The potential impact of Russia and Ukraine conflict on the Western Cape Agricultural Sector, South Africa

28 February 2022
1. Introduction

Russia and Ukraine are substantial role players in the global commodity market. Russia produces about 10% of the global wheat, while Ukraine accounts for a 4% global share (Sihlobo, 2022). Russia and Ukraine combined wheat production is estimated to be half of the European Union’s total wheat production and nearly a quarter of total global exports. Global food prices reached the highest levels last seen more than a decade ago due to the supply chain disruption due to the Covid-19 pandemic (Good, 2021). However, the recent tensions between Russia and Ukraine pose a major threat to trade. Before the Russian troops invaded the territories of Ukraine on Monday of 21 February 2022, the tension had taken a toll.

The statement to impose sanctions over Russia by the USA President Biden, and the potential for Russian retaliation had already pushed down the stock market prices and increased gas prices. The outright attack by Russian troops will likely result in spikes in energy, food prices, fuel inflation, and spook the investors; a combination that would threaten investment and economic growth around the world (Cohen & Ewing, 2022). Like the rest of the world, South Africa and Western Cape could be affected by the conflict taking place between Russia and Ukraine.

Wheat is a globally tradeable commodity and in the context of South Africa, it contributes significantly to food security. It is the second most-produced grain field crop after maize crop (van der Merwe, et al., 2016). The wheat industry contributes to the national gross domestic product (GDP) and recorded a gross value of production of R6.1 billion in 2019 (Meyer & Kirsten, 2005; Quantec, 2022). Whilst milled wheat flour serves as input in bread and continues to be in demand since bread is one of the staple foods in South Africa (Day, 2018). In 2018 South Africa produced 1.8 million tonnes of wheat lower than the domestic demand of 3.23 tonnes (DAFF, 2019). An estimated 99.71% of all processed wheat is used for human consumption whilst 0.29% is for animal feed (DAFF, 2019). Furthermore, statistics show that about 70 to 80% of all wheat flour produced is used for bread baking, which attracted estimated annual consumer expenditure at R6 700 million in 2020.

National bread consumption is at 2.8 billion loaves per annum, with approximately 62 loaves per person per annum. In the Western Cape, 76% of all bread eaten is white bread. Therefore, a limited supply of wheat in the global markets will have an impact on the domestic markets and the increase in the prices of bread will be one of the signs indicative of a short supply of wheat. The wheat farmers employ around 28 000 people at the production level and the capital investment in the milling industry is estimated at approximately R3 billion, and the addition of approximately 3 800 people are employed along the value chain. Both Russia and Ukraine are also major players in maize production and exports, both responsible for 4% of the world’s maize production.
In terms of the maize exports, Russia and Ukraine’s contribution cannot be overemphasised as both countries contributed 14% to the global maize exports in 2020 (Sihlobo, 2022). Both Russia and Ukraine are the major producers and exporters of global sunflower oil. This was an 81% share of the total production of 1.5 million tons in 2019. The Gross Value of Agricultural (GVA) production for wheat remained above R5 billion between 2009 and 2018 and closed with an increasing trend at the end of 2019.

As will be discussed later in the report, both Russia and Ukraine are important markets for South Africa and Western Cape agricultural exports. This report highlights agricultural trade performance with both European countries. As well as the potential impact on the Western Cape agricultural sector by highlighting key products traded. Followed by a discussion of the Western Cape wheat production trends.

2. Agricultural trade with Russia- Ukraine

Figure 1 illustrates the top 5 agricultural products imported by Western Cape Province from Russia and Ukraine in 2020. As indicated the province imported about 91%(valued at R653 million) of wheat from Russia in 2020, followed by Ammonium dihydrogen orthophosphate (under fertilizer) at 7%(R46 million), and other products amongst the top five include Linseed, Oat grain, and Cane over the same period, in value terms.

In the case of Ukraine, the Western Cape imports sunflower seeds accounting for 28% (valued at R11 million), crude oil 25% at (R10 million), peas 15%, malt extract 14% and cottonseed oil at 5% amongst the top five imported products. This shows that WC is dependent on grain imports from both Russia and Ukraine. Therefore, any conflict between Russia and Ukraine has potential to disrupt commodity markets.

Table 1 below shows South Africa’s top fifteen agricultural exports to Russia and Ukraine ranked in value terms and also shows the growth rates. Interesting to observe is that most of the exports are horticultural products (oranges, pears, lemons, mandarins, apples, wine, grapefruit etc.) which are predominantly produced in the Western Cape Province. Therefore, the lack of stability in Russia and Ukraine due to ongoing conflict poses a major threat because both countries are important markets for South Africa.
Figure 1: Western Cape agricultural imports from Russia and Ukraine in value terms
Source: Quantec, 2022

Table 1: SA Top Agricultural Exports to Russia and Ukraine in value terms: 2021

<table>
<thead>
<tr>
<th>Rank</th>
<th>Product Name</th>
<th>SA Agric Export (R) to Russia: 2021</th>
<th>5-Year Annual Growth (%)</th>
<th>Product Name</th>
<th>SA Agric Export to Ukraine (R): 2021</th>
<th>5-Year Annual Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Oranges</td>
<td>760 917 785</td>
<td>9.4</td>
<td>Oranges</td>
<td>60 175 415</td>
<td>7.05</td>
</tr>
<tr>
<td>2</td>
<td>Pears</td>
<td>576 753 049</td>
<td>23.7</td>
<td>Lemons &amp; Limes</td>
<td>40 490 406</td>
<td>18.53</td>
</tr>
<tr>
<td>3</td>
<td>Mandarinis</td>
<td>500 064 416</td>
<td>0.0</td>
<td>Grapefruit</td>
<td>14 967 011</td>
<td>10.48</td>
</tr>
<tr>
<td>4</td>
<td>Lemons &amp; Limes</td>
<td>429 754 540</td>
<td>6.6</td>
<td>Wines&lt; 2 litres or less</td>
<td>13 251 263</td>
<td>23.25</td>
</tr>
<tr>
<td>5</td>
<td>Apples</td>
<td>360 907 073</td>
<td>21.0</td>
<td>Animal/veg fertilisers</td>
<td>3 706 481</td>
<td>0.00</td>
</tr>
<tr>
<td>6</td>
<td>Grapefruit</td>
<td>199 898 193</td>
<td>9.5</td>
<td>Mandarinis</td>
<td>3 131 720</td>
<td>0.00</td>
</tr>
<tr>
<td>7</td>
<td>Jams, &amp; jellie of fruits</td>
<td>175 834 844</td>
<td>6.2</td>
<td>Fertilizers(N, P)</td>
<td>3 006 892</td>
<td>0.00</td>
</tr>
<tr>
<td>8</td>
<td>Fresh</td>
<td>166 039 959</td>
<td>3.3</td>
<td>Pears</td>
<td>2 548 559</td>
<td>0.00</td>
</tr>
<tr>
<td>9</td>
<td>Wine &lt; 2 litres</td>
<td>160 427 131</td>
<td>17.7</td>
<td>Shelled</td>
<td>1 969 006</td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>Plums and sloes</td>
<td>94 081 378</td>
<td>29.0</td>
<td>Flours, meals &amp; pellets</td>
<td>722 437</td>
<td>0.00</td>
</tr>
<tr>
<td>11</td>
<td>Avocados</td>
<td>79 036 735</td>
<td>37.6</td>
<td>Dried Grapes</td>
<td>639 155</td>
<td>0.00</td>
</tr>
<tr>
<td>12</td>
<td>Almonds, shelled</td>
<td>38 644 543</td>
<td>0.0</td>
<td>Fruit stones &amp; kernels</td>
<td>587 163</td>
<td>2.43</td>
</tr>
<tr>
<td>13</td>
<td>Pineapple Juice</td>
<td>37 916 779</td>
<td>30.2</td>
<td>Others</td>
<td>146 368 214</td>
<td>5.33</td>
</tr>
<tr>
<td>14</td>
<td>Frozen Fruit &amp; Nuts</td>
<td>26 235 020</td>
<td>0.0</td>
<td>Others</td>
<td>2 430 955</td>
<td>0.00</td>
</tr>
<tr>
<td>15</td>
<td>Clementine</td>
<td>21 400 385</td>
<td>0.0</td>
<td>Wines&gt; 2 l, &lt;= 10 litres</td>
<td>440 725</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>146 368 214</td>
<td>-20.2</td>
<td>Total Value</td>
<td>149 429 730</td>
<td>14.31</td>
</tr>
</tbody>
</table>

Source: Quantec, 2022
3. Western Cape wheat production

The Western Cape Province is the leading producer of wheat in the country and accounts for a significant share of the total area planted, and share total wheat production (GRAIN SA, 2022; DAFF, 2019). Figure 2 below shows the performance of wheat production in the Western Cape looking at the area planted, production and yield. The area under production increased by 9% from 300 000 hectares (ha) in 2009/2010 to 326 000 (ha) in 2020/2021 (GRAIN SA, 2022).

The total wheat area under dryland farming has since increased from 95.4% in 2007 to 97.52% in 2017, with 2.48% remaining under irrigated land (StatsSA, 2020). From 2009 to 2021 Wheat production show a slight general growth trend (see production linear line), however, there were significant declines in 2010, 2016 and 2020. As expected, the yield as a function of area planted and production follows the same trend, but interesting to observe is that yield ranged between 1.8 – 3.4 (ton/ha) during years of low and high production. The data from GrainSA (2022) shows that production is expected/estimated to increase during the period 2021/2022.

Figure 2: Western Cape wheat area, production and yield trends (2009-2021)
Source: GRAIN SA, 2022

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Production value from 2015 to 2021/22 are based on GrainSA estimates
4. Concluding remarks

The intensifying conflict between Russia and Ukraine could disrupt agricultural trade with a significant impact on global food supply chains. South Africa is dependent on agricultural exports from Russia and Ukraine, particularly for wheat, and other grain commodities. This conflict could lead to food supply chain disruptions, increase in energy prices, fuel inflation fear and threaten investment of different economies including South Africa have trade bilateral trade agreements with both countries. South Africa net importers of wheat and other grain products from Russia and Ukraine, therefore the tension between the latter countries has the potential to disrupt the local supply of such products and increase in prices of related commodities.

5. References


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