



# PRODUCER PRICE INDEX (PPI)

# **FOURTH QUARTER 2016**

**FEBRUARY 2017** 

#### 1. SUMMARY

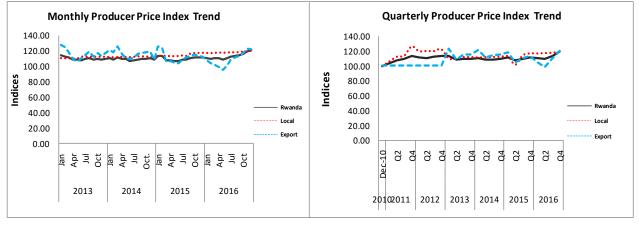
- The annual change in PPI for all Rwanda, fourth quarter 2016, is 6.60 percent
- The annual change in PPI for local products, fourth quarter 2016, is 1.86 percent
- The annual change in PPI for exports, fourth quarter 2016, is 5.82 percent
- The quarterly change in PPI for all Rwanda, fourth quarter 2016, is 4.85 percent
- The quarterly change in PPI for local products, fourth quarter 2016, is 1.12 percent
- The quarterly change in PPI for exports, fourth quarter 2016, is 8.63 percent

Table 1. PPI quarterly and annual changes for All Rwanda, local products and exports (in percentages)

Quarterly change (Q4.16-Q3.16)Annual change (Q4.16-Q4.15)PPI for All Rwanda4.856.60PPI for local products1.121.86PPI for export products8.635.82

Source: NISR

Figure 1. PPI for All Rwanda, local products and exports



Source: NISR

#### 2. INTRODUCTION

The Producer Price Index (PPI) measures the average change over time in prices received by domestic producers for the production of their goods and services.

The Producer Price Index for Rwanda is published on a quarterly basis; but it highlights monthly Producer Price Index for each of the three months of the quarter under review, the quarterly Producer Price Index and the annual Producer Price Index. It presents price changes for all combined products, products for local sales and that for exports. It covers a sample of 114 establishments and 402 products spread countrywide, both in Kigali City and in rural areas.

The Producer Price Index survey is conducted jointly with the National Bank of Rwanda. It now covers mining, manufacturing and energy; but NISR intends to include hotels and communication services in the future.

#### 3. PPI FOR ALL RWANDA

The table below presents the percentage changes on monthly, quarterly and annual basis.

Table2. Monthly, quarterly and annual changes for PPI for All Rwanda

2016OctoberNovember DecemberQ4Monthly change1.802.351.36Quartely change4.85Annual change4.486.968.366.60

Source: NISR

As the table 2 shows, on a monthly basis, the index increased by 1.80, 2.35 and 1.36 percent in October, November and December 2016 respectively.

On a quarterly basis, the index for the fourth quarter 2016 increased by 4.85 percent. On an annual basis, the index for the fourth quarter 2016 increased by 6.60 percent.

# Main contributors to change

On a monthly basis,

In October 2016 (1.80%):

- Manufacturing contributed positively by 2.10 percentage points of which food products contributed positively by 1.67, and manufacture of other non-metallic mineral products contributed positively by 0.25 percentage points.
- Mining and quarrying contributed negatively by 0.30 percentage points.

## In November 2016 (2.35%):

- Manufacturing contributed positively by 2.17 percentage points of which food products contributed positively by 2.22 percentage points.
- Mining and quarrying contributed positively by 0.18 percentage points.

## In December 2016 (1.36%)

- Manufacturing contributed positively by 1.04 percentage points of which food products contributed positively by 0.98 percentage points.
- Mining and quarrying contributed positively by 0.32 percentage points.

On a quarterly basis, the main contributors to the index change of the fourth quarter  $2016\ (4.85\%)$  are:

- Manufacturing contributed positively by 4.50 percentage points of which food products contributed positively by 4.04 percentage points.
- Mining and quarrying contributed positively by 0.35 percentage points.

On an annual basis, the main contributors to the index change of the fourth quarter 2016 (6.60%) are:

- Manufacturing contributed positively by 3.31 percentage points of which food products contributed positively by 2.67.
- Mining and quarrying contributed positively by 3.29 percentage points.

## 4. PPI FOR GOODS PRODUCED FOR LOCAL SALES

The table below presents the percentage changes on monthly, quarterly and annual basis.

Table3. Monthly, quarterly and annual changes for PPI for local sales

2016OctoberNovemberDecemberQ4Monthly change0.670.100.58Quartely change1.12Annual change1.691.712.191.86

Source: NISR

As the table 3 shows, on a monthly basis, in October, November and December the index increased by 0.67, 0.10 and 0.58 respectively.

On a quarterly basis, the index for the fourth quarter 2016 increased by 1.12 percent. On an annual basis, the index for the fourth quarter 2016 increased by 1.86 percent.

# Main contributors to change

On a monthly basis, the main contributors to the index change are: In October 2016 (0.67%):

• Manufacturing contributed positively by 0.67 percentage point in which manufacture of other non-metallic mineral products contributed negatively by 0.42 percentage points.

In November 2016 (0.10%):

• Manufacturing contributed positively by 0.10 percentage point in which Beverages contributed positively by 0.16, and metal products, except machinery and equipment contributed negatively by 0.07 percentage points.

In December 2016 (0.58%):

• Manufacturing contributed positively by 0.58 percentage points in which food products contributed positively by 0.50 and metal products, except machinery and equipment contributed positively by 0.08 percentage points.

On a quarterly basis, the main contributors to the index change (1.12%):

• Manufacturing contributed positively by 1.12 percentage points in which food products contributed positively by 0.46, manufacture of other non-metallic mineral products contributed positively by 0.42 percentage points.

On an annual basis, the main contributors to the index change (1.86%):

 Manufacturing contributed positively by 1.86 percentage points in which food products contributed positively by 1.57, beverages contributed positively by 0.64, and printing and production of recorded media contributed negatively by 0.47 percentage points.

#### 5. PPI FOR EXPORTS

The table below presents the index and the percentage changes on monthly, quarterly and annual basis.

Table4. Monthly, quarterly and annual changes for PPI for exports

	2016								
	October No	ovember De	ecember	Q4					
Monthly change	3.57	4.69	-0.39	_					
Quartely change				8.63					
Annual change	1.21	7.68	8.69	5.82					

Source: NISR

The table 4 shows that on a monthly basis, in October, and November the index increased by 3.57 and 4.69 percent respectively, and decreased by 0.39 in December 2016.

On a quarterly basis, the index for the fourth quarter 2016 increased by 8.63 percent. On an annual basis, the index for the fourth quarter 2016 increased by 5.82 percent.

# Main contributors to change

On a monthly basis,

In October 2016 (3.57%):

- Coffee products contributed positively by 4.01 percentage points.
- Non-ferrous metal ores contributed negatively by 0.98 percentage points.

In November 2016 (4.69%):

- Coffee products contributed positively by 2.30 percentage points.
- Tea products contributed positively by 1.66 percentage points.

In December 2016 (-0.39%):

- Coffee products contributed negatively by 3.38 percentage points.
- Tea products contributed positively by 2.27 percentage points.

On a quarterly basis, the main contributors to the index change of the fourth quarter 2016 (8.63%) are:

- Tea products contributed positively by 4.07 percentage points.
- Coffee products contributed positively by 3.14 percentage points.

On an annual basis, the main contributors to the index change of fourth quarter 2016 (5.82%) are:

- Non-ferrous metal ores contributed positively by 5.32 percentage points
- Coffee products contributed positively by 1.32 percentage points.

#### 6. TECHNICAL NOTE ON PPI

The Producer Price Index (PPI) measures the average change over time in the prices received by domestic producers of goods and services—goods and services which are output of production or enter in the production process.

NISR publishes PPI data for Mining, Manufacturing and Energy, and it will continue to be published quarterly, about 8 weeks following the quarter under review.

Over time the PPI will gradually be expanded to include other production sectors such as transportation, telecommunications, agriculture, and services. Expansion of PPI coverage depends upon the availability of data that could be used to derive weights.

The establishments are classified according to ISIC rev. 4; and the classification is determined by their main output.

The weights used in the PPI for Rwanda refer to the value of output (turnover without taxes) of establishments as reported in the 2011 Manpower survey collecting data for the year 2010, which constitutes the reference base period for the PPI calculation (June 2010).

The point of pricing is the establishment. The price is the selling price received by the producer for the selected product as it leaves the factory gate. In general, prices are collected each quarter from the selected establishment by considering the mid-point of each month of the quarter under review.

The formula used in the PPI calculation is the geometric modified Laspeyres.

LVL	Ann	ex 1: PP	, All Rwanda	Weights			Index (	Decembe	er 2010=1	00)		Month	ly Contri	ibution	Quarterly Contribution	Annual Contribution
		Index													0.4.004.6	0.4.004.6
	AGG		ISIC rev. 4 Description	1000						Q3 2016					Q4 2016	Q4 2016
		0 R	Rwanda				119.60		111.85	113.72		1.80	2.35	1.36		
	2 R	RB	Mining and quarrying				115.22		80.31	111.66		-0.30	0.18	0.32		
	4 RB	RB07	Mining of metal ores	96	116.97	113.16	115.22	119.04	80.31	111.66	115.81	-0.30	0.18	0.32	0.35	3.29
	5 550		Mining of non-ferrous metal	0.5	446.07	440.46	445.00	440.04	00.04	444.66	445.04	0.00	0.40	0.00	0.05	2.20
		7 RB072					115.22		80.31	111.66		-0.30	0.18	0.32		
	2 R	RC	Manufacturing	/14	113.39	116.84	120.39	122.13	113.01	112.54	119.79	2.10	2.17	1.04	4.50	3.31
	4.00	5040	Manufacture of food	276	444.67	447.00	400 70	125.51	440.40	440.00	400.47	4.67	2.22	0.00	4.04	2.67
	4 RC	RC10	products	3/6	111.67	117.00	123.78	126.64	112.18	110.08	122.47	1.67	2.22	0.98	4.04	2.67
			Manufacture of grain mill													
	5 RC10	0 RC106	products	42	92.01	90.49	89.80	89.15	97.54	92.13	89.82	-0.07	-0.04	-0.04	-0.11	-0.30
			Manufacture of other food													
			products				129.70		115.25	113.32		1.78	2.25	0.81		2.98
	6 RC10	01C1072	Manufacture of sugar	148	118.17	122.47	131.23	139.87	95.93	114.33	131.19	0.54	1.22	1.31	2.29	3.30
			Manufacture of other food													
			products n.e.c. (coffee and													
	6 RC10	01C1079		146	110.46	119.90	127.30	124.04	128.28	110.50	123.75	1.24	1.04	-0.50	1.84	-0.31
			Manufacture of coffee		0.5.24	112.00	100 ==	0.5.04	0.7. <0	00.42	444.02	4.00	0.60		0.00	0.00
	8 RC10	0107980	products	66	95.34	113.99	123.77	95.34	95.69	99.13	111.03	1.09	0.60	-1.54	0.80	-0.90
			Manufacture of tea products		101.10	100 =1	100.00	446.40	4.47.04	440.0	100.06	0.45	0.42	4.04	4.04	0.50
		0107990					129.96		145.84	118.27	133.36	0.15	0.43	1.04		
	4 RC	RC11	Manufacture of beverages	1/4	120.79	120.79	120.79	120.79	119.77	120.68	120.79	0.00	0.00	0.00	0.02	0.11
			Manufacture of rubber and													
	4 RC	RC22	plastics products	11	164.24	176.35	177.74	177.82	163.40	164.22	177.30	0.08	0.01	0.00	0.09	0.07
			Manufacture of other non-													
	4 RC	RC23	metallic mineral products	31	101.49	110.03	110.25	110.33	100.65	101.48	110.20	0.25	0.01	0.00	0.26	0.23
			Manufacture of fabricated													
			metal products, except													
	4 RC	RC25	machinery and equipment	29	109.5	110.8	108.2	109.9	106.97	108.89	109.62	0.03	-0.07	0.05	0.02	0.04
			Electricity, gas, steam and air													
	2 R	RD	conditioning supply	58	143.07	143.07	143.07	143.07	143.07	143.07	143.07	0.00	0.00	0.00	0.00	0.00
			Water supply; sewerage,													
			waste management and													
	2 R	RE	remediation activities	129	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00
			Information and													
	2 R	RJ	communication	3	191.87	191.87	191.87	191.87	191.62	191.63	191.87	0.00	0.00	0.00	0.00	0.00
Sour	ce: NISR	3														

LVL	Anne	x 1: PPI	, Local products	Weights		Ind	ex (Dec	ember :	2010=10	00)		Monthly	Contril	oution	Quarterly Contribution	Annual Contribution
	AGG	Index ID	ISIC rev. 4 Description		Sep-16	Oct-16	Nov-16	Dec-16	Q4 2015	Q3 2016	Q4 2016	Oct-16	Nov-16	Dec-16	Q4 2016	Q4 2016
1	0	R	Rwanda	1000	118.25	119.04	119.16	119.85	117.17	118.02	119.35	0.67	0.10	0.58	1.12	1.86
2	R	RC	Manufacturing	842	113.10	114.09	114.29	115.14	111.73	112.82	114.51	0.67	0.10	0.58	1.12	1.86
4	RC	RC10	Manufacture of food products	169	104.99	105.05	107.33	111.33	103.47	104.06	107.90	0.01	0.16	0.50	0.46	1.57
5	RC10	RC105	Manufacture of dairy products	23	87.74	85.50	85.50	98.36	91.01	87.74	89.78	0.00	0.00	0.35	0.09	-0.56
5	RC10	RC106	Manufacture of grain mill products	90	92.01	90.49	89.80	89.15	97.54	92.13	89.82	0.01	-0.07	-0.06	-0.39	1.81
	RC10	RC107	Manufacture of other food products			129.66	135.73					-0.01	0.22	0.21		0.32
6	RC107		Manufacture of bakery products	12	146.85	147.10	147.02	147.02	150.83	146.85	147.04	0.00	0.00	0.00	0.00	-0.04
6	RC107	RC1072	Manufacture of sugar	36	118.17	122.47	131.23	139.87	95.93	114.33	131.19	-0.01	0.22	0.21	0.76	0.36
4	RC	RC11	Manufacture of beverages	374	120.79	120.79	120.79	120.79	119.77	120.68	120.79	0.00	0.00	0.00	0.03	0.64
4	RC	RC18	Printing and reproduction of recorded media  Manufacture of chemicals and chemical	40	108.59	110.98	110.98	110.98	106.70	108.59	110.98	0.07	0.00	0.00	0.06	-0.47
4	RC	RC20	products  Manufacture of rubber and plastics	57	113.95	114.19	114.20	114.20	112.05	113.92	114.20	0.01	0.00	0.00	0.01	0.32
4	RC	RC22	products  Manufacture of other non-metallic	24	94.37	97.95	97.92	97.92	94.37	94.37	97.93	0.07	0.00	0.00	0.07	-0.11
4	RC	RC23	mineral products Manufacture of fabricated metal	67	101.49	110.03	110.25	110.33	100.65	101.48	110.20	0.42	0.01	0.00	0.42	-0.08
4	RC	RC25	products, except machinery and	63	109.52	110.78	108.16	109.92	107.80	108.89	109.62	0.05	-0.07	0.08	0.03	-0.02
2	R		Electricity, gas, steam and air conditioning supply Water supply; sewerage, waste	123	143.07	143.07	143.07	143.07	143.07	143.07	143.07	0.00	0.00	0.00	0.00	0.00
2	R	RE	management and remediation activities	28	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.00	0.00
2			Information and communication			191.87						0.00	0.00	0.00		0.00
	e: NIS	R														

Annex 3: PPI, Export products		Weights	Index (l			December 2010=100)					tribution thly char	to Q	ontribution uarterly nange	Contribution to annual change	
LVL AGG	Index ID	ISIC rev. 4 Description		Sep-16	Oct-16	Nov-16	Dec-16 Q	4 2015	Q3 2016	Q4 2016	Oct-16	Nov-16	Dec-16 Q	4 2016	Q4 2016
1	R	Exports	1000	113.08	117.12	122.62	122.14	113.99	111.04	120.63	3.57	4.69	-0.39	8.63	5.82
6 RB072	RB072	9 Mining of other non-ferrous metal ores	393	116.97	113.16	115.22	119.04	80.31	111.66	115.81	-0.98	0.72	0.71	1.42	5.32
8 RC1079	RC10798	Manufacture of coffee products	268	95.34	113.99	123.77	95.34	95.69	99.13	111.03	4.01	2.30	-3.38	3.14	1.32
8 RC1079	RC10799	Manufacture of tea products	328	121.13	123.71	129.96	146.40	145.84	118.27	133.36	0.53	1.66	2.27	4.07	-0.86
		Manufacture of other chemical products	10	116.78	117.31	119.17	118.82	104.86	118.14	118.43	0.00	0.02	0.00	0.00	0.04
6 RC202	RC202	9 n.e.c.													
Source: NIS	SR														

## **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

Publication Director: MURANGWA Yusuf, Director General, NISR;

yusuf.murangwa@statistics.gov.rw,

SIBOMANA Oscar, Acting Director of Economic Statistics Department, NISR;

 $\underline{sebastien.manzi@statistics.gov.rw}$ 

Lucie MUTETIJABIRO, Price Statistician Team Leader, NISR,

lucie.mutetijabiro@statistics.gov.rw