## Supply and Demand

World maize production for the 2021/22 season was set at 1 224.2 million tons according to the *International Grains Council Grain Market Report GMR 546 – 17 August 2023*, with the major maize producing countries being the USA, China and Brazil. The USA, Argentina, Ukraine and Brazil are the biggest exporters of maize. Maize usage figures are 137.5, 308.4 and 723.3 million tons respectively for food, industrial and feed purposes. World production for the 2022/23 season is estimated at 1 160.4 million tons and the 2023/24 figure is forecasted to be 1 220.8 million tons.

According to *The Bureau for Food and Agricultural Policy (BFAP) Baseline, Agricultural Outlook* 2022 – 2031, demand prospects for the various field crops differ owing to differences in use and marketing channels. Grains such as white maize and sorghum are predominantly consumed as staple foods. While the bulk of yellow maize consumption is attributed to the animal feed industry, where it provides the primary energy source in most feed rations.

The most widely consumed grain-based food in South Africa is maize meal. Per capita maize consumption is projected to rise by 0.5% per annum over the ten-year period, following a decline of 0.1% per annum in the previous decade. Combined with population growth, this supports growth of 11% in white maize consumption by 2031 compared to the 2019-21 base period.

Despite slower growth in the demand for animal protein in South Africa, the commitments made in the Poultry Masterplan still imply some growth in the demand for animal feed over the coming decade, albeit at a slower rate than the past. The Poultry Masterplan ought to result in some import replacement and consequently a decline in the share of imported products in domestic consumption, combined with export led expansion in the beef sector. Accordingly, yellow maize consumption as animal feed is projected to rise by 19% over the next 10 years.

White maize area increased sharply in 2020 & 2021, then contracted slightly in 2022. Following another spike in 2023, it is expected to trend downwards by 11%, relative to the 2019-21 average level, over the rest of the outlook period to 2031. Nevertheless, the expected 1.37 million hectares under white maize by 2031 will still exceed the levels observed in 2018 and 2019. The area planted to yellow maize is expected to stabilise at similar levels to the recent past, just exceeding 1 million hectares by 2031.

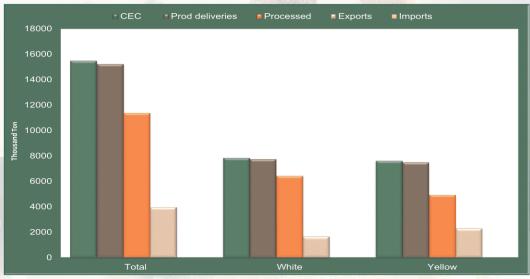
Considering the changes in area in conjunction with projected yields, by comparing 2031 to the 2019-2021 base period, fairly consistent yield gains are reflected. This reflection is based on continuous improvements in cultivar technology, as well as a consistent evolution of production practices and area dynamics. The largest yield gains are expected for sunflower and white maize – both commodities where area is expected to decline from current levels.

In white maize, this gain is projected at 20%. This is sufficient to ensure ample production for South Africa and provide an exportable surplus into neighbouring markets. For commodities where area is stable or expanding, such as yellow maize and soybeans, yield gains are more moderate at 11%. In the case of yellow maize, growth seems slower, but from an abnormally high base following exceptional years in 2020 and 2021. The baseline yield path assumes a return to longer term norms in terms of weather conditions.

As mentioned, production is still expected to be sufficient to sustain an exportable surplus, albeit smaller than the recent past. While projections reflect the assumption of stable weather conditions, the reality is that this surplus, and the associated prices, will fluctuate in line with weather dynamics. In normal years, the exportable surplus is expected to average around 1.5 million tons. This

comprises approximately 700 thousand tons of yellow maize, predominantly into the global market, and 800 thousand tons of white maize into the rest of the Southern African region. Despite competition from Zambia as a competitive supplier of non-GM maize, countries such as Mozambique, Namibia and Botswana continue to rely on South Africa as a consistent supplier, with additional export opportunities often emerging from Zambia's tendency to control export volumes when supplies decline.

Local Supply and Demand figures, compiled by SAGIS, are provided in the graph below and in tables and graphs on pages 9 to 14.



Graph 14: Maize supply and demand overview 2022/23 marketing season

Information provided by SAGIS.

