



REPUBLIC OF RWANDA



CONSUMER PRICE INDEX (CPI)

DECEMBER 2018

10 January 2019

1. Summary

This is the monthly publication of the Consumer Price Index (CPI) for the month of December 2018. Urban CPI will be the focus of the publication as it is the headline index for monetary policy purposes.

1.1. Urban Index

Urban CPI increased by 1.1 percent on annual basis and decreased by 0.2 percent on monthly basis. The annual average rate between December 2018 and December 2017 was 1.4 percent.

1.2. Rural Index

Rural CPI decreased by 0.6 percent on annual basis and decreased by 1.3 percent on monthly basis.

1.3. Overall Rwanda Index

Rwanda CPI increased by 0.1 percent on annual basis and decreased by 0.8 percent on monthly basis.

	2017		2018										
	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Urban CPI Annual change	0.7	1.3	0.7	0.9	1.7	3.0	2.9	2.0	2.1	1.2	-0.6	0.1	1.1
Rural CPI Annual change	-1.0	-0.9	-2.7	-2.9	-1.3	0.9	0.4	-0.3	-0.6	-2.7	-5.4	-1.8	-0.6
Rwanda CPI Annual change	-0.2	0.1	-1.3	-1.4	-0.1	1.8	1.4	0.6	0.6	-1.1	-3.4	-1.0	0.1
Urban CPI Monthly change	-1.2	0.2	0.6	0.7	1.3	1.1	-0.9	-1.0	0.4	0.2	-0.6	-0.5	-0.2
Rural CPI Monthly change	-2.5	-0.2	0.5	1.3	2.4	0.8	-1.7	-0.6	0.6	-0.3	-1.4	-0.6	-1.3
Rwanda CPI Monthly change	-1.9	0.0	0.5	1.1	1.9	0.9	-1.4	-0.8	0.5	-0.1	-1.0	-0.5	-0.8

Source: NISR

2. Urban Consumer Price Index

Urban CPI is calculated based on approximately 1,622 products in twelve urban centres of Rwanda. Table below shows the monthly and annual changes in December 2018 for the main categories of the urban index.

Code	Categories	Weights	Percentage change in Dec. 2018	
			on Nov. 2018	on Dec. 2017
	GENERAL INDEX	100%	-0.2%	1.1%
01	Food and non-alcoholic beverages	27%	-0.7%	-4.1%
01.1.1	Bread and cereals	5%	0.1%	-2.7%
01.1.2	Meat	2%	-0.4%	4.5%
01.1.4	Milk cheese and eggs	1%	0.8%	-0.1%
01.1.7	Vegetables	9%	-2.9%	-5.6%
01.2	Non-alcoholic beverages	1%	0.0%	4.2%
02	Alcoholic beverages tobacco and narcotics	5%	0.0%	7.0%
03	Clothing and footwear	5%	0.3%	2.5%
04	Housing water, electricity, gas and other fuels	21%	-0.1%	2.5%
05	Furnishings household equipment and routine household maintenance	4%	0.2%	4.1%
06	Health	1%	0.0%	0.2%
07	Transport	12%	0.1%	9.5%
08	Communication	3%	0.0%	0.1%
09	Recreation and culture	3%	0.0%	-2.6%
10	Education	3%	0.0%	1.3%
11	Restaurants and hotels	9%	0.0%	-0.4%
12	Miscellaneous goods and services	6%	-0.1%	2.7%

Source: NISR

Urban CPI increased by 1.1 percent in December 2018 compared to the same month of 2017. This was mainly due to the increase of 2.5 percent in prices of 'Housing water, electricity, gas and other fuels' and 9.5 percent in prices of 'Transport'.

Monthly CPI decreased by 0.2 percent in December 2018. This is mainly due to 'Food and non-alcoholic beverages' which decreased by 0.7 percent.

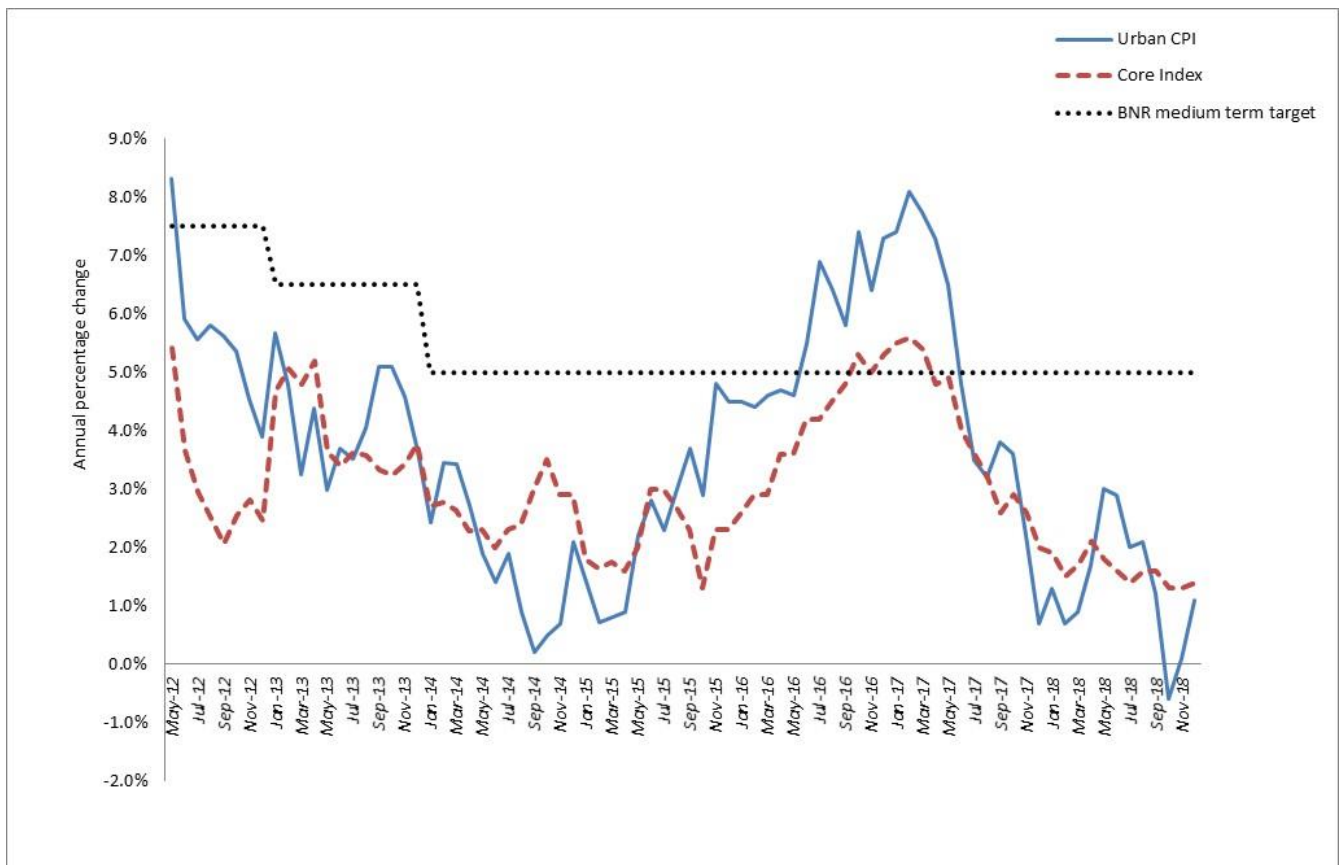
The underlying inflation rate (excluding fresh food and energy) increased by 0.1 percent when compared to November 2018 and increased by 1.4 percent when compared to December 2017 (See Table 4).

The annual average inflation rate between December 2018 and December 2017 is 1.4 percent. The annual average underlying inflation rate is 1.6 percent.

	percentage change on the same period 12 months earlier:												
	2017 2018												
	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
General index	4.8	4.3	3.7	3.2	2.7	2.4	2.3	2.2	2.1	1.9	1.5	1.3	1.4
Core / Underlying index	3.9	3.6	3.3	3.0	2.7	2.5	2.3	2.1	2.0	1.9	1.7	1.6	1.6

Source: NISR

Figure 1: Annual changes in urban CPI (May 2012 – December 2018)



3. Other selected urban indices

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

On annual basis, local goods index increased by 0.5 percent, imported goods index increased by 3.4 percent, fresh products index decreased by 2.5 percent, energy index increased by 6.8 percent and core index or general index excluding fresh products and energy increased by 1.4 percent.

On a monthly basis, local goods index decreased by 0.3 percent; imported goods index increased by 0.2 percent, fresh products index decreased by 1.5 percent, energy index decreased by 0.7 percent and core index increased by 0.1 percent.

TABLE 4: Consumer Price Index (Urban only), Core & other			
Categories	Weights	Percentage change in Dec. 2018	
		on Nov. 2018	on Dec. 2017
GENERAL INDEX	100%	-0.2%	1.1%
Local Goods Index	77%	-0.3%	0.5%
Food and non-alcoholic beverages	21%	-1.0%	-5.4%
Housing, water, electricity, gas and other fuels	21%	-0.1%	2.5%
Transport	6%	0.3%	10.2%
Imported Goods Index	23%	0.2%	3.4%
Food and non-alcoholic beverages	7%	0.2%	0.0%
Furnishing, household equipment	2%	0.5%	2.8%
Transport	6%	0.0%	8.8%
Fresh Products index¹	16%	-1.5%	-2.5%
Energy index	7%	-0.7%	6.8%
General Index excluding fresh Products and energy²	77%	0.1%	1.4%
<i>Source: NISR</i>			
(1) Fresh products are food products which have seasonal fluctuations			
(2) Proxy for underlying inflation			

4. Methodological notice

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

Household basket includes 1,622 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 29,482 prices in urban areas and 10,744 in rural areas are collected every month.

Weights used for index are from the result of the Household Living Conditions Survey (EICV4) conducted in 2013-2014 with a sample of 14,419 households.

Each month, NISR publishes All Rwanda index, All Urban index and All Rural index. Urban CPI is considered as the headline index for monetary policy purposes. In addition, selected detailed item indices are published for items judged to be important or experiencing extreme price movement.

Main terms used in Rwandan CPI

General index: The highest level of aggregation of CPI which covers all items within the scope of CPI

Core (underlying) inflation: A type of CPI which shows the underlying trend in inflation by excluding those movements which arise from transient factors such as seasonality or other short term price volatility

Index reference period (Feb 2014=100): The period with which all other periods are compared (the period for which the value of CPI is set to 100).

Monthly inflation: Compare the current index number with the index number of the previous month

Annual inflation: Compare the index number for a particular month with the index number for the same month of the previous year

Annual average inflation: Compare the average of all monthly indices in a particular year with the corresponding average for the previous year. Any twelve month average (eg. from July 2016 to June 2017) may be compared with the twelve month average (also from July 2015 to June 2016) in order to calculate June 2017 inflation rate.

4.1. How to Interpret the CPI

Movements of 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	<u>176</u>
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 x 100
Equals percent change	1.1

6. Annexes: Reference Tables

Annex 1: Consumer Price Index, Urban									
Code	Categories	Weights	Index (Feb 2014=100)			Percentage change in Dec. 2018		Contributions ¹ :	
			Dec-17	Nov-18	Dec-18	on Nov. 2018	on Dec. 2017	1 month	12 months
	GENERAL INDEX	100%	113.7	115.2	115.0	-0.2%	1.1%	-0.2%	1.1%
01	Food and non-alcoholic beverages	27%	123.1	118.9	118.0	-0.7%	-4.1%	-0.2	-1.2
01.1.1	Bread and cereals	5%	122.0	118.6	118.7	0.1%	-2.7%	0.0	-0.2
01.1.2	Meat	2%	111.9	117.3	116.9	-0.4%	4.5%	0.0	0.1
01.1.4	Milk cheese and eggs	1%	120.0	118.8	119.9	0.8%	-0.1%	0.0	0.0
01.1.7	Vegetables	9%	125.5	122.0	118.5	-2.9%	-5.6%	-0.3	-0.5
01.2	Non-alcoholic beverages	1%	118.0	122.9	122.9	0.0%	4.2%	0.0	0.1
02	Alcoholic beverages tobacco and narcotics	5%	123.3	131.9	132.0	0.0%	7.0%	0.0	0.4
03	Clothing and footwear	5%	113.2	115.7	116.0	0.3%	2.5%	0.0	0.1
04	Housing water, electricity, gas and other fuels	21%	110.1	113.0	112.8	-0.1%	2.5%	0.0	0.5
05	Furnishings household equipment and routine household maintenance	4%	109.4	113.7	113.9	0.2%	4.1%	0.0	0.1
06	Health	1%	107.4	107.6	107.5	0.0%	0.2%	0.0	0.0
07	Transport	12%	111.3	121.7	121.9	0.1%	9.5%	0.0	1.2
08	Communication	3%	105.8	105.8	105.8	0.0%	0.1%	0.0	0.0
09	Recreation and culture	3%	117.5	114.4	114.4	0.0%	-2.6%	0.0	-0.1
10	Education	3%	102.1	103.4	103.4	0.0%	1.3%	0.0	0.0
11	Restaurants and hotels	9%	105.5	105.1	105.1	0.0%	-0.4%	0.0	0.0
12	Miscellaneous goods and services	6%	109.0	112.0	111.9	-0.1%	2.7%	0.0	0.2

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 Dec. 2018		Contributions ¹ :	
			Dec-17	Nov-18	Dec-18	on Nov. 2018	on Dec. 2017	1 month	12 months
	GENERAL INDEX	100%	120.7	121.6	119.9	-1.3%	-0.6%	-1.3%	-0.6%
01	Food and non-alcoholic beverages	48%	126.8	120.1	116.4	-3.1%	-8.1%	-1.5	-4.1
01.1.1	Bread and cereals	8%	131.4	121.0	123.0	1.6%	-6.4%	0.1	-0.5
01.1.2	Meat	2%	116.9	120.5	121.4	0.7%	3.8%	0.0	0.1
01.1.4	Milk cheese and eggs	1%	109.4	116.6	116.6	0.0%	6.5%	0.0	0.1
01.1.7	Vegetables	26%	127.9	121.6	114.0	-6.3%	-10.9%	-1.6	-3.0
01.2	Non-alcoholic beverages	1%	111.0	115.3	115.8	0.5%	4.3%	0.0	0.0
02	Alcoholic beverages tobacco and narcotics	8%	118.2	117.8	116.8	-0.9%	-1.3%	-0.1	-0.1
03	Clothing and footwear	5%	111.1	115.5	116.0	0.4%	4.4%	0.0	0.2
04	Housing water, electricity, gas and other fuels	16%	112.0	129.1	128.9	-0.1%	15.1%	0.0	2.3
05	Furnishings household equipment and routine household maintenance	3%	106.6	108.5	108.9	0.3%	2.1%	0.0	0.1
06	Health	1%	106.0	105.4	105.4	0.0%	-0.6%	0.0	0.0
07	Transport	4%	101.8	111.4	111.4	0.0%	9.4%	0.0	0.3
08	Communication	2%	100.0	100.0	100.0	0.0%	0.0%	0.0	0.0
09	Recreation and culture	1%	107.5	109.3	109.2	-0.1%	1.6%	0.0	0.0
10	Education	1%	163.9	170.6	170.6	0.0%	4.1%	0.0	0.1
11	Restaurants and hotels	5%	112.7	116.1	116.1	0.0%	3.0%	0.0	0.1
12	Miscellaneous goods and services	4%	103.1	106.3	111.2	4.6%	7.8%	0.2	0.3

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 Dec. 2018		Contributions ¹ :	
			Dec-17	Nov-18	Dec-18	on Nov. 2018	on Dec. 2017	1 month	12 months
00	GENERAL INDEX	100%	118.5	119.7	118.7	-0.8%	0.1%	-0.8%	0.1%
01	Food and non-alcoholic beverages	39%	126.6	120.7	117.8	-2.3%	-6.9%	-0.9	-2.9
01.1.1	Bread and cereals	7%	129.4	121.4	122.7	1.1%	-5.1%	0.1	-0.4
01.1.2	Meat	2%	114.8	119.3	119.5	0.2%	4.1%	0.0	0.1
01.1.4	Milk cheese and eggs	1%	114.6	117.4	118.0	0.4%	2.9%	0.0	0.0
01.1.7	Vegetables	18%	127.6	122.0	115.1	-5.6%	-9.8%	-1.0	-1.9
01.2	Non-alcoholic beverages	1%	114.2	118.7	119.0	0.3%	4.2%	0.0	0.0
02	Alcoholic beverages tobacco and narcotics	7%	119.6	121.9	121.2	-0.6%	1.3%	0.0	0.1
03	Clothing and footwear	5%	111.9	115.5	115.9	0.3%	3.6%	0.0	0.2
04	Housing water, electricity, gas and other fuels	18%	110.2	120.3	120.2	-0.1%	9.0%	0.0	1.5
05	Furnishings household equipment and routine household maintenance	3%	107.7	110.8	111.0	0.2%	3.1%	0.0	0.1
06	Health	1%	106.7	106.4	106.4	0.0%	-0.2%	0.0	0.0
07	Transport	8%	108.0	118.1	118.2	0.1%	9.5%	0.0	0.7
08	Communication	2%	102.4	102.5	102.5	0.0%	0.0%	0.0	0.0
09	Recreation and culture	2%	113.3	112.2	112.1	0.0%	-1.1%	0.0	0.0
10	Education	2%	129.9	133.3	133.3	0.0%	2.7%	0.0	0.1
11	Restaurants and hotels	6%	109.3	110.3	110.4	0.0%	1.0%	0.0	0.1
12	Miscellaneous goods and services	5%	105.9	109.0	111.2	2.0%	5.0%	0.1	0.2

Source: NISR

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

Contacts:

National Institute of Statistics of Rwanda (NISR),
P.O. BOX 6139 Kigali,
Tel.: (250) 571035 Fax: (250) 570705.
Web site: www.statistics.gov.rw /CPI Indexes

Publication Directors:

MURANGWA Yusuf, Director General, NISR; yusuf.murangwa@statistics.gov.rw,

MURENZI Ivan, Deputy Director General, NISR; ivan.murenzi@statistics.gov.rw,

MWIZERWA J. Claude, Ag. Director of Economic Statistics Department, NISR;
claudemwizerwa@statistics.gov.rw,

MUTETIJABIRO Lucie, Price Statistics Research Statistician Team Leader, NISR;
lucie.mutetijabiro@statistics.gov.rw.