



NATIONAL INSTITUTE OF  
STATISTICS OF RWANDA



NATIONAL BANK OF RWANDA

**PRODUCER PRICE INDEX FOR  
MANUFACTURING SECTOR (PPI-M)  
FOURTH QUARTER 2009**

**Background**

This is the twentieth issue of monthly Producer Price Index for the Manufacturing sector (PPI-M). Work on the development of the methodology for the construction of the PPI-M started in March 2003 with technical assistance from the IMF East AFRITAC and financial assistance from the UK DFID. The PPI project is a joint project between the National Statistics Institute of Rwanda (NSIR) and the National Bank of Rwanda (NBR).

Table 1: Monthly Producer Price Indices by activity group: **Fourth Quarter 2009**  
**Goods Produced mainly for local sales**  
*(Base Period: Fourth Quarter 2003 = 100)*

Activity group	Weight	2008			2009			2008	2009
		Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	4Qrt	4Qrt
<b>PPI for Mainly Local Sold products</b>	<b>1000</b>	<b>168.04</b>	<b>158.72</b>	<b>158.32</b>	<b>154.44</b>	<b>155.73</b>	<b>156.03</b>	<b>161.69</b>	<b>155.40</b>
<i>% change, previous month/quarter<sup>(*)</sup></i>		6.38	-5.54	-0.25	-0.45	0.84	0.19	2.67	-0.22
<i>% change, 12 months</i>		30.25	22.03	21.78	-8.09	-1.89	-1.44	24.67	-3.89
<b>Food Products, Beverages and Tobacco</b>	<b>456</b>	<b>152.81</b>	<b>153.52</b>	<b>152.84</b>	<b>149.66</b>	<b>151.75</b>	<b>152.59</b>	<b>153.06</b>	<b>151.33</b>
<i>% change, previous month/quarter<sup>(*)</sup></i>		0.07	0.46	-0.44	0.15	1.39	0.55	0.72	0.37
<i>% change, 12 months</i>		24.48	25.07	24.23	-2.06	-1.15	-0.17	24.59	-1.13
<b>Food Products</b>	<b>129</b>	<b>186.92</b>	<b>189.40</b>	<b>187.03</b>	<b>176.04</b>	<b>183.39</b>	<b>186.35</b>	<b>187.78</b>	<b>181.93</b>
<i>% change, previous month/quarter<sup>(*)</sup></i>		0.20	1.33	-1.25	0.45	4.17	1.61	2.05	1.10
<i>% change, 12 months</i>		26.94	28.66	26.17	-5.82	-3.18	-0.36	27.25	-3.12
Production, processing and preserving of meat and meat products	3	220.85	220.85	220.85	220.85	220.85	220.85	220.85	220.85
Processing and preserving of fruits and vegetables	8	156.72	156.72	156.90	151.41	151.41	151.41	156.78	151.41
Manufacture of dairy products	32	197.98	197.98	197.98	196.24	196.24	196.24	197.98	196.24
Manufacture of grain mill and animal feeds products	27	171.34	186.10	185.93	184.00	184.80	184.89	181.12	184.56
Manufacture of bakery products, pastry, biscuits	13	203.94	203.94	203.94	203.52	203.59	205.08	203.94	204.06
Manufacture of sugar	45	186.65	184.91	178.20	150.33	170.83	178.80	183.26	166.65
<b>Beverages and Tobacco</b>	<b>327</b>	<b>139.29</b>	<b>139.29</b>	<b>139.29</b>	<b>139.20</b>	<b>139.20</b>	<b>139.20</b>	<b>139.29</b>	<b>139.20</b>
<i>% change, previous month/quarter<sup>(*)</sup></i>		0.00	0.00	0.00	0.00	0.00	0.00	0.03	-0.01
<i>% change, 12 months</i>		23.22	23.22	23.22	-0.06	-0.06	-0.06	23.22	-0.06
<i>Manufacture of beer, soft drinks and tobacco</i>	327	139.29	139.29	139.29	139.20	139.20	139.20	139.29	139.20
<b>Other than Food, Beverages and Tobacco</b>	<b>544</b>	<b>180.80</b>	<b>163.09</b>	<b>162.91</b>	<b>158.44</b>	<b>159.07</b>	<b>158.92</b>	<b>168.93</b>	<b>158.81</b>
<i>% change, previous month/quarter<sup>(*)</sup></i>		11.36	-9.80	-0.11	-0.92	0.40	-0.09	4.19	-0.68
<i>% change, 12 months</i>		34.67	19.72	19.93	-12.37	-2.46	-2.45	24.73	-5.99
Manufacture of textiles, wearing apparel, tanning and dressing of leather	47	146.59	146.42	146.65	179.07	179.17	179.15	146.55	179.13
Manufacture of paper and paper products, publishing of books, newspapers	40	367.32	123.50	126.43	118.42	120.34	119.38	205.75	119.38
Manufacture of chemical products	172	139.04	139.02	138.21	137.24	137.24	137.24	138.76	137.24
Manufacture of plastic products, tubes, retreading and rebuilding of rubber tyres	45	169.50	169.50	169.50	173.78	173.78	173.78	169.50	173.78
Manufacture of ceramic products, cement, lime and articles of concrete	126	182.16	182.43	182.43	182.53	182.53	182.53	182.34	182.53
Manufacture of fabricated metal products	70	218.55	218.55	218.55	166.21	169.95	169.38	218.55	168.52
Manufacture of furniture	43	156.89	161.42	159.45	159.43	159.41	159.41	159.25	159.41

**(\*) Only for quarterly figures**

Source: Quarterly Producer Price Index Survey

Table 1b: Monthly Producer Price Indices by activity group: **Fourth Quarter 2009**  
**Goods produced mainly for export**

(Base Period: Fourth Quarter 2003 = 100)

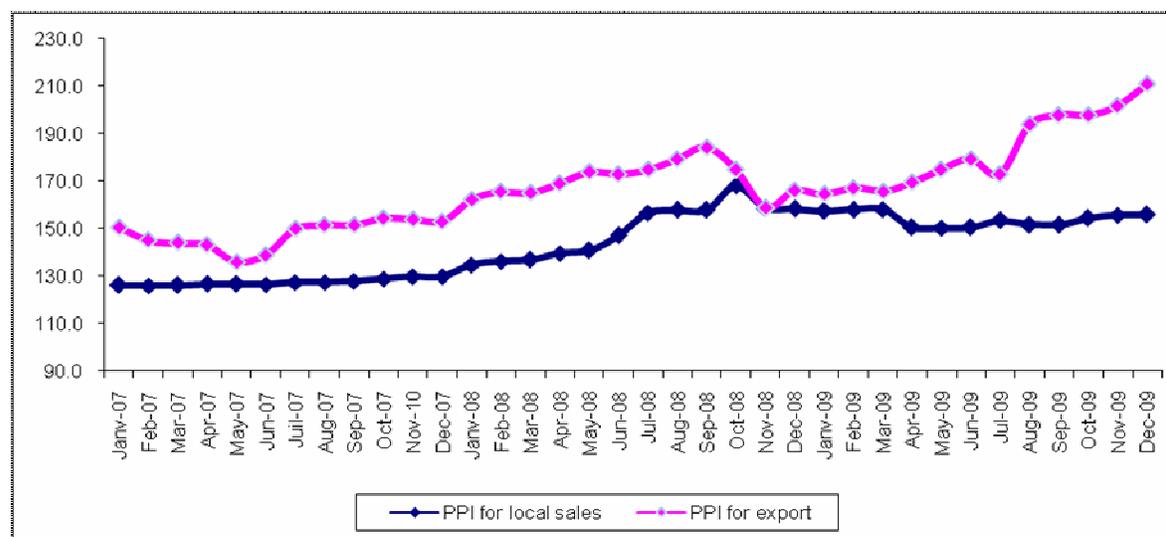
Activity group	Weight	2008			2009			2008	2009
		Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	4Qrt	4Qrt
<b>PPI for Mainly Export Products</b>	<b>1000</b>	<b>175.09</b>	<b>158.78</b>	<b>165.91</b>	<b>197.74</b>	<b>201.55</b>	<b>211.13</b>	<b>166.59</b>	<b>203.47</b>
% change, previous month/quarter <sup>(*)</sup>		-4.96	-9.32	4.49	-0.13	1.93	4.75	-13.62	5.50
% change, 12 months		15.62	3.21	8.39	12.93	26.94	27.26	-7.11	22.14
<b>Manufacture of other food products n.e.c</b>	<b>978</b>	<b>174.28</b>	<b>155.42</b>	<b>162.71</b>	<b>193.28</b>	<b>197.17</b>	<b>206.95</b>	<b>164.14</b>	<b>199.13</b>
% change, previous month/quarter <sup>(*)</sup>		-5.09	-10.82	4.69	-0.14	2.02	4.96	-13.10	5.42
% change, 12 months		15.49	2.49	7.70	10.90	26.86	27.19	-8.11	21.32
<b>Production of tea</b>	<b>585</b>	<b>136.82</b>	<b>113.31</b>	<b>125.48</b>	<b>168.09</b>	<b>177.03</b>	<b>186.10</b>	<b>125.20</b>	<b>177.07</b>
% change, previous month/quarter <sup>(*)</sup>		-9.18	-17.19	10.74	0.09	5.32	5.12	-23.27	8.52
% change, 12 months		30.40	9.29	14.72	22.86	56.24	48.31	-12.17	41.43
<b>Production of coffee</b>	<b>392</b>	<b>230.15</b>	<b>218.24</b>	<b>218.24</b>	<b>230.84</b>	<b>227.22</b>	<b>238.05</b>	<b>222.21</b>	<b>232.03</b>
% change, previous month/quarter <sup>(*)</sup>		-1.13	-5.18	0.00	-0.39	-1.57	4.77	-2.22	2.11
% change, 12 months		4.86	-2.22	2.34	0.30	4.11	9.08	-4.39	4.42
<b>Manufacture of pesticides and other agro-chemical products</b>	<b>22</b>	<b>210.95</b>	<b>306.56</b>	<b>306.56</b>	<b>394.33</b>	<b>394.33</b>	<b>395.14</b>	<b>274.69</b>	<b>394.60</b>
% change, previous month/quarter <sup>(*)</sup>		0.00	45.32	0.00	0.00	0.00	0.20	-25.34	7.25
% change, 12 months		20.66	22.37	27.48	86.93	28.63	28.90	30.22	43.66
<b>Production of pyrethrum</b>	<b>22</b>	<b>210.95</b>	<b>306.56</b>	<b>306.56</b>	<b>394.33</b>	<b>394.33</b>	<b>395.14</b>	<b>274.69</b>	<b>394.60</b>

(\*) Only for quarterly figures

Source: Quarterly Producer Price Index Survey

Graph1: PPI for local sales and export products

(Fourth quarter 2003=100)



Source: Quarterly Producer Price Index Survey

## **I. PPI-M (Base year: 4<sup>th</sup> Quarter 2003 =100)**

### *1.1 PPI-M: Local sales (tables 1a)*

The index of products in the manufacturing sector for sales on the local market registered a slight decline of 0.19% at the end of December 2009 when compared to the previous month. The subgroup « Food products, Beverage and Tobacco» registered a decrease of 0.55% in December 2009 and the subgroup « Other than Food, Beverages and Tobacco » registered a decrease of 0.09% in the same month (See table 1a).

The percentage change over the past twelve months of the index of products manufactured for local sales was -8.09% in October, -1.89% in November and -1.44% in December 2009.

The index of «Food Products, Beverages and Tobacco» registered a decrease of 0.17% in December 2009 when compared to the same period of the previous year of which: « Processing and preserving of fruits and vegetables » (-3.50%) and «Production of dairy products» (-0.88%).

The index for the subgroup « Other than Food, Beverages and Tobacco » retreated by 2.45% in December 2009 when compared to the same month of the year 2008. This decrease is mostly attributable to the overall effect of price changes in the following subgroups: « Manufacture of fabricated metal products » (-22.50%) and « Manufacture of paper and paper products, publishing of books, newspapers » (-5.58%). However, « Manufacture of plastic products, tubes, retreading and rebuilding of rubber tyres» (+2.53%) and « Manufacture of textiles, wearing apparel, tanning and dressing of leather » (+22.16%) have partially offset the negative trend of this group.

*The main causes of the observed price decrease for some manufactured products are competition from imported products and manufacturer's strategy to try to encourage demand.*

## ***1.2 PPI-M Exports (table1b)***

The PPI-M for goods mainly produced for exports stood at 211.13 in December 2009, which is an increase of 4.75% when compared to the previous month.

On an annual basis, the index for export products registered an increase of 27.26% in December 2009 when compared to the same month of the previous year.

## **II. Analysis of trends- Quarterly PPI-M**

### ***2.1 PPI-M Local sales***

The index of the third quarter registered a decrease of 2.22% compared to the index of the previous quarter and a decrease of 3.89% when compared to the fourth quarter of the year 2008.

### ***2.2 PPI-M Exports***

The quarterly index for manufacturing exports registered an increase of 5.50% in the fourth quarter of the year 2009 when compared to the previous quarter and an increase of 22.14% when compared to the same quarter of the previous year. \*

\*

\*

#### **Contact Persons:**

##### **National Institute of Statistics of Rwanda (NISR):**

Acting Director General, MURANGWA YUSUF  
Tel.: (250) 07 88 84 57 58, E-mail: [magoyusuf@hotmail.com](mailto:magoyusuf@hotmail.com)

##### **NISR: Economic Statistics Unit :**

Statistician in charge of Industrial and Trade Statistics, SIBOMANA Oscar  
Tel.: (250) 07 88 89 32 88, E-mail: [sibosca04@yahoo.fr](mailto:sibosca04@yahoo.fr)

##### **NBR: Department of Statistics :**

Senior Officer «Economic statistics », KAJIGIJA Eugène  
Tel : (250) 07 88 41 74 27, E-mail : [ekajigija@bnr.rw](mailto:ekajigija@bnr.rw)

Web sites: [http:// www.statistics.gov.rw](http://www.statistics.gov.rw)

[http:// www.bnr.rw](http://www.bnr.rw)

## Technical Note on PPI-M

**1. Scope and composition:** For the purpose of these indices, manufacturing encompass all products produced for sale on the domestic market as well as for the exports that is divisions 15 to 36. The PPI-M will initially cover manufacturing establishments that operate with 10 or more workers.

**2. Items and weights:** These indices are fixed weight indices. The weights were obtained from the gross output value reported by manufacturers at the 2000 Census of Industrial Production conducted in 2001. Gross output is valued at basic prices, and thus excludes all taxes on products, namely excise duties and Value added tax. Each selected product is assigned a weight representing its share in the total turnover for the fourth quarter of 2003 as reported by the establishments.

**3. Price information:** 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 at *mid – point of each month*.

**4. Reference base period for PPI\_M:** The reference period for the calculation of PPI-M is the fourth quarter 2003. The base price for a particular product is an arithmetic mean of the fourth quarter monthly prices in 2003.

**5. Index formula:** The PPI is calculated according to the Laspeyres formula, which is the weighted average of price relatives.

$$I_c = \sum \frac{w_i * (P_{ci} / P_{oi})}{\sum w_i} * 100$$

Where  $I_c$  = Index for current month

$W_i$  = Weight associated with product i

$P_{ci}$  = Price of product i for the current month

$P_{oi}$  = Price for product i for the reference period

### 6. Uses of the PPI

The main uses of the PPI are:

- As a leading indicator of inflationary trends.
- As deflators for national accounting at constant prices.
- As “escalators” to adjust prices of inputs in long term sales contracts.

**7. Dissemination of PPI-M:** The monthly PPI-M will be published in each quarter, about 8 weeks following the quarter under review.

\*\*\*\*\*