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## STATISTICAL RELEASE

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### EXPORT AND IMPORT PRICE INDICES FOR THE QUARTER ENDING JUNE, 2021

#### 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 Index (XMPI), which are compiled on quarterly bases, 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 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

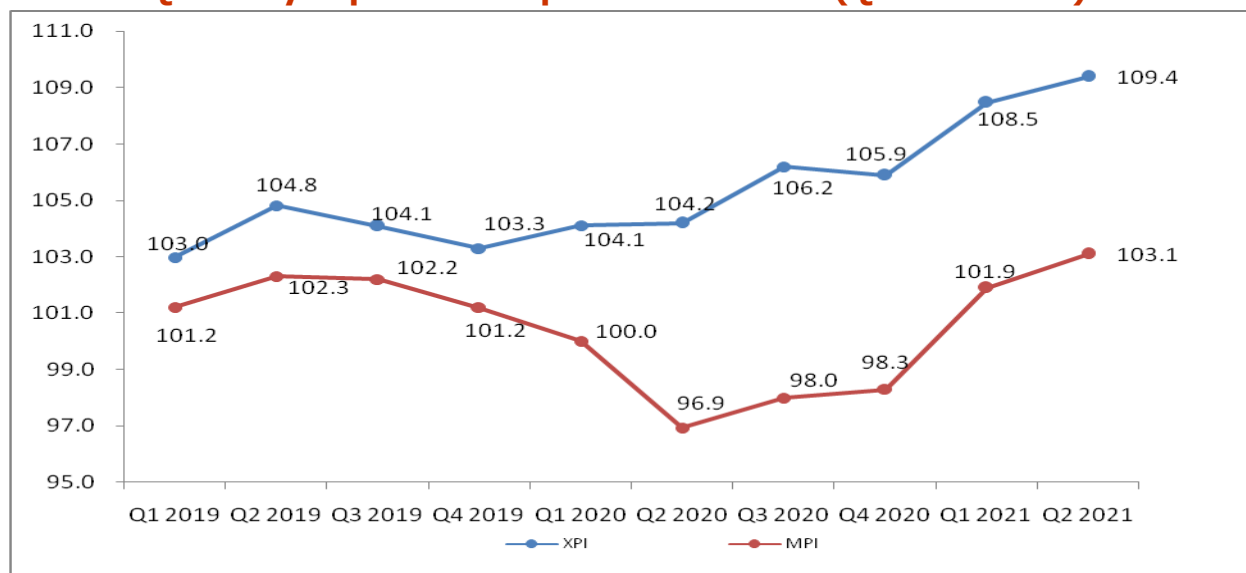
The products are classified according to the United Nations Harmonized Commodity Description and Coding System (HS). The HS is an international nomenclature for the classification of products.

## 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. 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 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 trend of XPI and MPI in the selected quarters.

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



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 of 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, oleaginous 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 2021 increased slightly by 0.9 percent to 109.4 compared to 108.5 recorded in the first quarter. This development was largely attributed by the increase in world market prices of frozen fillet and Nile perch. Likewise, when compared to the corresponding quarter of 2020 the export price index increased by 5.0 percent (**Table 1**).

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

HS Code	Description	Weight	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	% Change Previous Quarter	% Change the same quarter last year
<b>Overall</b>		<b>100</b>	<b>104.2</b>	<b>106.2</b>	<b>105.9</b>	<b>108.5</b>	<b>109.4</b>	<b>0.9</b>	<b>5.0</b>
03	Fish & crustacean, mollusc & other aquatic ir	6.2	95.2	94.3	95.0	97.8	111.8	14.4	17.4
07	Edible vegetables and certain roots and tube	11.4	106.7	109.2	109.3	107.0	106.3	-0.6	-0.4
08	Edible fruit and nuts; peel of citrus fruit or m	17.4	72.0	72.2	70.5	68.7	68.7	0.0	-4.6
09	Coffee, tea, mate and spices	4.3	86.1	94.6	94.5	104.9	104.6	-0.3	21.5
12	Oil seed, oleaginous fruits; miscell grain, seed, fru	4.2	136.3	136.7	136.7	136.7	126.2	-7.7	-7.4
15	Animal/veg fats & oil & their cleavage produ	7.4	109.5	109.7	109.7	107.9	107.9	0.0	-1.4
23	Residues & waste from the food indust; prep	6.2	99.6	97.6	100.2	104.8	108.8	3.8	9.2
24	Tobacco and manufactured tobacco substit	5.9	104.1	105.4	105.5	104.3	104.5	0.3	0.4
52	Cotton	1.0	101.3	106.3	107.6	107.8	109.8	1.9	8.4
56	Wadding, felt & nonwoven; yarns; twine, cor	4.9	103.6	103.7	100.1	106.9	107.3	0.3	3.6
70	Glass and glassware	2.2	110.1	110.9	108.5	117.0	118.3	1.1	7.5
71	Natural/cultured pearls, prec stones & metal	28.9	125.8	134.1	133.5	137.9	138.4	0.4	10.1

*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 in order to widen the understanding of the sources of changes.

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

The index for "Fish and crustacean, mollusk and other aquatic invertebrate" which account for 6.2 percent of the total weight, increased by 14.4 percent in the second quarter of 2021 to 111.8 from 97.8 recorded in the first quarter. The performance was largely attributed by the increase in the prices of frozen fillet and Nile perch. Similarly, when compared to the corresponding quarter of 2020 the index increased by 17.4 percent.

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

This chapter contributed 11.4 percent of the total weight of the exported commodities and the index for this chapter decreased slightly by 0.6 percent to 106.3 in the second quarter of 2021 from 107.0 recorded in the previous quarter, largely attributed by the decrease in the world-market prices of the pigeon peas. Likewise, when compared to the same quarter in the previous year, the index decreased slightly by 0.4 percent.

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

The export price index for "Edible fruits and nuts", which accounts for 17.4 percent of the total weight, remained unchanged at 68.7 in the second quarter of 2021. When compared with the same quarter in the previous year, the index has decreased by 4.6 percent.

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

This chapter contributed 4.3 percent of the total weight of exported commodities. During the first quarter of 2021, the index for "coffee, tea, mate and spices" decreased slightly by 0.3 percent to 104.6 from 104.9 recorded in the first quarter of 2021, largely associated with the world-market prices of tea (Mombasa) in the world market. Nonetheless, when compared to the corresponding quarter of last year, the index increased by 21.5 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 first quarter of 2021, the index for "Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder" decreased by 7.7 percent to 126.2 from 136.7 recorded in the previous quarter. The performance was largely associated to the decrease in prices of sesame seeds in the world market. Likewise, when compared to the same quarter in the previous year, the index decreased by 7.4 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", which accounts for 7.4 percent of the total weight, remained unchanged at 107.9 as recorded in the previous quarter. When compared to the same quarter in the previous year, the index decreased by 1.4 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", which accounts for 6.2 percent of the total weight, increased by 3.8 percent to 108.8 in the second quarter of 2021 from 104.8 recorded in the previous quarter. The performance was mainly attributed by the increase in prices of cotton and sunflower seed meals due to decline in global supply. Likewise, when compared to the same quarter of 2019 the index increased by 9.2 percent.

## **Chapter 24: Tobacco and manufactured tobacco substitutes**

This chapter accounts for 5.9 percent of the total weight. During the second quarter of 2021, the index increased marginally by 0.3 percent to 104.5 from 104.3 recorded in the previous quarter, largely associated with the increase in prices of manufactured tobacco. Likewise, when compared to the similar quarter in the previous year, the index increased slightly by 0.4 percent.

## **Chapter 52: Cotton**

During the first quarter of 2021 the export price index for "Cotton", which accounts for 1.0 percent of the total weight, increased by 1.9 percent to 109.8 compared to 107.8 recorded in the first quarter of 2021. The performance is explained by the increase in world market

prices of cotton owing to lower supplies as a result of reduced plantings in the United States of America (USA), India and Pakistan. Similarly, when compared with the same quarter in the preceding year the index increased by 8.4 percent.

### **Chapter 56: Wadding, felt & nonwoven; yarns; twine, cordage, etc**

This chapter contributed 4.9 percent of the total weight of exported commodities. During the first quarter of 2021 “Wadding, felt & nonwoven; yarns; twine, cordage, etc” increased slightly by 0.3 percent to 107.3 from 106.9 recorded in the previous quarter, largely associated with the increase in world market prices of sisal yarn. Likewise, when compared to the same quarter in the previous year, the index increased by 3.6 percent.

### **Chapter 70: Glass and glassware**

During the second quarter of 2021, the export price index for “Glass and glassware”, which accounts for 2.2 percent of the total weight increased by 1.1 percent to 118.3 from 117.0 recorded in the preceding quarter. The performance is explained by the increase in world market prices of empty bottles. Likewise, when compared to the similar quarter in the previous year, the index increased by 7.5 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 account for 28.9 percent of the total weight of exported commodities increased slightly by 0.4 percent to 138.4 in the second quarter of 2021 from 137.9 recorded in the previous quarter. The performance was mainly associated in the increase in the world-market price of gold. Likewise, when compared to the same quarter of 2020 the index increased by 10.1 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) Fertilizers, (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 equipments 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 2021 increased by 1.2 percent to 103.1 from 101.9 recorded in the first quarter, mainly due to higher prices of iron, steel and petroleum products. Likewise, when compared to the same quarter of 2020, the index increased by 6.3 percent (**Table 2**).

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

HS Code	Description	Weight	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	% Change Previous Quarter	% Change same Quarter last year
<b>Overall</b>		<b>100.0</b>	<b>96.9</b>	<b>98.0</b>	<b>98.3</b>	<b>101.9</b>	<b>103.1</b>	<b>1.2</b>	<b>6.3</b>
10	Cereals	4.1	109.9	106.9	110.3	119.0	120.1	0.9	9.3
15	Animal/veg fats & oil & their cleavage product	4.2	98.0	98.2	98.3	98.3	98.3	0.0	0.3
27	Mineral fuels, oils & product of their distillate	21.7	56.0	69.3	68.9	83.7	87.5	4.6	56.3
30	Pharmaceutical products	5.2	103.7	103.9	104.6	104.7	104.7	0.0	1.0
31	Fertilisers	1.8	102.4	103.2	103.8	107.1	109.5	2.2	6.9
38	Miscellaneous chemical products	2.0	90.9	88.8	89.3	97.8	96.9	-0.9	6.7
39	Plastics and articles thereof	6.2	92.2	93.9	96.1	104.2	109.7	5.3	19.0
40	Rubber and articles thereof	2.8	100.1	103.5	98.3	96.4	93.2	-3.3	-6.9
72	Iron and steel	5.3	87.1	84.5	82.6	84.1	88.9	5.7	2.1
73	Articles of iron and steel	4.0	104.5	105.4	105.4	107.8	107.8	0.0	3.2
84	Nuclear reactors, boilers, mchy & mech applia	15.2	116.1	116.0	117.4	117.1	117.7	0.5	1.5
85	Electrical mchy equip parts thereof; sound rec	10.9	103.6	104.4	107.2	108.1	108.7	0.5	5.0
87	Vehicles o/t railw/tranw rool-stock, pts & acc	14.4	102.0	102.8	103.5	106.9	109.5	2.4	7.3
90	Optical, photo, cine, meas, checking, prec	2.1	90.6	90.9	90.8	91.4	90.6	-0.8	0.0

*1=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 2021, the import price index for "Cereals" increased slightly by 0.9 percent to 120.1 from 119.0 recorded in the previous quarter, largely associated with the increase in world-market prices

of wheat. Likewise, when compared to the same quarter in the previous year the index increased by 9.3 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 2021, the index remained unchanged at 98.3. When compared to the same quarter in the preceding year, the index increased slightly by 0.3 percent.

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

During the second quarter of 2021, 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 4.6 percent to 87.5 from 83.7 recorded in the first quarter. The performance was largely attributed by the increase in imports prices of petroleum products in the global market. However, when compared to the similar quarter of 2020 the index increased by 56.3 percent.

### **Chapter 30: Pharmaceutical products**

The index for “Pharmaceutical products” which represent about 5.2 percent of the total weight remained unchanged at 104.7 in the second quarter of 2021. When compared to the same quarter in the previous year, the index increased by 1.0 percent.

### **Chapter 31: Fertilizers**

The index for “Fertilizers” which accounts for 1.8 percent of the total weight of the imported commodities index increased by 2.2 percent to 109.5 in the second quarter of 2021 from 107.1 recorded in the previous quarter. The performance was largely driven by increase in world market prices of fertilizers, driven by strong demand and higher input costs. Likewise, when compared to the same quarter in the previous year the index increased by 6.9 percent.

### **Chapter 38: Miscellaneous chemical products**

The index for “Miscellaneous chemical products” which accounts for 2.0 percent of the total weight decreased slightly by 0.9 percent in the second quarter of 2021 to 96.9 from 97.8 recorded in the first quarter. However, when compared to the similar quarter last year, the index increased by 6.7 percent.



### **Chapter 39: Plastics and articles thereof**

This chapter contributes 6.2 percent to the total weight of imported commodities. The index increased by 5.3 percent to 109.7 in the second quarter of 2021 from 104.2 recorded in the previous quarter. The performance was mainly driven by the increase in the prices of plastic raw materials. Likewise, when compared to the corresponding quarter in 2020, the index increased by 19.0 percent.

### **Chapter 40: Rubber and articles thereof**

In the second quarter of 2021, the index for "Rubber and articles thereof" which contributes 2.8 percent to the total weight of imported commodities, decreased by 3.3 percent to 93.2 from 96.4 recorded in the first quarter. The performance was largely attributed by the decrease in prices of tyres. Similarly, when compared to the same quarter in the previous year the index decreased slightly by 6.9 percent.

### **Chapter 72: Iron and steel**

During the second quarter of 2021, the index for "Iron and steel", which accounts for 5.3 percent of the total weight, increased by 5.7 percent to 88.9 from 84.1 recorded in the first quarter. This was largely attributed by the increase in prices of hot rolled steel sheets in coils. Likewise, the index increased by 2.1 percent when compared to the similar quarter of 2020.

### **Chapter 73: Articles of iron and steel**

This chapter contributes 4.0 percent of the total weight. During the second quarter of 2021, the index for "Articles of iron and steel" remained at 107.8. When compared to the same quarter in 2020, the index increased by 3.2 percent.

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

The index for "Boilers, machinery and machinery appliance" which accounts for 15.2 percent of total weight of imported commodities increased slightly by 0.5 percent to 117.7 in the second quarter of 2021 from 117.1 recorded in the previous quarter. Likewise, when compared with the corresponding quarter of 2020 the index increased by 1.5 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 slightly by 0.5 percent to 108.7 in the second quarter of 2021 from 108.1 attained in the previous quarter. Likewise, when compared to the same quarter in 2020, the index increased by 5.0 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 by 2.4 percent to 109.5 in the second quarter of 2021 from 106.9 recorded in the previous quarter. The performance was largely explained by the increase in prices of various brands of motor vehicles and trucks. Likewise, when compared to the same quarter in the previous year the index increased by 7.3 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 2021, the index decreased slightly by 0.8 percent to 90.6 from 91.4 recorded in the previous quarter. When compared to the similar quarter last year, the index remained unchanged.

### Terms of Trade

The Terms of Trade Index is the ratio of Export Price Index to Import Price Index. Export Price Index was mostly influenced by world market prices of frozen fillet and Nile perch, while Imports Price Index was driven by prices of iron, steel and petroleum products. Overall, during the second quarter of 2021, Terms of Trade remained favourable though decreased by 0.4 points to 106.1 from 106.5 recorded in the first quarter (**Table 3**).

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

Indices	2019				2020				2021	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
EXPI	103	104.8	104.1	103.3	104.1	104.2	106.2	105.9	108.5	109.4
MPI	101.2	102.3	102.2	101.2	100	96.9	98	98.3	101.9	103.1
TOT	101.8	102.4	101.9	102.1	104.1	107.5	108.4	107.7	106.5	106.1

**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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