



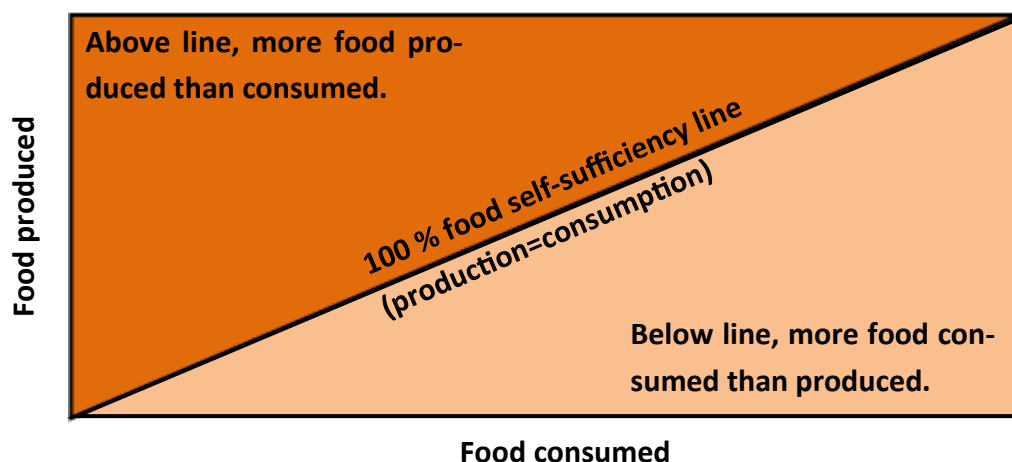
SELF-SUFFICIENCY INDEX

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 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.

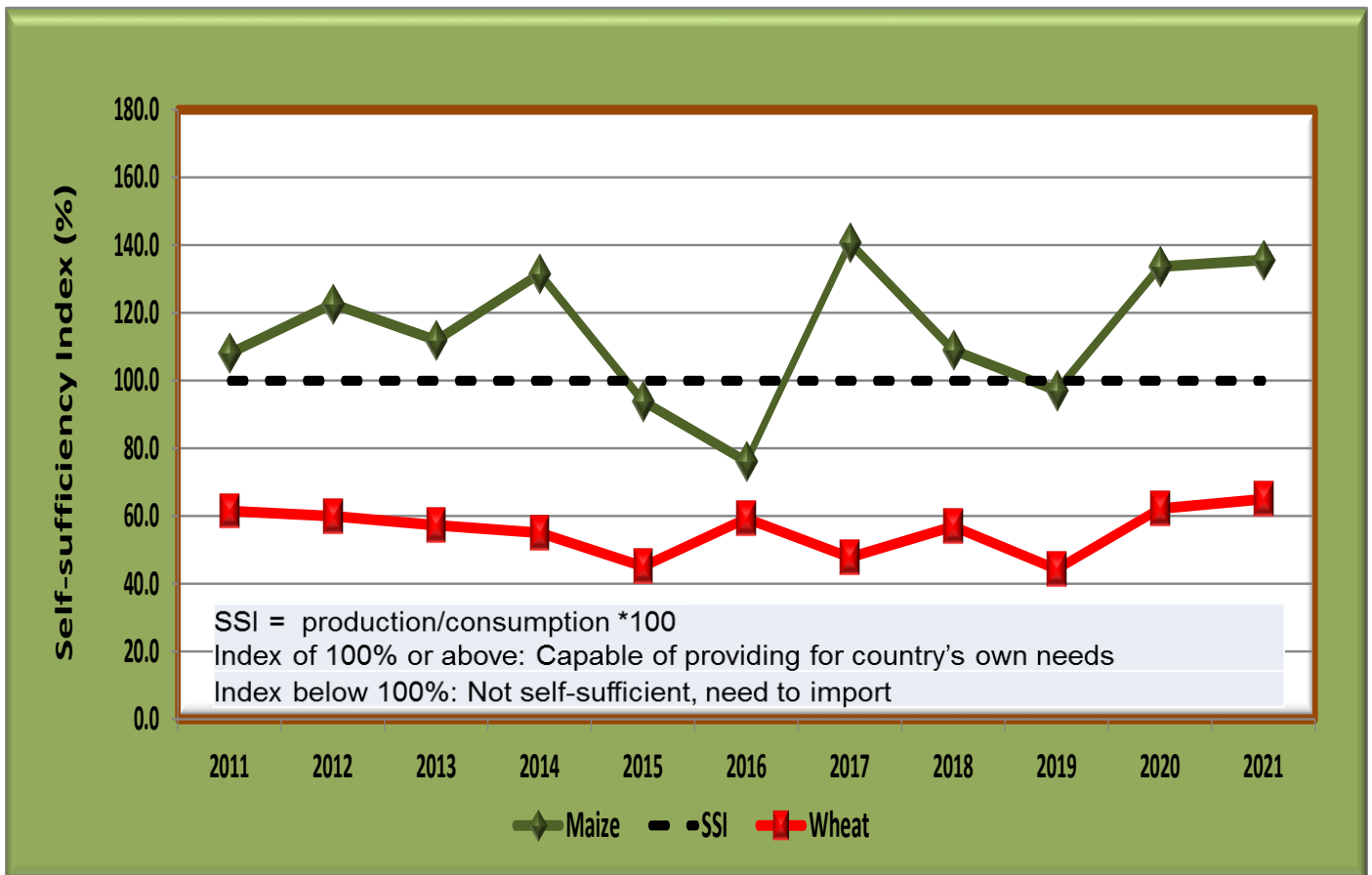


The key point is that if a country is food self-sufficient, it produces an amount of food that is equal to or greater than the amount of food that it consumes. The self-sufficiency index (SSI), expresses food production as a ratio of consumption.

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 forty to fifty percent of the country's wheat requirement is imported.

SSI of maize & wheat, 2011 - 2021



Maize : 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 (2011 to 2020) of maize is 112. The surplus of maize (white) is usually exported to neighbouring SADC countries.

The index value of maize for 2021 is 136, which is slightly more (1,5%) than the index value of 2020 (134). This increase can mainly be attributed to the larger expected commercial maize crop of 2021, which is 6,5% higher at 16,3 million tons, as compared to the smaller crop of 2020 of 15,3 million tons. The 2021 maize crop is also the second largest maize crop on record. The larger maize crop contributes to a larger production figure as compared to the consumption of maize, resulting in a higher SSI value for 2021.

Over the past 10 years, South Africa maintained an average marginal growth rate of about two percent per annum in the commercial consumption of maize. This trend is mainly driven by increased demand through population growth and expansion in the local broiler industry to serve the local market. White maize, in the form of a meal, is the staple food for many South African households, especially for lower income consumers, as it is a relatively inexpensive source of carbohydrates. Yellow maize is used as the primary ingredient for animal feed, especially in the broiler industry. Chicken meat has grown to be the most important protein source in the diet of the majority of South Africans over the past 20 years (Source: FAS Gain and Feed Annual Report).

Wheat:

Wheat is the second most important grain commodity consumed in South Africa after maize. The annual per capita consumption of maize is the highest at 74kg/person, followed by wheat (47kg/person) and rice (16kg/person). South Africa consumes approximately 2,2 billion loafs of bread per annum or 37 loafs of bread per person per year.

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 (2011 to 2020) of wheat is 55.

The index value of wheat for 2021 is 65, which is 4,5% more than the index value of 2020 (62). This increase can mainly be attributed to a larger expected wheat crop, estimated at 2,3 million tons for 2021 as compared to the 2,1 million tons of 2020. The main contributor to the increase in wheat production was favorable weather conditions, especially in the winter rainfall area of the Western Cape province, that resulted in historical high country-wide average yields of 4,3 t/ha. More than 60% of wheat produced in South Africa is planted in the Western Cape province. The 2021 wheat crop is the largest since the 2002 wheat crop of 2,4 million tons or the past almost 20 years.

The larger wheat crop contributes to a higher production figure as compared to the consumption of wheat, resulting in a higher SSI value for 2021.