



The Food Price Monitor: East Africa is a monthly report developed for the Food Security Portal (FSP), facilitated by IFPRI, with the goal of providing clear and accurate information on price trends and variations in selected maize and rice markets throughout East Africa. The reports are intended as a resource for those interested in maize and rice markets in East Africa, namely producers, traders, consumers, or other agricultural stakeholders.

Highlights

- ▶ Kenya had the highest wholesale and retail price of maize and rice across all the months when compared to other countries in the region and in the same period last year
- ▶ The high price of maize and rice in Kenya emanate from high global fertilizer prices following the Russian-Ukrainian conflict and the effects of the Covid-19 pandemic, besides climatic factors like drought and erratic rainfall
- ▶ In Tanzania, maize prices had increased mainly due to low harvests associated with delayed short rains and high demand for food from neighboring countries like Rwanda and Kenya.
- ▶ In Uganda, the rise in maize prices is partially due to the increased market in Southern Sudan and poor harvest due to drought in the main producing areas.
- ▶ For rice, wholesale and retail prices still rose highest in Kenya, followed by Rwanda. In Uganda and Tanzania, prices were relatively stable, especially from July to September.
- ▶ The constraints to supply, such as increased fertilizer cost, drought, and high transportation costs that existed last year, still exist during 2022.
- ▶ Government interventions in the form of full or partial subsidies for inputs and fuel prices will likely continue to have to affect observed price changes in the subsequent months.

Changing Maize Prices in East Africa

Generally, from April to September, Kenya exhibited the highest wholesale and retail prices of maize compared to all the other countries in the East African region (Figure 1). At the same time, Tanzania had the lowest wholesale prices. For all the other countries except Rwanda, the wholesale and retail price of maize was on the rise in the weeks of April and then suddenly dropped in the first week of May. After that, the prices stabilized. Prices were more volatile in Kenya and relatively stable in Tanzania during this period. For all the countries, the price variations follow the season's patterns. Prices reduced from around the last week of June to the end of August (harvest period) and increased in the lean season from September.

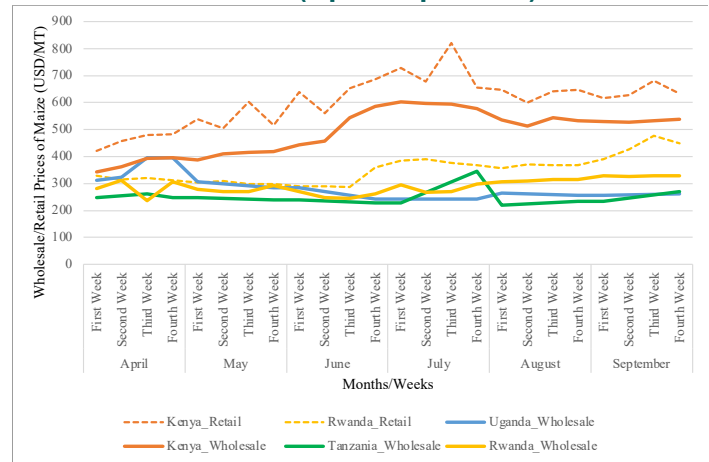
There was a sharp decline in prices for Kenya from July to about the last week of August. At about the same period, the Government of Kenya announced a subsidy on the price of maize flour (announced on July 18th, but it suspended it again on August 13th, 2022). The high wholesale and retail prices in Kenya emanated from several factors. First, Kenya experienced drought during the short rains that affected the supply of maize during the May to July period, which explains the rise in prices. Secondly, Kenya relies greatly on importation and cross-border trade with Uganda and Tanzania.

Any factors that affect local supply and cross borders within the two countries are likely to affect the supply of maize in Kenya. At the end of August, Tanzania instituted restrictions

that slowed down exports of maize from Tanzania to Kenya¹. Produce exporters were required to secure export permits whose prices had been doubled and Phyto certificates, while foreign companies needed to register their companies. These restrictions were a hindrance to maize exportation to Kenya. Uganda, one of the top suppliers of maize to Kenya, also diverted most of its maize exports to South Sudan, where traders' fetched higher prices². Third, the electoral cycles of the recent general elections caused a lot of price speculative tendencies among traders. Lastly, Kenya, whose large farms rely greatly on fertilizer, felt the pinch of the rise in global fertilizer costs. Fertilizer prices in Kenya have increased by 70 percent from 2021 to 2022 following the Ukraine-Russia conflict and high energy prices³. High fertilizer prices translate to low application rates or non-application, affecting yield. In the past two years, fertilizer prices in East Africa have generally risen following Covid 19 related supply disruptions, high costs of energy like natural gas, export restrictions in China, and lower production in Europe.

Rwanda maintained relatively higher weekly average wholesale and retail prices than Uganda and Tanzania from mid-July because of its heavy reliance on Tanzania (affected by the delay in issuance of the trade export permits) and the rise in the regional demand from Uganda, Burundi (after reinstating their political and trade relations), and Sudan. Drought also affected production, with farmers reporting a yield of two tons per hectare rather than the expected five to six tons per hectare⁴. In addition, the high demand for maize from Tanzania by Kenya also affected Rwanda by leading to an increase in the price of imported maize which it mainly imports from Tanzania. Prices in Tanzania remained relatively stable due to food reserves.

Figure 1: Average wholesale and retail price of maize in East Africa (April-Sept. 2022)



Source: Authors' construction using data from FSP (for Uganda and Tanzania), Ministry of Agriculture Livestock and Fisheries (for Kenya), and e-SoKo (for Rwanda).

Uganda

Ugandan selected markets shown in Figure 3 below, Kampala and Kabale maintained relatively the highest weekly average wholesale prices of maize except for shock observed in fourth week of July. This is due to the hike in transport costs elevated by the rise in disease fuel prices, the main ingredient in trucks moving food crops from the farms to these long distant local and main markets. While prices in Lira, and Masindi were less the same due to the geographical locality of these markets, it is expected that the deviation of the prices would be negligible. Also, prices movements shown in other markets are indicative of the price movement seen in Masindi market, a major renown maize production center was in part influenced by weather vagaries like heavy rains and long dry spell affecting maize production in the region. Generally, the patterns in the weekly average wholesale prices in Uganda were highly volatile across all the markets. The higher fuel prices at the beginning of the year evoked the volatile maize prices seen between April and May, and then the weekly average wholesale price drop due to the bumper harvest experienced between June but the shocks experienced in Kabale, Lira and Masindi markets in the last week of July overrode the bumper harvest prices. All of this while prices in Kampala market took a nosedive within the same period but later rebounded to level with prices with other markets and stabilized between August and September.

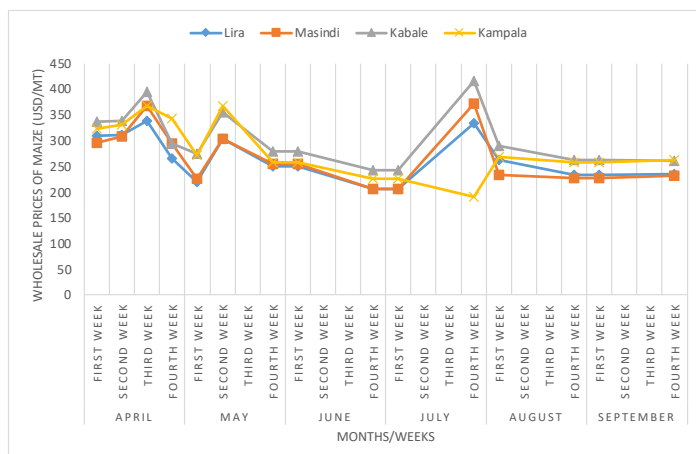
¹ Mwijuke, G., Anami, L., Tairo, A., & Karashani, B. 2022. Erratic weather and global crises push the cost of food to record-high levels. *The East African*. Retrieved November 2, 2022, from [here](#)

² Andae, G. 2022. Tanzania slaps new tax rules on foreign grain traders. *The East African*. Retrieved November 1, 2022, from [here](#)

³ World Food Program (WFP). 2022. Impact of increasing fertilizer prices on maize production in Kenya. Available [here](#)

⁴ Ntirenganya, E. 2022. Rwanda offers free fertilizer and irrigation as drought bites. *The Newtimes*, October 27 2022. Available [here](#)

Figure 2: Average weekly wholesale prices of maize in selected markets in Uganda (April-Sept. 2022)

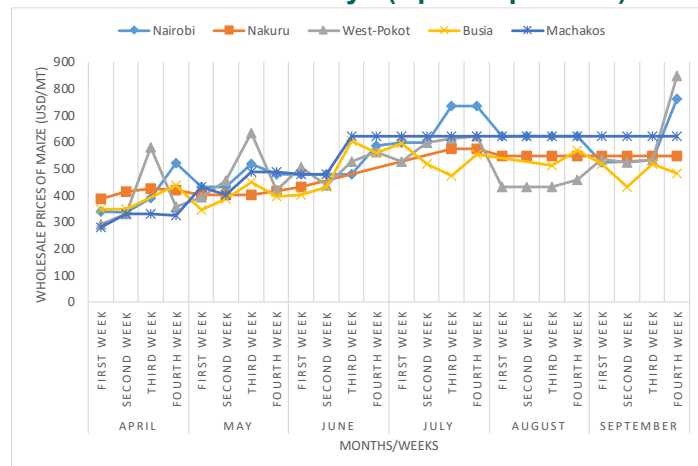


Source: Authors' construction using data of RATIN from FSP

Kenya

Comparing the changes in the price of maize across selected markets in Kenya, the weekly average wholesale prices were volatile in Nairobi, West-Pokot, Busia, and Nakuru, except for Machakos, where the prices stabilized, averaging USD/MT 621 from the third week of June to the end of September (Figures 2). Generally, the prices exhibited an upward trend. Maize production in Kenya has been declining since 2020 due to supply challenges like drought and an increase in fertilizer costs. Between 2020 and 2021, maize production in Kenya dropped by 550,000 metric tons (MT), which translated to a 30 to 60 per cent increase in the price of maize⁵. Nakuru, one of the highest maize-producing areas, was affected by fertilizer price increases. In contrast, prices in border towns such as Busia (prices were volatile) are affected by non-tariff barriers associated with border restrictions.

Figure 3: Average weekly retail prices of maize in selected markets in Kenya (April-Sept. 2022)



Source: Authors' construction using data from FSP

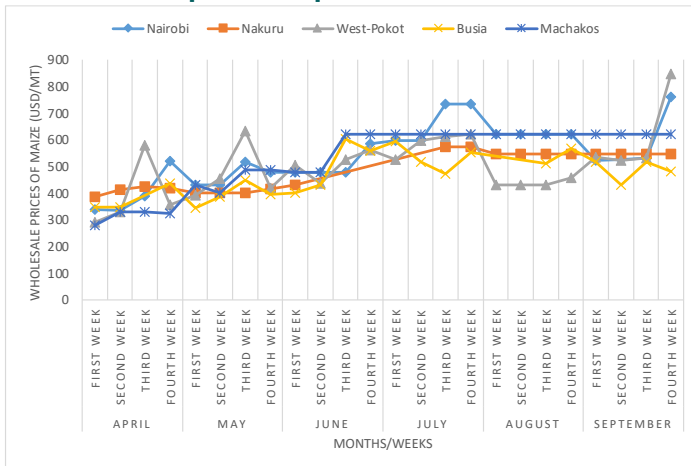
Comparison of maize prices from September 2021 and September 2022

Comparing the wholesale price of maize from April to September 2022 to the same period in 2021, we observe some similarities and minimal differences. For example, unlike this year, where the price of maize in Kenya was higher than for every other country in the region, last year, Rwanda and Uganda reported higher prices in May and September, respectively. In 2021, high prices were explained by high fuel and fertilizer costs emanating from increases at the global level. This year, there is the additional supply constraint of further increases in fertilizer prices caused by the Ukraine/Russian conflict. Kenya is primarily an Arid and Semi-Arid Land region and has the largest fertilizer market size in the East African region with 700,000 tonnes⁶. Large-scale farmers rely heavily on fertilizers to improve their yield, so the higher global fertilizer prices induced the prices of maize to rise. In Uganda, the retail price of maize in 2022 was generally lower than in 2021, while for Tanzania, the retail prices in 2022 were usually higher than in 2021. Tanzania exports maize to countries in the region, and there has been an increase in import demand from these countries. In Rwanda, prices gradually increased from June to September, which was above the price in the previous year. Climatic factors like irregular rains and drought explain the changes observed between 2021 and 2022. Also, high fuel and fertilizer prices since 2021 continue to define the high cost of maize observed in the region.

⁵ World Food Program (WFP). 2022. Impact of increasing fertilizer prices on maize production in Kenya. Available [here](#)

⁶ International Fertiliser Development Center, 2022. Fertiliser Logistics in East Africa. Accessible [here](#)

Figure 4: Monthly average wholesale prices of maize from April to September in 2021 and 2022



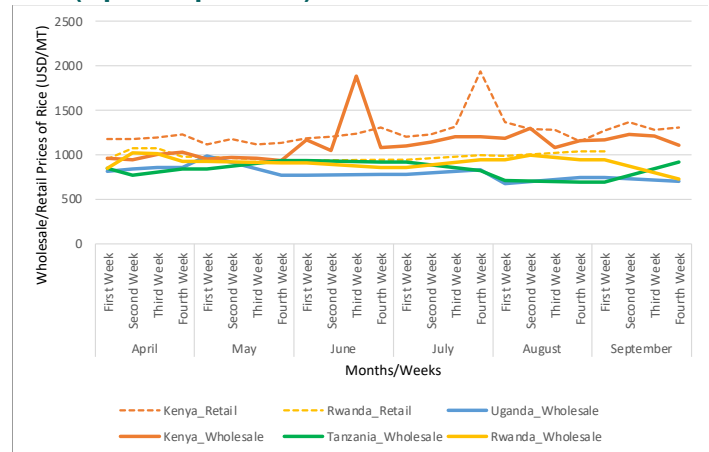
Source: Authors' construction using RATIN data (for Uganda and Tanzania), Ministry of Agriculture Livestock Fisheries and Cooperatives and e-Soko for Rwanda.

Changing Rice Prices in East Africa

From April to September 2022, Kenya had the highest and most volatile rice wholesale and retail prices in the East African region (Figures 5). For the other countries, the wholesale and retail prices remained relatively stable and more or less in the same range. The wholesale and retail price of rice is usually set by the Government of Rwanda every season to minimize price volatility and to ensure farmers have a considerable profit margin⁷. The hike in fuel prices, which also drove the costs of importation in Rwanda despite Government subsidies, is one of the likely factors affecting the price of rice. Rwanda relies on 60 percent of imported rice to meet national demand from countries such as Tanzania, Pakistan, and Thailand.

In Uganda, there was a slight decrease in the wholesale and retail price of rice from July to September, corresponding to months when farmers harvest rice and an increased supply. The Ugandan Government also scrapped Value Added Tax on rice imports from Tanzania, expanding the opportunity for Ugandan traders to import rice⁸.

Figure 5: Average retail price of rice in East Africa (April-Sept. 2022)



Source: Authors' construction using data from FSP (for Uganda), Ministry of Agriculture Livestock and Fisheries (for Kenya), Ministry of Agriculture (for Tanzania) and e-Soko (for Rwanda)

Comparison of rice prices from September 2021 and September 2022

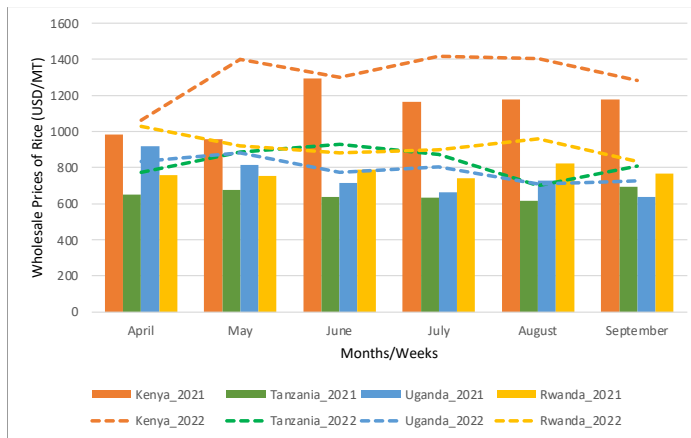
A comparison of wholesale prices from April to September 2021 and 2022 is shown in Figure 6 below. In Kenya, the price of rice in 2022 was higher than its price in 2021 for most of the months. For Uganda, the price of rice followed the same trend as in 2021, decreasing gradually from April to September. In Tanzania, the price of rice also followed relatively the same trend in 2022 and 2021, although the retail price in 2021 was slightly higher in April compared to other months. Uganda, Kenya, Rwanda, and the Democratic Republic of Congo import rice from Tanzania. Increased costs of transportation of goods arising from high fuel prices and increased demand for exports within the EAC might explain this. In Rwanda, the retail price of rice was relatively higher in 2022 than in 2021, with a percentage difference range of 2.6 per cent to 16.4 per cent. The retail price of rice in Rwanda was even higher than it was in Uganda. Fertilizer prices have also increased substantially in Rwanda; the price of UREA increased by 36.6 percent from the second season of 2021 to the first season of 2022; DAP increased by 41.4 percent, while NPK increased by 31 percent. The government of Rwanda responded with a subsidy of 42 percent for DAP, 40 percent for urea, and 35 percent for NPK9 to farmers.

⁷ Ntirenganya, E. 2022. Farmers seek farm gate price rise amidst soaring costs. *The Newtimes*. Available [here](#)

⁸ Nafula, J. (2022, August 12). Government scraps tax on imported rice from Tanzania. *The Daily Monitor*. Retrieved November 2022. Available [here](#)

⁹ Spielman, D.J, Mugabo, S., Rosenbach, G., Ndikumana, S., Benimana, G., Ingabire, C. 2022. Expected impacts of increases in international prices of fertilizer in Rwanda. Policy note 6. Available [here](#)

Figure 6: Monthly average retail prices of rice from April to September 2021 and 2022



Source: Authors' construction using RATIN data (for Uganda and Tanzania), Ministry of Agriculture Livestock Fisheries and Cooperatives and e-Soko for Rwanda

Summary and Future Outlook

From April to September, we observed high rice and maize market prices in the East African countries. The East African region is facing a wave of inflation as disruptions in the global supply chain continue and prices of essential commodities rise.

The driving factors include (1) supply bottlenecks caused by high fuel and fertilizer costs from global supply interruptions following the Russian-Ukraine conflict, (2) prolonged dry spells in most of the countries, and the upcoming lean season characterized by planting of crops and dwindled harvests from last season (3) market diversions such as Uganda diverting some of its maize sales to Southern Sudan rather than to Kenya (4) Barriers to trade such as the institution of export permits by the Government of Tanzania. Generally, the above factors, particularly the supply bottles associated with the Russian-Ukraine conflict, will continue to influence the market outlook of prices after September in the absence of Government intervention. Fertilizer prices are also predicted to continue to remain high. The World Food Program, for example, estimates that fertilizer price

increases of about 70 percent could result in a 12 percent decline in maize yield in Kenya when all factors are constant¹⁰.

In response to the increased costs of fertilizer, East African governments have intervened or made promises toward this effect. The Government of Kenya, for example, announced a subsidy on 71 metric tons of fertilizer on September 13th 2022, for the short growing seasons; a 50 kg bag will cost Kenyan shillings 3500 down (USD 28.7) from shs. 6500 (USD 53.3) for a 50 kg bag. The Government of Rwanda, on its part, has also embarked on providing a full subsidy from partial support for DAP and UREA fertilizers in the second season of 2022 (from September 2022) for maize farmers on consolidated land and large-scale farmers. Government interventions in the market might influence the wholesale and retail prices observed in the subsequent months in the year.

Data and Methodology

Data for wholesale and retail prices of rice and maize for Uganda and Tanzania were obtained from the (1) Food security Portal (FSP)¹¹ facilitated by the International Food Policy Research Institute, (2) Kenya Market Information System¹² sourced for the Ministry of Agriculture Livestock Fisheries and Co-operatives (MALF) for Kenya, and e-Soko (3)¹³ for Rwanda. Also, we maintain that the data source for commodity prices for Rwanda neither indicates whether the prices are retail or wholesale. Further, the data for Kenya and Rwanda were collected in the local currencies, measured in Kshs/Kg and Rwf/Kg, and converted to USD/MT. Additionally, we averaged the weekly and daily wholesale and retail prices of maize and rice across the markets for each country in East Africa while drawing comparisons between January and February. We also analysed within-country weekly average wholesale prices of maize in selected markets of Uganda and Kenya. We also computed monthly average changes in rice wholesale and retail prices between January and February for the East African region to quantify any changes in the two periods. Finally, we constructed graphs of wholesale and retail prices of domestically produced and imported rice for Uganda and Rwanda.

¹⁰ (WFP, 2022)

¹¹ The Food Security Portal data for East African countries is from the Regional Agricultural Trade Intelligence Network (RATIN) and is available at food price monitoring Africa weekly average - dataset - [ckan \(food-securityportal.org\)](https://food-securityportal.org)

¹² Ministry of Agriculture Livestock Fisheries and Co-operatives, Kenyan Market Information System. Data available via http://amis.co.ke/site/market/900?product=1&per_page=100

¹³ e-SOKO price data is available from the Ministry of Agriculture and Animal Resources of the Republic of Rwanda: <http://www.esoko.gov.rw/esoko/Dashboard/Login.aspx?DashboardId=4&dash=true&Login=true>

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