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1. BACKGROUND

The agriculture sector continues to play a critical role in Kenya accounting for 22 percent of Gross Domestic Product (GDP) and 27 percent indirectly through its linkages with other sectors. The sector also employs over 40 percent of the total population and more than 70 percent of the rural populace. Given the critical role the sector plays in providing livelihoods and a food basket for the Kenyan economy, it is increasingly important to ensure that high frequency quality data is available to inform the food supply situation in the country, the prevailing prices and the challenges that may affect production in the sector.

Towards this end, the Central Bank of Kenya (CBK) introduced a new Survey of agriculture sector to complement the existing CEOs, Market Perceptions, and Hotels Surveys as well as other agriculture data sources.

The objective of the Survey is to obtain information on the recent trends in prices of agricultural commodities sold in Wholesale and Retail markets as well as farms. The Survey also provides an indication of the extent of availability/supply of key food commodities including maize, potatoes and vegetables in the country. The main areas of focus in the survey include:

i. Prices of key agricultural commodities;
ii. Expectations of changes in agricultural supplies and prices;
iii. Factors affecting agricultural production; and
iv. Key proposals to improve the agricultural production.

The Survey came at a time when COVID-19 positivity rate averaged 2.8 percent, the economy fully reopened, and uncertainties linked to the pandemic significantly reduced. The Government in early March also lifted a ban on maize imports from Uganda and Tanzania as per the East Africa Community protocols. The war in Ukraine has impacted negatively on wheat prices globally due to the global shortage given that Russia supplies 40 percent of global markets.

This Survey coincided with the implementation of additional measures by the Government to reduce the cost of living for vulnerable households. The measures include:

- A reduction of maize flour price to retail at KSh 100 down from KSh 210 previously.
- A fuel subsidy enabling diesel to retail at KSh 140 down instead of the market price of KSh 193.6; petrol at KSh 159.1 instead of KSh 210 and kerosene at KSh 127.9 instead of KSh 181.1.
- A reduction in LPG gas prices to KSh 3000 for 13kg and KSh 1,400 for 6kg cylinders.
- A 15 percent reduction in cost of electricity to households since January 2022.

This report provides a summary of findings from the Survey.

2. METHODOLOGICAL FRAMEWORK

The Survey conducted between July 19 and 21, 2022 drew respondents from wholesale traders, retail markets, and farms in major towns across the country. These included Nairobi and the neighbouring counties including Kiambu, Kajiado and Machakos, Naivasha area, Nakuru, Narok, Kisumu, Mombasa, Kisii, Eldoret, Meru and Nyeri.

This being the first Survey of the agriculture sector, it was limited to 10 commodities and three animal products including vegetables (Kales, Cabbages, Spinach), non-vegetables (tomatoes, onions, potatoes), grains (dry maize, green maize, beans, wheat) and animal products (beef, eggs and milk). The coverage and scope is expected to expand in future Surveys.

Researchers made physical visits to markets and farms where face to face interviews were conducted in major towns. The Survey was administered successfully to 99 respondents. The data was aggregated, and analysis done along the three market categories namely, wholesale, retail and farms. The findings were presented using tables and charts.

The Survey attained 100 percent response rate from the target markets. This is summarized in Figure 1.

3. MAIN HIGHLIGHTS FROM THE SURVEY

The following section presents the key findings from the CBK July 2022 Survey of Agriculture Sector.
• The survey revealed that prices of some food items, particularly cabbages, tomatoes, onions, potatoes, and green maize, have declined since June due to improved supply.
• Respondents expect the supply of green maize and wheat to increase from August with the harvest season while the supply of dry maize is expected to increase due to imports.
• The major factors constraining agricultural production are: transport costs, poor weather conditions, and input costs.

Retail markets accounted for over 50 percent of the sampled respondents followed by wholesale markets (41.1 percent), farms (15.8 percent) and other category in that order.

### 3.1 Prices of Key Agricultural Commodities and their Expectations

The Survey sought to determine the trends of changes in prices of key agricultural commodities between May and July 2022. Mixed trends were observed in the three markets and the results were as follows:

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**Figure 1: Response Rate (percent)**

**Figure 2: Changes in Wholesale Prices of Key Food Items (percent)**

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**Figure 1: Response Rate (percent)**

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Retail markets accounted for over 50 percent of the sampled respondents followed by wholesale markets (41.1 percent), farms (15.8 percent) and other category in that order.
The analysis of wholesale markets revealed that wholesale prices of kales, spinach, and beans remained elevated due to continued dry weather conditions which led to drying up of rivers used for irrigation. On the other hand, prices of cabbages, tomatoes, onions, potatoes, and green maize had declined. The decline in prices of onion was on account of imports from Tanzania. Prices of tomatoes were found to be lower as the high output season for tomatoes had kicked in. A similar downward trend was observed for potato prices as wholesalers started receiving more produce from farmers. Notably, the prices of dry maize, wheat, and beef slowed in July while prices of milk remained unchanged (Figure 2).

The movement in the prices of agricultural commodities in retail markets largely reflects the trends in wholesale markets. Some of the differences could be accounted for by the source of food items since some are sourced directly from farms while others are imported. The prices of tomatoes, onions, potatoes, and green maize declined in July due to increased supplies in the market. Retail prices of kales, and cabbages increased as traders transferred rising costs to consumers from the reduced supplies following the persistent dry weather conditions. Increases in prices of dry maize, beans, wheat, beef, eggs, and milk slowed down in July (Figure 3).
In the farms segment, prices of tomatoes, onions, potatoes, dry maize, green maize, and milk declined in July on improved supply (Figure 4). The price of dry maize declined following the government waiver of import duties which has increased imports. Although the prices of animal products remained high, the increases in prices of beef and eggs slowed down reflecting improved supply. However, the prices of kales, cabbages, spinach, and beans increased due to the high input costs and bad weather.

3.2 Expectations of Changes in Agricultural Supplies and Prices

The Survey sought to gauge market expectations of the quantities and prices of agricultural commodities in the next one month (August 2022). This result is shown in Figure 5 and Figure 6.

The price of dry maize is expected to fall due to the expected increase in imports. The price of wheat is expected to go up in August due to reduced production following the reduced acreage as farmers grapple with the dry weather conditions. Equally, the price of green vegetables and beans is expected to remain high due to low production as the country continues to register low rainfall. However, the prices of animal products will remain largely unchanged.
The volume of green maize and wheat supplied in the markets in the month of August is expected to rise as the harvest season peaks. This coupled with the waiver of import duties on dry maize is expected to bolster dry maize stocks through increased imports and lower the market prices. Similarly, the supply of tomatoes and onions will be boosted by imports from the region. However, the supply of cabbages, kales and spinach is expected to remain subdued due to the prevailing dry weather conditions. The supply of animal products such as beef, eggs and milk is expected to remain unchanged in the next one month. The supply of eggs could remain low, as the cold season persists.

3.3 Factors affecting Agricultural Production

Several factors account for the observed changes in the prices and quantities of agricultural commodities in July. This was assessed by asking respondents the extent to which various factors affected the market supplies. The responses were subjected to a five-point Likert scale based on the level of significance as presented below (Figure 7).

The findings revealed that transport costs, weather conditions and input costs were very significant scoring over 56 percent of the total responses. COVID-19 pandemic was found to impact the agriculture sector moderately and is no longer considered to be a major issue as the economy is now fully open following the lifting of most restrictions. Market availability, labour cost and the war in Ukraine were also mentioned as being very significant in shaping market supplies. Even though land is not very significant, respondents mentioned it as an important factor that affects agricultural production. Uptake of technology remains low and could be the reason why majority found it not to significantly affect market supplies.

![Figure 7: Factors affecting Agricultural Production – July 2022](image-url)
4. PROPOSALS TO IMPROVE THE AGRICULTURE SECTOR

The Survey sought responses on the areas where market traders and farmers may want to see improvements to increase agriculture production. The respondents recommended the following:

- Reduce transport costs by lowering fuel prices;
- Provide concessionary loans to market traders;
- Reduce cost of inputs e.g. fertilizer and seeds;
- Build more dams for irrigation to counter the adverse weather conditions;
- Discourage subdivision of land to promote large scale farming and mechanization;
- Reduce tax levies to support farming and trading activities; and
- Create markets for agricultural commodities.

5. CONCLUSION

The CBK conducted a maiden Survey of the agriculture sector from July 19-21, 2022 to obtain information on the recent trends in prices of agricultural commodities in various markets across the country. The Survey focused on prices of key agricultural commodities and their expectations; expectations of agricultural supplies over next one month; factors affecting agricultural production and key proposals to improve the agricultural production. The target respondents included wholesale traders, retailers, and farmers in major towns.

The collated findings were drawn from 99 respondents covering Nairobi and the neighbouring counties including Kiambua, Kajiado and Machakos, Naivasha area, Nakuru, Narok, Kisumu, Mombasa, Kisii, Eldoret, Meru and Nyeri, were analysed. The Survey established mixed trends in wholesale, retail and farm prices for most vegetables and grains. The price of grains is expected to fall in August with increase in maize imports and improved wheat harvests. On the contrary, the quantity supplied for vegetable products will remain subdued in August 2022 but increase for non-vegetables and grains. The supply of animal products is expected to remain the same.

On the factors affecting agricultural production, the Survey found transport costs, weather, and input costs to be very significant accounting for 56.8 percent of the responses. To mitigate the challenges faced in the agriculture sector and improve production, the respondents recommended a reduction in transport costs, provision of concessionary loans to market traders, a reduction in the cost of inputs such as fertilizer, pesticides and seeds, construction of more dams to harvest water for irrigation, discourage subdivision of land to accommodate large scale farming, reduction of tax levies and creation of markets for the produced goods.