

Food markets have not been working well in 2022

November 2022

Welcome to the monthly food price tracker. This is an initiative of the African Market Observatory (AMO) of the [Centre for Competition, Regulation and Economic Development](#), at the University of Johannesburg, and its partners. It summarises key trends in prices in East and Southern Africa (ESA) for selected staple food products, focusing on highlighted areas. Please also see the [previous trackers](#).

This issue of the AMO price tracker looks back at 2022 developments in agricultural and food markets in 2022. In tracking prices across the region, we have found that markets are broken and remain vulnerable to shocks. In addition, we examine the differing impacts of climate change on countries in the planting season. This price tracker also provides a preliminary analysis of production, trade, and prices of common beans in the region.

Key developments

- Two realities characterize this planting season: continued drought in Eastern Africa coupled with good rains in Southern Africa; and, fertilizer remaining at extremely high prices which are expected to undermine yields in countries such as [Zambia](#)
- This may be mitigated in Malawi which expects to receive [260 000 tons of fertilizer](#) donated from Russia
- Maize prices in Malawi continue to increase with reports of prices as high as US\$440/t in some parts
- Maize prices in Kenya and Rwanda remain extremely high, both countries around US\$650/t
- Kenyan government plans to import 900 000 tons of duty-free maize under a [3-month import window](#) from February 2023
- Zimbabwe has set a target of [3 million tons](#) of maize production for the 2022/23 season
- Crop production estimates show that South Africa is likely to have a [decent harvest in the 2022/23 season](#)

A view of 2022

2022 saw [climate-induced natural disasters](#) continue across the region under La Niña global climate conditions which brought drought to Kenya, the Horn of Africa. At the same time, most parts of southern Africa experienced heavy rains and flooding with parts of Malawi and Zimbabwe experienced tropical storm Ana in January. Brazil and Argentina, two of the top maize and soybean-producing countries in the world, have been affected by a prolonged drought that has disrupted their agricultural sectors, resulting in lower crop production. La Niña has since returned for the third consecutive year.

In February, the Russia-Ukraine war began and caused significant increases in the prices of grains, fertilizer and fuel. However, although Russia's invasion of Ukraine resulted in large global food price increases, the food price spikes in many African countries [exceeded the global increases](#).

Over the next few months following the invasion, we observed that [regional developments](#) in the ESA region were driving price increases. There have consistently been huge margins in maize and soybean prices between the producing areas of Malawi and Zambia, and the consuming areas of Nairobi, Kenya; Kampala, Uganda and Dar es Salaam, Tanzania. The large price differences cannot be justified by transport costs, indicating that regional markets are not working well. This exacerbates the impact of

climate change and makes the region vulnerable to shocks such as the multiple supply disruptions that occurred in the second quarter of 2022.

Indonesia's [palm export ban](#) in April affected other vegetable oil prices and compounded the effects of poor rains that negatively affected soybean production in Brazil and Argentina and canola production in Canada, while sunflower was impacted by the war.

Another contributor to rising food prices is the [cost of fertilizer](#). The rise in fertilizer prices was magnified by Russia's invasion of Ukraine given the importance of these countries to global fertilizer supply. 2022 fertilizer prices reached their highest levels since the 2008 global crisis. Farmers opted to [move some of their area planted](#) from maize to soybean as soybean requires less fertilizer. This led to maize production dropping in Zambia and Malawi even while growing conditions were good.

Food security has been a major concern in the region as inadequate progress has been made to eradicate hunger and malnutrition. The Horn of Africa, facing its [worst drought](#) in over four decades, has been hit very hard. Effective regional integration is essential to support food exports from countries such as Zambia to meet demands in East Africa.

The World Bank recognizes that food system shocks are becoming more frequent and severe and are putting more people at risk of food insecurity. To address this, the World Bank approved a [US\\$2.3 billion program](#) to help countries in the ESA region tackle food insecurity. Other programs to address challenges in food markets include the Food Systems Resilience Program (FSRP) for Eastern and Southern Africa and the African Emergency Food Production Facility.

Planting season has commenced in the region

Summer crop planting and land preparation are proceeding in Southern Africa. The rainfall predictions are mixed. On the one hand, countries in Southern Africa have favourable planting conditions and some have declining fertilizer prices; on the other hand, countries in the Eastern Africa region are experiencing drought coupled with high fertilizer prices.

[CS3 Multimodal seasonal rainfall forecast maps](#) show prolonged drought in the horn of Africa continuing with Kenya, Rwanda and Tanzania in East Africa also expected to be severely affected, and Uganda somewhat less so. At the same time there are rainfall conditions for Southern Africa. South Africa and Zimbabwe are projected to experience heavy rains during this planting season, from early November until April. Malawi is also projected to experience relatively high rainfall.

Aid organisations have cautioned that rising fertilizer costs may compel African smallholder farmers to [curtail plantings of basic crops](#) such as maize. This will create an even greater food crisis in a region where millions of people have already been thrust into extreme poverty due to the impact of Covid-19 and climate shocks.

Bean Production, Trade, and Prices

Beans are a staple food and an important source of protein for people in Africa. The common bean is crucial for food supply in Eastern and Southern Africa. It is eaten in the form of cooked green leaves, young green pods, and/or dry grains.

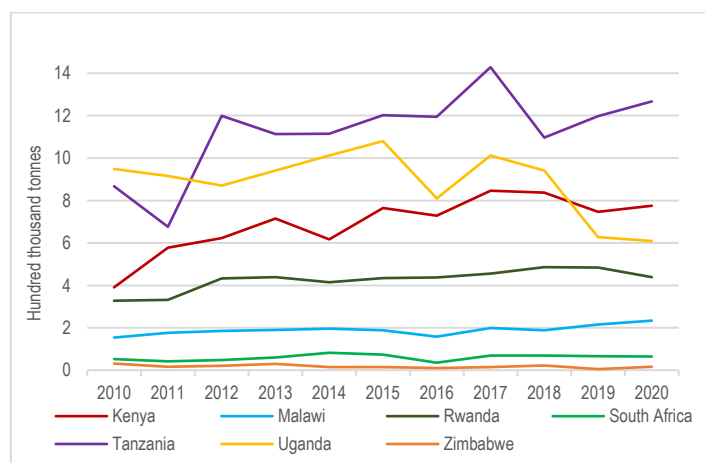
In [Eastern Africa](#), common beans are planted twice a year, with sowing seasons running from March to April and from September

to October. In Southern Africa, the main sowing time for common beans is from November to December.

The common bean is rapidly changing from a subsistence to a market-oriented cash crop. Beans are the most important, widely grown and consumed grain legume in both Eastern and Southern Africa, where about [6.3 million](#) hectares of land is used to grow beans every year. Consumption of beans per person in Eastern Africa is the highest in the world.

In 2012, Tanzania became the biggest producer of dry beans in the selection of countries in the ESA region (Figure 1), overtaking Uganda. Tanzania has since been consistently high producer, followed by Uganda, Kenya, and Rwanda all in East Africa. Southern African countries are not significant bean producers.

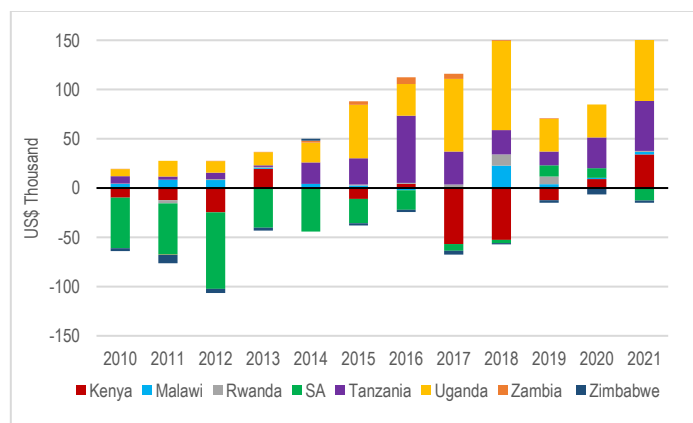
Figure 1. Dry bean production



Source: Our World in Data; and Trade for Tanzania

Tanzania and Uganda have been constant net exporters of dry beans for the period under consideration. Even though Kenya is a substantial producer of dry beans, they are not always able to meet the domestic demand for beans as reflected in the negative trade balance (Figure 2). Kenya recorded a negative trade balance for five consecutive years between 2014 and 2019. Rwanda, on the other hand, has had small positive trade balances or balanced trade.

Figure 2. Dry bean trade balances



Source: Trade Map

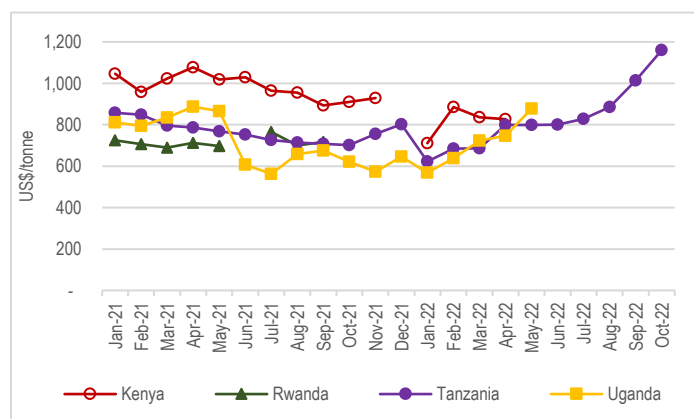
In the Southern Africa region, South Africa has had substantial net imports in most years, although less so since 2017. Malawi has been a net exporter, except for 2016. Zambia has become a very small net exporter from 2014, with the exception of 2020.

In terms of planting, beans are [not heavy feeders](#) requiring fertilizer, as maize does. Beans can fix nitrogen in the soil and so, while maize depletes the soil of nutrients, beans build the soil.

Eastern Africa countries, which are the biggest producers and consumers of beans, have been experiencing very limited rainfall and the [CS3 Multimodel seasonal rainfall forecast maps](#) project that this will continue through April 2023. Big bean producers such as Tanzania, are also experiencing rising fertilizer prices. However, as bean production is not fertilizer intensive it is much less impacted. Dry bean production also [requires less water than maize production](#) and the limited rainfall in Eastern Africa may not severely cut the region's beans production capacity.

A preliminary analysis of bean prices in four of the largest bean producers in the ESA region shows that prices moving in a wide range between US\$550/t and US\$1200/t since January 2021 (Figure 3). Prices in Tanzania have been relatively stable since the beginning of 2021 but began to increase in June 2022 and have reached their peak at US\$1160/t in October 2022. Prices in Rwanda (although patchy) and Uganda have been in line with the prices in Tanzania, while Kenyan prices have been above the prices in these three countries.

Figure 3. Wholesale bean prices



Source: based on price tracker data from multiple sources

Maize prices

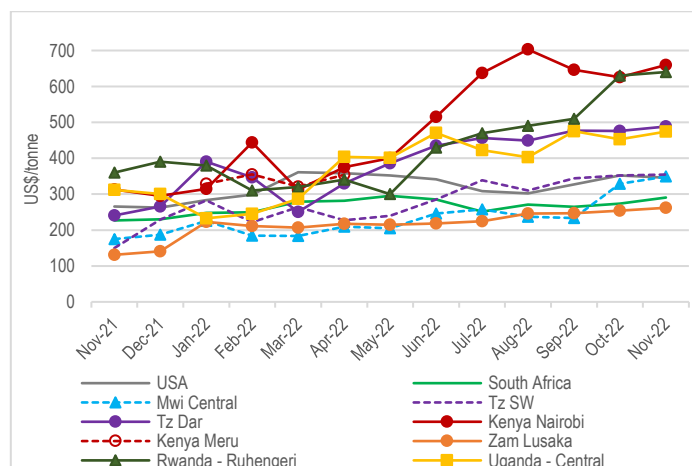
The huge differences in maize prices across ESA which opened-up over the year, much larger than transport costs, have been sustained in recent months.

Maize prices in Kenya and Rwanda remained extremely high in November at levels of US\$640/t to US\$660/t, notwithstanding harvests in some areas of Kenya in August (Figure 4). Indeed, Rwanda prices doubled from May to October indicating the widespread impact of the ongoing drought conditions in the region. These extremely high prices are followed by those in Uganda and in Dar es Salaam in Tanzania at around US\$480/t, with the differences of \$160/t difficult to understand within the East African Community.

By comparison, prices in Malawi have increased to the same levels as in southwest Tanzania, at an average of US\$350/t in November, in line with international prices. These prices have diverged from Zambian prices, which remain low at US\$260/t. Despite the increase in prices in Malawi, farmers in producing areas report still

getting relatively low prices while there are high margins in exports to consuming areas.

Figure 4. Maize prices, ESA and international



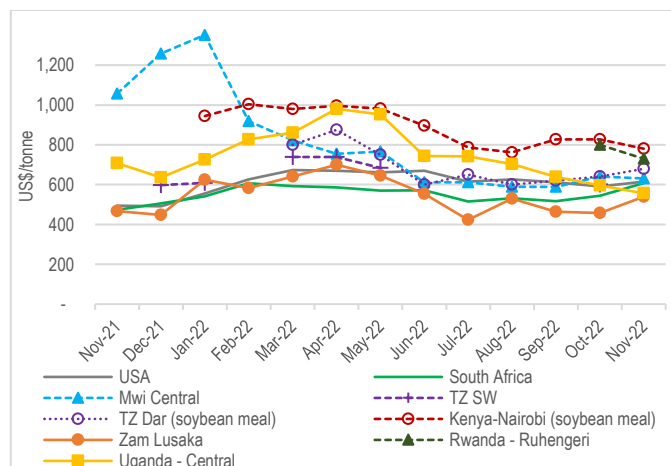
Source: based on price tracker data from multiple sources; South Africa is SA Futures Exchange price; USA is fob prices from SAGIS.

Soybean prices

In this issue, we report on the soybean meal prices in Dar es Salaam, as we do for Nairobi. In each city buyers such as animal feed producers source meal as there are not substantial local soybean processors. Soymeal is therefore the product that is mainly traded.

The November prices of soybean meal in Kenya and Tanzania are US\$780/t and US\$680/t, respectively (Figure 5). For Kenya, this is a decrease, as prices averaged US\$970/t in the first quarter of 2022 and US\$960/t in the second quarter. They declined in the third quarter, averaging US\$790/t, and have remained at similar levels since. For Tanzania, soymeal prices reached their peak in April at US\$875/t. However, prices have declined to levels below US\$700/t since June. Soybean prices in Rwanda are in this range, dropping from US\$800/t in October to US\$730/t in November.

Figure 5. Soybean prices, ESA and international



Source: based on price tracker data from multiple sources. South Africa is SA Futures Exchange price; USA is fob prices from SAGIS.

Prices in Malawi, Uganda and Zambia converged in November to between US\$540/t and US\$630/t (Figure 5). This reflects substantial reductions in Uganda from close to \$1000/t in April.

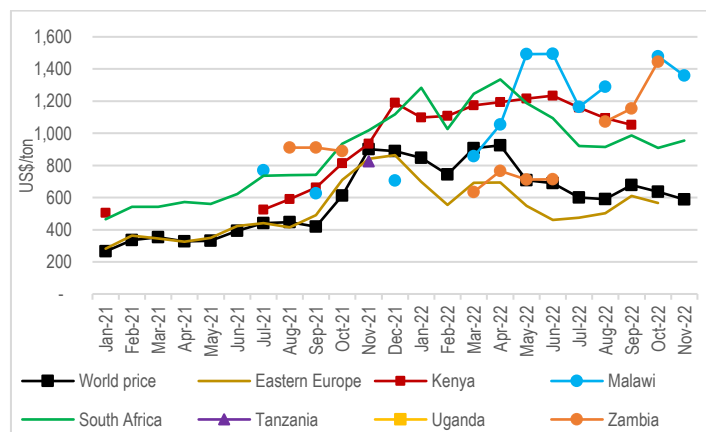
Fertilizer prices

International fertilizer prices have remained relatively stable in the past few months. By historical standards, international Urea prices are still high but are expected to decline as 2022 draws to a close. The downward trend is expected to continue into 2023 as natural gas prices also decline due to easing of supply constraints.

In Malawi, where fertilizer is imported (as is the case in other African countries), fertilizer prices in November reached US\$1360/t. After taking transport costs into account, these prices reflect excess margins between US\$350-400/t.

Countries such as Zambia and Malawi face an acute crisis of rising fertilizer prices (Figure 6). Farmers will depend on subsidized fertilizer at great fiscal cost or on international donations. Fertilizer manufacturer Omnia is a supplier to both commercial and smallholder farmers in many countries in sub-Saharan Africa including South Africa, Zimbabwe, Zambia, Kenya, and Tanzania. It believes fertilizer prices will remain high as the supply continues to be disrupted even while there have been low fertilizer sales through to the end of September as farmers deferred purchases. However, they have seen an increased demand from governments looking to purchase under smallholder programs.

Figure 6. Urea prices



Source: World price is from the World Bank. Eastern Europe & South Africa prices are from Grain SA. Kenya and Uganda are from AfricaFertilizer. Malawi, Tanzania and Zambia are from AfricaFertilizer and from POKET app users.

In Malawi, President Lazarus Chakwera has launched the 2022/2023 Affordable Inputs Programme (AIP) in an effort to ensure that smallholder farmers can access fertilizer. 2.5 million beneficiaries have been identified through farmer organisations. The current fertilizer price in Malawi ranges from MK60 000 to MK78 000 per bag (between US\$1100/t to US\$1500/t).

Market Observatory App

For crowd-sourcing data, we use a Market Observatory App which is available for download on the Google play store (POKET, only available on android devices), please contact gnsomba@uj.ac.za or +27 65 9965936 for the relevant country code.

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