

# agriculture, forestry & fisheries

Department: Agriculture, Forestry and Fisheries **REPUBLIC OF SOUTH AFRICA** 

## SELF-SUFFICIENCY INDEX

### Directorate: Statistics & Economic Analysis

This is a new bi-annual publication 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 and wheat. 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.



#### Food consumed

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, partly because imports are cheaper than domestic production.

SSI of maize & wheat, 2010 - 2018



As South Africa is producing sufficient quantities of maize to satisfy local consumption, thus resulting in a positive SSI (SSI>100). The surplus of maize is usually exported to neighbouring SADC countries.

The Index value of maize for 2018 is 112, which is 21% less than the index value of 2017 (141). This decrease can mainly be attributed to the lower maize crop of 2018, which was 26% lower at 12,5 million tons, as compared to the bumper crop of 2017 of 16,8 million tons. The lower maize crop contributes to a lower production figure as compared to the consumption of maize, resulting in a lower SSI value for 2018.

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 Index value of wheat for 2018 is 54, which is 12% more than the index value of 2017 (48). This increase can mainly be attributed to a larger wheat crop of 1,8 million tons for 2018 as compared to the 1,5 million tons of 2017, as production conditions improved, specifically in the Western Cape Province following the severe drought experienced in 2017. The larger wheat crop contributes to a higher production figure as compared to the consumption of wheat, resulting in a higher SSI value for 2018.