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SELF-SUFFICIENCY INDEX

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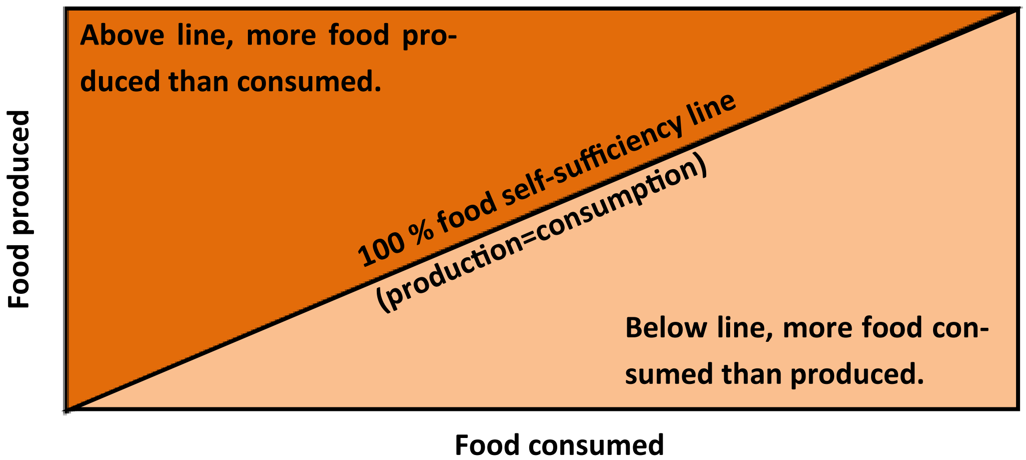
This is a bi-annual information leaflet by the Directorate: Statistics and Economic Analysis. The aim of the publication is to inform decision makers on the extent to which South Africa is food secure. The production of sufficient volumes of agricultural commodities forms an important part of food security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

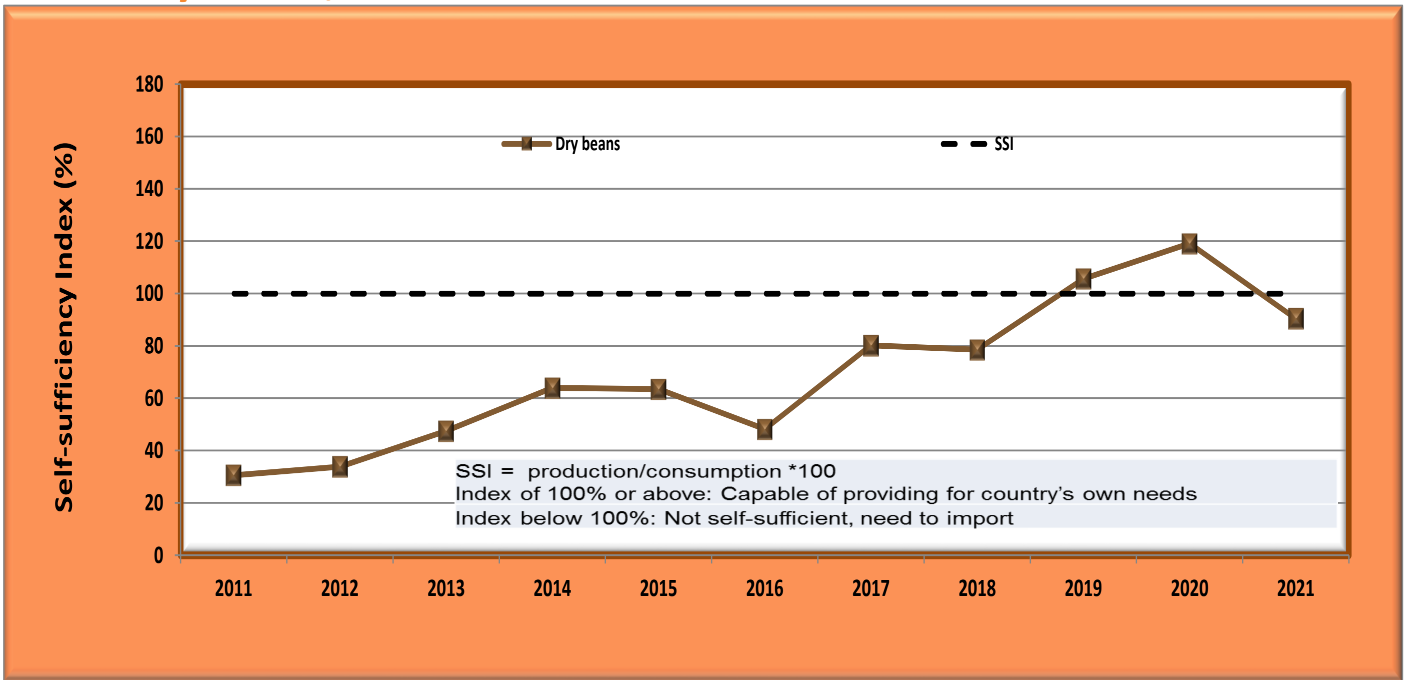


The key point is that if a country is food self-sufficient, it produces an amount of food that is equal to or greater than the amount of food that it consumes. The self-sufficiency index (SSI), expresses food production as a ratio of consumption.

Dry beans:

South Africa has the capacity to be self-sufficient in most agricultural products. However, South Africa does rely on imports for some agricultural products, including dry beans. South Africa's production and imports of dry beans have been declining over the past decade in correlation with a decrease in consumption. Dry bean imports declined by approximately 90% since 2011 with South Africa's dry bean consumption stabilising at around 60 000 tons per year.

SSI of dry beans, 2011 - 2021



As South Africa is producing insufficient quantities of dry beans to satisfy local consumption, thus resulting in a mostly negative SSI (SSI>100). The average 10-year index value (2011 to 2020) of dry beans is 67.

Dry bean production is relatively small and averaged around 65,000 tons over the past five years. However, for the 2021 season it is estimated that South Africa will realize a dry bean crop of 56 600 tons, 13% less than the previous season. As a result, dry bean imports for the 2021 season are expected to increase, while dry bean exports are expected to decrease.

The Index value of dry beans for 2021 is 90, which is 24% less than the index value of 2020 (119). This decrease can mainly be attributed to the smaller expected commercial dry bean crop of 2021, as compared to the larger crop of 64 800 tons in 2020. The smaller dry bean crop contributes to a smaller production figure as compared to the consumption of dry beans, resulting in a lower SSI value for 2021. Dry beans will continue to be a small but important niche market in South Africa with many nutritional benefits.

A major reason for the decline of dry bean production in South Africa is that yield levels have failed to increase at the same positive rate as yield levels of maize and oilseeds, resulting in less competitive gross margins. Unless technology changes occur that could improve dry bean productivity, producers will continue to switch to more profitable crops and the decreasing trend in hectares planted with dry beans in South Africa will continue.

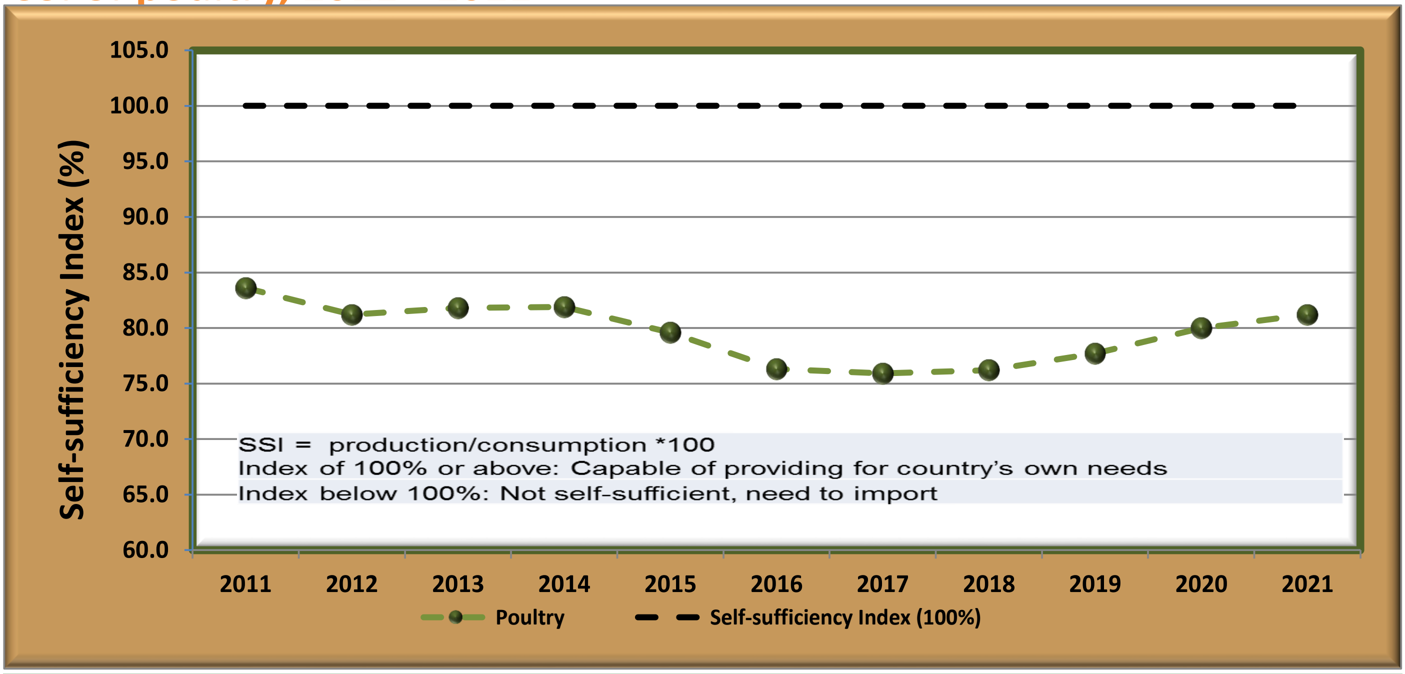
The decline in dry bean consumption is mainly due to consumer preferences and the price competitiveness of dry bean products. Dry beans are available to the local consumer either as packed or already cooked, and preserved in a can in either a saline solution or tomato sauce (baked beans).

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. While consumption levels in 2020 were also influenced by reduced food service operations and are therefore not attributable to spending power alone, the stagnation in economic activity in recent years prior to any influence by the pandemic, already resulted in weaker consumption growth during the previous decade relative to the early 2000's. The prolonged nature of the economic recovery, combined with further increases in unemployment as a result of the pandemic, will likely result in markedly slower meat consumption growth in the current decade. Poultry meat remains the cheapest source of animal protein, but for many lower income consumers it has few alternatives and when disposable income declines, it becomes unaffordable, leading to a reduction in meat consumption and a switch back to a more starch-rich diet. Conversely, its 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. Amongst higher income consumers, its convenience and perceived health benefits are appealing. All of these factors combine to support demand levels, which was evident in 2020, when it was the only major meat type where consumption did not decline year on year.

The consumption of poultry meat is expected to decline by 3% in 2021. This remains depressed due to continued lockdowns and a struggling economy and the continued COVID-19 lockdowns. Local producers reported losses due to low demand, as consumption at home did not appear to offset the loss of consumption in hotels and restaurants caused by COVID-19 lockdowns. The hard lockdowns that mandated the closure of restaurants were approximately three months while the country continues to have lockdown levels mandating a curfew for restaurants. Poultry meat is consumed by people of all income groups, and it continues to be a cheaper protein. In 2021, however, some consumers were unable to afford even substitute meats and reduced protein intake altogether. Due in large part to South Africa's unemployment rate of 34,4%, it is estimated that 40% of the population cannot afford to buy a basic food basket.

SSI of poultry, 2011 - 2021



The production of poultry meat is expected to increase by 2% in 2021. Despite investments in the sector, the pace of growth seen in prior years has been slowed by the recent increase in international feed prices, poor economic growth and structural constraints. South Africa's feed costs account for close to 70% of total broiler production costs. Due to the relatively high levels of import dependency for feed protein and the free market for maize exports, South African feed costs are heavily influenced by changes in international prices and increased in 2021 despite a bumper crop. The actions and commitments in the Poultry Sector Master Plan are expected to yield further production growth in the short term, but profitability remains key to the sustainability of these investments and the prospects for further growth in the medium term.

Imports account for approximately 25% of poultry meat consumed in South Africa. Brazil, the European Union and the United States are the major suppliers of poultry 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 (2011 to 2020) of poultry is 91. The Index value of poultry for 2020 is 81, which is slightly more than the index value of 2020 (80). The increase can mainly be attributed to an increase in the production of poultry. Poultry meat is the highest consumed meat in the country with a per capita consumption of 38 kg/year, as compared to the beef per capita consumption of 16 kg/year and 9 kg/year for eggs.

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