AFRICAN MARKET OBSERVATORY (AMO)

Price tracker: Competitive market expectations and price developments at beginning of harvests

April 2022

Welcome to the monthly food price tracker. This is an initiative of the African Market Observatory (AMO) of the <u>Centre for Competition</u>, <u>Regulation and Economic Development</u>, 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 <u>previous trackers</u>. This tracker also marks the first anniversary of the AMO.

In this issue of the price tracker, we focus on understanding fair market prices as the harvest gets underway for soybeans and maize in many countries, and price expectation for soybeans given regional trade. In addition, we look at the flow of prices from maize and soybean through to animal feed and chicken prices in Malawi.

Key developments:

- International developments and local harvests being anticipated saw highly variable prices.
- Indonesia announced a ban on palm oil exports,¹ adding to weather effects on soybeans and the war in Ukraine on sunflower, driving-up prices for a range of vegetable oils
- Overall prices of maize and soybeans increased in April in most places in ESA, with sharp changes in Dar es Salaam and Kampala.
- In Nairobi, maize prices increased from March as drought conditions continued to impact, and imports are required with trade from Zambia, Malawi and Tanzania being essential.
- Buyers having been offering advanced pricing to farmers ahead of the harvests in Zambia and Malawi for soybeans.
- The Malawi government released minimum farm gate prices in April for the 2022 growing season, including for maize and soybean.

Implications of international developments for ESA

While strong local supplies in much of the region (aside from Kenya) have cushioned against international impacts, higher global prices are now starting to impact. International agri-food markets have been hit by major supply disruptions. Notably, in April the palm oil export ban by Indonesia had a knock-on effect on other vegetable oil prices and on the oilseeds in their production. The export ban compounds the already negative outlook from poor rains affected soybean in Brazil and Argentina, and canola in Canada, while sunflower has been affected by the war in Ukraine.

Palm oil is used in various products from cakes and frying fats to cosmetics and cleaning products and accounts for nearly 60% of global vegetable oil shipments. High vegetable oil prices will negatively impact on low-income consumers across the world who are still struggling from the effects of the Covid-19 pandemic.

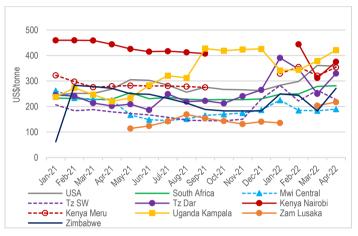
Global wheat prices also soared reflecting reduced exportable supplies resulting from the sharp reduction in exports from Ukraine, a slowdown in shipments from the Russian Federation, and droughts in parts of Canada, Kazakhstan and the United States. There are also lower-than-expected yields due to La Niña

in Argentina and Brazil. Higher food prices will exacerbate food insecurity in many countries, with particularly severe impacts on the poorest households.

Maize prices

Prices have increased across the region in April, apart from south west Tanzania (Figure 1). Prices in Dar es Salaam, Nairobi and Kampala are all relatively high, between US\$330/t and US\$430/t, in line with relatively high international prices. Prices in supplying areas to meet this demand are also increasing, as we see in south west Tanzania, Zambia as well as South Africa.

Figure 1. 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 averages mask substantially different prices to market participants of different sizes. For example, in Lilongwe, the smaller participants' buyer price was at US\$220/t for April. However, bulk delivery prices were much lower at US\$159/t. These prices compare with the government's newly set minimum farm gate prices in April for the 2022 growing season of 220MK/kg for maize or around US\$270/t. This price factors in a 30% mark up to account for the cost of production, market forces, price trends for the previous years and the need to provide incentives to growers. While it is substantially above the average Malawi central price of US\$190/t, it is in line with that in Malawi north at US\$265/t.

In Uganda, the price of maize continued to increase to levels above US\$400/t underpinned by reduced domestic availability following erratic rains during both the first and the second season in 2021.² This is above import prices from surplus regions such as Zambia.

Similarly, Kenya continues to suffer from severe drought, with prices in Nairobi and Meru increasing well above US\$350/t. The Nairobi prices are around 10-20% above reasonable import parity prices from Mzuzu in Malawi and Lusaka (see the March tracker and recent working paper for transport costs).

Zimbabwe has also been impacted by unfavourable weather with substantially below average maize production now being expected. Production is expected to decline by at least 43%. Poor and late onset of rains meant planting was delayed and yields were further affected by the prolonged dry spell.³ The government therefore lifted the import ban on maize in February. Imports from Zambia can relieve price pressures even while these are reported

¹ https://gro-intelligence.com/insights/indonesia-palm-oil-export-ban-drives-up-vegetable-oil-prices

² https://www.fao.org/3/cb9556en/cb9556en.pdf

³ https://allafrica.com/stories/202205060332.html?utm_campaign=daily-headlines&utm_medium=email&utm_source=newsletter&utm_content=aans-view-link

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for delivery at US\$272/t, higher than the price set by the government which translates to US\$138/t at the parallel exchange rate.

Prices in good producing areas in Zambia have increased while those in south west Tanzania have declined to align at just over US\$200/t. Meanwhile prices in Dar es Salaam increased from US\$250/t in March to US\$330/t. Improved rains in Tanzania since February lifted crop prospects for the major "Msimu" harvest, which will be gathered in May in the central and southern unimodal rainfall areas, thus easing pressure on prices.⁴

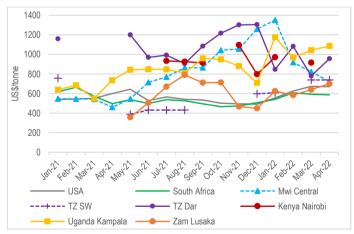
Supplies in Malawi, South Africa, Tanzania and Zambia are projected to remain adequate and expected to satisfy requirements of regional maize deficit countries throughout the current marketing year. As a result, prices are expected to continue firming in countries where the harvest is below average (such as Zimbabwe) even during the harvest period due to tight supplies and increased demand.

Soybean prices

Some parts of the ESA region are currently in the harvest period. In Malawi and Zambia, harvesting takes place in April and May while in south west Tanzania, the harvest begins towards the end of May. This is therefore a sensitive and significant time as farmers are working out what to sell and at what prices, and buyers are working out what to offer. Even within the month there have been sharp movements such as 20% increases in south west Tanzania and central Malawi which are only evident in weekly pricing patterns.

Overall, soybean prices have risen in the region with prices in Dar es Salaam reaching levels close to US\$1000/t and Zambia reaching US\$700/t, in line with central Malawi (Figure 2) even while northern Malawi are higher. Prices in Uganda also continue to increase and are at above US\$1000/t. This is due to the fact that their harvest season is only in August

Figure 2. 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.

As with maize, market participants of different sizes have been receiving substantially different prices from the market. In Dar es Salaam, the smaller participants' buyer price was high at US\$1100/t for April. However, bulk delivery prices came through

much lower at US\$770/t, giving an average price of around US\$950/t for Dar es Salaam (Figure 2).

In Malawi in March, smaller market participants in Malawi reported prices similar prices of US\$753/t in Malawi central and US\$769/t in Malawi north. However, prices from the International Food Policy Research Institute (IFPRI) in Malawi were around US\$1,320/t in Malawi north and US\$1,000/t in Malawi central. Bulk buying participants were receiving US\$714/t in Lilongwe, indicating a very wide range of prices.

In April, the recommended minimum soybean price was set by the government of Malawi at 480MK/kg, around US\$580/t. However, market prices are far above this at US\$934/t in Malawi north and US\$754/t in Malawi central. Smaller participants reported prices around US\$900-1000/t in April, while larger participants were getting bulk prices of US\$630/t throughout the month.

In Zambia, bulk buying prices were at an average of US\$700/t for April, although they increased over the month.

Similarly, the South African price over April climbed from US\$556/t at the beginning of the month to US\$629/t by month end (although It had fallen back in early May). This price increase was influenced by the war in Ukraine and the export ban of palm oil in Indonesia.

The April price in Mozambique for soybeans was US\$730/t, which is in line with the price in Zambia and the United States. The bulk buying price in Zimbabwe was reported at US\$730/t.

Competitive market expectations – soybean prices

In the ESA region, the good conditions and strong production levels in Malawi, Zambia and Uganda are consistent with relatively low prices in the first half of 2021 reflecting the net exporter status of these countries (Figure 3). Production has been increasing in 2020 and 2021 in Malawi and Zambia, for export, with a large proportion being due to small-holders. This regional supply depends on farmers getting fair prices to reward their investments, however, there are major concerns about whether regional markets are competitive based on price comparisons in geographic space, and price changes over time.

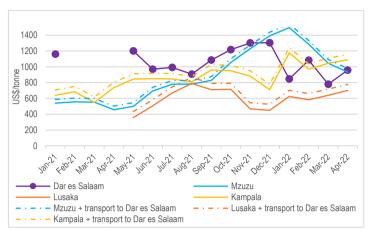
In terms of comparing prices over geographic space, there were very high margins between the producing areas around harvest time in April/May 2021 in Malawi and Zambia and the prices for soybeans delivered in areas which are net importers.

Fair prices are those that clear markets, that is, meet demand and cover reasonable costs of supply including transport. These are prices that are in line with the international prices in supplying countries, plus transport costs. We add on efficient transport costs to illustrate what the delivered prices could be into Dar es Salaam (Figure 3). This allows us to compute the excess margins in the trading of soybean over selected transport routes. The efficient transport costs between Lusaka and Dar es Salaam are around US\$78/t. Our import parity calculation (Figure 3) indicates that the fair prices from Lusaka into Dar es Salaam which are much lower than the actual prices. This was partly due to export restrictions imposed by Zambia from August to November, 2021, yet prices

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have remained substantially above market clearing levels in competitive markets.

Figure 3. Soybean prices in Dar es Salaam compared against market clearing supplies



Source: calculated from tracker data and efficient transport costs

Dar es Salaam prices have also been far above estimated delivered prices from Malawi and Uganda at times. The Malawi prices, however, trebled from mid-2021 to January 2022, even while the country continued to have a surplus. Prices in Kampala were also lower from the harvest in August 2021 until the end of the year.

The changes in Malawi prices are also concerning given the country being a large net exporter. It might have been expected that prices would increase to the levels to deliver to Dar es Salaam and Nairobi, as was the case for Zambia. But, from September 2021 prices in Zambia and Malawi diverged and Malawi prices continued to increase to extremely high levels, apparently reflecting scarcity conditions which were not the case.

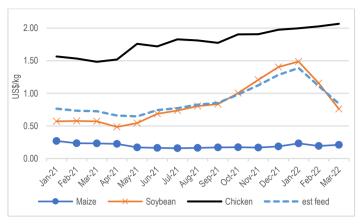
Poultry prices and feed constituents in Malawi

Soybean and maize constitute the bulk of input ingredients into the production of poultry feed. By mass, a kg of feed is just over 50% maize and around 38% soybean with some other ingredients. Soybeans are greater in terms of value. Feed is crucial for poultry profitability as it accounts for around two thirds of input costs (Ncube et al, 2017).

Soybean and maize price changes therefore impact on poultry margins. In Malawi soybean prices surged sharply from September 2021 to January 2021 while the prices of maize remained stable over time. We can estimate the effect on feed costs and see the effects on poultry prices (Figure 4). These are all expressed per kg, and take into account the amount of feed required for a kg of meat (the feed conversion ratio) and the size of chickens typically produced. There are other costs not included such as the breeding stock and the growers' costs.

The effects of the higher soybean prices are evident in poultry prices even while poultry producers' margins were reduced. Lower soybean prices should see poultry prices come down also.

Figure 4. Poultry, maize and soybean prices in Malawi

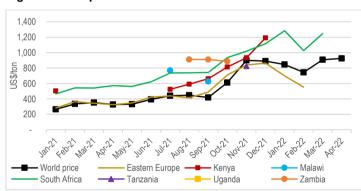


Source: Chicken prices are averages from IFPRI; Maize and soybean prices from AMO price tracker data, country averages; assumes 2.5kg live chicken weight, feed conversion ratio of 1.9; constant cost of other components of US\$0.04/kg of feed.

Fertilizer prices

Fertilizer prices continued at higher levels in the first quarter of 2022 at just over US\$900/t for urea (Figure 5). This has been driven by a confluence of factors — record-high energy and raw material costs, supply disruptions and uncertainty due to sanctions on Belarus and Russia, Chinese export restrictions, and strong demand. The high fertilizer prices will affect next season's agricultural production in ESA negatively. Countries are considering a range of steps to ameliorate these impacts.

Figure 5. 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.

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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