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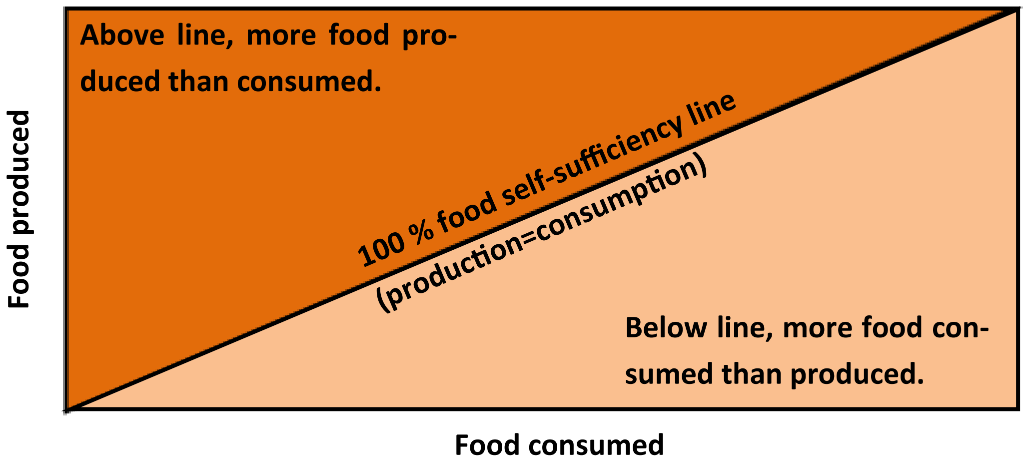
SELF-SUFFICIENCY INDEX

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 soybeans and sunflower seed. Future issues will focus on other commodities like maize and wheat.

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.

Soybeans and Sunflower seed:

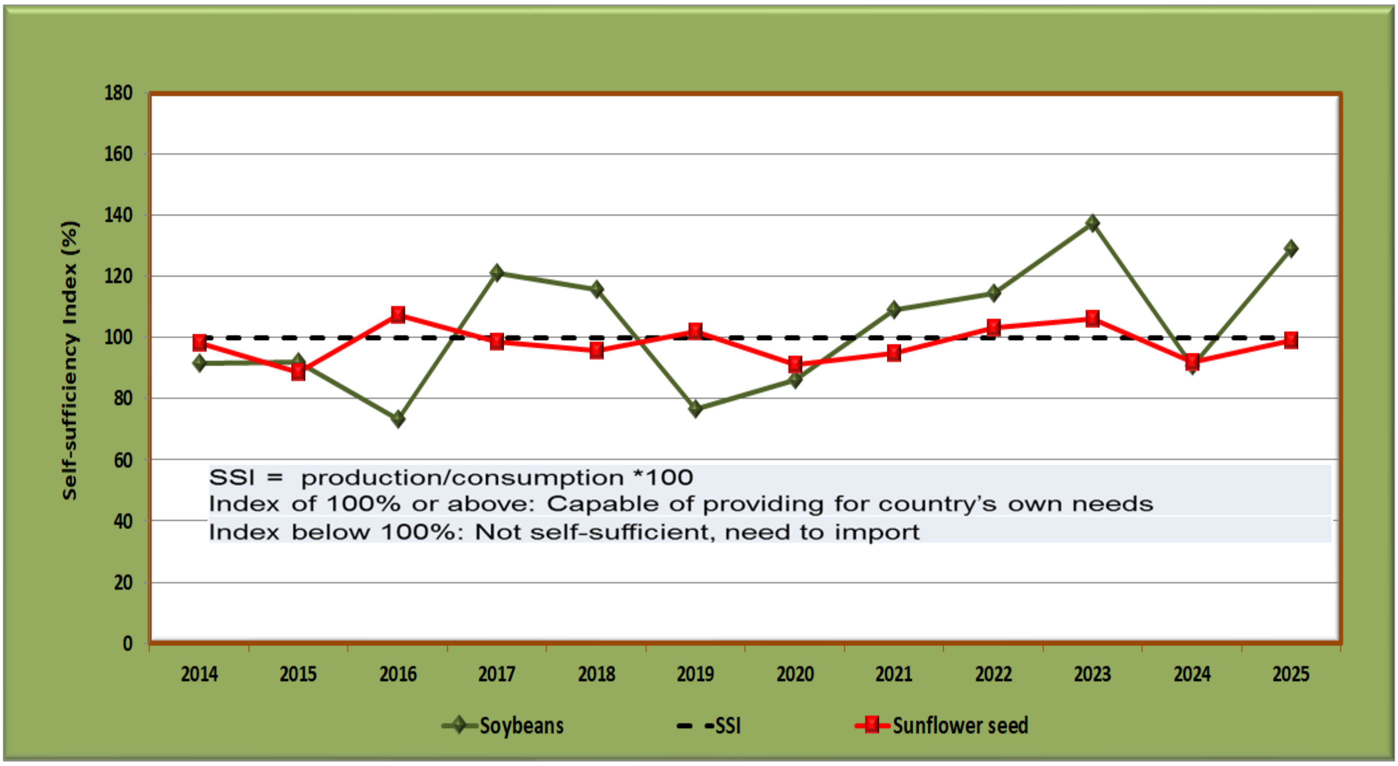
South Africa has the capacity to be self-sufficient in most agricultural products. However, South Africa does rely on imports for some significant agricultural products, including soybeans and sunflower seed.

Over the past three production years, the summer rainfall oilseed crop area has stagnated at around 1,7 million hectares after a period of extensive growth over the past 10 years. This surge was driven by a 7-fold expansion in the soybean area planted as producers realised the benefits in using soybeans as a rotational crop with maize. South Africa's oilseed complex (specifically soybeans) is experiencing constant growth in yield potential driven by adoption of advanced production technologies, such as genetically engineered seed, and more efficient and effective farming practices. Precision agriculture has been readily adopted by South African farmers who have been able to invest in supporting technology. Conservation farming is also gaining in popularity, with no-till practices now favoured by famers, particularly in the Mpumalanga province. With most oilseeds in South Africa non-irrigated, lack of rainfall is the primary factor that drives temporary yield reductions

In addition, a substantial local demand for soybeans through sizable investments in oilseed processing plants were established. South Africa's total oilseed processing capacity is estimated at 2,8 million tons and is derived from a combination of dedicated soybean and sunflower seed processing facilities, as well as crushing plants with the ability to switch between soybean and sunflower seed.

The bulk of soybeans and sunflower seeds produced in South Africa are crushed to produce both edible oil for human consumption and protein meal for inclusion in animal feed rations. Sunflower seed is a higher oil yielding seed, therefore more oriented towards human consumption. Sunflower meal, a byproduct of the oil extraction process, is sold to local animal feed manufacturers. In contrast, soybeans yield higher protein meal and are mainly crushed to be used by the animal feed sector.

SSI of soybeans & sunflower seed, 2014 - 2025



Soybeans:

South Africa produces intermittedly sufficient quantities of soybeans to satisfy local consumption, thus resulting in a positive SSI (SSI>100), from time to time. The average 10-year index value (2015 to 2024) of soybeans is 102. The index value of soybeans for 2025 is 129, which is 41,8% more than the index value of 2024 (91). The increase can mainly be attributed to the largest commercial soybean crop on record at 2,753 million tons, which is also 49,0% more at 1,8 million tons produced in 2024.

The larger soybean crop contributes to a larger production figure as compared to the consumption of soybeans, resulting in a higher SSI value for 2025.

Producers in South Africa planted a record soybean area of 1,15 million ha in 2025, an increase of 0,04% compared to the 2024 season, surpassing yellow maize plantings for the third consecutive season.

South African soybean producers benefit from international seed technology and investments into local multiplication of oilseed varieties that support yield gains over time. In addition, producers pay a statutory seed levy to the South African Cultivar and Technology Agency (SACTA) on an annual basis. SACTA was formed as a non-profit company to guarantee that breeding and technology levies are paid to seed breeding companies and plant breeder rights holders, ensuring continuous research and cultivar development.

In general, soybeans require fewer farming inputs, especially fertilizer, compared to maize. The generally higher commodity prices, specifically grains and oilseeds, provide financial support to absorb some of these costs. However, inflated input costs enlarged the risk of production in a mostly weather dependent industry. South Africa uses around 2,2 million tons of fertilizer annually (1% of global usage), of which about 50% is used by maize producers. South Africa imports more than 70% of its fertilizer annually.

Sunflower seed:

South Africa is regarded as a net importer of sunflower seed as local production is not sufficient to satisfy local consumption, resulting in a negative SSI (SSI<100). The average 10-year index value (2015 to 2024) of sunflower seed is 98.

The index value of sunflower seed for 2025 is 99, which is 7,6% more than the index value of 2024 (92). The increase can mainly be attributed to a larger sunflower seed crop, estimated at 708 300 tons, representing an increase of 12,1% as compared to the 632 000 tons of 2024.

South Africa's 2024-25 summer grains and oilseed production estimate was lifted again in August 2025, by 4,3% from the July 2025 estimate to an expected 19,5 million tonnes (up 25,9% year-on-year). There is an annual uptick in all the crops, mainly supported by favourable summer rains and the decent area plantings. This ample harvest will likely add downward pressure on prices, which bodes well for consumer food price inflation. The recent surge in maize prices was linked to the slow harvest process and quality issues, but that was short-lived and does not change the expectation of prices potentially moderating going forward.

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