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## Global Wheat Trade and Market Disruptions: Income and Food Security Effects for Nigeria

Ismael Fofana\*, Leysa Maty Sall\*\*, and Yaya Ky\*\*\*



### 1. Exposure to the Global Wheat Market Disruptions and Price Shocks

The Russia-Ukraine conflict has introduced severe disruptions into international grain trade as the two countries are major producers and exporters of wheat and other staples worldwide. Nigeria is highly dependent on imports from the global market to satisfy its domestic wheat demand. In 2020, the West African country's import penetration rate was 89 percent (AATM 2022). Furthermore, Russia is an important trading partner for Nigeria, contributing 16 percent of the country's total wheat imports in 2020 (AATM 2022). The supply disruptions and price spikes induced by the Ukraine crisis could have considerable implications on the country's wheat sector as well as food price inflation, and consequently on food security in Nigeria. Wheat products are intermediate inputs mainly used by the processing industries, i.e., milling and baking. When wheat import prices rise, they not only affect the prices of cereals and other substitute products, but they also increase the costs of inputs and wheat-related products in the domestic markets. The effects of the global market disruptions on a country's economy depend on the size of the wheat sector within the economy. Given the sector's small size within the Nigerian economy, the effects of the global shocks are expected to be minimal.

1 Bouët, A., S. P. Odjo, and C. Zaki, eds. 2022. Africa Agriculture Trade Monitor 2022. Kigali and Washington, DC: AKADEMIYA2063 and International Food Policy Research Institute (IFPRI).

\*Director, Capacity and Deployment, AKADEMIYA2063

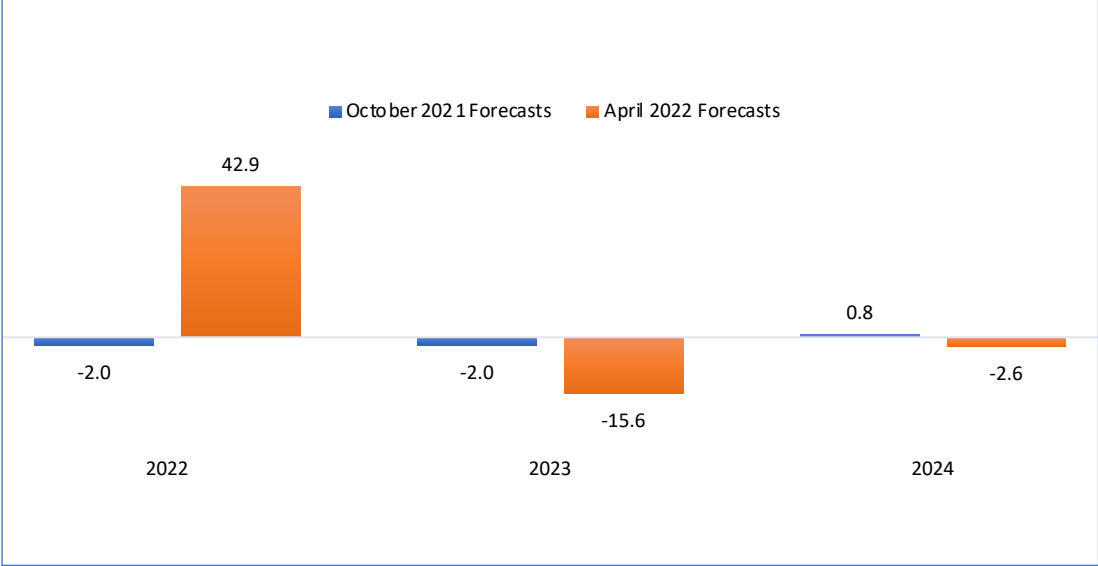
\*\*Economist, Centre d'Études Prospectives et d'Informations Internationales (CEPII)

\*\*\*Economist, Université Thomas Sankara (UTS), Burkina Faso

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Figure 1 depicts the rise in wheat prices at the start of the Russia-Ukraine war. Global wheat prices were expected to decline by 2 percent in October 2021, i.e., before the onset of the war. However, in April 2022 after the war had started, global wheat prices were projected to increase substantially by 43 percent by the end of the year. While these prices are projected to drop by 16 percent in 2023 and 3 percent in 2024, the 2022 surge will keep the prices relatively high well into 2024.

**Figure 1: Changes in the International Price of Wheat (%)**

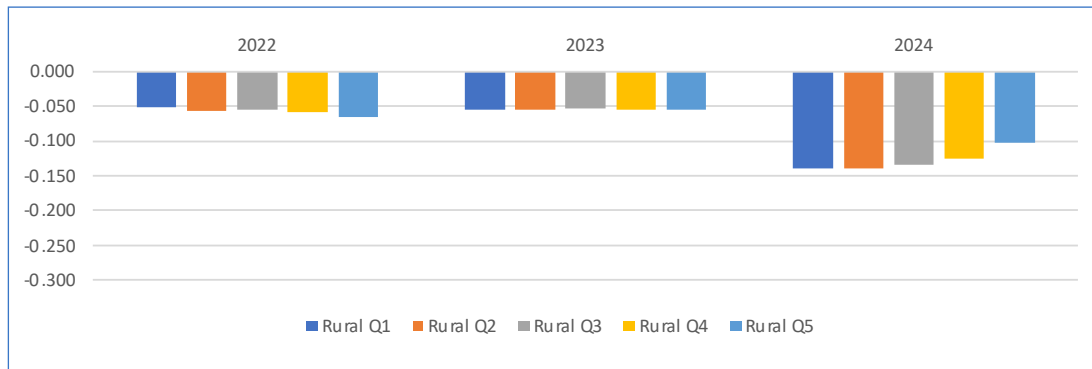


**Source:** Compilation from the commodity price database (World Bank 2022).

**2. Effects of Rising Wheat Prices on Household Incomes, Food Price Index, and Food Consumption**

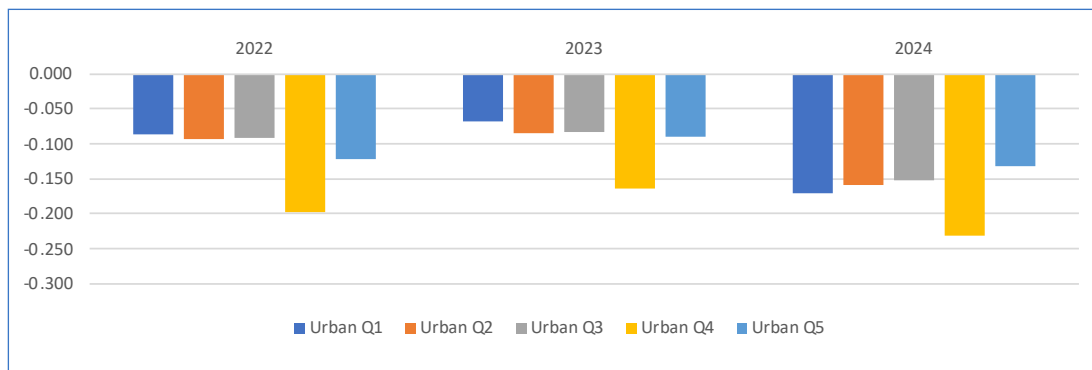
Figures 2 and 3 show a decline in household income, in both urban and rural areas due to the negative inflationary effects on the economy caused by higher global wheat prices. However, the magnitude of the income decline is modest, consistent with the contribution of wheat to the agricultural sector and the entire economy (less than 0.1 percent). Rural incomes decline less than urban incomes as the former benefit from the rise in global wheat prices. Household incomes are projected to continue declining in 2023 and 2024, due to the contraction of the overall economy driven by the inflationary effects induced by the global wheat trade and market disruptions. The rise in global wheat prices is projected to trigger a generalized increase in food prices across Nigeria from 2022-2024 (Figures 4-5). Like the income effects, food price increases are expected to be modest given the small share of wheat products in household food budgets. Declining incomes and food price increases affect household consumption negatively. Indeed, all categories of households experience a drop in food consumption over the 2022-2024 period (Figures 6-7).

**Figure 2: Effects of Rising Wheat Prices on Gross Income of Rural Households, Changes vs. Baseline (%)**



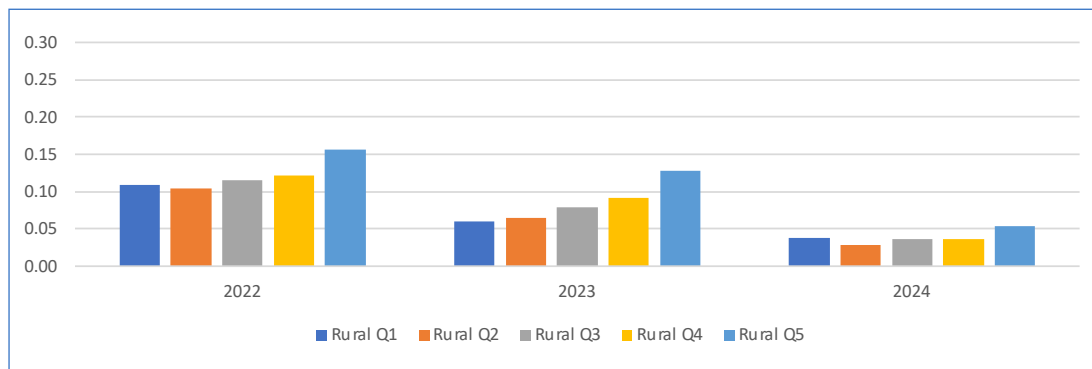
Source: Compilation from simulation results (2022).

**Figure 3: Effects of Rising Wheat Prices on Gross Income of Urban Households, Changes vs. Baseline (%)**



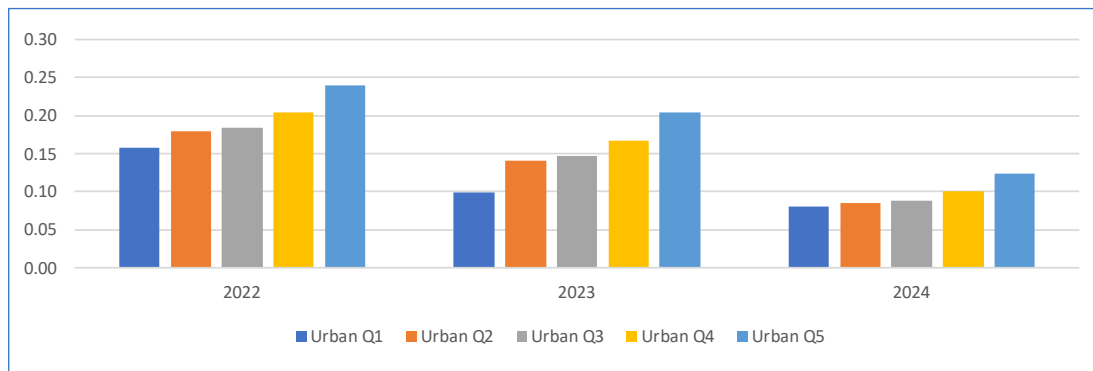
Source: Compilation from simulation results (2022).

**Figure 4: Effects of Rising Wheat Prices on Food Price Index of Rural Households, Changes vs. Baseline (%)**



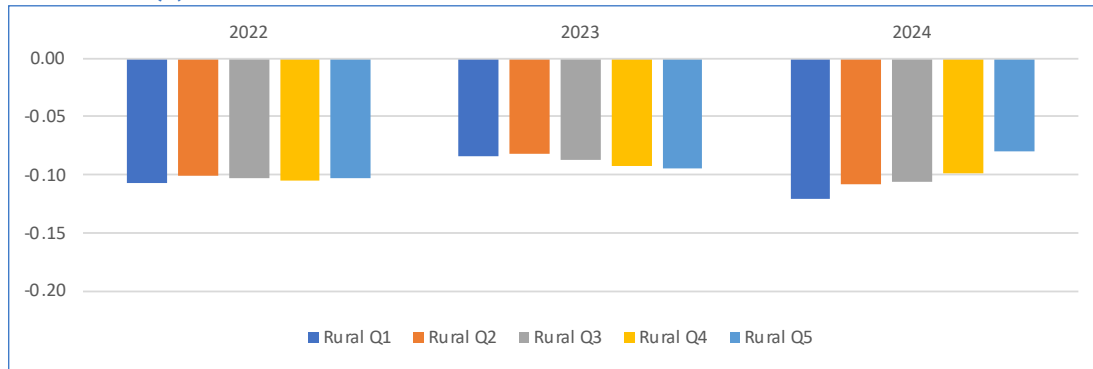
Source: Compilation from simulation results (2022).

**Figure 5: Effects of Rising Wheat Prices on Food Price Index of Urban Households, Changes vs. Baseline (%)**



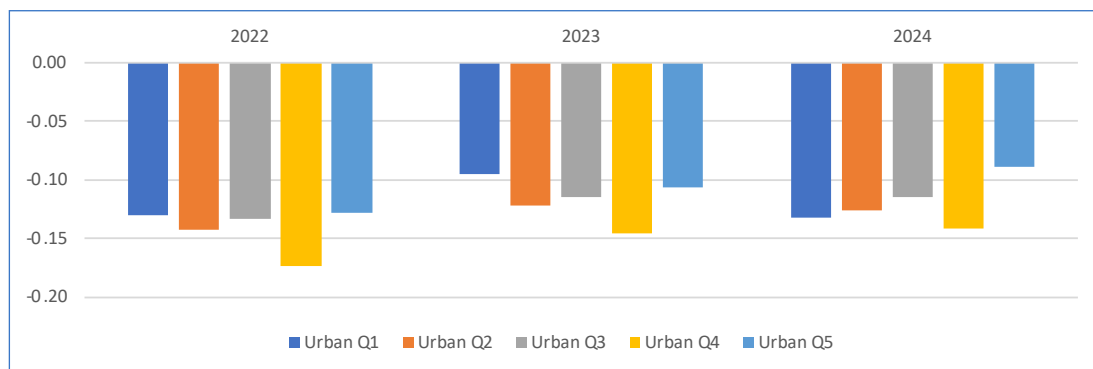
**Source:** Compilation from simulation results (2022).

**Figure 6: Effects of Rising Wheat Prices on Food Consumption of Rural Households, Changes vs. Baseline (%)**



**Source:** Compilation from simulation results (2022).

**Figure 7: Effects of Rising Wheat Prices on Food Consumption of Urban Households, Changes vs. Baseline (%)**







**Source:** Compilation from simulation results (2022).

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-  AKADEMIYA2063 | Kicukiro/Niboye KK 341 St 22 | 1855 Kigali-Rwanda
-  +250 788 318 315 | +221 33 865 28 81
-  [kigali-office@akademiya2063.org](mailto:kigali-office@akademiya2063.org)
-  [www.akademiya2063.org](http://www.akademiya2063.org)

    @AKADEMIYA2063