Southern Africa
Reduced 2018 harvests and agricultural productivity underpin increased rates of food insecurity

Highlights:
• Despite an average maize harvest and an overall satisfactory supply outlook for 2018/19, the aggregate number of people affected by food insecurity has increased.
• Declining per capita maize production in the past ten years has heightened reliance on imports to satisfy consumption needs, increasing vulnerabilities to external shocks.

Cereal production declines in 2018, but the aggregate output remains near average
Cereal production in the subregion of Southern Africa is estimated at 33.8 million tonnes for 2018, almost 5.9 million tonnes (15 percent) below the record high of 2017, but slightly above the previous five-year average. Most of the year-on-year production decline relates to maize, the main food staple, which accounts for about 29 percent of the total per capita calorie supply. By country, the decrease in South Africa’s output accounts for the bulk of the contraction, where the maize harvest is estimated at 13.8 million tonnes, 3.8 million tonnes lower than the record high of 2017. Large annual production decreases of 1.3 million tonnes in Zambia and 0.7 million tonnes in Malawi also contributed to the aggregate decrease, with outputs lower by 21 percent and 14 percent, respectively, compared with the previous five-year averages. Maize harvests in the remaining countries were close to, or slightly above, average levels. By contrast, production of rice, predominantly grown in Madagascar, is estimated to have increased on a yearly basis in 2018, while for wheat, mostly produced in South Africa and Zambia, production in 2018 is forecast at a similar level as last year, reflecting favourable growing conditions from March onwards.

The estimated reduction in the cereal harvest mainly reflects below-average rains and above-average temperatures in January and early February, which generally correspond to the flowering and yield formation stages of maize. At these stages, maize is most sensitive to water deficits. Outbreaks of Fall Armyworm had localized impacts, however, the precise extent of the damage has not been quantified.

Large stocks bolster national availabilities, although supplies remain tighter than in the previous year
Excluding South Africa (a surplus producer and net exporter), aggregate maize production in 2018 is estimated to be below total domestic utilization (see Figure 2). This implies that the countries would need to drawdown their stocks and/or increase imports to satisfy national consumption needs.

As most countries had been able to build up their national inventories after the bumper crops in 2017, opening stocks in the 2018/19 marketing years (generally May/April) are generally high (see Figure 3). These larger stocks have helped to cushion the impact of production shortfalls in 2018, bolstering national availabilities. In particular, the two main exporters of the subregion, South Africa and, to a lesser extent, Zambia, registered well above-average opening stocks, even buttressing subregional surpluses in 2018/19.

Although the maize supply situation for the subregion as a whole is not unfavourable, the analysis of per capita production estimates reveals a different perspective.

While aggregate maize production over the past ten years indicates a positive trend, the rate of increase remained below the rate of the population growth. As a consequence, per capita maize production decreased from an average of 108 kg per person in 2009-2013 to 87 kg per person in 2014-2018. The lower per capita production suggests an overall reduced production capacity and lower availabilities of the main staple from domestic supplies.

It also implies that imports are playing a growing role in domestic maize availability to avoid declining per capita supplies. Increased households' access to imported food, however, requires higher income levels and/or lower prices. A look at the evolution of per capita incomes, using per capita GDP\(^2\) as a proxy, suggests a decline or, in some cases, stagnant per capita incomes and less purchasing power. On the positive side, maize prices in 2018 have been generally low. An exception to this general trend is Madagascar, where prices of rice reached record highs in early 2018. However, rice production and incomes were estimated to have increased this year helping to mitigate the impact of price spikes.

While per capita maize production is a very partial indicator of food security in general, it is a first proxy to assess food security in Southern Africa, given the high reliance of the poor on growing and consuming maize.

Food insecurity numbers rise in 2018
Stagnant incomes and the reduced per capita maize production has contributed to keep the number of food insecure persistently high in 2018, notwithstanding the generally satisfactory supply situation and the lower prices. Results from the Vulnerability Assessment Committees' (VAC) evaluations indicate that 8.3 million people are food insecure\(^3\), 80 percent above the 2017 level and the third highest estimate in the last ten years.

The largest year-on-year increases in 2018 were estimated in Malawi and Zambia, which both registered


\(^3\) Excluding South Africa, due to differences in measurements, and Angola, as data is not available, and Mauritius.
well below-average maize harvests this year. It should be noted that this year’s total food insecure estimate is almost half compared to 2016, when 16.9 million people were assessed to be in need of food assistance, which was caused by El Niño-induced dry weather conditions.

Reviewing the data since 2009 shows that both the prevalence and absolute number of food insecure has risen over the last ten years. This rise can in part be explained by the decline in per capita production that has caused a contraction in maize availabilities, as imports have not fully compensated for the domestic shortfalls; however, last year’s record output resulted in an uptick in per capita maize availabilities for 2017/18 and 2018/19.

Although this analysis does not examine the potential food substitution effects in the local diets, stemming from the reduced maize availabilities or possible changes in consumption preferences, it serves to illustrate stagnant productive capacities set against the context of a growing population. This is an underlying factor that has contributed to the higher number of people affected by food insecurity.

Thus, continuing to tackle factors that impede growth in agricultural productivity, as well as strengthening resilience to external shocks, it is essential to reduce vulnerabilities and address the high levels of food insecurity.
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