



Voluntary Report - Voluntary - Public Distribution

Date: May 27, 2020

Report Number: SF2020-0034

Report Name: South Africa's Declining Trend in Sorghum Production to Continue

Country: South Africa - Republic of

Post: Pretoria

Report Category: Grain and Feed

Prepared By: Dirk Esterhuizen

Approved By: Kyle Bonsu

Report Highlights:

Over the past decade, sorghum production in South Africa decreased dramatically as producers preferred to plant more profitable crops, like corn and oilseeds. For the 2020/2021 MY, this trend is expected to continue, as Post estimates a 6 percent decline in area planted to sorghum and a 14 percent decrease in production to 120,000 tons. As a result, sorghum imports will rise by 80 percent to 55,000 tons. South Africa's sorghum crop for the 2019/20 MY is estimated at 138,885 tons, which is 9 percent higher than the 127,000 tons of sorghum produced in the 2018/19 MY. South Africa is also experiencing a significant depreciation of its exchange rate since the start of 2020, which coupled with the increase in production to cause a sharp rise in the import parity prices of sorghum. As a result, Post estimates sorghum imports will drop by 50 percent to 30,000 tons in the 2019/20 MY. The United States is the major supplier of sorghum to South Africa with almost 95 percent of total sorghum imports.

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Summary

Post estimates that the overall decreasing trend in sorghum production in South Africa will continue in the 2020/21 MY (March 2021 – February 2022), with a 6 percent drop in area planted to 40,000 hectares. If normal climatic conditions and average yields are assumed, then a sorghum crop of 120,000 tons could be produced in the 2020/21 MY, a drop of 14 percent from the previous season. As a result, sorghum imports are expected to increase by 25,000 tons to 55,000 tons.

South Africa's sorghum crop for the 2019/20 MY (March 2020 – February 2021) is estimated at 138,885 tons on an area planted of 42,500 hectares at a national average yield of 3.3 tons per hectare. This represents an increase of 9 percent from the 127,000 tons of sorghum produced in the 2018/19 MY (March 2019 – February 2020) on 16 percent less area. Coupled with the increase in production, South Africa is also experiencing a significant depreciation of its exchange rate since the start of 2020, which resulted in a sharp rise in the import parity price of sorghum. Hence, Post estimates sorghum imports will drop by 50 percent to 30,000 tons in the 2019/20 MY. South Africa imported about 60,000 tons of sorghum in the 2018/19 MY. The United States is the major supplier of sorghum to South Africa with almost 95 percent of total sorghum imports.

South Africa's sorghum meal consumption hovers around 90,000 tons per annum. Post expects this trend to continue in the 2019/20 MY and 2020/21 MY with local sorghum consumption remaining at around 90,000 tons. Sorghum used for malting decreased by almost 25 percent the past 10 years to about 60,000 tons as consumers prefer to drink more lager beer instead of sorghum beer. However, Post estimates sorghum usage for malting will increase in the 2019/20 MY, due to the COVID-19 lockdown and a ban on the sale of all alcohol, which initiated a sharp increase of home brewed beer, including sorghum beer. Hence, Post estimates sorghum used for malting will increase to 70,000 tons in the 2019/20 MY, but will fall back to around 65,000 tons in the 2020/21 MY.

Production

Sorghum is a tropical grass grown primarily in semi-arid regions of the world. Sorghum can grow in areas too dry for corn and is deemed to be the fifth most important grain crop grown in the world (after corn, wheat, rice and barley). In South Africa, sorghum is the fourth most important grain crop as rice production is insignificant in the country, due to the high-water requirements of the crop.

Sorghum production in South Africa had a 30-year peak period, from the mid-sixties to mid-nineties, when an annual average of almost 450,000 tons of sorghum were produced on an average area of 280,000 hectares. The highest sorghum production was recorded in the 1966/67 MY, when 728,000 tons of sorghum was produced on 640,000 hectares (see also Figure 1). However, after the deregulation of South Africa's agricultural markets in 1997, sorghum production decreased dramatically. Since 2000, the average annual area planted declined to a mere 70,000 hectares and average annual production to 180,000 tons. Sorghum area reached an all-time low of 28,800 hectares in the 2017/18 MY. In the past 10-years, sorghum production in South Africa decreased even further with an average annual production of around 140,000 tons.



Figure 1: The trends in the area planted and production of sorghum in South Africa (1936/37 MY – 2020/2021 MY)

Source: The South African Grain Information Services (Sagis)

A major reason for the decline of sorghum production in South Africa the past 20 years is that sorghum yield levels have failed to increase at the same positive rate as yield levels of corn and oilseeds, resulting in less competitive gross margins (see also Figure 2 which compares the yield levels of corn and sorghum). Unless technology changes occur that could improve sorghum productivity, producers will continue to switch to more profitable crops and the decreasing trend in hectares planted with sorghum in South Africa will continue.





Source: GrainSA

As a result, Post estimates that the overall decreasing trend in sorghum production in South Africa will continue in the 2020/21 MY, with a 6 percent drop in area planted to 40,000 hectares. If normal climatic conditions and average yields are assumed a sorghum crop of 120,000 tons could be produced in the 2020/21 MY, a drop of 14 percent from the previous season. In addition, Post estimates that the area to be planted with oilseeds in South Africa for the 2020/21 MY will continue on the positive trend of the past 10 years, which will hinder an increase in sorghum area planted. Post estimates producers will plant 600,000 hectares with sunflower seed and 750,000 hectares with soybeans, respectively, 20 percent and 6 percent more than the previous marketing year (also refer to the following document: <u>Oilseeds and Products Annual</u>).

South Africa's 2019/20 MY planting season started in October 2019 with extreme hot and dry conditions before decent widespread rainfall occurred and planting could commence. Due to the late start of the rains, a large percentage of South Africa's summer rainfall crops were planted later than normal and outside the optimal planting dates. However, sufficient rainfall throughout the growing season in most of South Africa's summer rainfall producing areas has had a positive impact on anticipated yields. As a result, above average yields are expected for South Africa's summer rainfall crops.

On April 29, 2020, the Crop Estimates Committee (CEC) released its third commercial production estimate for South Africa's summer rainfall crops. According to the CEC, the South African sorghum crop for the 2019/20 MY, is estimated at 138,885 tons on 42,500 hectares at a national average yield of 3.3 tons per hectare. This represents an increase of 9 percent from the 127,000 tons of sorghum produced in the 2018/19 MY on 16 percent less area.

On February 13, 2020, the CEC finalized the size of the 2018/19 MY sorghum crop at 127,000 tons on 50,500 hectares. The CEC finalizes the South African summer rainfall crops annually in February after considering total producer deliveries and on-farm usage. In Table 1, the area and production of sorghum in South Africa is indicated for the past 10 years.

| MY | Area (1,000 hectares) | Yield (tons/ha) | Production (1,000 tons) | | |
|---------------------|--------------------------|--------------------|----------------------------|--|--|
| 2010/11 | 69 | 2.2 | 155 | | |
| 2011/12 | 49 | 2.8 | 136 | | |
| 2012/13 | 63 | 2.3 | 147 | | |
| 2013/14 | 79 | 3.4 | 265 | | |
| 2014/15 | 70 | 1.7 | 121 | | |
| 2015/16 | 48 | 1.5 | 71 | | |
| 2016/17 | 42 | 3.6 | 152 | | |
| 2017/18 | 29 | 4.0 | 115 | | |
| 2018/19 | 51 | 2.5 | 127 | | |
| 2019/20 (estimate) | 43 | 3.2 | 139 | | |
| 2020/21* (forecast) | 40 | 3.0 | 120 | | |

Table 1: Area planted and production of sorghum in South Africa

Source: The Crop Estimates Committee (CEC)

* Post calculations

Consumption

In South Africa, sorghum is mainly used for human consumption (about 92 percent of sorghum usage), which include food (sorghum meal) and beverage (malt) consumption. Table 2 indicates that total sorghum consumption decreased by almost 20 percent the past 10 years, mainly due to the decrease in the usage of sorghum for malt and meal. In the past 5 years around 57 percent of sorghum was consumed as sorghum meal, while 35 percent was used for malting/brewing. Sorghum meal, also known as "Mabele", competes with other grain products, like corn meal and wheat products, and is generally served as a breakfast cereal. Malt is used for manufacturing sorghum beer (traditional African beer). Only 5 percent or 8,000 tons of sorghum in South Africa ends up as animal feed. The animal feed market comprises of sorghum processed for pet food, poultry and livestock.

South Africa's sorghum meal consumption hovers around 90,000 tons per annum (see also Table 2). Post expects this trend to continue in the 2019/20 MY and 2020/21 MY with local sorghum meal consumption remaining at around 90,000 tons. Due to negative economic growth and a bumper corn crop, which will lower the price of corn meal, major increases in the consumption of sorghum

products are not foreseen in the 2019/20 MY. It is still too early to predict the precise impact of COVID-19 on the South African economy, but economist estimate that the economy could shrink as much as 10 percent. South Africa's current corn crop is estimated at 16.0 million tons, 35 percent higher than the previous season. The commercial white corn crop is estimated at 8.9 million tons, 60 percent higher than the previous season and the commercial yellow corn crop at 6.6 million tons, 14 percent higher than the previous season (subsistence corn production accounts for the remaining 500,000 tons). As a result, local corn prices decreased by more than 20 percent since April 2020. Harvesting of this bumper corn crop will commence next month (June 2020).

Sorghum used for malting decreased by almost 25 percent the past 10 years to about 60,000 tons as consumer prefer to drink more lager beer instead of sorghum beer. However, Post estimates sorghum usage for malting will increase in the 2019/20 MY, due to the COVID-19 lockdown and a ban on the sale of all alcohol. The President of South Africa announced a 21-day national lockdown that started on Friday March 27, 2020, but later extended it to last until the end of April. From May 1, 2020, South Africa moved to a stage 4 lockdown with some restrictions being lifted, but for most part South Africa is still in a relative firm lockdown until at least the end of May. During the lockdown period a strict restriction on the sale of any alcoholic drinks has been implemented. The ban on alcohol sales initiated a sharp increase of home brewed beer, including sorghum beer. Hence, Post estimates sorghum used for malting will increase to 70,000 tons in the 2019/20 MY, but will fall back to 65,000 tons in the 2020/21 MY.

| Marketing year | Sorghum meal | Malt | Total human consumption | Animal feed | Others | TOTAL | | |
|--------------------|-----------------|------|-------------------------|----------------|--------|-------|--|--|
| | 1,000 tons | | | | | | | |
| 2010/11 | 101 | 81 | 182 | 7 | 12 | 202 | | |
| 2011/12 | 89 | 69 | 158 | 6 | 9 | 173 | | |
| 2012/13 | 96 | 69 | 165 | 5 | 8 | 178 | | |
| 2013/14 | 90 | 62 | 153 | 7 | 6 | 166 | | |
| 2014/15 | 88 | 61 | 149 | 10 | 5 | 165 | | |
| 2015/16 | 98 | 63 | 161 | 10 | 2 | 172 | | |
| 2016/17 | 93 | 60 | 153 | 9 | 4 | 165 | | |
| 2017/18 | 88 | 56 | 144 | 11 | 2 | 157 | | |
| 2018/19 | 94 | 61 | 155 | 9 | 2 | 166 | | |
| 2019/20*(estimate) | 90 | 70 | 160 | 8 | 2 | 170 | | |
| 2020/21*(forecast) | 90 | 65 | 155 | 8 | 2 | 165 | | |

Table 2: Consumption of sorghum in South Africa

Source: Sagis and Grain SA

*Post calculations

Trade

Over the past 10 years, South Africa moved from being a net exporter of sorghum to a net importer of sorghum, as local production decreased (see Figure 3). Sorghum imports are expected to increase by 25,000 tons to 55,000 tons in the 2020/2021 MY as a result of another year of decreased domestic production. In the 2019/20 MY, Post estimates sorghum imports will drop by 50 percent to 30,000 tons as South Africa experienced a significant depreciation of the Rand that resulted in a sharp rise in the import parity price of sorghum. The South African Rand depreciated by 25 percent against the United States Dollar since January 2020 (see Figure 4) to reach a record level of R19.25 per US\$1, driving sorghum import parity prices to historical high levels of more than R5,000 per ton. Mainly two factors contributed to the depreciation of the South African exchange rate: the impact of COVID-19 and the Moody's downgrade of South Africa's credit rating to junk status. Coupled with the depreciation of the Rand, South Africa imported about 60,000 tons of sorghum in the 2018/19 MY. The United States is the major supplier of sorghum to South Africa with almost 95 percent of total sorghum imports.

South Africa continues to export sorghum to its neighboring countries such as Botswana and Eswatini (formerly Swaziland), but at a declining rate. In the 2018/19 MY, exports amounted to 4,247 tons, 15 percent less than the previous year. Post estimates that exports will continue declining in the 2019/20 MY and 2020/21 MY to 4,000 tons and 3,500, respectively.



Figure 3: South Africa's imports and exports of sorghum the past 12 years

Source: Sagis



Figure 4: The sharp depreciation of the South African Rand in 2020

Source: South African Reserve Bank

| Sorghum | 2018/2 | 2018/2019 March 2019 | | 2019/2020 March 2020 | | 2020/2021 March 2021 | |
|-----------------------------------|------------------|-------------------------|------------------|-------------------------|---------------|-------------------------|--|
| Market Begin Year South Africa | March | | | | | | |
| | USDA Official | New Post | USDA Official | New Post | USDA Official | New Post | |
| Area Harvested | 50 | 51 | 45 | 43 | 50 | 40 | |
| Beginning Stocks | 25 | 25 | 55 | 42 | 58 | 37 | |
| Production | 135 | 127 | 133 | 139 | 125 | 120 | |
| MY Imports | 60 | 60 | 50 | 30 | 50 | 55 | |
| TY Imports | 59 | 59 | 50 | 40 | 50 | 55 | |
| TY Imp. from U.S. | 74 | 74 | 0 | 0 | 0 | 0 | |
| Total Supply | 220 | 212 | 238 | 211 | 233 | 212 | |
| MY Exports | 5 | 4 | 5 | 4 | 5 | 4 | |
| TY Exports | 4 | 4 | 5 | 4 | 5 | 4 | |
| Feed and Residual | 15 | 11 | 15 | 10 | 15 | 10 | |
| FSI Consumption | 145 | 155 | 160 | 160 | 160 | 155 | |
| Total Consumption | 160 | 166 | 175 | 170 | 175 | 165 | |
| Ending Stocks | 55 | 42 | 58 | 37 | 53 | 43 | |
| Total Distribution | 220 | 212 | 238 | 211 | 233 | 212 | |
| Yield | 2,70 | 2,49 | 2,96 | 3,23 | 2,50 | 3,00 | |
| (1000 HA) ,(1000 MT) ,(MT/F | HA) | | | | | | |

Table 3: PS&D Table for sorghum

Attachments:

No Attachments.