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## STATISTICAL RELEASE

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## EXPORT AND IMPORT PRICE INDICES FOR THE QUARTER ENDING JUNE, 2022

## Background notes

## Definition

The Export and Import Price Indices (XMPI) are average measures of price changes of goods exported outside or imported into the country. The XMPI are used in various areas to do analysis such as Terms of Trade (ToT) which is the ratio of Export Price Index (XPI) to the Import Price Index (MPI).

The Export and Import Price Indices, which are compiled on a quarterly basis, covers both exports and imports of merchandise trade. These quarterly specification based XMPI have been compiled and disseminated since the first quarter of 2013 up to the last quarter of 2017 with reference base period being the quarter ending March 2013. The updated XMPI has the fourth quarter of 2017 as the reference base period. The updated weights and the product sample for the XMPI used customs data for the years 2014 to 2016. Price collection for the updated XMPI was carried out during the period October-December 2017. This allowed for the compilation of the XMPI for the fourth quarter of 2017 using the new product and enterprise samples.

## Weights and a reference period

The XMPI weights are based on values of imported and exported commodities for the period 2014 to 2016. A top-down approach was taken in the determination of the index structure, composition and the allocation of the weights. The aim was to maximize the indirect
representation of un-priced commodities in the index, through a chain of representation. The price reference period is the quarter ending December 2017.

## Product Classification

The products are classified according to the United Nations Harmonized Commodity Description and Coding System (HS). The HS is an international nomenclature for the classification of products.

## Methodology

Selection of items: In the selection of items, a top - down procedure was applied in three steps. First, the major 2-digit HS chapters contributing to the total value of imports in terms of the sum of values for the year 2014 to 2016 were selected for direct inclusion in the indices. As a result, 14 chapters (2-digit HS codes) were selected for imports and 12 chapters for exports out of 99 chapters representing 80 percent or more depending on the degree of concentration. Secondly, the process was repeated at 4-digit level of HS; 73 items were selected for imports and 19 items were selected for exports. Finally, the procedure was repeated at the 8 -digit level of the HS by selecting 178 items for imports and 23 items for exports. The result of these procedures was the derivation of the structure and composition of the indices.

The XMPI has incorporated a number of methodological improvements including the use of geometric means for compiling elementary index aggregates, the use of an improved index compilation system, and improved procedures for collecting and processing prices. The Laspeyres index formula was used to compute higher level aggregates for the XMPI. Chart 1 depicts trends of XPI and MPI in the selected quarters.

Chart 1: Quarterly Export and Import Price Indices (Q4 2017=100)


Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

## Export Price Index

## Structure of the XPI

The XPI covers 12 chapters out 99 chapters, namely; (i) Fish and crustacean, mollusk and other aquatic invertebrate, (ii) Edible vegetables and certain roots and tubers, (iii) Edible fruits and nuts, peel of citrus fruit or melons, (iv) Coffee, tea, mate and spices, (v) Oil seed, oleagi fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder, (vi) Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes, (vii) Residues \& waste from the food industries; prepared animal fodder, (viii) Tobacco and manufactured tobacco substitutes, (ix) Cotton, (x) Wadding, felt \& nonwoven; yarns; twine, cordage, etc, (xi) Glass and glassware and (xii) Natural/cultured pearls, precious stones and metals, coin, etc. The sample of twelve chapters constitute 80 percent of total value of exports, aggregated from 2014 to 2016.

## Quarterly Export Price Index

The overall Export Price Index during the second quarter of 2022 increased by 2.3 percent to 117.7 compared to 115.1 recorded in the first quarter of 2022. This development was largely attributed to the increase in prices of edible oils and oil seeds. Likewise, when compared to the corresponding quarter of 2021, the index increased by 8.5 percent (Table 1).

Table 1: Quarterly Export Price Indices by Chapter (Q4 2017= 100)

| $\begin{aligned} & \text { HS } \\ & \text { Code } \end{aligned}$ | Description | Weight | $\begin{gathered} \text { Q2 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q3 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q4 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q1 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q2 } \\ 2022 \end{gathered}$ | \% Change Previous | \% Change the same quarter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Overall |  |  |  |  |  | Quarter | last year |
|  |  | 100.0 | 109.4 | 111.3 | 113.6 | 115.1 | 117.7 | 2.3 | 8.5 |
| 03 | Fish \& crustacean, mollusk \& other aquatic invertebrate | 6.2 | 111.8 | 111.9 | 111.7 | 111.8 | 111.9 | 0.1 | 14.5 |
| 07 | Edible vegetables and certain roots and tubers | 11.4 | 106.3 | 111.7 | 111.2 | 111.3 | 112.4 | 0.9 | 5.0 |
| 08 | Edible fruit and nuts; peel of citrus fruit or melons | 17.4 | 68.7 | 68.7 | 68.3 | 67.2 | 67.2 | 0.1 | -2.1 |
| 09 | Coffee, tea, mate and spices | 4.3 | 104.6 | 114.2 | 116.1 | 119.3 | 116.7 | -2.1 | 11.3 |
| 12 | Oil seed, oleagi fruits; miscell grain, seed, fruit etc | 4.2 | 126.2 | 130.1 | 129.9 | 130.1 | 144.8 | 11.3 | 5.9 |
| 15 | Animal/veg fats \& oil \& their cleavage products; etc | 7.4 | 107.9 | 112.5 | 129.7 | 132.9 | 160.1 | 20.5 | 48.4 |
| 23 | Residues \& waste from the food indust; prepr ani fodder | 6.2 | 108.8 | 112.2 | 104.8 | 105.5 | 105.1 | -0.3 | 0.3 |
| 24 | Tobacco and manufactured tobacco substitutes | 5.9 | 104.5 | 102.6 | 102.4 | 104.5 | 104.6 | 0.1 | 0.3 |
| 52 | Cotton | 1.0 | 109.8 | 110.3 | 120.8 | 122.9 | 123.0 | 0.1 | 14.1 |
| 56 | Wadding, felt \& nonwoven; yarns; twine, cordage, etc | 4.9 | 107.3 | 106.0 | 113.4 | 114.8 | 115.0 | 0.1 | 7.5 |
| 70 | Glass and glassware | 2.2 | 118.3 | 118.0 | 118.0 | 117.8 | 109.2 | -7.3 | -6.7 |
| 71 | Natural/cultured pearls, prec stones \& metals, coin etc | 28.9 | 138.4 | 137.8 | 137.5 | 143.2 | 142.3 | -0.7 | 3.2 |

Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

## Sub-indices by Chapter

This section gives detailed analysis on the movements of export price indices by chapter:

## Chapter 03: Fish and crustacean, mollusk and other aquatic invertebrate

The index for "Fish and crustacean, mollusk and other aquatic invertebrates" which accounts for 6.2 percent of the total weight, increased slightly by 0.1 percent to 111.9 in the second quarter of 2022 from 111.8 registered in the first quarter. Likewise, when compared to the corresponding quarter of 2021, the index increased by 14.5 percent.

## Chapter 07: Edible vegetables and certain roots and tubers

This chapter contributed 11.4 percent of the total weight of the exported commodities. The index increased marginally by 0.9 percent to 112.4 in the second quarter of 2022 from 111.3 recorded in the previous quarter. In comparison with the same quarter in the year 2021, the index also increased by 5.0 percent.

## Chapter 08: Edible fruits and nuts, peel of citrus fruit or melons

During the second quarter of 2022, the export price index for "Edible fruits and nuts", which accounts for 17.4 percent of the total weight, remained broadly the same as the previous quarter. However, when compared with the same quarter in the previous year, the index decreased by 2.1 percent.

## Chapter 09: Coffee, tea, mate and spices

This chapter contributed 4.3 percent of the total weight of exported commodities. During the second quarter of 2022, the index for "coffee, tea, mate and spices" decreased by 2.1 percent to 116.7 from 119.3 recorded in the previous quarter. The decrease was explained by subdued demand for both coffee and tea at the global market following the continued spill over effects of the war in Ukraine. Nonetheless, when compared to the corresponding quarter of 2021, the index increased by 11.3 percent.

Chapter 12: Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder

This chapter accounts for 4.2 percent of the total weight. During the second quarter of 2022, the index for "Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder" increased by 11.3 percent to 144.8 from 130.1 recorded in the first quarter. The performance was largely attributed by the increase in prices of sesame seeds following high global demand. Similarly, when compared with the corresponding quarter of 2021 the index increased by 5.9 percent.

## Chapter 15: Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes

The export price index for "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes", accounts for 7.4 percent of the total weight for exports. The index increased by 20.5 percent during the second quarter of 2022 to 160.1 from 132.9 recorded in the previous quarter. The performance was largely explained by increase in prices of edible oils in the world market owing to supply shortages resulting from export bans in Indonesia - major producer of palm oil. Likewise, in comparison with the corresponding quarter of 2021, the index increased by 48.4 percent.

Chapter 23: Residues \& waste from the food industries; prepared animal fodder
The export price index for "Residues \& waste from the food industries; prepared animal fodder", accounting for 6.2 percent of the total weight, decreased slightly to 105.1 in the second quarter of 2022 from 105.5 recorded in the previous quarter. However, when compared to the same quarter of 2021 , the index increased marginally by 0.3 percent.

## Chapter 24: Tobacco and manufactured tobacco substitutes

This chapter accounts for 5.9 percent of the total weight. During the second quarter of 2022, the index increased marginally to 104.6 from 104.5 recorded in the previous quarter. When compared to the same quarter in 2021, the index increased slightly by 0.3 percent.

## Chapter 52: Cotton

During the second quarter of 2022, the export price index for "Cotton", which accounts for 1.0 percent of the total weight, slightly rose by 0.1 percent to 123.0 compared to 122.9 in the second quarter of 2022 and 14.1 percent when compared to the corresponding period in 2021.

Chapter 56: Wadding, felt \& nonwoven; yarns; twine, cordage, etc.
The chapter contributes 4.9 percent of the total weight of exported commodities. During the second quarter of 2022 , the index increased by 0.1 percent to 115.0 from 114.8 in the previous quarter. The index also increased by 7.5 percent when compared with the same quarter in the preceding year.

## Chapter 70: Glass and glassware

During the second quarter of 2022, the export price index for "Glass and glassware", which accounts for 2.2 percent of the total weight, declined by 7.3 percent to 109.2 from 117.8 in the preceding quarter. This outturn was due to a fall in demand. Similarly, when compared to the same quarter of the previous year, the index declined by 6.7 percent.

## Chapter 71: Natural/cultured pearls, precious stones and metals, coin etc.

The export price index for "Natural/cultured pearls, precious stones and metals, coin etc", which accounts for 28.9 percent of the total weight of exported commodities, decreased slightly by 0.7 percent to 142.3 in the second quarter of 2022 from 143.2 in the first quarter. This is attributed to an increase in interest rates by the US Federal Reserve, which raised yields for treasury notes and in turn lowered gold demand. In contrast, when compared to the corresponding quarter of 2022 the index increased by 3.2 percent.

## Import Price Index

## Structure of the MPI

The MPI covers 14 chapters out of 99 chapters, namely; (i) Cereals, (ii) Animal fats and oil \& their cleavage product, (iii) Mineral fuels, oils and product of their distillation, (iv) Pharmaceutical products, (v) Fertilisers, (vi) Miscellaneous chemical products, (vii) Plastics and articles thereof, (viii) Rubber and articles thereof, (ix) Iron and steel, (x) Articles of iron and steel, (xi) Nuclear reactors, boilers, machinery and machinery appliance, parts, (xii) Electrical machinery equipment parts thereof; sound recorder etc, (xiii) Vehicles other than railway/transport way roll-stock, parts and accessories and (xiv) Optical, photo, cine, meas, checking, precision, etc. The sampled fourteen chapters constitute 80 percent of total value of imports aggregated from 2014 to 2016.

## Quarterly Import Price Index

The overall Import Price Index for the second quarter of 2022 increased by 4.4 percent to 117.1 from 112.1 recorded in the first quarter of 2022, mainly due to higher prices of petroleum products, fertilisers, and cereals. Likewise, when compared to the same quarter of 2021, the index increased by 13.6 percent (Table 2).

Table 2: Quarterly Import Price Indices by Chapter (Q4 2017=100)

| HS Code | Description | Weight | $\begin{gathered} \text { Q2 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q3 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q4 } \\ 2021 \end{gathered}$ | $\begin{gathered} \text { Q1 } \\ 2022 \end{gathered}$ | $\begin{gathered} \text { Q2 } \\ 2022 \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Overall |  |  |  |  |  |  |  |
|  |  | 96.9 | 103.1 | 107.6 | 109.9 | 112.1 | 117.1 | 4.4 | 13.6 |
| 10 | Cereals | 109.9 | 120.1 | 120.1 | 122.7 | 122.9 | 131.4 | 6.9 | 9.4 |
| 15 | Animal/veg fats \& oil \& their cleavage products; etc | 98.0 | 98.3 | 98.3 | 98.1 | 98.3 | 98.4 | 0.1 | 0.1 |
| 27 | Mineral fuels, oils \& product of their distillation; etc | 56.0 | 87.5 | 96.5 | 103.6 | 113.3 | 161.9 | 42.9 | 85.0 |
| 30 | Pharmaceutical products | 103.7 | 104.7 | 106.2 | 104.4 | 104.6 | 104.7 | 0.1 | 0.0 |
| 31 | Fertilisers | 102.4 | 109.5 | 136.0 | 141.4 | 146.7 | 152.3 | 3.8 | 39.1 |
| 38 | Miscellaneous chemical products | 90.9 | 96.9 | 98.3 | 97.5 | 97.4 | 99.4 | 2.0 | 2.5 |
| 39 | Plastics and articles thereof | 92.2 | 109.7 | 117.8 | 118.1 | 119.8 | 120.6 | 0.7 | 9.9 |
| 40 | Rubber and articles thereof | 100.1 | 93.2 | 93.6 | 111.0 | 111.4 | 111.3 | -0.1 | 19.5 |
| 72 | Iron and steel | 87.1 | 88.9 | 101.6 | 104.8 | 105.9 | 106.0 | 0.1 | 19.2 |
| 73 | Articles of iron and steel | 104.5 | 107.8 | 110.9 | 111.0 | 121.0 | 121.2 | 0.1 | 12.4 |
| 84 | Nuclear reactors, boilers, mchy \& mech appliance; parts | 116.1 | 117.7 | 118.4 | 119.0 | 118.3 | 119.7 | 1.2 | 1.6 |
| 85 | Electrical mchy equip parts thereof; sound recorder etc | 103.6 | 108.7 | 108.8 | 108.1 | 110.4 | 112.0 | 1.4 | 3.1 |
| 87 | Vehicles o/t railw/tranw rool-stock, pts \& accessories | 102.0 | 109.5 | 109.0 | 109.3 | 109.6 | 110.5 | 0.8 | 0.9 |
| 90 | Optical, photo, cine, meas, checking, precision, etc | 90.6 | 90.6 | 90.6 | 90.0 | 90.1 | 90.2 | 0.1 | -0.4 |

Note: Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December

## Sub-indices by Chapter

This section analyses movements of import price indices for each chapter.

## Chapter 10: Cereals

This chapter accounts for 4.1 percent of the total weight. During the second quarter of 2022, the import price index for "Cereals" increased by 6.9 percent to 131.4 from 122.9 recorded in the previous quarter. The performance was a result of low supply of wheat in the world market following geopolitical tension between Russia and Ukraine-major wheat producers. Similarly, when compared to the same quarter in the previous year, the index increased by 9.4 percent.

## Chapter 15: Animal fats and oil and their cleavage product

This chapter contributes 4.2 percent of the total weight of the imported commodities. During the second quarter of 2022, the index increased slightly by 0.1 percent to 98.4 from 98.3 that was recorded in the previous quarter. Similarly, when compared to the same quarter in the previous year, the index increased slightly by 0.1 percent.

## Chapter 27: Mineral fuels, oils and product of their distillation

During the second quarter of 2022, import price index for "Mineral fuels, oils and product of their distillation" which contributes 21.7 percent to the total weight of the imported commodities, increased by 42.9 percent to 161.9 from 113.3 recorded in the first quarter of 2022. The performance was explained by the increase in oil prices resulting from the global demand-supply imbalances, further escalated by the war in Ukraine. Similarly, when compared to the corresponding quarter of 2021, the index increased by 85.0 percent.

## Chapter 30: Pharmaceutical products

The index for "Pharmaceutical products" which represents about 5.2 percent of the total weight, increased slightly by 0.1 percent to 104.7 in the second quarter of 2022 from 104.6 recorded in the previous quarter. When compared to the corresponding quarter of 2021, the index remained unchanged.

## Chapter 31: Fertilisers

The index for "Fertilisers" which accounts for 1.8 percent of the total weight of the imported commodities, rose by 3.8 percent to 152.3 in the second quarter of 2022 from 146.7 recorded in the first quarter of 2022. Soaring prices were driven by surging input costs and supply disruptions due to sanctions in Russia. In correspondence with the same quarter in 2021, the index increased by 39.1 percent.

## Chapter 38: Miscellaneous chemical products

The index for "Miscellaneous chemical products" which accounts for 2.0 percent of the total weight, increased to 99.4 in the second quarter of 2022 from 97.4 in the first quarter. The increase was due to strong demand in major end markets such as construction, health and safety. When compared to the similar quarter last year, the index increased by 2.5 percent.

## Chapter 39: Plastics and articles thereof

In the second quarter of 2022, the index for "Plastic and articles thereof" which contributes 6.2 percent to the total weight of imported commodities, slightly increased by 0.7 percent to 120.6 from 119.8 recorded in the previous quarter. Nonetheless, when compared to the corresponding quarter in 2021, the index increased by 9.9 percent.

## Chapter 40: Rubber and articles thereof

This chapter, which contributes 2.8 percent to the total weight of imported commodities. During the second quarter of 2022, the index marginally decreased by 0.1 percent to 111.3 from 111.4 recorded in the first quarter. However, when compared to the corresponding quarter in the preceding year the index increased by 19.5 percent.

## Chapter 72: Iron and steel

During the second quarter of 2022, the index for "Iron and steel", which accounts for 5.3 percent of the total weight, slightly increased by 0.1 percent to 106.0 from 105.9 recorded in the first quarter of 2022. Nonetheless, the index increased by 19.2 percent when compared to the similar quarter of 2021.

## Chapter 73: Articles of iron and steel

This chapter contributes 4.0 percent of the total weight. In the second quarter of 2022 , the index for "Articles of iron and steel" marginally increased by 0.1 percent to 121.0 from 121.2 recorded in the first quarter. When compared to the corresponding quarter of 2021, the index rose by 12.4 percent.

Chapter 84: Nuclear reactors, boilers, machinery and mechanical appliance and parts

The chapter accounts for 15.2 percent of the total weight of imported commodities. The index increased by 1.2 percent to 119.7 in the second quarter of 2022 from 118.3 in the preceding
quarter of 2022. However, when compared to the same quarter of 2021, the index increased by 1.6 percent.

## Chapter 85: Electrical machinery equipment and parts thereof

The index for "Electrical machinery equipment and parts thereof", which accounts for 10.8 percent of the total weight, increased by 1.4 percent to 112.0 in the second quarter of 2022 compared to 110.4 recorded in the previous quarter. The increase is a result of the decline in supply due to high metal input costs. Similarly, when compared to the same quarter of 2021, the index increased by 3.1 percent.

## Chapter 87: Vehicles other than railway/transport ways roll-stock

The index for "vehicles other than railway/transport ways roll-stock" which accounts for 14.4 percent of total weight, increased marginally to 110.5 in the second quarter of 2022 from 109.6 recorded in the previous quarter. Likewise, when compared to the corresponding quarter of 2021, the index increased by 0.9 percent.

Chapter 90: Optical, photo, cine, meas, checking, precision, etc.
This chapter accounts for 2.1 percent of the total weight. During the second quarter of 2022, the index increased slightly by 0.1 percent to 90.2 from 90.1 recorded in the first quarter. However, when compared with the similar quarter of 2021, the index decreased marginally.

## Terms of Trade

The Terms of Trade Index is the ratio of Export Price Index to Import Price Index. The Exports Price Index was mostly influenced by world market prices of edible oil and oil seeds while the Imports Price Index was driven by prices of petroleum products, cereals, and fertilisers. Overall, during the second quarter of 2022, Terms of Trade remained favourable, albeit decreasing by 2.2 percentage point to 100.5 from 102.7 recorded in the first quarter of 2022 (Table 3). This implies that for every unit of goods exported, the country can obtain more units of imports. Nonetheless, the country's competitiveness in the global market has decreased as a result of sharp increase in import prices.

Table 3: Quarterly Terms of Trade (Q4 2017 = 100)

|  | $\mathbf{2 0 2 0}$ |  |  |  |  | $\mathbf{2 0 2 1}$ |  |  |  | $\mathbf{2 0 2 2}$ |  |
| :--- | :---: | :---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indices | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |  |
| EXPI | 104.1 | 104.2 | 106.2 | 105.9 | 108.5 | 109.4 | 111.3 | 113.6 | 115.1 | 117.7 |  |
| MPI | 100.0 | 96.9 | 98.0 | 98.3 | 101.9 | 103.1 | 107.6 | 109.9 | 112.1 | 117.1 |  |
| TOT | 104.1 | 107.5 | 108.4 | 107.7 | 106.5 | 106.1 | 103.5 | 103.4 | 102.7 | 100.5 |  |

## Note;

Q1=January-March, Q2=April-June, Q3=July-September, Q4=October-December
XPI = Export Price Index
MPI = Import Price Index
ToT = Terms of Trade

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