A profile of rapeseed oil

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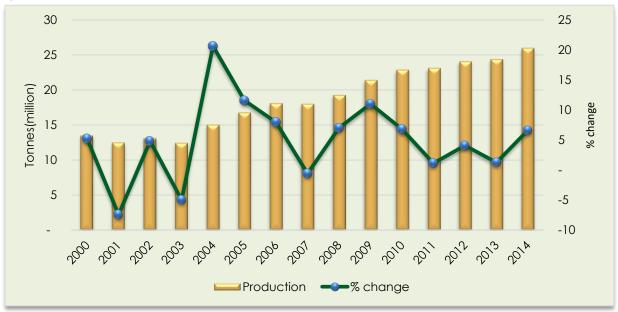
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1. Introduction

Rapeseed oil, derived from rapeseed (canola), is mainly used in forage. In South Africa, the major production area of canola is in the Western Cape. However, canola, albeit in small quantity, is also produced in the Northern Cape, Free State, Eastern Cape, Kwa-Zulu Natal, Limpopo, and North West province (Department of Agriculture, 2016). The purpose of this profile is to present a production and trade analysis of rapeseed oil commonly known as Canola.

2. World production of rapeseed oil

Figure 1: World production and percentage change of rapeseed oil from 2000 to 2014



Source: FAO, 2018

Figure 1 illustrates the world production trends and the percentage changes of rapeseed oil over the period of 15 years, from 2000 to 2014. Over the period, the world production of rapeseed oil exhibits an increasing trend. However, a significant reduction of about 7% year-on-year production of rapeseed oil was in 2001, though there was a slight decline in tonnage of roughly about 5% in 2003 and 1% in 2007. During the period 2008 to 2014, there was a significant increase in the production of rapeseed oil ranging from 19 million to 26 million tonnes.

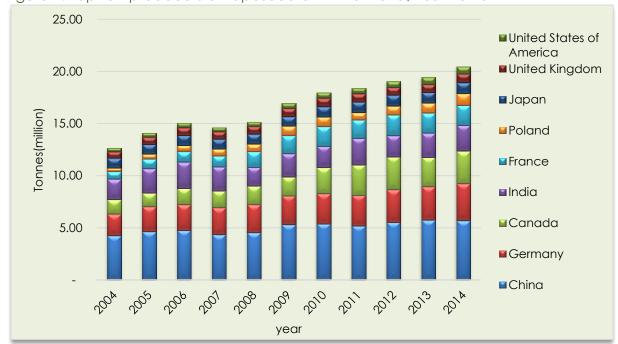


Figure 2: Top ten producers of rapeseed oil in the world, 2004 to 2014

Source: FAO, 2018

Figure 2 above presents top ten producers of rapeseed oil in the world over the period 2004 to 2014. In 2004, a slightly above 10 million tonnes of rapeseed oil production was accounted for by the leading top ten producers. China was the main producer of rapeseed oil, with production ranging from value of 3,54 to 4,25 million tonnes, followed by Germany ranging from 2,08 to 3,54 million tonnes, Canada ranging from 1,38 to 2,47 million tonnes.

3. South African production of rapeseed oil

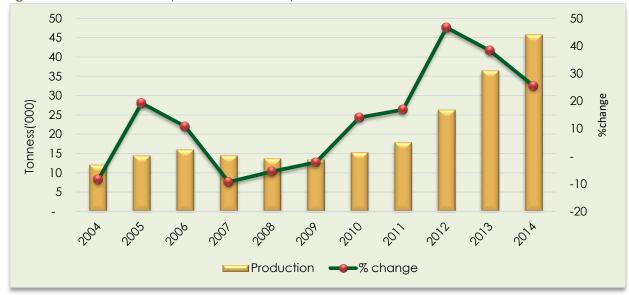


Figure 3: South African production of rapeseed oil, 2004 to 2014

Source: FAO, 2018

Figure 3 above illustrates the production of rapeseed oil in South Africa over the period 2004 to 2014. In addition, it depicts the percentage changes in the volume of production. There was a substantial growth in the South African production of rapeseed oil of about 19% in 2005, though a decline of about 9% is seen in 2007. However, subsequent to 2007, there has been an increase in South African rapeseed oil production, with 2012 recording the highest growth of about 47%. In tonnage terms, the production of rapeseed ranged from 12 to 46 thousand tonnes over the period 2004 to 2014.

4. Rapeseed processing

Figure 4 shows various stages of processing rapeseed, with the first stages involving primary processing such cleaning. However, the last stages of processing are solvent extraction, meal desolventising and toasting, and oil refining.

Figure 4: Processing of rapeseed

SEED CLEANING • The first stage of rapeseed involves seed cleaning to remove weed seeds, stems, pods and other unwanted materials.

Seed preconditioning and flaking • In this stage the cleaned seed is first flaked by means of roller mills, so as to rapture the seed. The aim of this stage is to transport as many cell as can be, without any damage to the seed.

Seed cooking • The cooking prosess involves the passing of cooked flakes through a series of steam heated drums. The aim is to adjust the moisture on flakes. The ideal temperature for cooking is about 88 degrees celcius, and the time to take to cook is 15 to 20 minutes.

Pressing

• The main aim of pressing is to release as much oil as possible, in achieving this stage, cooked flakes are passed through a series of screw process.

Solvent extraction • The process involves removing all the oil from the seed, that may have remained from the previous stage.

Meal desolventiz ng and toasting •In this stage large number of solvent is removed from the meal by means of heating it on a series of steam heated plates.

Oil refining

• Oil refining stage involves, transferring tye oil through a series of a process that involves water precipitation or organic acid combination with water. During this stage the oil is deodorized, and is ready to be packed and sold as cooking oil, and it can also be further processed into products like magarine.

Source: Canola Council of Canada, 2017

5. Trade patterns

5.1 Global trade of rapeseed oil

160.00
140.00
120.00
100.00
80.00
40.00
20.00

■Exports ■Imports

Figure 5: World exports and imports of rapeseed oil, 2013 to 2016

Source: TradeMaps, 2018

Figure 5 above depicts total exports and imports of rapeseed oil in the world over the period 2013 to 2016. Global trade of rapeseed oil appears to remain slightly stable. In 2016, the value of the world exports and imports of rapeseed oil were R121, 62 billion and R136, 60 billion, respectively.

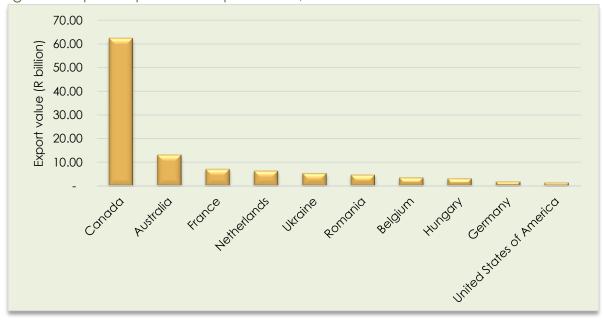


Figure 6: Top 10 exporters of rapeseed oil, 2016

Source: TradeMaps, 2018

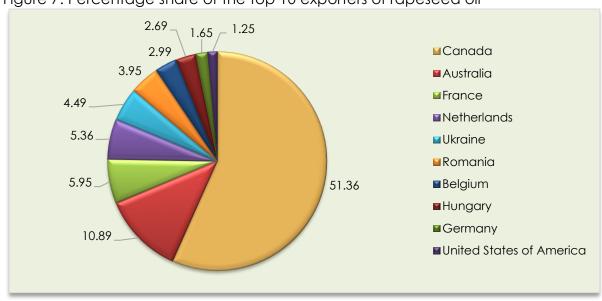
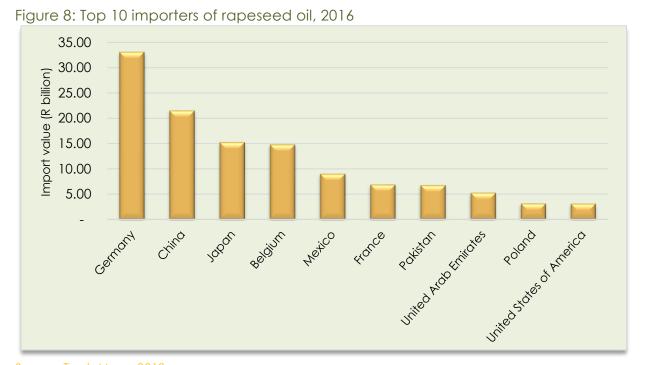


Figure 7: Percentage share of the top 10 exporters of rapeseed oil

Source: TradeMaps, 2018

Figure 6 and 7 above presents the top ten exporters of rapeseed oil in 2016. Canada was the leading exporter of rapeseed oil, with an export value of around R62,46 billion. Moreover, Canada had a share of approximately 51,36% as shown in Figure 7 above. Australia was ranked second with an export value of around R13,25 billion and a share of 10, 89%, followed by France with an export value of R7,24 billion and a share of 5,95%. The Netherlands has an export value of R6,52 billion and a share of 5,36%.



Source: TradeMaps, 2018

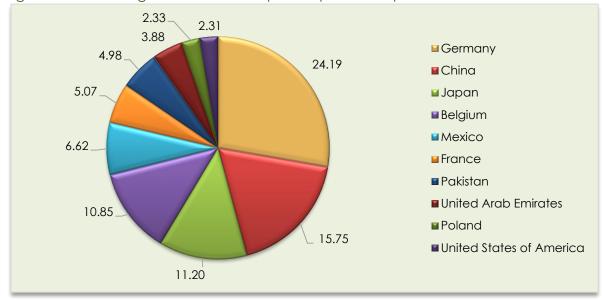


Figure 9: Percentage share of the top 10 imports of rapeseed oil

Source: TradeMaps, 2018

Figure 8 and 9 above show top ten leading importers of rapeseed oil in 2016. The major importers of rapeseed oil were Germany, China and Japan. Germany was the leading importer of rapeseed oil with an import value of R33,05 billion and a market share of 24,19%, followed by China with an import value of R21,52 billion and a share of 15,75%, while Japan had an import value of R15,29 billion, which is 11,20% of the total world imports. Belgium had an import value of R14,83 billion and a share of 10,85%.

5.2 South Africa's trade of rapeseed oil

Figure 10 below presents South Africa's trade balance of rapeseed oil over the period of five years, 2013 to 2017. South Africa is a net importer of rapeseed oil. In 2017, South Africa had an export value of R0,16 million, while imports reached R137,174 million. This, consequently, led to a negative trade balance of about R132,01 million in 2017.



Figure 10: South Africa's trade of balance of olive oil, 2013 to 2017

Source: TradeMaps, 2018

Table 1 below shows South Africa's exports of rapeseed oil in 2017. Lesotho was the sole importer of South African rapeseed oil, which amounted to around R0.16 million.

Table 1: South Africa's exports of rapeseed oil in 2017

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	Country	Export value (R million)	% share		
	World	0,16	100,0		
	Lesotho	0,16	100,0		

Source: TradeMaps, 2018

Table 2 below highlights South Africa's imports of rapeseed oil in 2017. Bulgaria is the leading supplier of rapeseed oil to South Africa with a market share of 89,65 %, followed by Chile (4,11%) and Australia (3,63%).

Table 2: South Africa's imports of rapeseed oil in 2017

Country	Import value (R million)	% share
World	132,17	100,0
Bulgaria	118,50	89,65
Chile	5,43	4,11
Australia	4,80	3,63
Denmark	1,14	0,87
Germany	1,14	0,87
Spain	1,14	0,87
Netherlands	0,01	0,01

Source: TradeMaps, 2018

Figure 11 below illustrates prospects for market diversification for South Africa's exports of rapeseed oil. As shown in the Figure 11 South Africa is not a major exporter of rapeseed oil in the world. South Africa exports rapeseed oil mainly to Lesotho, with no prospects to diversity exports due to its limited production capacity.

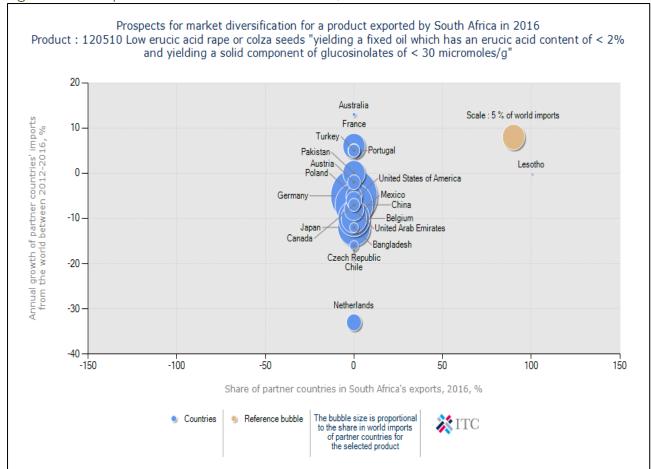


Figure 11: Prospects for market diversification, 2016

Source: TradeMaps, 2018a

6. Summary

The global production of rapeseed oil continues to grow over the reviewed period. The dominant producer of rapeseed oil is China, followed by Germany and Canada. South Africa, though its production of rapeseed oil has shown an upward trend, depends mainly on imports to meet its local consumption.

The major exporter of rapeseed oil was Canada, exporting approximately R62,46 billion, which constitutes 51,36% of the world's total exports. Australia, France and the Netherlands had an export share of 10,89%, 5,95% and 5,36%, respectively, in 2017. The leading importers of rapeseed were Germany, China and Japan with a market share of 24,19%, 15,75%, and 11,20%, respectively.

However, South Africa is not a major exporter of rapeseed oil, it mainly exports a meagre of R0.16 million to Lesotho. South Africa had a huge negative trade balance, relying primarily on imports to meet local demand.

Reference

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