# South Africa's standing in the global food security ladder

18 October 2021

**Wandile Sihlobo**
Chief Economist
+27 12 807 6686
wandile@agbiz.co.za

www.agbiz.co.za

This past week, *The Economist* released its Corteva-sponsored *Global Food Security Index* results for 2021.[1] South Africa is now at 70th position out of 113 countries, from 69 in 2020 and 44 in 2019. At face value, this decline may be seen as worrying. However, when one looks at the index scoring's technical position, it becomes clear that South Africa is not doing as badly as the headline "ranking" suggests. In this case, South Africa's scoring remained unchanged from 2020, following a point drop in 2020 from 2019. The score came in at 57,8 in 2021, which is the same level as 2020, and down by 1,4 from 2019 in the *Global Food Security Index*. Relative to 2019, other countries have improved notably, resulting in the seemingly alarming deterioration in South Africa's ranking to 70.

The *Global Food Security Index* comprises four subindices, namely; (1) food affordability, (2) food availability, (3) food quality and safety, and (4) natural resources and resilience. The affordability and availability have a higher weighting of a combined two thirds (each 32,4%). The affordability subindex includes a change in average food costs, proportion of a population in poverty and agricultural import tariffs. Meanwhile, the availability subindex consists of the sufficiency of supply, agricultural infrastructure, volatility in agricultural production, political and social barriers to food, and food loss.

In 2021, South Africa experienced a mild deterioration in the food affordability and availability subindices of 0,7 and 0,1 points, respectively. Meanwhile, the rest of the other subindices improved marginally. In the case of affordability, the major challenge was an overall increase in food prices.

The food affordability issue in South Africa is not far off from what even local researchers have observed in various surveys, including Statistics South Africa. For example, the fifth wave of the National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM) highlighted that some households had run out of money to buy food since the pandemic started, thus observing a rise in food insecurity.[2] Moreover, South Africa's overall food price inflation has been elevated this year, averaging 6,5% y/y in the first eight months, from 4,8% in 2020. These dynamics are in line with the views expressed in this Index. But worth emphasizing is that this challenge speaks to the rising costs of food in an environment where more people are out of work due to disruptions the COVID-19 pandemic caused in business.

In addition, it is essential to highlight that the rise in food prices is a global phenomenon and not unique to South Africa. The dryness in South America, which negatively affected the crops in the 2020/21 production season, combined with growing demand for oilseeds and grains in China and higher shipping costs, are some of the factors that have underpinned global food prices.[3] This, in turn, supported grain prices in South Africa; hence the food price inflation was somewhat elevated in the first eight months of this year. This was a global issue rather than domestic supply constraints.

[1] The Index is accessible here.
[2] The full report of the National Income Dynamics Study – Coronavirus Rapid Mobile Survey on Food Insecurity in South Africa can be accessed here.
[3] The IMF explored this issue in a blog post in June 2021, see here.

In terms of availability, we find the deterioration of this subindex inconsistent with the realities in South Africa. The 2020/21 production season was the second largest in history in terms of grains and oilseeds. In horticulture, the citrus industry had a record harvest, while other fruits and vegetables experienced a general improvement in output compared with the previous season. In such an environment of abundant output, one wouldn't expect a decline in the "availability" subindex. Moreover, there is also no major change in South Africa's agricultural infrastructure, political and social barriers to food, and food loss over the past nine months compared to 2020. The only notable glitch in supply chains was during the KwaZulu-Natal and Gauteng unrests and even then, it was short-lived and supply chains adjusted in a matter of days.

The "food quality and safety" subindex comprise of nutritional standards, dietary diversity, protein quality and food safety. These are challenging to measure in each country, which again raises concerns about the global ranking of such aspects. South Africa has the products standards regulations that guides food producers and ensures their products meet the required quality. Hence, we are not as concerned about this particular ranking, which South Africa improved on. The "natural resources and resilience" subindex focuses on drought, floods, agriculture water risk, forest change, and land degradation, amongst other aspects. These are generally easily observable and there are often public records of them, particularly droughts and floods. South Africa's ranking in this subindex improved, as there was a generally good agriculture season.

At the core, a major issue to keep in mind when observing global agricultural indexes as *The Economist's Global Food Security Index* is that its authors must contend with several challenges which often depend on their judgment rather than realities on the ground in each country. These include the data sources' inconsistency in quality, coverage, and frequency and reliability across all countries. The weightings and ranking are also tricky challenges that the Index authors have to consider thoroughly as these could be subjective.

While we note the technical issues of this Index, we still think the message is that South Africa will need to continue improving food security through expansion in agricultural production and job creation in various sectors of the economy. As we have previously stated, at a technical level, the ideas of expanding agriculture and agro-processing capacity to boost growth and job creation were well established as far back as in National Development Plan in 2012.[4] They were again highlighted in the 2019 National Treasury paper.[5]

These include expanding agricultural activity in the former homelands and government land, enhancing government-commodity organisations partnerships in extension services, investment in the network industries (water, electricity and road infrastructure), port infrastructure, and state laboratories. Some interventions are more regulation-focused, and therefore do not require significant capital spending by the government, although these still need institutional capacity building. Such regulatory interventions include modernising regulations such as the Fertilizers, Farm Feeds, Seeds and Remedies Act 36 of 1947, which many role players in agriculture continue to express dissatisfaction with. The enforcement of the Agricultural Product Standards Act in a way that ensures that the DALRRD leads the implementation and does not assign it to the third parties is also another critical intervention that could be explored.

In terms of regional focus, Limpopo, KwaZulu-Natal and the Eastern Cape, which are amongst the most food-insecure provinces, also have vast tracts of underutilised land. These provinces should be a priority in agricultural development plans. With a commercial focus where conditions permit, agriculture improvement would help job creation and, ultimately, household food security.

[4] Chapter six of the National Development Plan is available here.
[5] The National Treasury's 2019 paper on economic transformation, inclusive growth and competitiveness is available here.

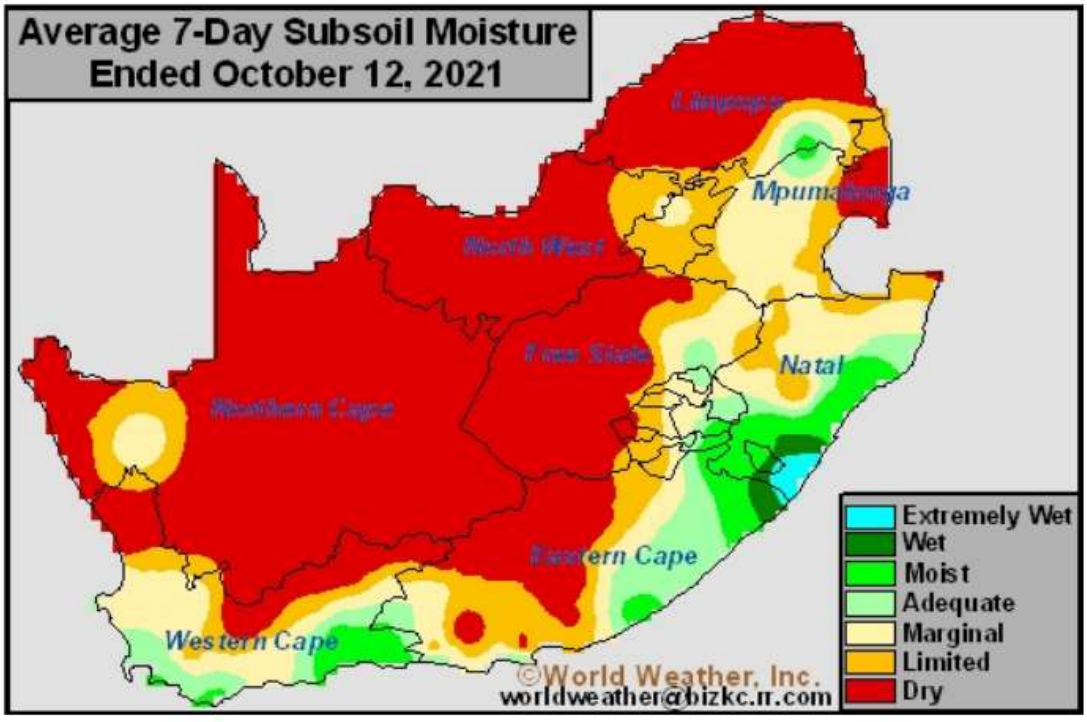
## Weekly highlights

**Improved soil moisture in Eastern regions of SA will support new crop planting**

South Africa's summer crop planting season is underway in the eastern and central regions. The rainfall and soil moisture will be crucial from now until February 2022, when the crop pollinates. A recent report from *World Weather Inc* shows that soil moisture has improved noticeably in the eastern regions of the country following rainfall of the past few weeks (see Exhibit 1). Importantly, this builds from already good soil moisture levels from the rainy 2020/21 summer season. These favourable soil moisture levels provide conducive conditions for planting, germination of seeds and after that, growth of the crop. More so, as the near-term weather prospects also show the likelihood of widespread rains between this week and the first week of November.[6]

All this, however, is unsurprising. We are in a La Niña event period, which means that the chances of above-normal rainfall in Southern Africa have increased. In its recent report on 12 October 2021, the *Australian Bureau of Meteorology* indicated that "the chance of La Niña forming in the coming months has increased to around 70%. This is roughly three times the normal likelihood of an event forming in any year." Importantly, these favourable weather prospects are not only a reality of field crops which we typically devote much time to but the entire agricultural sector.

**Exhibit 1: South Africa's soil moisture levels**




Source: World Weather Inc.

**The USDA maintained its upbeat forecast for 2021/22 global grains and oilseed production**

The 2021/22 grains and oilseed crop in the Northern Hemisphere has matured, and various regions expect a relatively good harvest. The attention will soon be shifting to the Southern Hemisphere and the essential region here is South America, a major producer of various

[6] The weather prospects data is available here.

grains and oilseeds. The concern of various analysts is how the forecast La Niña will impact the planting activity, and thereafter crops in this region, and the impact of all this in the global 2021/22 production forecasts. We think the major forecasters such as the International Grains Council (IGC) and the United States Department of Agriculture (USDA) have not fully accounted for a potential decline in crop output in this particular region.

A case in point is the recent USDA's update of the World Agricultural Supply and Demand Estimates report, which painted a picture of generally large supplies of maize, wheat, rice and soybeans in the 2021/22 production season. In the case of maize, the 2021/22 global harvest estimate was lifted marginally from September to 1,198 billion tonnes, which is up by 7% from the 2020/21 production season. The 2021/22 global maize stocks were also lifted from the previous month to 301 million tonnes, which is up 4% y/y. Notably, while this 2021/22 global maize production forecasts look promising, the outcome of the global supplies will depend on the final size of the South American crop. Hence, we continue to see upside risks due to an expected La Niña, which could cause dryness in this region.

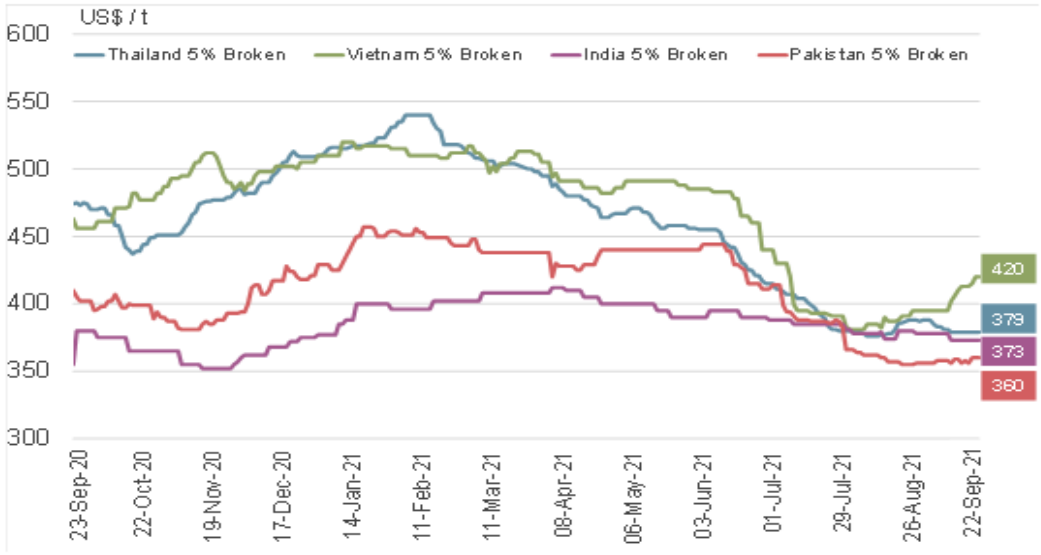
Similarly to maize, the 2021/22 global rice production estimate was lifted by 1% from September to 510 million tonnes. This is up by 1% from the 2020/21 production season because of expanding area plantings in Asia and the expected improvement in yields. The global rice stocks also lifted marginally from September 2021 to 183 million tonnes. Still, this is 1% lower than the 2020/21 global rice stock levels. Therefore, we expect the global rice prices to increase marginally or move sideways in the coming months. This will follow nearly six months of decline in global rice prices. This also means that rice-importing countries such as South Africa can expect prices at relatively higher levels in the coming months. Still, prices are unlikely in the near term to be at higher levels as experienced at the start of the year where Thailand and Vietnam rice prices (5% broken) were over $US500 per tonne in February and March. Both these prices are currently at levels below US$450 per tonne (see Exhibit 2).

Moreover, the 2021/22 global soybeans production estimate was lifted marginally from September to 385 million tonnes. This is 5% higher than the previous 2020/21 production season, primarily supported by an expected large harvest in the US, Brazil, Argentina, India, Paraguay, Russia, Ukraine, and Uruguay. Again, the 2021/22 production season in South America only started this month, October, so the optimistic harvest estimate is still tentative in the face of the aforementioned La Niña risk on the horizon. Still, unlike other grains that are characterized by tight stocks, the 2021/22 global soybeans stocks are at fairly comfortable levels at 105 million tonnes, up by 5% from the previous season. This is a result of both an improvement in production and also an expected softening in global consumption, especially in China.

Negatively, the USDA lowered its 2021/22 global wheat harvest estimate by 1% from September 2021 to 776 million tonnes. With that said, this is still 1% higher than the previous month. The stocks followed a similar path and were lowered from September by 2% to 277 million tonnes. This is now 3% lower than the 2020/21 production season. These lower stocks will most likely add upward pressure on prices, and thus increasing costs for wheat importing countries such as South Africa. South Africa's wheat import estimate for the 2021/22 marketing year is 1,53 million tonnes, slightly above the previous season's imports.

In sum, the major global crop forecasters have maintained a reasonably optimistic view about the 2021/22 production season. Still, this could change depending on the severity of the La Niña impact in South America. We are particularly concerned as this could be a second consecutive year of dryness in this region and its contribution to global maize and soybean production. Critical from now on will be consistent monitoring of the weather conditions at least through to February 2022, when crops in the Southern Hemisphere region generally matures.

**Exhibit 2: Global rice prices**




Source: International Grains Council

## Data releases this week

We start the week with a global focus. Today, the USDA will release the **US Crop Progress report** for 17 October 2021. In the previous report of 10 October, the US maize crop was rated 60% good/excellent, which is slightly below the last year's rating in the same week of 61%. In the same week of 10 October 2021, the US soybean crop was rated 59% good or excellent, which is slightly poorer than the rating of the same week last year of 63%. On Thursday, the USDA will release the **US Weekly Export Sales** data.

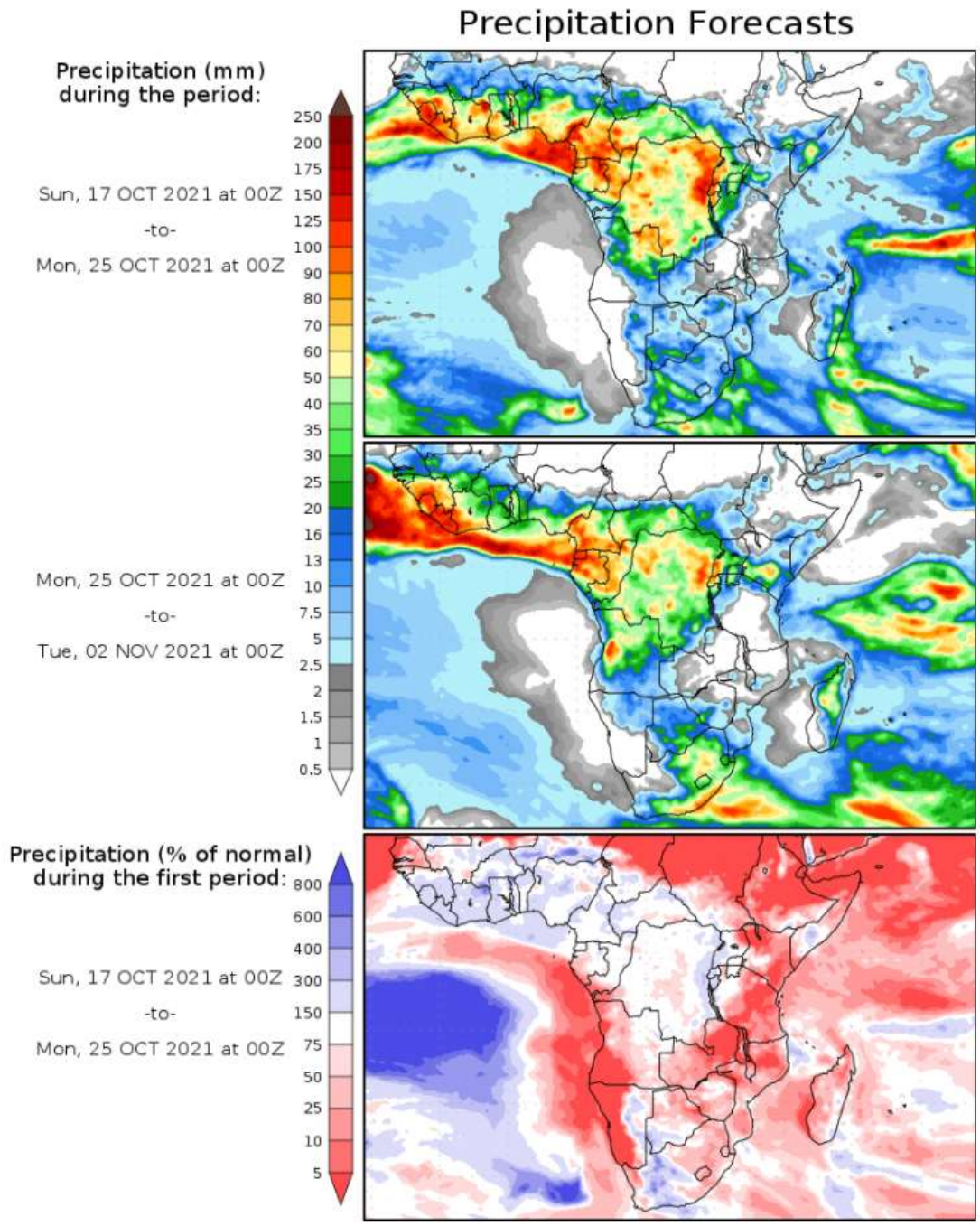
On the domestic front, on Wednesday, SAGIS will release the **Weekly Grain Producer Deliveries** data for 15 October 2021. This data cover summer and winter crops, although we only focus on summer crops for now, where harvesting has recently been completed. To recap, on 08 October, about 1 137 tonnes of soybeans were delivered to commercial silos. This placed the soybean producer deliveries for 32 weeks of the 2021/22 marketing year at 1,83 million tonnes, which equals 97% of the expected harvest of 1,89 million tonnes. Moreover, 669 915 tonnes of sunflower seed for the 2021/22 season had already been delivered to commercial silos in the same week, out of the expected crop of 677 240 tonnes. In maize, the marketing year is different from oilseeds; we are still in the 23rd week of the 2021/22 marketing year, which began in May. The producer deliveries currently amount to 14,0 million tonnes, equating to 86% of the expected crop of 16,2 million tonnes.

Also, on Wednesday, Statistics South Africa will release the **Consumer Price Index (CPI)** data for September 2021. As a recap, the consumer food price inflation accelerated to 7,4% y/y in August 2021 after registering 7,0% in the previous two months. This is the highest level since March 2017. The underpinning drivers of this uptick in consumer food price inflation was meat and, to a lesser extent, fish and vegetables. Meanwhile, most products in the food basket, including 'bread and cereals, and 'oils and fats', decelerated, the latter after a sharp increase in recent months.

On Thursday, SAGIS will release the **Weekly Grain Trade** data for the week of 15 October 2021. To recap, in the week of 08 October 2021, which was the 23rd week of South Africa's 2021/22 maize marketing year, total maize exports amounted to 1,79 million tonnes, which equates to 59% of the revised seasonal forecast of 3,03 million tonnes (up by 6% y/y). In terms of wheat, South Africa is a net importer. 08 October 2021 was the second week of the 2021/22 marketing year. The total imports are now at 145 419 tonnes out of the seasonal

import forecast of 1,53 million tonnes (slightly above the 2020/21 marketing year imports 1,47 million tonnes).

**Exhibit 3: South Africa's precipitation forecast**




Source: George Mason University (wxmaps)

*The weather forecast for the next two weeks shows prospects of widespread rains which should help improve soil moisture and support the planting activity for the 2021/22 crop.*