

Price tracker: key food prices

April 2021

DRAFT FOR PILOT

Welcome to the initial food price tracker! This is an initiative of the Market Observatory of the Centre for Competition, Regulation and Economic Development, at the University of Johannesburg, and its partners.

Each month we will provide a short summary of key trends in prices for selected staple food products. We will start with just a few products and countries and aim to expand over time.

The price tracker is motivated by the need for greater transparency on prices on the ground to smaller market participants. Small producers and agri-businesses such as traders and millers are at the heart of growing production and value, yet prices are often not transparent and are also very volatile.

African countries face the twin challenges of growing agricultural production to meet expanding demand, at the same time as climate change means increased weather variability. Covid-19 highlights the importance of resilient supply of critical products.

It is not widely appreciated that there is huge potential for expanded food production across many African countries. There are good soils and water availability. With fair market prices and support for investments in areas including production, storage, and processing, there is massive potential.

The market observatory aims to collect and disseminate data to help assess if prices are fair and markets are working well for small producers, within and across borders.

In this tracker we focus on maize and soybeans in East and Southern Africa (ESA) and share insights across Malawi, Tanzania and Zambia. Maize is a staple in most countries while soybeans are critical for animal feed and the competitiveness of poultry and fish farmers, among others.

Key international developments:

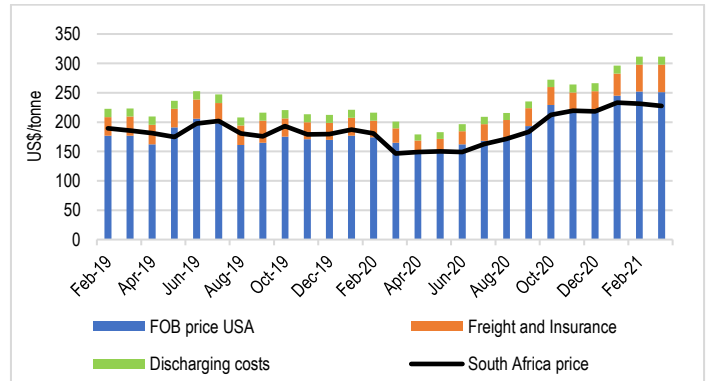
- Maize and soybean prices have increased internationally by 50% since mid-2020, driven by demand and supply factors.
- Chinese demand for maize and soybeans continues to increase, led by demand for animal feed.
- Weather events associated with La Niña effects are impacting on supply in importance producers such as Brazil.
- There have been good rains in ESA, with bumper harvests in maize in many countries, however, locust swarms in East Africa affected crops in 2020, and are a threat in 2021.
- The continued easing of Covid-19 restrictions has reduced obstacles to international trade.
- Pressure is growing on supply chain traceability and sustainability; the focus on countries such as Brazil and Indonesia will be widened.

Maize prices

While maize is mainly for human consumption in many African countries, yellow maize is predominantly used for animal feed. Animal feed accounts for more than half of domestic maize demand globally. Around 13% of all maize globally is exported with the biggest producer and exporter being the USA. The second biggest producer, China, is also the biggest importer given the size of its demand, and it runs a persistent trade deficit.

International maize prices have tended to move between \$150-\$200/t. However, in six months they increased substantially with the benchmark US (free-on-board Gulf of Mexico) price jumping from \$173/t in August 2020 to \$252/t in February 2021 (Fig. 1). Prices appear to be remaining at these higher levels.

Figure 1. International maize prices



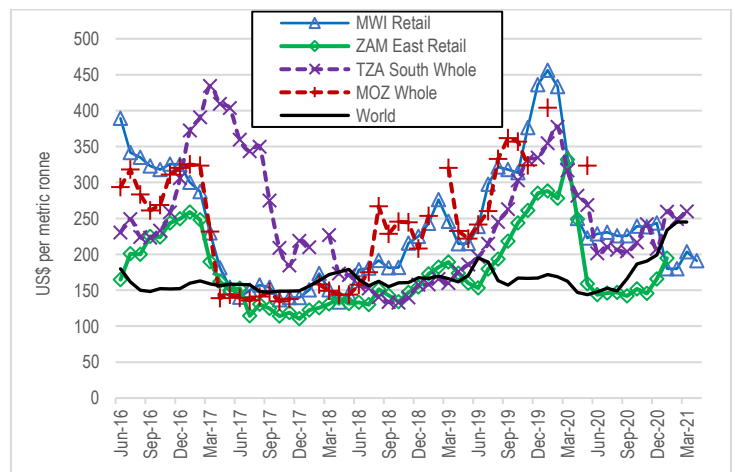
Source: SAGIS Weekly Bulletin

Notes: Free on Board (FOB) price is on the USA's Gulf of Mexico and the indicated freight, insurance and discharging costs are indicative for shipping to Durban in South Africa. The South Africa price is the price traded on the SAFEX.

South Africa is the largest maize producer in ESA and apart from in major droughts (such as 2015/16) has a substantial surplus meaning that the market price is in line with the export price (and lower than the cost of landing imports, in Fig. 1).

Prices in many local markets across ESA are much more variable than international prices. We focus on prices around the common borders of Malawi, Mozambique, Zambia and Tanzania (Fig 2). Prices have moved from lows close to \$100/t to highs of \$450/t. There have been differences of as much as \$200/t at times between locations in relative proximity.

Figure 2. Maize prices in selected regional markets



Source: WFP's Vulnerability Analysis & Mapping (VAM); World from World Bank.

Notes: Wholesale prices not available for Malawi and Zambia; retail prices include retail markups and taxes where applicable.

- Imports into Malawi and Tanzania mainly originate from Zambia, which is a net exporter.
- Tanzania and Malawi prices have spiked at levels much higher than transport costs from Zambia.
- Tropical cyclones in 2019 in Malawi and Mozambique, affected maize yields, increased imports and prices.
- Despite poor data, it appears traders have been able to exploit large price differentials to make arbitrage profits.

Soybean prices

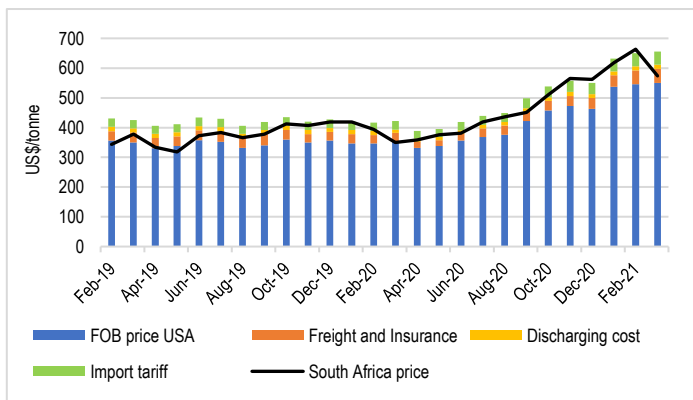
Soybean is grown in tropical and subtropical climates and is one of the most valuable crops in the world, not only as an oilseed crop and feed for livestock and aquaculture but also as a good source of protein in the human diet and as a biofuel. The global soybean market is therefore driven by demand for the derivative products, through the crushing industry, where soy meal and soy oil are extracted, which have wide applications in the food and feed industries.

Soy meal is used in the animal feed industry and around 80% of global soybean demand is due to feed. A large proportion, more than 30% of soybean demand, is met by international trade (which would be an even higher proportion if we took trade in derivative products, such as animal feed, into account).

The USA and Brazil lead global production, accounting for almost two-thirds of the total. Brazil is the largest exporter with supplies mainly going to meet the huge demand in China for animal feed for pork, poultry and fish farming, among others.

China's demand for soybeans has driven increased prices. The international price (FOB Gulf of Mexico) increased from \$368/t in July 2020 to \$550/t in March 2021 on an export free-on-board basis and has remained at these levels, with similar increases in Brazil. This increase in prices is driven by the recovery of Chinese pork production after the outbreak of swine flu earlier last year. However, a resurgence of the flu during the early months of 2021 threatens to put the brakes on soaring global feed grain demand.

Figure 3. International soybean prices



Source: SAGIS Weekly Bulletin

Notes: Free on Board (FOB) price is on the USA's Gulf of Mexico, and the indicated freight, insurance, import tariff and discharging costs are indicative for shipping to Durban in South Africa. The South Africa price is the price traded on the SAFEX.

Furthermore, climate change impacts on Argentina and Brazil have also affected supply and hence the price of soybeans in 2021. Argentine soybean production is located in areas where there has been heightened drought conditions, brought on by the La Niña climate event which developed in late 2020.

Brazil's soybean harvest for 2021 is also running behind schedule as drought slowed soybean planting in 2020. Now heavy rains have saturated fields and hampered early soybean harvesting. Consequently, soybean shipments from Brazil to China were the lowest in seven years. However, the United States has stepped up shipments to make up for Brazil's export shortfall.

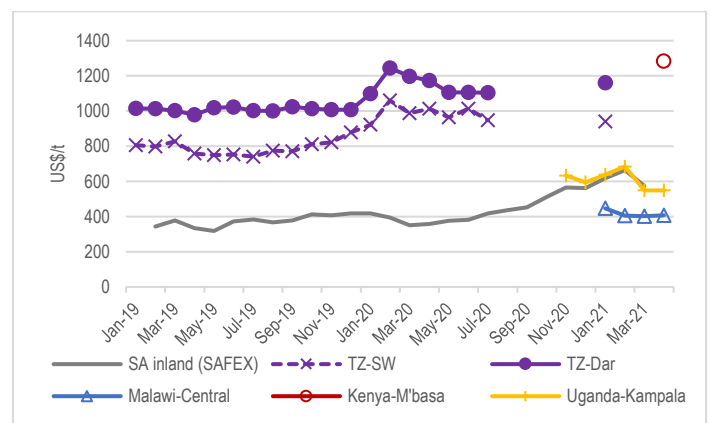
South Africa prices are at or around import levels as, despite substantial local production, there is a persistent deficit which requires imports from South America, especially for the demand for animal feed in coastal markets in Durban and Cape Town.

Turning to ESA, soybean production has been growing in a number of countries, led by Zambia and Malawi, reflecting its great value as a crop, and increasing demand for meat and fish, especially in urban populations with growing incomes.

Despite it being such an important input to poultry and fish farming, price data on soybeans is much less available than for maize. What data exists indicates that bulk prices have been around the \$300-\$400/t level in South Africa until 2020 (Fig 4). Prices then increased along with the international prices, reflecting the imported prices including the transport costs.

Prices in Tanzania appear to be much higher, albeit the prices are only available at a retail level and so not on a like for like basis. Considering 2021, when more price data are available, Malawi prices are lower than in other countries and Uganda prices are similar to those in South Africa. Kenya only has a single price point which indicates similar and very high prices in line with Tanzania, while data are also not available on prices in Zambia.

Figure 4. Soybean prices in East and Southern Africa



Source: Tanzania is from WFP(VAM) and from retail prices per kg; Kenya, Uganda from RATIN per tonne; Malawi from Ace Africa, per kg. S Africa is SA Futures Exchange price.

A market observatory

Covid-19 has pointed to the challenges of ensuring resilient regional value chains, reinforcing the impacts of climate change which had already been evident from extreme weather events. To ensure sustainable production and stable prices of key crops investment in support to farmers and in storage and logistics are essential.

The absence of reliable price data at the wholesale and producer level means that large traders are able to take advantage of market volatility and the weak bargaining position of smaller market participants, whether as sellers or buyers.

Competition authorities have identified concerns around opportunistic price gouging in Covid-19. There have also been concerns about cartels, such as identified by the CCPC in Zambia with regard to fish fingerlings and poultry.

A market observatory is an essential part of realizing the potential for sustainable food systems in East and Southern Africa which work to the benefit of smaller producers and consumers.

Contact details

Centre for Competition, Regulation and Economic Development, University of Johannesburg; www.competition.org.za

Email: gnsomba@uj.ac.za