



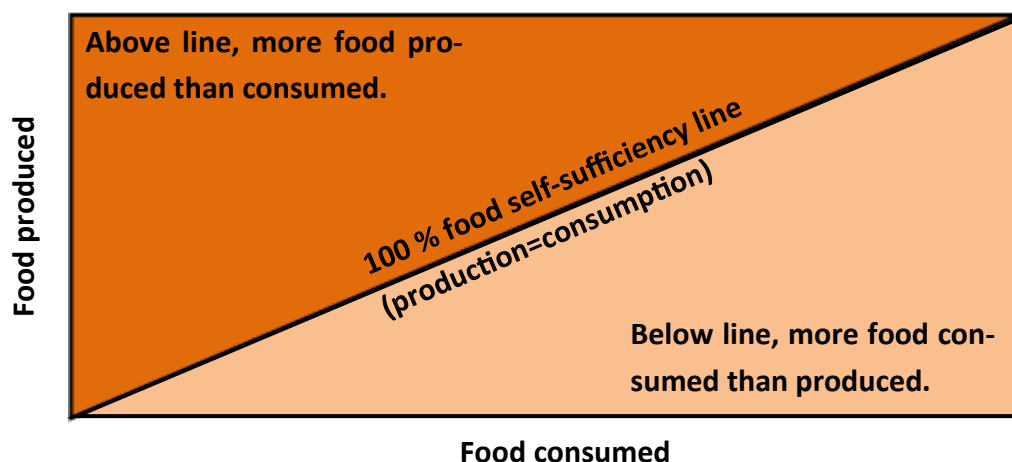
# SELF-SUFFICIENCY INDEX

## Directorate: Statistics & Economic Analysis

This is a bi-annual information leaflet by the Directorate: Statistics and Economic Analysis. The aim of the publication is to inform decision makers on the extent to which South Africa is food secure. The production of sufficient volumes of agricultural commodities forms an important part of food security in South Africa. Thus, selected commodities has been identified that will be addressed in this volume, namely maize, wheat and poultry. Future issues will focus on other commodities like oilseeds (sunflower seed and soybeans), as well as red meat.

## What is a Self-sufficiency Index?

The concept of food self-sufficiency is generally taken to mean the extent to which a country can satisfy its food needs from its own domestic production. This understanding is illustrated in the diagram below, whereas the diagonal line indicates 100% food self-sufficiency, i.e. where food production is equal to food consumption.

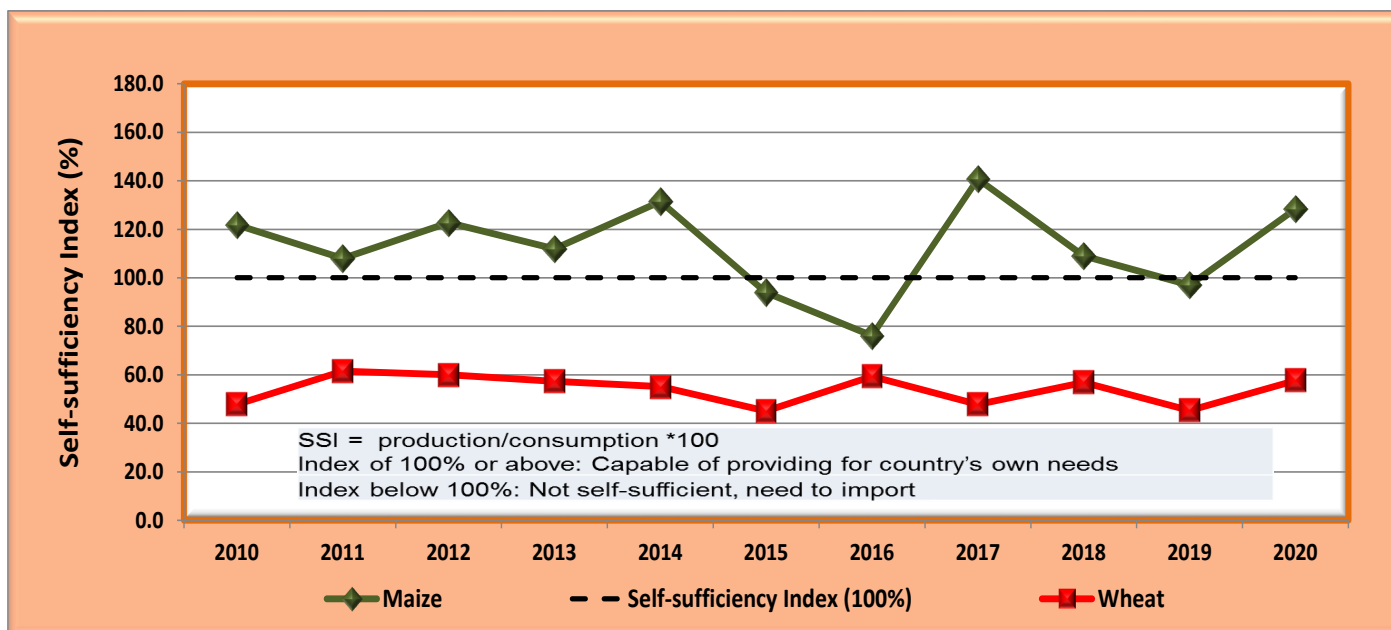


The key point is that if a country is food self-sufficient, it produces an amount of food that is equal to or greater than the amount of food that it consumes. The self-sufficiency index (SSI), expresses food production as a ratio of consumption.

## Maize and Wheat:

South Africa has the capacity to be self-sufficient in most agricultural products. In most years, South Africa produces a surplus over the domestic consumption of the main staple crop, maize; historical exceptions to this have largely been the result of droughts. However, South Africa does rely on imports for some significant agricultural products, including wheat. Approximately fifty to sixty percent of the country's wheat requirement is imported.

### SSI of maize & wheat, 2010 - 2020



As South Africa is producing sufficient quantities of maize to satisfy local consumption, thus resulting in a positive SSI (SSI>100). The average 10-year index value (2010 to 2019) of maize is 111. The surplus of maize is usually exported to neighbouring SADC countries.

The Index value of maize for 2020 is 128, which is 32% more than the index value of 2019 (97). This increase can mainly be attributed to the larger expected commercial maize crop of 2020, which is 37% higher at 15,5 million tons (second largest crop on record), as compared to the smaller crop of 2019 of 11,3 million tons. The larger maize crop contributes to a larger production figure as compared to the consumption of maize, resulting in a higher SSI value for 2020.

South Africa is regarded as a net importer of wheat as local production is not sufficient to satisfy local consumption, resulting in a negative SSI (SSI<100). The average 10-year index value (2010 to 2019) of wheat is 54.

The Index value of wheat for 2020 is 58, which is 29% more than the index value of 2019 (45). This increase can mainly be attributed to a larger expected wheat crop, projected at 2,0 million tons for 2020 (the largest crop since 2011) as compared to the 1,5 million tons of 2019, as a result of improved production conditions following the good rainfall received since May 2020 in the Western Cape Province, where 63% of the local wheat is planted. The larger wheat crop contributes to a higher production figure as compared to the consumption of wheat, resulting in a higher SSI value for 2020.

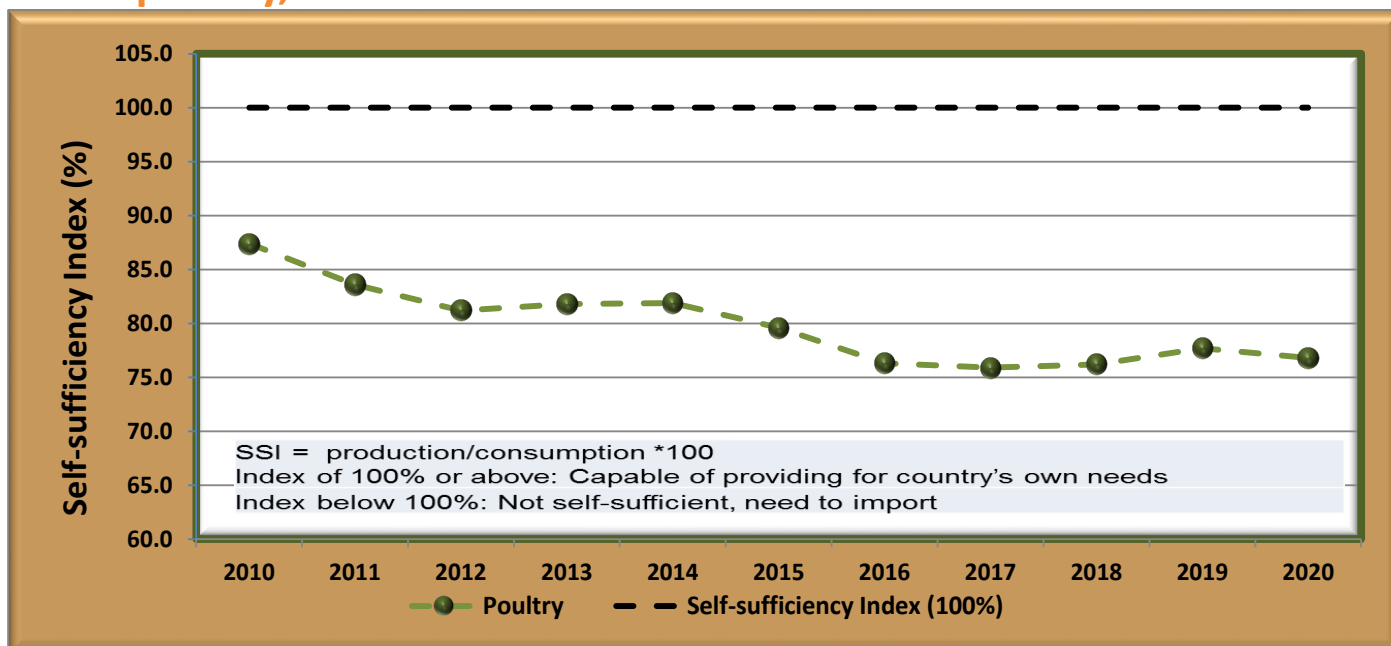
The impact of COVID-19 globally has influenced South Africa's procurement options in terms of wheat as large global exporters such as Russia, Ukraine and Kazakhstan have imposed export quotas on wheat in order to ensure sufficient domestic supplies. Fortunately, global stocks remain high and both Europe and Canada remained consistent suppliers to South Africa.

## Poultry:

According to the latest Bureau for Food and Agricultural Policy (BFAP) Baseline Report, the fundamental factors that underpin meat consumption are income levels and the resultant changes in spending power, population growth, and urbanisation. With income growth stagnating in recent years, growth in meat consumption has also slowed substantially relative to the early 2000's. The prolonged impact of the measures imposed to curb COVID-19 and the resultant increase in unemployment will likely result in markedly slower meat consumption growth in the coming decade. However, poultry's relative affordability within the total meat basket implies that mid-income consumers who had been able to afford a more diverse meat basket may end up consuming more poultry.

Imports account for 25 to 30 percent of chicken meat consumed in South Africa. Brazil, the European Union and the United States are the major suppliers of chicken meat to South Africa. Thus, South Africa is regarded as a net importer of poultry as local production is not sufficient to satisfy local consumption, resulting in a negative SSI (SSI<100). The average 10-year index value (2010 to 2019) of poultry is 80. The Index value of poultry for 2020 is 77, which is slightly less than the index value of 2019 (78). The decrease can mainly be attributed to an increase in the consumption of poultry. Chicken is the highest consumed meat in the country with a per capita consumption of 40 kg/year as compared to the beef per capita consumption of 17 kg/year and 8 kg/year for eggs.

## SSI of poultry, 2010 - 2020



It is projected that South Africa's poultry production will increase in the near future as a result of the increase in the import duties on bone-in chicken meat and boneless chicken meat and the Poultry Sector Master Plan introduced by the South African government and the poultry industry stakeholders. The Plan is intended to increase profitability and efficiency in the industry by protecting poultry producers against unfair trade practices.

The poultry industry is also subject to high production costs that impact on their yearly productivity. Production costs are dominated by high feed costs and that reduces the poultry industry's competitiveness. The feed costs account for 70 percent of the production costs and other inputs such as soybeans are imported at a high cost as a result of the weak exchange rate. The bumper maize crop of 15,5 million tons of 2020 has suppressed local maize prices and this expected to continue in the 2021 season. Thus, feed costs declined compared to prior years and contributed to lower production costs and will also contribute to increased production levels.