



REPUBLIC OF RWANDA



# CONSUMER PRICE INDEX (CPI)

## OCTOBER 2016

10 November 2016

## 1. Summary

This is the monthly publication of the Consumer Price Index for the month of October 2016. The Urban CPI will be the focus of the publication as it is the headline index for monetary policy purposes.

### 1.1. Urban Index

The Urban CPI increased by 7.4 percent on annual basis and increased by 1.4 percent on a monthly basis. The annual average rate between October 2016 and October 2015 is 5.4 percent.

### 1.2. Rural Index

The Rural CPI increased by 10.0 percent on an annual basis, and increased by 4.0 percent on a monthly basis.

### 1.3. Overall Rwanda Index

The Rwanda CPI increased by 9.1 percent on an annual basis, and increased by 3.1 percent on a monthly basis.

	percentage change on the same period 12 months earlier:												
	2015			2016									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	Jul.	Aug.	Sep.	Oct.
Urban CPI Annual change	2.9	4.8	4.5	4.5	4.4	4.6	4.7	4.6	5.5	6.9	6.4	5.8	7.4
Rural CPI Annual change	6.8	9.0	8.0	7.7	7.1	6.5	4.3	4.3	6.7	8.3	8.1	8.3	10.0
Rwanda CPI Annual change	5.5	7.5	6.8	6.6	6.1	5.8	4.4	4.4	6.3	7.8	7.5	7.4	9.1
Urban CPI Monthly change	-0.1	1.1	-0.5	-0.5	0.4	0.9	0.8	0.5	0.9	1.1	0.5	0.5	1.4
Rural CPI Monthly change	2.3	0.2	-2.7	-1.5	0.8	1.9	0.6	-0.2	1.1	1.4	1.9	2.3	4.0
Rwanda CPI Monthly change	1.5	0.5	-2.0	-1.2	0.7	1.6	0.7	0.0	1.0	1.3	1.4	1.7	3.1

Source: NISR

## 2. Urban Consumer Price Index

The Urban Consumer Price Index is calculated based on approximately 1022 products in twelve urban centres of Rwanda. The table below shows the monthly and annual change in October 2016 for the main categories of the urban index.

Code	Categories	Weights	Percentage change in Oct. 2016	
			on Sep. 2016	on Oct. 2015
	<b>GENERAL INDEX</b>	<b>100%</b>	<b>1.4%</b>	<b>7.4%</b>
01	Food and non-alcoholic beverages	28%	4.8%	16.3%
01.1.1	Bread and cereals	5%	2.0%	5.8%
01.1.2	Meat	2%	0.9%	3.8%
01.1.4	Milk cheese and eggs	2%	0.2%	3.6%
01.1.7	Vegetables	10%	5.2%	26.7%
01.2	Non-alcoholic beverages	1%	2.3%	12.3%
02	Alcoholic beverages tobacco and narcotics	3%	-0.4%	-0.4%
03	Clothing and footwear	4%	1.4%	3.9%
04	Housing water, electricity, gas and other fuels	23%	0.2%	1.3%
05	Furnishings household equipment and routine household maintenance	4%	1.2%	3.8%
06	Health	1%	0.3%	0.8%
07	Transport	18%	-1.1%	7.9%
08	Communication	3%	0.0%	8.3%
09	Recreation and culture	2%	-0.3%	5.3%
10	Education	6%	0.0%	2.3%
11	Restaurants and hotels	4%	-0.2%	5.6%
12	Miscellaneous goods and services	4%	-1.3%	0.7%

Source: NISR

The Urban CPI increased by 7.4 percent in October 2016 compared to the same month of the previous year. This is mainly due to the rising prices of 'Food and non-alcoholic beverages' 16.3 percent, 'Housing water, electricity, gas and other fuels' 1.3 percent and 'Transport' 7.9 percent.

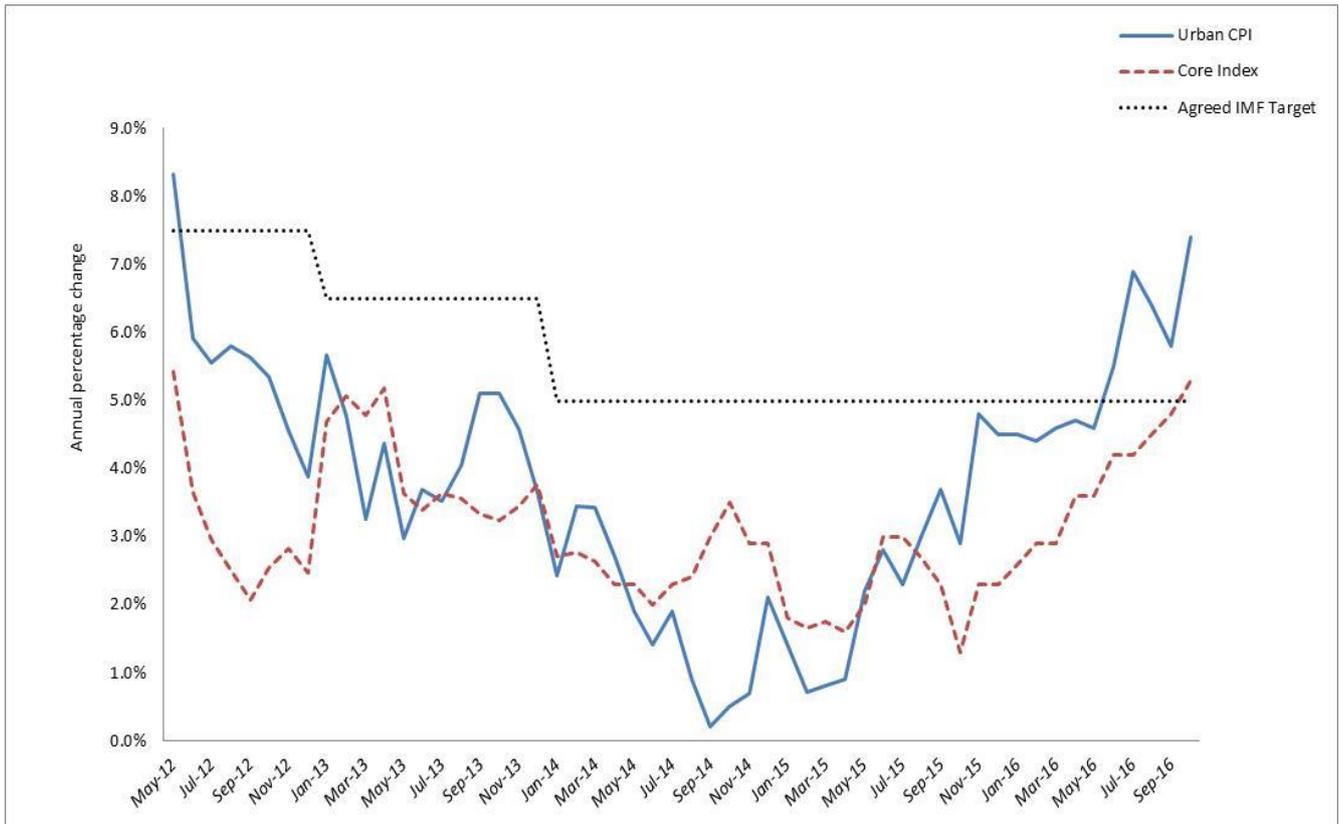
The monthly CPI increased by 1.4 percent in October 2016. 'Food and non-alcoholic beverages' increased by 4.8 percent.

The underlying inflation rate (excluding fresh food and energy) increased by 0.1 percent when compared to September 2016 and increased by 5.3 percent when compared to October 2015. The annual average underlying inflation rate is 3.6 percent.

	2015			2016									
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June	Jul.	Aug.	Sep.	Oct.
General index	2.0	2.3	2.5	2.8	3.1	3.4	3.7	3.9	4.1	4.5	4.8	5.0	5.4
Core / Underlying index	2.2	2.2	2.1	2.2	2.3	2.4	2.6	2.7	2.8	2.9	3.1	3.3	3.6

Source: NISR

**Figure 1: Annual changes in urban CPI (May 2012 – October 2016)**



### 3. Other selected urban indices

In this section, we present five selected urban indices - the local goods index, the imported goods index, the fresh products index, the energy index and the core index.

On an annual basis, the local goods index increased by 7.8 percent, the imported goods index increased by 6.3 percent, the fresh products index increased by 18.8 percent, the energy index increased by 0.7 percent and the core index or the general index excluding fresh products and energy increased by 5.3 percent.

On a monthly basis, the local goods index increased by 1.8 percent; the imported goods index was stable, the fresh products index increased by 6.2 percent, the energy index increased by 0.6 percent and the core index increased by 0.1 percent.

<b>TABLE 4: Consumer Price Index (Urban only), Core &amp; other</b>				
<b>Categories</b>	<b>Weights</b>	<b>Percentage change in Oct. 2016</b>		
		<b>on Sep. 2016</b>	<b>on Oct. 2015</b>	
<b>GENERAL INDEX</b>	<b>100%</b>	<b>1.4%</b>	<b>7.4%</b>	
<b>Local Goods Index</b>	<b>74%</b>	<b>1.8%</b>	<b>7.8%</b>	
Food and non-alcoholic beverages	23%	5.4%	18.8%	
Housing, water, electricity, gas and other fuels	23%	0.3%	1.4%	
Transport	7%	0.0%	6.0%	
<b>Imported Goods Index</b>	<b>26%</b>	<b>0.0%</b>	<b>6.3%</b>	
Food and non-alcoholic beverages	5%	1.6%	5.6%	
Furnishing, household equipment	2%	1.5%	1.5%	
Transport	11%	-1.7%	9.1%	
<b>Fresh Products index<sup>1</sup></b>	<b>17%</b>	<b>6.2%</b>	<b>18.8%</b>	
<b>Energy index</b>	<b>8%</b>	<b>0.6%</b>	<b>0.7%</b>	
<b>General Index excluding fresh Products and energy<sup>2</sup></b>	<b>75%</b>	<b>0.1%</b>	<b>5.3%</b>	

*Source: NISR*

(1) Fresh products are food products which have seasonal fluctuations

(2) Proxy for underlying inflation

#### 4. Methodological notice

The Consumer Price Index (CPI) is a measure of the average change over time of goods and services purchased by households. The CPI uses a Modified Laspeyres formula to calculate the index. The reference population for the CPI consists of all households, urban and rural in Rwanda.

The household basket includes 1,022 products sold in many places spread all over the country. A variety of places of observation are selected: shops, markets, hospitals, schools etc. More than 25,392 prices in urban areas and 8,329 in rural areas are collected every month.

The weights used for the index are from the result of the Household Living Conditions Survey (EICVIII) conducted in 2010-2011 with a sample of 14,308 households.

##### 4.1. How to Interpret the CPI

Movements of the indices from one month to another usually are expressed as percentage changes rather than changes in index points. The level of the index (relative to its base period) affects index point changes, but it does not affect percent changes.

The following example illustrates how to calculate percentage changes:

*Index point change*

CPI 178

Less CPI for previous period 176

Equals index point change                    2

*Percent change*

Index point difference                    2

Divided by the previous index            176

Equals    0.011

Results multiplied by 100             $0.011 \times 100$

Equals percent change                    1.1

## 6. Annexes: Reference Tables

<b>Annex 1: Consumer Price Index, Urban</b>									
Code	Categories	Weights	Index (Feb 2014=100)			Percentage change in Oct. 2016		Contributions <sup>1</sup> :	
			Oct-15	Sep-16	Oct-16	on Sep. 2016	on Oct. 2015	1 month	12 months
	<b>GENERAL INDEX</b>	100%	104.7	110.9	<b>112.5</b>	<b>1.4%</b>	<b>7.4%</b>	<b>1.4%</b>	<b>7.4%</b>
01	Food and non-alcoholic beverages	28%	108.4	120.4	<b>126.1</b>	4.8%	16.3%	1.5	4.8
01.1.1	Bread and cereals	5%	106.2	110.2	<b>112.4</b>	2.0%	5.8%	0.1	0.3
01.1.2	Meat	2%	106.6	109.6	<b>110.6</b>	0.9%	3.8%	0.0	0.1
01.1.4	Milk cheese and eggs	2%	103.4	107.0	<b>107.2</b>	0.2%	3.6%	0.0	0.1
01.1.7	Vegetables	10%	117.4	141.3	<b>148.7</b>	5.2%	26.7%	0.7	3.0
01.2	Non-alcoholic beverages	1%	101.9	111.9	<b>114.5</b>	2.3%	12.3%	0.0	0.2
02	Alcoholic beverages tobacco and narcotics	3%	113.5	113.5	<b>113.1</b>	-0.4%	-0.4%	0.0	0.0
03	Clothing and footwear	4%	103.7	106.3	<b>107.8</b>	1.4%	3.9%	0.1	0.2
04	Housing water, electricity, gas and other fuels	23%	106.6	107.7	<b>108.0</b>	0.2%	1.3%	0.1	0.3
05	Furnishings household equipment and routine household maintenance	4%	103.5	106.1	<b>107.4</b>	1.2%	3.8%	0.0	0.2
06	Health	1%	100.0	100.5	<b>100.8</b>	0.3%	0.8%	0.0	0.0
07	Transport	18%	98.4	107.3	<b>106.2</b>	-1.1%	7.9%	-0.2	1.3
08	Communication	3%	100.2	108.5	<b>108.5</b>	0.0%	8.3%	0.0	0.2
09	Recreation and culture	2%	106.0	111.8	<b>111.5</b>	-0.3%	5.3%	0.0	0.1
10	Education	6%	100.5	102.8	<b>102.8</b>	0.0%	2.3%	0.0	0.1
11	Restaurants and hotels	4%	102.1	108.0	<b>107.8</b>	-0.2%	5.6%	0.0	0.2
12	Miscellaneous goods and services	4%	103.8	105.9	<b>104.6</b>	-1.3%	0.7%	0.0	0.0

Source: NISR  
 (1) "Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

## Annex 2: Consumer Price Index, Rural

Code	Categories	Weights	Index (Feb 2014=100)			Percentage change in Oct. 2016		Contributions <sup>1</sup> :	
			Oct-15	Sep-16	Oct-16	on Sep. 2016	on Oct. 2015	1 month	12 months
	<b>GENERAL INDEX</b>	100%	110.5	116.9	<b>121.6</b>	<b>4.0%</b>	<b>10.0%</b>	<b>4.0%</b>	<b>10.0%</b>
01	Food and non-alcoholic beverages	53%	117.6	128.3	<b>136.9</b>	6.7%	16.5%	3.9	9.2
01.1.1	Bread and cereals	7%	104.6	111.0	<b>118.1</b>	6.4%	13.0%	0.4	0.8
01.1.2	Meat	2%	107.3	115.4	<b>115.8</b>	0.3%	8.0%	0.0	0.1
01.1.4	Milk cheese and eggs	1%	100.9	102.2	<b>105.9</b>	3.6%	4.9%	0.0	0.1
01.1.7	Vegetables	30%	129.9	144.8	<b>154.7</b>	6.8%	19.1%	2.5	6.7
01.2	Non-alcoholic beverages	1%	100.7	109.5	<b>108.8</b>	-0.6%	8.1%	0.0	0.1
02	Alcoholic beverages tobacco and narcotics	4%	112.5	112.5	<b>112.8</b>	0.2%	0.3%	0.0	0.0
03	Clothing and footwear	5%	101.2	104.3	<b>105.5</b>	1.2%	4.2%	0.1	0.2
04	Housing water, electricity, gas and other fuels	18%	101.3	102.8	<b>103.0</b>	0.2%	1.7%	0.0	0.3
05	Furnishings household equipment and routine household maintenance	3%	103.7	103.5	<b>104.2</b>	0.7%	0.5%	0.0	0.0
06	Health	1%	103.1	102.1	<b>102.6</b>	0.5%	-0.4%	0.0	0.0
07	Transport	6%	100.1	100.1	<b>99.9</b>	-0.2%	-0.3%	0.0	0.0
08	Communication	2%	100.0	100.0	<b>100.0</b>	0.0%	0.0%	0.0	0.0
09	Recreation and culture	1%	101.8	101.9	<b>102.6</b>	0.6%	0.8%	0.0	0.0
10	Education	3%	105.7	108.2	<b>108.2</b>	0.0%	2.4%	0.0	0.1
11	Restaurants and hotels	2%	101.0	103.0	<b>105.2</b>	2.1%	4.1%	0.0	0.1
12	Miscellaneous goods and services	3%	102.3	110.8	<b>107.8</b>	-2.7%	5.4%	-0.1	0.1

Source: NISR

(1) "Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

### Annex 3: Consumer Price Index, All Rwanda

Code	Categories	Weights	Index (Feb 2014=100)			Percentage change in Oct. 2016		Contributions <sup>1</sup> :	
			Oct-15	Sep-16	Oct-16	on Sep. 2016	on Oct. 2015	1 month	12 months
00	<b>GENERAL INDEX</b>	100%	108.4	114.8	<b>118.4</b>	<b>3.1%</b>	<b>9.1%</b>	<b>3.1%</b>	<b>9.1%</b>
01	Food and non-alcoholic beverages	44%	115.5	126.5	<b>134.5</b>	6.3%	16.4%	3.1	7.7
01.1.1	Bread and cereals	6%	105.1	110.8	<b>116.4</b>	5.1%	10.8%	0.3	0.7
01.1.2	Meat	2%	107.0	113.1	<b>113.7</b>	0.5%	6.3%	0.0	0.1
01.1.4	Milk cheese and eggs	1%	102.0	104.2	<b>106.4</b>	2.1%	4.4%	0.0	0.1
01.1.7	Vegetables	23%	127.9	144.3	<b>153.8</b>	6.6%	20.2%	1.9	5.4
01.2	Non-alcoholic beverages	1%	101.2	110.5	<b>111.2</b>	0.6%	9.9%	0.0	0.1
02	Alcoholic beverages tobacco and narcotics	4%	112.7	112.8	<b>112.8</b>	0.1%	0.1%	0.0	0.0
03	Clothing and footwear	5%	102.0	104.9	<b>106.2</b>	1.2%	4.1%	0.1	0.2
04	Housing water, electricity, gas and other fuels	20%	103.5	104.8	<b>105.0</b>	0.2%	1.5%	0.0	0.3
05	Furnishings household equipment and routine household maintenance	4%	103.6	104.6	<b>105.5</b>	0.9%	1.8%	0.0	0.1
06	Health	1%	101.6	101.3	<b>101.7</b>	0.4%	0.2%	0.0	0.0
07	Transport	10%	99.0	104.7	<b>103.9</b>	-0.8%	4.9%	-0.1	0.4
08	Communication	2%	100.1	104.0	<b>104.0</b>	0.0%	3.9%	0.0	0.1
09	Recreation and culture	1%	104.1	107.5	<b>107.6</b>	0.1%	3.3%	0.0	0.0
10	Education	4%	102.8	105.2	<b>105.2</b>	0.0%	2.3%	0.0	0.1
11	Restaurants and hotels	3%	101.5	105.4	<b>106.5</b>	1.0%	4.8%	0.0	0.1
12	Miscellaneous goods and services	3%	102.9	108.7	<b>106.4</b>	-2.1%	3.3%	-0.1	0.1

Source: NISR

(1) "Contributions" take into account both the growth rate and the relative weight of each category to explain the percentage change observed.

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