# Price tracker: key food prices

June 2021

### **DRAFT 3 FOR PILOT**

Welcome to the third draft 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 in East and Southern Africa (ESA) for selected staple food products, and a focus on selected areas. Please also see the <u>previous trackers</u>. We are starting with just a few products and countries and aim to expand over time and filling in the gaps.

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 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 demand while adapting to climate change. Covid-19 has highlighted the importance of resilient supply chains.

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, the massive potential can be realised.

In this third tracker we include: a note on why the initiative is particularly important given climate change; and, review prices at the consumer level of the maize value chain.

Key international developments:

- Maize and soybean prices have remained at historic highs in June, around \$300/t for maize and \$600/t for soybeans.
- Maize production forecasts continue to fall with concern arising from the worst drought in Brazil for a century, along with drought in Mexico and extreme weather in the USA.
- Strong Chinese demand continues to impact on animal feed and through this to sustain historic soybean prices.
- Southern Africa is having bumper harvests with good weather, which has seen very low prices to farmers in some areas even while international prices are high and the region remains a net importer of soybean.
- Zimbabwe imposed an import ban on maize and maizemeal imports to underpin the very high prices offered to farmers.

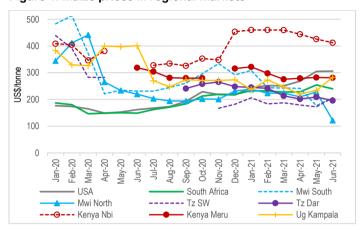
## Maize and maizemeal prices

Recent developments in the ESA region continue to reflect very good harvests, with ongoing substantial variations across countries. While world prices remained above \$300/t in June, South African prices (on SAFEX) have reduced somewhat to \$240/t (Figure 1) and are set at export parity into deep-sea markets. Prices in Zambia, Malawi, Tanzania have remained relatively low, while prices in Uganda and Kenya are higher (Table 1):

- In southwest Tanzania prices remained around \$200/t.
- Price across Zambia have converged around \$120-\$130.
- Malawi prices have fallen in the northern areas to around \$120-\$130 (similar to Zambia), while prices in the south remain above \$200.

- In contrast, in Uganda prices increased over the past month from around \$220-230 to above \$280; closer to the very high prices in Kenya.
- Kenyan prices in Nairobi which had increased after concerns over quality checks on regional imports have now adjusted downwards somewhat to around \$400, around \$300 in areas such as Meru and Eldoret.
- In Zimbabwe the high maize price to farmers was fixed by government at US\$378/t (or \$267/t using exchange rates in the parallel market), with imports now being banned, given the much lower prices in neighbours.

Figure 1. Maize prices in regional markets



Notes: based on price tracker data from multiple sources

Table 1. Prices, mid-June, from users, US\$/t

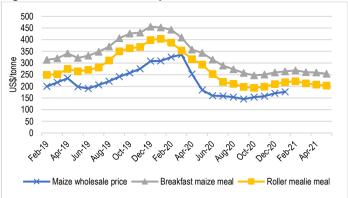
	Maize	Maize meal
Kenya Nairobi		
Malawi North	122	
Malawi Central		
Malawi South	207	423
Tanz Iringa	160	
Tanz Dodoma (Majengo)	223	
Tanzania Dar	196	
Zambia Eastern	122	
Zambia Central/Lka/Sern	128	
Zambia Copperbelt	122	
Zimbabwe Harare	378	
Zimbabwe (parallel exch)	267	
South Africa inland	240	

We aim to also track prices along value chains, through to maizemeal, noting that maizemeal is also traded across the region.

Maizemeal prices are expected to follow grain prices given that this is the main variable input cost to maizemeal, with a by-product which goes into animal feed. This is what we see in Zambia where we can compare prices of maize and maizemeal over time, both expressed as equivalent to US\$/t (Figure 2). As maize prices have remained very low (Table 1), we would expect this to underpin maizemeal prices.

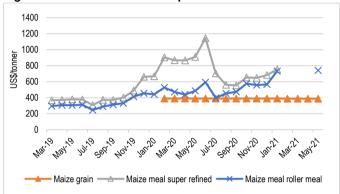
In Zimbabwe, by comparison, the maize prices have been set by government with all sales and purchases having to be made with the Grain Marketing Board, since 2019. We reflect the maize prices as decided in February 2020 and February 2021, at the official exchange rate. The maizemeal prices are more variable and approximately double the maize prices (Figure 3), including with bigger changes depending on the grade of maizemeal. Note that there are a range of factors to be taken into account such as milling yields, retail margins and sales taxes.

Figure 2. Zambia consumer prices



Source: Breakfast maize meal and roller mealie meal are from ZamStat retail prices per 25kg. Maize grain wholesale price is from WFP (VAM) per kg.

Figure 3. Zimbabwe consumer prices



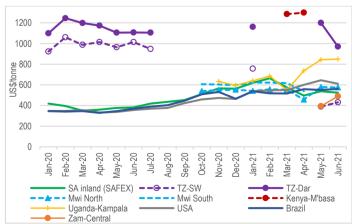
Source: From 20kg meal pack size, Zimbabwe Ministry of Agriculture, and Consumer Council of Zimbabwe (for May 2021).

## Soybean prices

Soybean is highly valued, including for animal feed which accounts for the great majority of demand (see price tracker 2 in May for the value chain overview). The international demand for animal feed drives prices with a large proportion of soybean globally being internationally traded. Brazil and the USA are the major exporters and China is the main source of demand.

International soybean prices have remained at levels around 50% higher than those prevailing over the previous five years. Prices for USA exports are above \$600/t while Brazil and South Africa are somewhat lower, meaning South African prices are not being set by deep sea imports but by regional supply (Figure 4).

Figure 4. Soybean prices, ESA and international



Source: Tanzania is from WFP(VAM) and from retail prices per kg; Kenya, Uganda from RATIN per tonne; Malawi from IFPRI, per kg. S Africa is SA Futures Exchange price. USA is fob prices from SAGIS. Zambia are user prices.

Prices in Zambia have been much lower, although they have increased from levels around \$350-\$400 in May to \$440-\$490 in June, pulled-up by regional export opportunities (Table 2). Similarly, Tanzania prices in Iringa increased to US\$431 in June, while prices in Dar have fallen to US\$970, although a huge price wedge remains. Malawi prices also reflect intra-country differences, ranging from being in line with those in Zambia in the south to much higher in the central and northern regions based on prices reported by users. On the other hand, prices in Uganda have increased sharply to above \$800/t.

Table 2. Prices, mid-June, from users, (US\$/t)

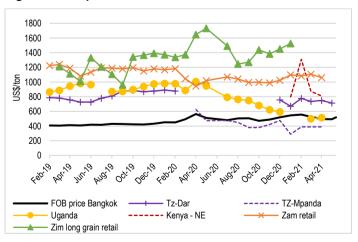
	Soybean	Rice
Malawi North	576	739
Malawi Central	663	
Malawi South	429	535
Tanz Iringa	431	722
Tanz Dodoma		701
Tanzania Dar	970	677
Uganda Kampala	849	815
Zambia Eastern	443	
Zambia Central/Lka/Sern	489	
Zambia Copperbelt	480	
Zimbabwe Harare		
Zimbabwe (parallel exch)		
South Africa inland	524	

These trends imply that, while there are concerns globally about higher food price inflation flowing through from higher grain prices, strong production in 2021 in ESA means prices should not be increasing to same extent. Food producers in the region are also becoming more competitive against deep sea imports.

## Rice prices

Rice is a major staple food in African countries albeit not as important as in some other parts of the world such as Asia. International rice prices continue to be relatively stable, as Covid-19 related restrictions have been lifted (Figure 5). Prices in the ESA region vary massively. The only major producing country Tanzania has relatively low wholesale prices, with those in the Mpanda region even being below world prices. Uganda prices have also tracked down to be almost half the levels in early 2020. Prices in Kenya, Zambia and Zimbabwe (all on a retail basis, however) are much higher.

Figure 5. Rice prices



Source: Tanzania and Uganda is WFP(VAM) and Min of Agriculture in Tanzania wholesale prices per 100kg. Kenya is WFP(VAM) retail prices per kg. Bangkok prices are fob from USDA. Zimbabwe is Min of Agriculture, per 2 kg. ZAM retail from ZamStat, per kg.

#### Climate change and the importance of pricing information

Climate change is having massive impacts on global agricultural production. In the short term, there is more frequent extreme weather such as droughts and floods. In the medium-term Southern Africa will experience much higher temperatures and become much dryer in the south.

Southern Africa is identified as a climate change hotspot with temperature increases predicted to be double the global average. Even if global average increases are kept to 1.5 degrees, the increase in Southern Africa will be 3 degrees. Africa in general is also particularly vulnerable to climate change impacts as the continent largely depends on rainfed agriculture and has little investment in water management and irrigation.

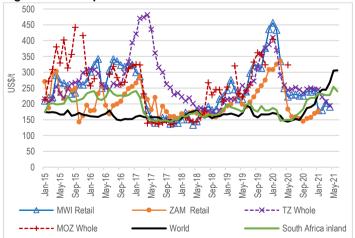
In 2021, weather conditions in the ESA region have been good thus far, however, other regions of the world are experiencing the worst drought in a century (in Brazil), as well as extreme weather in the USA with heatwaves, tornadoes and wildfires. These are associated with a La Niña pattern in late 2020/21.

The El Niño Southern Oscillation (ENSO) is an important weather phenomenon which is characterized by three states - "El Niño", "La Niña" or "neutral". El Niño is a warming of the central to eastern tropical Pacific Ocean, with drought in southern Africa whilst inducing heavy rainfall and floods in eastern Africa. The 1982, 1997 and 2015 El Niño were identified as 'super', breaking new average temperature records with catastrophic effects. La Niña is the opposite, with cooling of the central to eastern tropical Pacific Ocean, and possible droughts in Brazil and Argentina whilst ESA has good rainfall.

### Impacts on key agricultural commodities

The impacts of the rapidly developing climate emergency can be seen in maize prices. In 2015/16 the worst drought in Southern Africa for around 30 years saw maize shortages and prices jumping in countries such as South Africa, Mozambique and Malawi (Figure 6). There were, however, good rains still in much of Zambia. In 2017 high prices in Tanzania occurred when there were low prices in neighbours, meaning trade in more integrated regional markets would have mitigated the impact. In 2019 extreme weather events (such as cyclones in Mozambique), poor rainfall and concerns about drought saw prices spike again.





Sources: WFP's Vulnerability Analysis & Mapping (VAM); SAGIS; World Bank.

In 2021 by contrast, droughts in Brazil and North America have seen global maize prices almost doubling to levels not seen since 2012, while there have been good rains and bumper harvests in ESA. The La Niña pattern also impacted on soybean production in Brazil which saw soybean prices increasing significantly given the importance of Brazil (Figure 4). There is continuing concern about the impact on the prices of soybeans and maize even while expanded soybean production in ESA has mitigated the effects. The reduced dependence in the region on deep-sea soybean imports mean fish and poultry producers are more competitive.

Increased volatility and higher levels of uncertainty can also be magnified by speculation. Countering this requires appropriate measures such as buffer stocks, and better storage and logistics to enable regional trade between areas affected differently.

#### Adaptation and mitigation strategies

Urgent measures are required to support agricultural practices in adapting to climate change. Drier weather conditions mean that farmers have to alter production systems including management of water, pests, changes in the mix of crops planted and adoption of drought-resistant seeds. Across ESA, it is critical to plan ahead for the changes rather than wait for the impact.

Mitigation recognizes that food and agriculture is responsible for 25-33% of greenhouse gas emissions and major changes are required to reduce this impact. Countries such as Germany and the UK are bringing in measures on products based on their environmental impact, such as whether they are linked to deforestation and the chemicals fertilizers used. For example, deforestation in the Amazon has been linked to delayed and shorted rainy seasons.

Consumers and supermarkets are seeking to trace the origins of food products for several reasons, including to assess their environmental impact. African countries are in many cases in a relatively good position to adopt and certify sustainable farming practices to meet the growing global pressure for sustainability. Countries need to invest in monitoring and regulation to support producers with improved technologies.

Making the changes necessary requires a regional approach given the differing anticipated impacts within and across different countries and for groups of producers. Steps can be taken to ensure African food value chains remain resilient and build capabilities to be better positioned as exporters of key commodities in the global agricultural markets. The investments and interventions need to be made urgently given the accelerating pace of changes.

## A market observatory

The absence of reliable price data at the wholesale and producer level inhibits the monitoring and assessment of the effects of climate change. Covid-19 has further reinforced the importance of ensuring resilient regional value chains. A market observatory is thus essential for sustainable food systems in East and Southern Africa, to the benefit of smaller producers and consumers.

Previous versions of the tracker are available <u>here</u>.

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<sup>&</sup>lt;sup>1</sup> Wits University Global Change Institute; World Meteorological Organisation, State of the Climate in Africa.