. Olive oil production is expanding slowly and is expected to reach 21,000 MT in 2017/18. There are few official statistics on other oilseeds, such as soybeans and sunflowers, but the volume of production is small.

## **Commodities:**

**Oilseeds** 

## OVERVIEW AND SEASONAL OUTLOOK

Australia normally produces around 5 million MT of oilseed crops each year, with canola and cottonseed accounting for over 90 percent of the total. Canola represents over half of this total and cottonseed a third, with small quantities of soybeans, safflower and linseed also grown. Canola is Australia's third largest broad acre crop after wheat and barley, and it is widely grown across south east Australia and Western Australia. Cottonseed is a by-product of cotton production and is crushed to produce oil for human consumption and seed for animal feed.

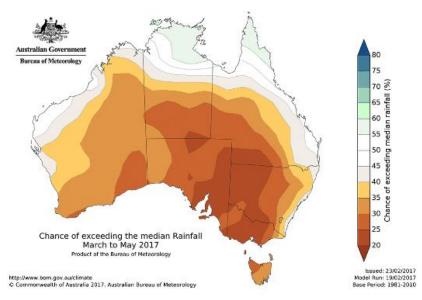
Cottonseed, sunflower and soybean are summer crops grown mostly in northern New South Wales (NSW) and Queensland. Canola, safflower and linseed are winter crops grown from mid-northern NSW across southern and eastern Australia. Western Australia is the largest producer of canola whereas NSW and Queensland account for most of cotton production. The seasonal outlook for these widely separated regions has a key influence on the outlook for Australian oilseeds production.

Australia's varying seasonal conditions have a significant impact on the size of harvested areas and overall production. After highly favorable seasonal conditions in 2016/17, the Bureau of Meteorology (BOM) is forecasting lower than median rainfall for most oilseed growing regions for the three months to May 2017. In addition, average temperatures are forecast to be above median levels for most regions for this period (Chart 1 and 2 below). These conditions have already been evident in Queensland where high temperatures have impacted the cotton and especially dryland cotton crops in the first two months of 2017 when rainfall was below average. However, above average rains in March 2017 has offset this effect. According to first accounts, the impact of a Queensland cyclone in late March has not been damaging for cotton production.

On the positive side, widespread winter and spring rains over 2016/17 contributed to increased dam storage levels throughout Queensland and NSW; with the Dartmouth, Hume and Eildon dams at over 75 percent of capacity in February 2017, compared to below 50 percent at the same time in 2016. Greater access to irrigated water is likely to support cotton and cottonseed production while good soil moisture

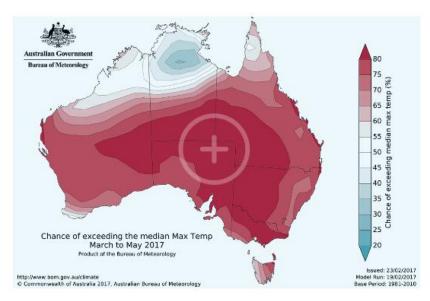
in NSW and Victorian canola growing regions have supported increased plantings for the 2017/18 season. The forecasts for Australian oilseeds production in this report assume average seasonal conditions will prevail across eastern and western Australia.

Chart 1: Chance of exceeding the median rainfall in the three months to May 2017



Source: Bureau of Meteorology (2017).

Chart 2: Chance of exceeding the median temperature in the three months to May 2017



Source: Bureau of Meteorology (2017).

#### **CANOLA**

## **Production**

Australian production of canola is forecast by Post at 3.5 million MT in 2017/18, down almost 15 percent on the previous record harvest year. In 2017/18, high prices for canola compared to other cereal crops such as wheat and barley are likely to lead to an expansion in harvested area to 2.5 million hectares, up from 2.3 million hectares in the previous year. Soil moisture levels in both western and eastern Australian regions appear likely to support the crop expansion, assuming that average rainfall occurs over the year.

Lower yields are forecast by Post in view of the significantly less favorable seasonal conditions expected for most regions over the year. The Australian Bureau of Meteorology (BOM) has forecast below average rainfall in many growing areas for the three months to May 2017 and beyond. Post therefore expects a yield of 1.4 MT a hectare for 2017/18, down from almost 1.8 MT a hectare in 2016/17 when seasonal conditions were very favorable or 'almost perfect'.

Further, some growers have experienced a shortage of commerciall hybrid canola seed and have been using available stocks of farm-retained open pollinated seed. The seed shortage reportedly occurred because of the late-2016 flooding of areas designated to supply hybrid seed. Use of less resistant canola seed could also contribute to the expected lower yields for 2017/18.

Post notes that canola farmers in Australia have access to both conventional and genetically engineered (GE) product as each is grown under strict production protocols for different markets. The Gene Technology Regulator gave approval for the growing of GE varieties of canola 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.

Canola is grown as a source of 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 from south-west Western Australia to south-eastern Australia and into northern NSW. 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.

# **Consumption**

In 2017/18, Post forecasts consumption of canola in Australia to decline to 770,000 MT as a result of lower overall production. This represents a decline of 12.5 percent on the previous record year. Canola is processed into both canola meal and canola oil for domestic use but the export market is the main source of demand for canola.

#### **Trade**

In 2017/18, Australian canola exports are forecast by Post to reach 2.8 million MT, down around 10 percent on the previous year due to an expected decline in overall production of canola. Australia is a significant exporter of canola, with an average of around 15 percent of international trade in recent years.

The European Union is expected to remain Australia's major export market, accounting for over 60 percent of total canola exports in 2017/18. Other export markets for canola include South Korea, Japan, Netherlands, Malaysia and Germany. The main use for canola exported to the EU is as an input in the production of biodiesel. In Asian markets, canola is used to produce oil for human consumption.

#### **CANOLA MEAL**

## **Production**

In 2017/18, Post expects canola meal production to be 0.4 million MT, down on the previous year because of lower forecast production of canola. Canola meal is a by-product produced after the seed has been crushed and the oil extracted. Canola meal is primarily used as a high protein feed for intensive livestock in the pig, poultry and dairy industries.

# **Consumption**

Post forecasts domestic consumption of canola meal in 2017/18 to be stable at 375,000 MT. 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 has a higher proportion of protein compared to canola (45 and 37 percent respectively) and is therefore preferred as a stockfeed for the chicken and pig livestock sectors.

Canola meal is used for livestock feed especially in the Australian dairy industry as a protein source to supplement other feed grains such as wheat, barley and sorghum. Canola growing regions and processing facilities in south-eastern Australia are close to the dairy farms in Victoria and NSW and low transport costs have supported demand for the oilseed meal.

Consumption of canola meal is expected to contract slightly compared to 2016/17, partly because of pasture growth in Victoria, which has over 60 percent of Australia's dairy herd. It is not clear if herd rebuilding of the dairy herd will occur in 2017/18 as low world dairy prices could continue. Post also notes that domestic demand for canola meal from the dairy industry is limited by low world dairy prices and by the availability of lower cost alternatives such as palm kernel meal.

#### **Trade**

In 2017/18, Australian canola meal exports are forecast by Post to be stable at 25,000 MT, the same as in the previous year. Over 94 percent of canola meal is consumed domestically.

#### **CANOLA OIL**

## **Production**

In 2017/18, Post expects canola oil production to be 290,000 MT, around 9 percent below the previous year because of an expected decline in the production of canola.

# **Consumption**

In 2017/18, Post forecasts domestic consumption of canola oil to be stable at 182,000 MT. Canola oil is used for food production and has a growing reputation as a healthy alternative to other oils. According to the Grains Research and Development Corporation, canola oil has the lowest level of saturated fatty acids and is second only to olive oil in its high level of monounsaturated oleic acid.

## **Trade**

Canola oil exports are forecast by Post to be stable 165,000 MT. Around half of Australian production of canola oil is exported.

Table 1: Australian canola production, supply and demand data statistics, 2015/16 to 2017/18

Canola	2015/2016		2016/201	2016/2017		2017/2018	
Market Begin Year	Dec 2015		Dec 2016		Dec 2017		
Australia	USDA	New	USDA	New	USDA	New	
	Official	Post	Official	Post	Official	Post	
Area Harvested	2,357	2,357	2,300	2,300	0	2,500	
<b>Beginning Stocks</b>	453	453	277	360	0	407	
Production	2,944	2,944	4,100	4,100	0	3,500	
MY Imports	1	1	1	1	0	1	
MY Imp. from U.S.	0	0	0	0	0	0	
MY Imp. from EU	0	0	0	0	0	0	
<b>Total Supply</b>	3,398	3,398	4,378	4,378	0	3,908	
MY Exports	2,300	2,300	3,100	3,100	0	2,800	
MY Exp. to EU	1,800	1,800	1,750	1,750	0	1,800	
Crush	770	770	800	800	0	700	
Food Use Dom. Cons.	0	0	0	0	0	0	
Feed Waste Dom.	51	51	71	71	0	70	
Cons.							
Total Dom. Cons.	821	821	871	871	0	770	
<b>Ending Stocks</b>	277	277	407	407	0	338	
Total Distribution	3,398	3,398	4,378	4,378	0	3,908	
(1000 HA),(1000 MT)							

Table 2: Australian canola meal PS&D statistics, 2015/16 to 2017/18

Canola Meal	2015/2016		2016/201	7	2017/2018			
Market Begin Year	Dec 2015		Dec 2016		Dec 2017			
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Crush	770	770	800	800	0	700		
Extr. Rate, 999.9999	0.574	0.574	0.5733	0.5713	0	0.5714		
Beginning Stocks	8	8	10	10	0	12		
Production	442	442	457	457	0	400		
MY Imports	0	0	0	0	0	0		
MY Imp. from U.S.	0	0	0	0	0	0		
MY Imp. from EU	0	0	0	0	0	0		
Total Supply	450	450	467	467	0	412		
MY Exports	25	25	25	25	0	25		
MY Exp. to EU	0	0	0	0	0	0		
Industrial Dom. Cons.	0	0	0	0	0	0		
Food Use Dom. Cons.	0	0	0	0	0	0		
Feed Waste Dom.	415	415	430	430	0	375		
Cons.								
Total Dom. Cons.	415	415	430	430	0	375		
Ending Stocks	10	10	12	12	0	12		
Total Distribution	450	450	467	467	0	412		
(1000 MT) ,(PERCENT)								

Table 3: Australian canola oil PS&D statistics, 2015/16 to 2017/18

Oil, Rapeseed	2015/2016 Dec 2015		2016/2017 Dec 2016		2017/2018		
Market Begin Year					Dec 2017		
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Crush	770	770	800	800	0	700	
Extr. Rate, 999.9999	0.4133	0.413	0.4125	0.4125	0	0.4143	
Beginning Stocks	31	31	27	27	0	33	
Production	318	318	330	330	0	290	
MY Imports	23	23	23	23	0	40	
MY Imp. from U.S.	0	0	0	0	0	0	
MY Imp. from EU	0	0	0	0	0	0	
Total Supply	372	372	380	380	0	363	
MY Exports	163	163	165	165	0	165	
MY Exp. to EU	0	0	0	0	0	0	
Industrial Dom. Cons.	0	0	0	0	0	0	
Food Use Dom. Cons.	182	182	182	182	0	182	
Feed Waste Dom.	0	0	0	0	0	0	
Cons.							
Total Dom. Cons.	182	182	182	182	0	182	
Ending Stocks	27	27	33	33	0	16	
Total Distribution	372	372	380	380	0	363	
(1000 MT) ,(PERCENT)							

#### **OLIVE OIL**

## **Production**

Australian olive oil production in 2017/18 is forecast by Post at 21,000 MT, the same as the previous year. The area harvested is forecast at 36,000 hectares, from around 4.6 million trees, which is a slight increase on the previous year. The 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. A single large producer in Victoria has over 2.2 million producing trees planted on over 6,000 hectares and is expanding production while smaller farms exit the industry. There are no recent official statistics on production of olive oil.

Australia's production season for olives and olive oil is 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 2017/18 begins in January 2018. The industry is gradually expanding harvest area in Victoria and southern NSW. Olive oil prices for the Australian product appear to be strengthening, compared to imported olive oil, which accounts for over half of market supplies.

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 productivity and oil quality.

# **Consumption**

Consumption of olive oil in 2017/18 is forecast by Post at 50,000 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.

The olive industry estimates that Australian consumption of olive oil has increased from around 1.2 to 1.8 liters per head in the two decades to 2015. Olive oil is a leading cooking oil in Australia. Domestic producers specialize in first crush 'extra virgin' olive oil as well as 'virgin' grade oil. There is no production of pomace olive oil.

In 2016, domestically produced olive oil had an average retail price of US\$8.70 a liter compared to US\$6.00 per liter for olive oil of European origin. One explanation for this price premium is that EU-sourced olive oil typically is sold in larger units for use in the food industry while local olive oil is sold in bottles for a higher unit price.

#### **Trade**

Imports of olive oil into Australia in 2017/18 are forecast by Post to be stable at 35,000 MT, the same as the previous year. Italy and Spain are major suppliers to the Australian market. Exports of olive oil are expected to be 5,000 MT in 2017/18, the same as in 2016/17.

Table 4: Australian olive oil PS&D statistics, 2015/16 to 2017/18

Oil, Olive	2015/2016		2016/2017		2017/2018			
Market Begin Year	Jan 2016		<b>Jan 2017</b>		Jan 2018			
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Area Harvested	0	35	36	36	0	36		
Trees	4,500	4,500	4,600	4,600	0	4,600		
Beginning Stocks	2	2	5	5	0	6		
Production	20	20	21	21	0	21		
MY Imports	37	37	35	35	0	35		
MY Imp. from U.S.	0	0	0	0	0	0		
MY Imp. from EU	28	28	28	28	0	28		
Total Supply	59	59	61	61	0	62		
MY Exports	5	5	5	5	0	5		
MY Exp. to EU	3	3	3	3	0	3		
Industrial Dom. Cons.	0	0	0	0	0	0		
Food Use Dom. Cons.	49	49	50	50	0	50		
Feed Waste Dom.	0	0	0	0	0	0		
Cons.								
Total Dom. Cons.	49	49	50	50	0	50		
Ending Stocks	5	5	6	6	0	7		
Total Distribution	59	59	61	61	0	62		
(1000 HA), (1000 TREES), (1000 MT)								

#### **COTTONSEED**

#### **Production**

In 2017/18, Australian production of cottonseed is forecast by Post at 1.55 million MT, due to an expanded harvested area for cotton of 590,000 hectares. Post has revised the cottonseed production figure for 2016/17 to 1.43 million MT due to the higher than expected harvested area for cotton of 557,000 hectares. This is slightly higher than the official estimate of 1.4 million MT. A conversion rate of 0.31 was used to estimate cottonseed extracted from cotton lint.

Cottonseed is a by-product of cotton production. A metric ton of cotton produces around 310 kilograms of seed. Cottonseed produces an average of 17 percent oil and 83 percent of meal when crushed. Cotton lint makes up about 40 percent of the picked cotton by weight and contributes about 85 percent of the total income from a cotton crop. The other 15 percent of income is from cottonseed.

# **Consumption**

In 2017/18, Post forecasts domestic consumption of cottonseed to increase to 1.05 million MT, up 16 percent on the official estimate. This revision by Post has been made because of increased production and higher demand for both cottonseed meal and cottonseed oil.

## **Trade**

In 2017/18, exports of cottonseed are expected by Post to increase to 400,000 MT due to higher than expected production and strong international demand. Australia exports cottonseed to a number of countries, including Japan (crushed and cattle feed), Korea (crushed), China (crushed) and the United States (dairy feed) with the direction of trade varying somewhat with the parity price and the value of the Australian dollar.

#### **COTTONSEED MEAL**

#### **Production**

In 2017/18, Post forecasts Australian cottonseed meal production at 385,000 MT, up by over 20 percent because of increased cotton production. Cottonseed meal is used as an animal feed for dairy cattle, beef cattle, poultry, horses and pigs and is typically processed into feed pellets. Not all cottonseed is crushed for meal as whole seeds are also fed to cattle.

# **Consumption**

In 2017/18, Post forecasts Australian cottonseed meal consumption at 350,000 MT, equal to over 90 percent of production. Cottonseed meal is a protein and energy source for animal feed and is typically processed into feed pellets for livestock. Demand for cottonseed meal increases in dry seasons when pasture is less available. Post notes that the seasonal outlook for pasture growth in 2017/18 is still uncertain, especially in Queensland.

Traditionally, feedlots have been the largest users of cottonseed meal and the expansion of the feedlot industry in recent years has support demand from this source. In southern Queensland and northern NSW, the cotton industry and processing facilities are located near beef feedlots Currently, almost one million cattle are in feedlots in Australia which are closely located to some areas of cotton production, especially in Queensland and northern NSW.

## **Trade**

Only a small proportion of cottonseed meal production is exported. Post forecasts 2017/18 exports of cottonseed meal at 10,000 MT.

#### **COTTONSEED OIL**

#### **Production**

In 2017/18, Post forecasts Australian cottonseed oil production at 134,000 MT, up over 20 percent on the previous year. This reflects an increased crush of 800,000 MT, up from 650,000 MT in 2016/17. The oil yield from cottonseed provides a significant return to growers and processors, as it is a higher value product than cottonseed meal.

In recent years, the oil yield from cottonseed has been falling from around 20 percent to the current 17 percent. This change is a result of the use of new GE varieties which are designed to increase the lint ratio in cotton production compared to the seed ratio. Australia's two major cottonseed crushing facilities are in Hay and Narrabri, NSW.

# **Consumption**

In 2017/18, Post forecasts Australian cottonseed oil consumption at 120,000 MT. Cottonseed oil is an increasingly popular oil used for human consumption in food service deep frying in the restaurant and fast food industries, as it has a relatively high smoke point as a frying medium.

## **Trade**

Australia is not an exporter of cottonseed oil, while imports have accounted for less than 5 percent of market supplies in recent years.

Table 5: Australian cottonseed PS&D statistics, 2015/16 to 2017/18

Oilseed, Cottonseed	2015/2016		2016/201	7	2017/2018			
Market Begin Year	Apr 2016		Apr 2017		Apr 2018			
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Area Harvested (Cotton)	312	312	550	557	0	590		
Seed to Lint Ratio	0	0	0	0	0	0		
Beginning Stocks	122	122	36	36	0	216		
Production	881	881	1,400	1,430	0	1,550		
MY Imports	0	0	0	0	0	0		
MY Imp. from U.S.	0	0	0	0	0	0		
MY Imp. from EU	0	0	0	0	0	0		
Total Supply	1,003	1,003	1,436	1,466	0	1,766		
MY Exports	220	220	320	350	0	400		
MY Exp. to EU	0	0	0	0	0	0		
Crush	580	580	650	650	0	800		
Food Use Dom. Cons.	0	0	0	0	0	0		
Feed Waste Dom. Cons.	167	167	250	250	0	250		
Total Dom. Cons.	747	747	900	900	0	1,050		
<b>Ending Stocks</b>	36	36	216	216	0	316		
Total Distribution	1,003	1,003	1,436	1,466	0	1,766		
(1000 HA), (RATIO), (1000 MT)								

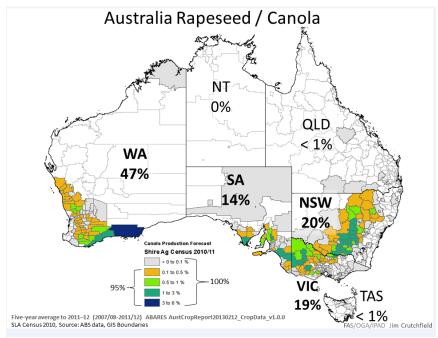
Table 6: Australian cottonseed oil PS&D statistics, 2015/16 to 2017/18

Oil, Cottonseed	2015/2016		2016/201	7	2017/2018	
Market Begin Year	Apr 2016		Apr 2017		Apr 2018	
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Crush	580	580	650	650		800
Extr. Rate, 999.9999	0.1667	0.1667	0.1677	0.1677		0.1675
Beginning Stocks	33	33	33	33		34
Production	100	100	109	109		134
MY Imports	16	16	5	5		10
MY Imp. from U.S.	0	0	0	0		0
MY Imp. from EU	0	0	0	0		0
Total Supply	149	149	147	147		178
MY Exports	0	0	0	0		0
MY Exp. to EU	0	0	0	0		0
Industrial Dom. Cons.	0	0	0	0		0
Food Use Dom. Cons.	116	116	116	116		120
Feed Waste Dom.	0	0	0	0		0
Cons.						
Total Dom. Cons.	116	116	116	116		120
Ending Stocks	33	33	31	31		58
Total Distribution	149	149	147	147		178
(1000 MT) ,(PERCENT)						

Table 7: Australian cottonseed meal PS&D statistics, 2015/16 to 2017/18

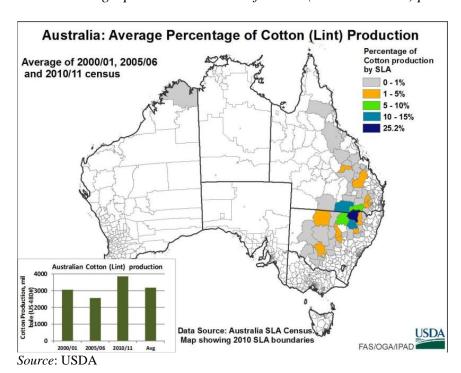
Meal, Cottonseed	2015/2016		2016/201	7	2017/2018			
Market Begin Year	Apr 2016		Apr 2017		Apr 2018			
Australia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Crush	580	580	650	650		800		
Extr. Rate, 999.9999	0.4828	0.4828	0.4815	0.4815		0.4813		
Beginning Stocks	16	16	11	14		14		
Production	280	280	313	313		385		
MY Imports	0	0	0	0		0		
MY Imp. from U.S.	0	0	0	0		0		
MY Imp. from EU	0	0	0	0		0		
Total Supply	296	296	324	324		399		
MY Exports	10	10	10	10		10		
MY Exp. to EU	0	0	0	0		0		
Industrial Dom. Cons.	0	0	0	0		0		
Food Use Dom. Cons.	0	0	0	0		0		
Feed Waste Dom.	275	275	300	300		350		
Cons.								
Total Dom. Cons.	275	275	300	300		350		
Ending Stocks	11	11	14	14		39		
Total Distribution	296	296	324	324		399		
(1000 MT) ,(PERCENT)								

Chart 3: Geographical distribution of canola production in Australia (5-year average to 2012)



Source: USDA

Chart 4: Geographical distribution of cotton (and cottonseed) production in Australia



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