

## agriculture, forestry & fisheries

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

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## 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, as well as red meat and poultry meat. Future issues will focus on other commodities like oilseeds (sunflower seed and soybeans), as well as fruits (deciduous fruit and citrus) and vegetables (potatoes).

# 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 selfsufficiency, 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 - 2017

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. 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).

#### Red meat:

Growing income levels, sustained trends of urbanisation and improved living standards have supported dietary diversification in South Africa, resulting in the inclusion of more protein in typical diets and rapid growth in meat consumption. In South Africa, an increasing trend in the local production and consumption of **red meat** is evident over time. However, local production is not sufficient to satisfy local consumption thus resulting in a slightly negative SSI (SSI<100). Therefore, imports are required.

#### SSI of red meat, 2010 - 2017



#### **Poultry meat:**

The Poultry Industry is a critical subsector within the South African agriculture and is considered as the single largest contributor to the value of gross agricultural production. The industry is also central to food security, as it provides the most affordable source of animal protein to South African consumers. Although the imports of **poultry meat** are showing an increasing trend over time, local consumption still exceeds local production resulting in a negative SSI (SSI<100).

#### SSI of poultry meat, 2010 - 2017



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