



# PRODUCER PRICE INDEX (PPI)

## **FIRST QUARTER 2016**

**MAY 2016** 

#### 1. SUMMARY

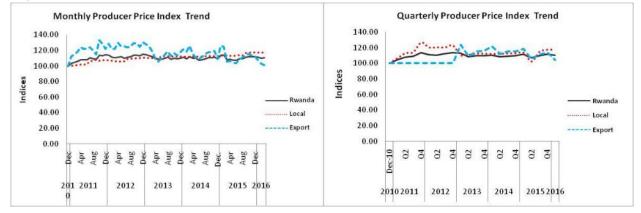
- The annual change in PPI for all Rwanda, first quarter 2016, is -1.07 percent
- The annual change in PPI for local products, first quarter 2016, is 3.28 percent
- The annual change in PPI for exports, first quarter 2016, is -12.23 percent
- The quarterly change in PPI for all Rwanda, first quarter 2016, is -1.29 percent
- The quarterly change in PPI for local products, first quarter 2016, is -0.07 percent
- The quarterly change in PPI for exports, first quarter 2016, is -8.52 percent

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

|                         | Quarterly change (Q1.16-Q4.15) | Annual change (Q1.16-Q1.15) |
|-------------------------|--------------------------------|-----------------------------|
| PPI for All Rwanda      | -1.29                          | -1.07                       |
| PPI for local products  | -0.07                          | 3.28                        |
| PPI for export products | -8.52                          | -12.23                      |

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.

Table 2. Monthly, quarterly and annual changes for PPI for All Rwanda

|                 |         | 2010     |       |            |
|-----------------|---------|----------|-------|------------|
| <u>-</u>        | January | February | March | <b>Q</b> 1 |
| Monthly change  | -0.75   | -1.03    | 0.38  |            |
| Quartely change |         |          |       | -1.29      |
| Annual change   | -2.16   | -3.10    | 2.21  | -1.07      |

Source: NISR

As the table 2 shows, on a monthly basis, in January and February 2016, the index decreased by 0.75 and 1.03 percent respectively, while the index for March 2016 increased by 0.38 percent.

On a quarterly basis, the index for the first quarter 2016 decreased by 1.29 percent. On an annual basis, the index for the first quarter 2016 decreased by 1.07 percent.

Main contributors to change On a monthly basis,

#### In January 2016 (-0.75%):

- Coffee and tea contributed negatively by 3.46 percentage points
- Non-ferrous metal ores contributed negatively by 0.45 percentage points
- Sugar contributed positively by 3.28 percentage points

#### In February 2016 (-1.03%):

- Coffee and tea contributed negatively by 2.24 percentage points
- Non-ferrous metal ores contributed positively by 1.27 percentage points.

#### In March 2016 (0.38%)

 $\bullet$   $\,$  Non-ferrous metal ores contributed positively by 0.32 percentage points.

On a quarterly basis, the main contributors to the index change of the first quarter 2016 (-1.29%) are:

- Coffee and tea products contributed negatively by 5.89 percentage points
- Sugar contributed positively by 4.53 percentage points

On an annual basis, the main contributors to the index change of the first quarter 2016 (-1.07%) are:

• Non-ferrous metal ores contributed negatively by 1.14 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

2016 **February** January March Q1 Monthly change -0.14-0.160.24 Quartely change -0.07 Annual change 3.34 3.11 3.38 3.28

Source: NISR

As the table 3 shows, on a monthly basis, in January and February 2016, the index decreased by 0.16 and 0.14 percent respectively, while the index of March 2016 increased by 0.24 percent.

On a quarterly basis, the index for the first quarter 2016 decreased by 0.07 percent. On an annual basis, the index for the first quarter 2016 increased by 3.28 percent.

#### Main contributors to change

On a monthly basis, the main contributors to the index change are:

#### In January 2016 (-0.16%):

- Grain mill products contributed negatively by 0.10 percentage points
- Dairy products contributed negatively by 0.08 percentage points

#### In February 2016 (-0.14%):

- Metal products, except machinery and equipment contributed negatively by 0.15 percentage points
- Grain mill products contributed positively by 0.07 percentage points

#### In March 2016 (0.24%):

- Sugar contributed positively by 0.17 percentage points
- Metal products, except machinery and equipment contributed positively by 0.11 percentage points

On a quarterly basis, the main contributors to the index change (0.07%):

 Metal products, except machinery and equipment contributed negatively by 0.08 percentage points

On an annual basis, the main contributors to the index change (3.28%):

- Electricity power generation, transmission and distribution contributed positively by 3.31 percentage points
- Sugar contributed positively by 1.93 percentage points
- Printing and related service activities contributed positively by 1.55 percentage points
- Non-metallic mineral products contributed negatively by 3.13 percentage points

#### 5. PPI FOR EXPORTS

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

Table 4. Monthly, quarterly and annual changes for PPI for exports

| •               |         | 2016     |       |        |
|-----------------|---------|----------|-------|--------|
|                 | January | February | March | Q1     |
| Monthly change  | -3.86   | -4.35    | -1.82 | -      |
| Quartely change |         |          |       | -8.52  |
| Annual change   | -14.23  | -16.93   | -4.34 | -12.23 |

Source: NISR

As the table 4 shows, on a monthly basis, in January, February and March 2016 the index decreased by 3.86, 4.35 and 1.82 percent respectively.

On a quarterly basis, the index for the first quarter 2016 decreased by 8.52 percent. On an annual basis, the index for the first quarter 2016 decreased by 12.23 percent.

Main contributors to change On a monthly basis,

In January 2016 (-3.86%):

- Non-ferrous metal ores contributed negatively by 2.40 percentage points
- Tea products contributed negatively by 1.30 percentage points

#### In February 2016 (-4.35%):

- Coffee products contributed negatively by 7.44 percentage points
- Non-ferrous metal ores contributed positively by 4.83 percentage points

#### In March 2016 (-1.82%):

- Coffee products contributed negatively by 4.28 percentage points
- Tea products contributed negatively by 4.16 percentage points
- Non-ferrous metal ores contributed positively by 6.60 percentage points

On a quarterly basis, the main contributors to the index change of the first quarter 2016 (-8.52%) are:

- Coffee products contributed negatively by 6.05 percentage points
- Tea products contributed negatively by 3.56 percentage points

On an annual basis, the main contributors to the index change of first quarter 2016 (-12.23%) are:

- Coffee products contributed negatively by 13.59 percentage points
- Non-ferrous metal ores contributed negatively by 9.87 percentage points
- Tea products contributed positively by 10.77 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 (March 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.

### 7. ANNEXES: REFERENCE TABLES

| Anne    | x 1: PP  | , All Rwanda  | Weights Index (December 2010=100) |        |          |          |          |         |         |          | Contributi<br>Monthly cl |      |  |
|---------|----------|---|-----------------------------------|--------|----------|----------|----------|---------|---------|----------|--------------------------|------|--|
| AGG     | Index ID | ISIC rev. 4 Description   |                                   | Dec-15 | Jan-16   | Feb-16   | Mar-16   | Q1 2015 | Q4 2015 | Q1 2016  | Jan-16                   | Feb- |  |
| 1       | R        | Rwanda  | 1000                              | 111.84 | 111.00   | 109.86   | 110.27   | 111.57  | 111.82  | 110.38   | -0.75                    | -1.0 |  |
| 2 R     | RB       | Mining and quarrying  | 96                                | 80.59  | 75.71    | 82.33    | 88.24    | 110.61  | 80.31   | 82.09    | -0.45                    | 1.2  |  |
| 4 RB    | RB07     | Mining of metal ores  | 96                                | 80.59  | 75.71    | 82.33    | 88.24    | 110.61  | 80.31   | 82.09    | -0.45                    | 1.2  |  |
| 5 RB07  | RB072    | Mining of non-ferrous metal ores                                    | 96                                | 80.59  | 75.71    | 82.33    | 88.24    | 110.61  | 80.31   | 82.09    | -0.45                    | 1.2  |  |
| 6 RB072 | RB0729   | Mining of other non-ferrous metal ores                              | 96                                | 80.59  | 75.71    | 82.33    | 88.24    | 110.61  | 80.31   | 82.09    | -0.45                    | 1.   |  |
| 2 R     | RC       | Manufacturing   | 714                               | 112.96 | 112.32   | 109.93   | 110.12   | 112.30  | 112.97  | 110.79   | -0.31                    | -2.2 |  |
| 5 RC10  | RC105    | Manufacture of dairy products                                       | 11                                | 91.01  | 87.05272 | 87.05272 | 87.05272 | 85.98   | 91.01   | 87.05272 | -0.04                    | 0.0  |  |
| 6 RC105 | RC1050   | Manufacture of dairy products                                       | 11                                | 91.01  | 87.05272 | 87.05272 | 87.05272 | 85.98   | 91.01   | 87.05272 | -0.04                    | 0.   |  |
| 5 RC10  | RC106    | Manufacture of grain mill products                                  | 42                                | 97.62  | 96.24795 | 96.37411 | 95.92379 | 96.65   | 97.54   | 96.18195 | -0.04                    | 0.0  |  |
| 6 RC107 | RC1072   | Manufacture of sugar  | 148                               | 99.35  | 102.08   | 102.33   | 107.38   | 99.99   | 95.93   | 103.93   | 3.28                     | 0.0  |  |
| 6 RC107 | RC1079   | Manufacture of other food products n.e.c. (coffee and tea)          | 146                               | 125.97 | 122.27   | 112.18   | 108.05   | 124.84  | 128.28  | 114.17   | -3.46                    | -2.2 |  |
| 4 RC    | RC11     | Manufacture of beverages Manufacture of other non-metallic          | 174                               | 119.63 | 119.6295 | 119.6295 | 119.6295 | 119.63  | 119.63  | 119.6295 | 0.00                     | 0.0  |  |
| 4 RC    | RC23     | mineral products  | 31                                | 100.71 | 100.7496 | 100.7536 | 100.7718 | 104.33  | 100.65  | 100.7584 | 0.00                     | 0.0  |  |
| 2 R     | RD       | Electricity, gas, steam and air conditioning supply                 | 58                                | 143.07 | 143.07   | 143.07   | 143.07   | 119.79  | 143.07  | 143.07   | 0.00                     | 0.0  |  |
| 2 R     | RE       | Water supply; sewerage, waste management and remediation activities | 129                               | 100.00 | 100.00   | 100.00   | 100.00   | 100.00  | 100.00  | 100.00   | 0.00                     | 0.0  |  |
| 2 R     | RJ       | Information and communication                                       | 3                                 | 191.60 | 191.60   | 191.60   | 191.60   | 192.36  | 191.62  | 191.60   | 0.00                     | 0.0  |  |

| Anne        | x 2: PP  | Weights   | ts Index (December 2010=100) |        |        |                     |        |         |         | Contribution Monthly cha |        |        |
|-------------|----------|---|------------------------------|--------|--------|---------------------|--------|---------|---------|--------------------------|--------|--------|
| VL AGG      | Index ID | ISIC rev. 4 Description   |                              | Dec-15 | Jan-16 | Feb-16              | Mar-16 | Q1 2015 | Q4 2015 | Q1 2016                  | Jan-16 | Feb-16 |
| 1           | R        | Rwanda  | 1000                         | 117.23 | 117.05 | 116.89              | 117.17 | 113.32  | 117.11  | 117.04                   | -0.16  | -0.14  |
| 2 R         | RC       | Manufacturing   | 842                          | 111.81 | 111.60 | 111.39              | 111.73 | 111.60  | 111.66  | 111.57                   | -0.16  | -0.14  |
| 4 RC        | RC10     | Manufacture of food products  | 169                          | 104.24 | 103.02 | 103.11              | 104.04 | 102.66  | 103.47  | 103.39                   | -0.17  | 0.01   |
| 5 RC10      | RC105    | Manufacture of dairy products   | 23                           | 91.01  | 87.05  | 87.05               | 87.05  | 85.98   | 91.01   | 87.05                    | -0.08  | 0.00   |
| 5 RC10      | RC106    | Manufacture of grain mill products  | 90                           | 97.62  | 96.25  | 96.37               | 95.92  | 96.65   | 97.54   | 96.18                    | -0.10  | 0.07   |
| 5 RC10      | RC107    | Manufacture of other food products  | 47                           | 117.00 | 117.78 | 117.54              | 120.92 | 114.69  | 115.03  | 118.74                   | 0.02   | -0.05  |
| 6 RC107     | RC1071   | Manufacture of bakery products  | 12                           | 150.80 | 148.96 | 148.96              | 148.96 | 146.22  | 150.83  | 148.96                   | 0.00   | 0.00   |
| 6 RC107     | RC1072   | Manufacture of sugar  | 36                           | 99.35  | 102.08 | 102.33              | 107.38 | 99.99   | 95.93   | 103.93                   | 0.03   | -0.05  |
| 4 RC        | RC11     | Manufacture of beverages  | 374                          | 119.63 | 119.63 | 119.63              | 119.63 | 119.63  | 119.63  | 119.63                   | 0.00   | 0.00   |
| 5 RC11      | RC110    | Manufacture of beverages  | 374                          | 119.63 | 119.63 | 119.63              | 119.63 | 119.63  | 119.63  | 119.63                   | 0.00   | 0.00   |
| 6 RC110     | RC1103   | Manufacture of malt liquors and malt  | 362                          | 120.02 | 120.02 | 120.02              | 120.02 | 120.02  | 120.02  | 120.02                   | 0.00   | 0.00   |
| 4 RC        | RC12     | Manufacture of tobacco products   | 7                            | 107.92 | 107.92 | 107.92              | 107.92 | 107.92  | 107.92  | 107.92                   | 0.00   | 0.00   |
| 4 RC        | RC13     | Manufacture of textiles   | 10                           | 73.62  | 73.62  | 73.62               | 73.62  | 73.62   | 73.62   | 73.62                    | 0.00   | 0.00   |
| 4 RC        | RC18     | Printing and reproduction of recorded media   | 40                           | 107.16 | 106.40 | 106.40              | 106.54 | 103.51  | 106.70  | 106.44                   | -0.03  | 0.00   |
| 4 RC        | RC20     | Manufacture of chemicals and chemical products Manufacture of rubber and plastics       | 57                           | 112.05 | 112.15 | 112.14              | 112.14 | 112.93  | 112.05  | 112.14                   | 0.00   | 0.00   |
| 4 RC        | RC22     | products Manufacture of other non-metallic  | 24                           | 94.37  | 94.36  | 94.37               | 94.37  | 94.17   | 94.37   | 94.37                    | 0.00   | 0.00   |
| 4 RC        | RC23     | mineral products Manufacture of fabricated metal products, except machinery and         | 67                           | 100.71 | 100.75 | 100.75              | 100.77 | 104.33  | 100.65  | 100.76                   | 0.00   | 0.00   |
| 4 RC        | RC25     | equipment   | 63                           | 107.80 | 108.10 | 104.79              | 106.89 | 106.38  | 107.80  | 106.59                   | 0.02   | -0.15  |
| 4 RC        | RC31     | Manufacture of furniture  | 18                           | 107.63 | 108.90 | 108.90              | 108.90 | 109.04  | 107.63  | 108.90                   | 0.02   | 0.00   |
| 2 R         | RD       | Electricity, gas, steam and air<br>conditioning supply<br>Water supply; sewerage, waste | 123                          | 143.07 | 143.07 | 143.07              | 143.07 | 119.79  | 143.07  | 143.07                   | 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   |
| 2 R         | RJ.      | Information and communication   | 7                            |        | 191.60 | (3) (3) (4) (4) (4) | 191.60 | 192.36  | 191.62  |                          | 0.00   | 0.00   |
| Source: NIS |          |   |                              | 151.00 | 151.00 | 151.00              | 151.00 | 152.50  | 151.02  | 151.00                   | 0.00   | 0.00   |

| Annex 3: PPI, Export products |           |          | Weights                                | ghts Index (December 2010=100) |        |        |        |          |                 |         | Contribution Monthly ch |        |        |
|-------------------------------|-----------|----------|--|--------------------------------|--------|--------|--------|----------|-----------------|---------|-------------------------|--------|--------|
| LVI                           | L AGG     | Index ID | ISIC rev. 4 Description                |                                | Dec-15 | Jan-16 | Feb-16 | Mar-16 ( | Q1 <b>201</b> 5 | Q4 2015 | Q1 2016                 | Jan-16 | Feb-16 |
| 1                             |           | R        | Exports                                | 1000                           | 112.38 | 108.04 | 103.34 | 101.45   | 118.81          | 113.99  | 104.28                  | -3.86  | -4.35  |
| 6                             | RB072     | RB0729   | Mining of other non-ferrous metal ores | 393                            | 80.59  | 75.71  | 82.33  | 88.24    | 110.61          | 80.31   | 82.09                   | -2.40  | 4.83   |
| 8                             | RC1079    | RC107980 | Manufacture of coffee products         | 268                            | 91.96  | 91.26  | 73.23  | 68.23    | 161.61          | 95.69   | 77.57                   | -0.21  | -7.44  |
| 8                             | RC1079    | RC107990 | Manufacture of tea products            | 328                            | 144.13 | 138.46 | 133.19 | 125.96   | 99.11           | 145.84  | 132.54                  | -1.30  | -1.75  |
|                               |           |          | Manufacture of other chemical products | 10                             | 104.26 | 108.77 | 109.92 | 110.91   | 74.69           | 104.86  | 109.87                  | 0.04   | 0.01   |
| 6                             | RC202     | RC2029   | n.e.c.                                 |                                |        |        |        |          |                 |         |                         |        |        |
| So                            | urce: NIS | R        |  |                                |        |        |        |          |                 |         |                         |        |        |

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