What are competitive market prices for soybean and maize?

March 2023

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 focuses on understanding what are competitive market prices for soybean in the context of trade as the harvest season begins. It also reviews maize pricing given the ongoing effects of poor rains in the Horn of Africa and high fertilizer prices.

Key monthly developments

- East Africa continues to suffer from La Niña – with white maize stocks dwindling in the Horn of Africa – and high prices.
- Kenyan government is facing difficulties purchasing maize as other countries restrict trade due to food security concerns.
- There are concerns in Zambia about Kenyan demand for maize causing possible shortages in Zambia.
- Export permit restrictions in Zambia suppress prices of maize to levels where farmers struggle to cover high fertilizer costs
- Indications are strengthening of shift to El Niño later this year which typically brings drought conditions to southern Africa.
- Fertilizer prices remain at high levels, of US$900/t and more for Urea, while international prices fell to below US$350/t
- TradeMark Africa launched platform to improve information and market access for women traders in East Africa
- A global UN initiative to ensure that all countries are protected by early warning systems by 2027, is being fast-tracked.

Competitive market expectations – soybean prices

Zambia, Malawi, Tanzania and Uganda all have good soya bean growing conditions yet the region as a whole as run a substantial trade deficit, including in derived products of vegetable oil and animal feed. This deficit has been reduced in recent years as production has increased. Zambia is the largest producer with production of 475 thousand tonnes in 2022, estimated to increase substantially to around 700 000 tonnes in 2023.[1] Malawi produced around 400 000 tonnes annually and growth in Tanzania saw it export over 100 000 tonnes in 2021, mainly to India.

Prices have varied massively within relatively short spaces of time and across countries by margins which are much larger than storage or transport costs. Traders able to secure volumes at low prices and sell high have made large profit margins. The volatility, however, makes it difficult for farmers to plan and negotiate prices.

In competitive markets for traded goods, the market price should not be *higher* than the import parity price, which is the price at which imports can be landed to meet a local deficit. When there is a local surplus, the price should not be *lower* than the export parity price, that is, the international price less all the transport and related costs to get it to market. Competition in trading and supply across borders drives these outcomes.

With the main harvest coming in across the region, we ask ***what soybean prices might we expect this year?***

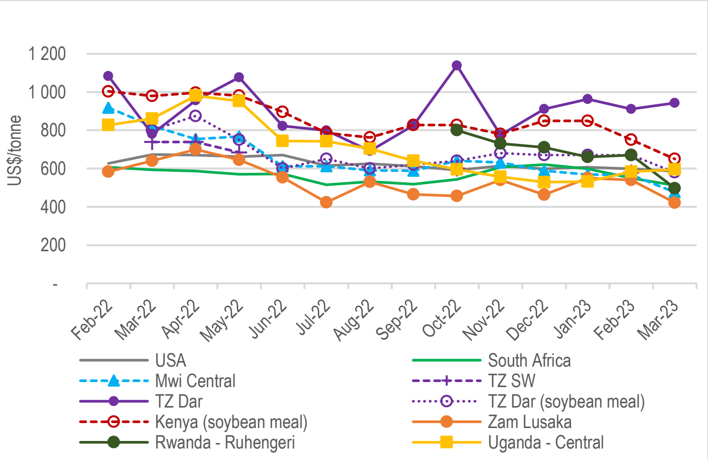
Trade can be in beans or in soymeal or cake. The meal and cake are produced after the beans have been processed to extract the oil. The oil is very valuable, as demand in the region heavily outstrips supply, and this can mean that the meal is priced somewhat lower than the beans (as seen in international markets).

International prices for soybeans have been around $600/t over the past nine months. Global demand continues to grow due to the importance of soybeans in animal feed and vegetable oil. On the supply-side the largest exporter of oilcake, Argentina, is predicting poor production due to drought. However, Brazil, the largest soybean exporter, is expecting a bumper soybean crop which may offset Argentina's decline. The balance of supply and demand factors suggest international prices remain around US$600/t.

In the region cities such as Nairobi and Dar es Salaam have rapidly growing demand for animal feed and prices of beans and soymeal were $1000/t in early 2022 (Figure 1). However, more recently prices of soymeal in these cities have declined to $600-700/t in line with international import prices from global markets, even while bean prices have been higher.

Demand in Kenya and Tanzania can be met by imports from across the region, with growing regional trade. Prices in Uganda and Malawi of soybeans have been around $600/t since September 2022 (Figure 1). Prices in Zambia have been lower, and declined to $421/t in March. Should we expect prices around these levels, or more in line with minimum prices indicated by the government in Malawi of $781/t?

Figure 1. 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.

Transport costs to markets play a key role, although these costs may be inflated. We consider what are efficient costs and the effects on prices. Transport costs from Zambia and Malawi to Nairobi should be no more than $120/t, especially as fuel prices are now coming down. Costs from Lusaka to Dar es Salaam (a similar distance) are around $90/t. These benchmarks imply prices of soybeans around $500/t to $550/t for aggregated volumes, in Malawi, Zambia and Uganda. Prices of soymeal may be lower, as beans are processed at source for the valuable oil.

[1] Industry interviews.

The prices of soybeans in Uganda at $596/t appear in line with export parity prices to Nairobi. By comparison, prices in Zambia and Malawi appear suppressed by 10-20%, at $421/t and $476/t respectively in March (falling further since). In Zambia, this is at least partly due to export licences being restricted even while production is likely to be triple local demand.

An important additional factor is whether the production in 2023 is so large to tip the whole region into surplus, and soybeans are exported in substantial quantities into global markets?

Kenyan imports of beans and meal have been around 60th tonnes which means the expanded output of Zambia will more than meet demand. Trade data also indicate that Tanzania did in fact export large volumes (of around 90th tonnes) of beans to India in 2021, at average prices of US$617/t. India's demand is growing rapidly and as it requires non-GM soybeans it is restricted in where it can import. Countries in East and Southern Africa apart from South Africa produce non-GM soybeans and can sell into India.

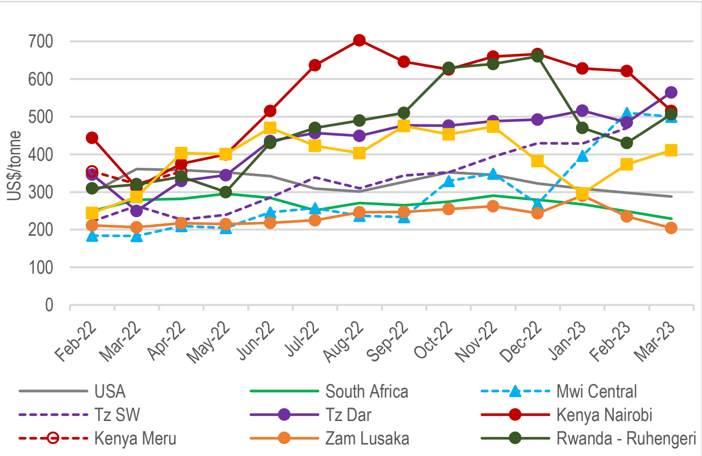
Fair prices should reward farmers for exports while providing competitive supplies to local feed and oil industries to sustain rapid growth in soybean oil production and in livestock and fish farming.

Maize prices

Maize prices in much of the East Africa region increased in March, with prices in Nairobi, Dar es Salaam and Rwanda exceeding US$500/t, and prices in Uganda increasing to levels above US$400/t (Figure 2). The continued high maize prices are due to the La Niña weather pattern that continues to affect this region with drought, driving up deficits.

But maize prices in Zambia prices have remained low at around US$200/t due to the export bans in place. Zambian prices are substantially below international prices and the price differences between Zambia and its neighbours are extremely large. In Dar es Salaam maize is at US$565/t. The government regulated minimum price of maize sits at US$485 in Malawi, while market prices averages US$507/t in March, with some traders paying prices as high as US$588/t.

Figure 2. 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

The strict export restrictions in Zambia and suppressed prices provide huge incentives for maize to be smuggled out of Zambia to sell at high prices in neighbouring countries. Smuggling levels have reportedly worsened in the Copperbelt in Zambia. The northern part of Zambia reportedly had over 800th metric tonnes of white maize, enough to meet the demand in that part of the country, however, demand from East Africa led to traders buying up maize from farmers and leading to shortages.

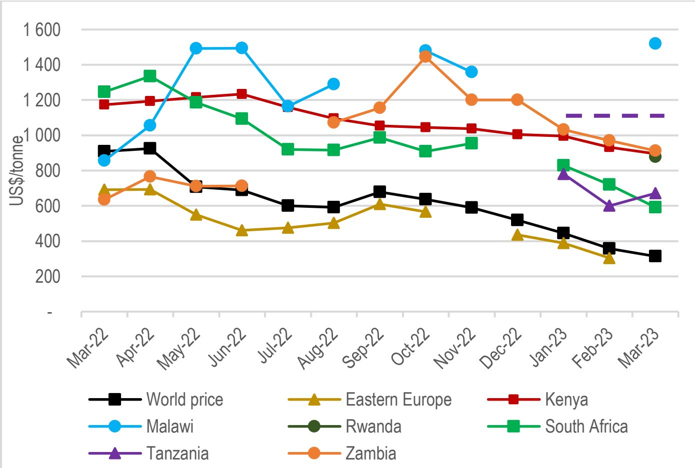
Maizemeal exports have also been restricted in Zambia and maize meal prices are capped at K170 per 25kg bag (approximately US$9). This is extremely low compared to the US$28 per 25kg of maize flour price in Malawi, which means incentives to smuggle.

The continued export ban in Zambia will affect the returns to farmers from the coming crop. With very high fertilizer prices farmers will make extremely low margins from their harvest. The concern is that farmers plant less maize and save on fertilizer, reducing yields and output, even while there is great need for expanded production to meet regional demand.

Fertilizer prices

International fertilizer prices continue to decline due to easing of supply constraints. However, fertilizer prices in the region are still at historic highs, treble the world prices in many countries (Figure 3). For example, while world prices of urea fell to US$314/t in March, in many countries, prices remain at $900/t and higher. These high prices compound the food security challenges.

Figure 3. Urea fertilizer prices



Source: based on price tracker data from multiple sources. World price is from the World Bank.

To ease production impacts, governments in the region have implemented fertilizer subsidy programmes. Prices in Tanzania with the government subsidy are at $600-700/t while unsubsidized prices are around $1100/t, which is similar to unsubsidized prices in Uganda and Rwanda, with Malawi prices even higher. The wide margins between international fertilizer prices and prices in the region cannot be justified by transport costs and indicate that fertilizer firms are earning significantly high margins.

African Market Observatory

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The African Market Observatory is supported by the COMESA Competition Commission.

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