



དཔལ་ལྷན་འབྲུག་གཞུང་།  
རྒྱལ་ཡོངས་ཚེས་དབྱེད་བཀོད་འཛིན།  
ཐིམ་ཕུ།

ROYAL GOVERNMENT OF BHUTAN  
NATIONAL STATISTICS BUREAU  
THIMPHU



# Producer Price Index (PPI) Fourth Quarter- 2021

Economic and Environmental  
Statistics Division  
National Statistics Bureau

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## Foreword

The National Statistics Bureau (NSB) is pleased to release the **Producer Price Index (PPI)** Bulletin for the fourth quarter (October - December), 2021. This is the 36<sup>th</sup> series of PPI bulletin published by the Bureau.

The PPI is a measure of average price change of goods and services over time. It measures price change from producer's perspective unlike the Consumer Price Index (CPI) which measures the price change from the purchaser's perspective.

Bhutan's PPI covers logging, mining and quarrying, manufacturing, utilities (electricity and water), transport and communication sectors. It covers domestically produced goods and services.

The NSB would like to express its sincere gratitude to all government agencies, private companies and corporations for providing the data for the publication of this bulletin. We look forward to your continued support and co-operation in future as well.

April, 2021

National Statistics Bureau

Thimphu: Bhutan

## Highlights

### Year-on-Year inflation

The year-on-year (YoY) inflation rate (as measured by PPI) for October, November and December as compared to the same months of the previous year is recorded at 13.88%, 22.43% and 14.75% respectively. On average this is an increase of **17.02%** from the fourth quarter of the previous year (i.e. 2020).

The inflation was mainly driven by Manufacturing sector and Mining & Quarrying sector. Manufacturing sector recorded the highest increase with 34.25% in all three months (Oct, Nov and Dec) followed by Mining & Quarrying sector, which increased by 33.29%, 33.29% and 33.62% in October, November and December respectively. Within the Manufacturing sector, increase in price of basic metals was the main contributor which led to the overall increase. Transport sector recorded an increase of 6.72% on an average due to the fluctuation in exchange rate and increase in the RSTA bus fare and taxi fare. Information & communication sector showed constant decrease of -7.65% in all three months. And the Electricity Sector recorded constant increase of 0.11% in all three months. Prices remained same for Logging and Water supply.

### Month-to-month inflation

The month-to-month PPI increased in October and November by 2.66% and 6.88% respectively, while it decreased in December by 5.29%. On an average, it increased by **1.42%** in fourth quarter due to increase in price of manufacturing sector by 5.78% and 15.01% in October and November respectively while it decreased in December by 10.84%. The Mining/Quarrying sector showed a slight decrease by 0.40% on an average. And Transport Sector increased by 0.23% on an average.

Prices remained same for, Logging, water supply and Information & communication and Electricity and Gas sector in all the three months.

**Table 1: Annual and monthly PPI and inflation by industry**

| ISIC Code | Sectors   | Weights (%) | Index Level (September 2011=100) |        |        |        |        |        |        | Monthly Inflation (%) |             |              | Annual Inflation (%) |              |              |
|-----------|---|-------------|----------------------------------|--------|--------|--------|--------|--------|--------|-----------------------|-------------|--------------|----------------------|--------------|--------------|
|           |   |             | Oct-20                           | Nov-20 | Dec-20 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Oct-21                | Nov-21      | Dec-21       | Oct-21               | Nov-21       | Dec-21       |
|           | All Industry  | 100.00      | 124.00                           | 123.29 | 124.57 | 137.56 | 141.22 | 150.94 | 142.95 | <b>2.66</b>           | <b>6.88</b> | <b>-5.29</b> | <b>13.88</b>         | <b>22.43</b> | <b>14.75</b> |
| A         | Logging   | 0.72        | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| B         | Mining and quarrying  | 5.81        | 128.29                           | 128.29 | 128.29 | 173.52 | 171.00 | 171.00 | 171.41 | -1.46                 | 0.00        | 0.24         | 33.29                | 33.29        | 33.62        |
| C         | Manufacturing   | 47.66       | 126.91                           | 125.34 | 128.14 | 151.95 | 160.73 | 184.86 | 164.81 | 5.78                  | 15.01       | -10.84       | 26.65                | 47.48        | 28.62        |
| D         | Electricity, gas, steam and air conditioning supply                 | 35.35       | 124.65                           | 124.65 | 124.65 | 124.78 | 124.78 | 124.78 | 124.78 | 0.00                  | 0.00        | 0.00         | 0.11                 | 0.11         | 0.11         |
| E         | Water supply; sewerage, waste management and remediation activities | 0.08        | 109.39                           | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| H         | Transport   | 5.91        | 130.59                           | 130.98 | 130.68 | 138.86 | 139.50 | 139.29 | 139.83 | 0.47                  | -0.16       | 0.39         | 6.83                 | 6.34         | 7.00         |
| I         | Information and communication                                       | 4.47        | 82.17                            | 82.17  | 82.17  | 75.89  | 75.89  | 75.89  | 75.89  | 0.00                  | 0.00        | 0.00         | -7.65                | -7.65        | -7.65        |

**Table 2: Annual and monthly PPI and inflation by Product**

| CPC Code  | Description  | Share (%) | Index Level (September 2011=100) |        |        |        |        |        |        | Monthly Inflation (%) |             |              | Annual Inflation (%) |              |              |
|-----------|--|-----------|----------------------------------|--------|--------|--------|--------|--------|--------|-----------------------|-------------|--------------|----------------------|--------------|--------------|
|           |  |           | Oct-20                           | Nov-20 | Dec-20 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Oct-21                | Nov-21      | Dec-21       | Oct-21               | Nov-21       | Dec-21       |
|           | All Product  | 100.00    | 124.00                           | 123.29 | 124.57 | 137.56 | 141.22 | 150.94 | 142.95 | <b>2.66</b>           | <b>6.88</b> | <b>-5.29</b> | <b>13.88</b>         | <b>22.43</b> | <b>14.75</b> |
| Section 0 | Logging  | 0.72      | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| Section 1 | Ores and Minerals; Electricity, gas and water  | 5.81      | 128.29                           | 128.29 | 128.29 | 173.52 | 171.00 | 171.00 | 171.41 | -1.46                 | 0.00        | 0.24         | 33.29                | 33.29        | 33.62        |
| Section 2 | Food products, beverages and tobacco; textiles, apparel and leather products   | 3.56      | 114.71                           | 114.71 | 114.71 | 115.59 | 116.05 | 116.05 | 116.05 | 0.40                  | 0.00        | 0.00         | 1.16                 | 1.16         | 1.16         |
| Section 3 | Other transportable goods, except metal products, machinery and equipment  | 15.36     | 119.81                           | 119.81 | 119.81 | 119.92 | 120.38 | 120.38 | 121.54 | 0.38                  | 0.00        | 0.97         | 0.48                 | 0.48         | 1.45         |
| Section 4 | Metal products, machinery and equipment  | 28.75     | 132.53                           | 129.82 | 134.65 | 178.36 | 195.29 | 246.26 | 202.54 | 9.49                  | 26.10       | -17.76       | 47.36                | 89.70        | 50.41        |
| Section 6 | Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services | 41.34     | 125.45                           | 125.50 | 125.46 | 126.67 | 126.75 | 126.73 | 126.80 | 0.07                  | -0.02       | 0.06         | 1.04                 | 0.98         | 1.06         |
| Section 8 | Business and production services   | 4.47      | 82.17                            | 82.17  | 82.17  | 75.89  | 75.89  | 75.89  | 75.89  | 0.00                  | 0.00        | 0.00         | -7.65                | -7.65        | -7.65        |

**Table 3: Annual and monthly PPI and inflation at sub-group level by industry classification**

| ISIC Code | ISIC description   | Weights (%)   | Index Level (September 2011=100) |        |        |        |        |        |        | Monthly Inflation (%) |             |              | Annual Inflation (%) |              |              |
|-----------|--|---------------|----------------------------------|--------|--------|--------|--------|--------|--------|-----------------------|-------------|--------------|----------------------|--------------|--------------|
|           |  |               | Oct-20                           | Nov-20 | Dec-20 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Oct-21                | Nov-21      | Dec-21       | Oct-21               | Nov-21       | Dec-21       |
|           | <b>All Industry</b>  | <b>100.00</b> | 124.00                           | 123.29 | 124.57 | 137.56 | 141.22 | 150.94 | 142.95 | <b>2.66</b>           | <b>6.88</b> | <b>-5.29</b> | <b>13.88</b>         | <b>22.43</b> | <b>14.75</b> |
| A         | Agriculture, Forestry and Logging                                  | 0.72          | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| 02        | Forestry and logging   | 0.72          | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| 022       | logging  | 0.72          | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| B         | Mining and quarrying   | 5.81          | 128.29                           | 128.29 | 128.29 | 173.52 | 171.00 | 171.00 | 171.41 | -1.46                 | 0.00        | 0.24         | 33.29                | 33.29        | 33.62        |
| 05        | mining of coal and lignite   | 0.89          | 188.05                           | 188.05 | 188.05 | 135.57 | 136.67 | 136.67 | 138.85 | 0.81                  | 0.00        | 1.60         | -27.33               | -27.33       | -26.16       |
| 051       | mining of hard coal  | 0.89          | 188.05                           | 188.05 | 188.05 | 135.57 | 136.67 | 136.67 | 138.85 | 0.81                  | 0.00        | 1.60         | -27.33               | -27.33       | -26.16       |
| 08        | other mining and quarrying   | 4.91          | 119.70                           | 119.70 | 119.70 | 181.46 | 178.09 | 178.09 | 178.09 | -1.86                 | 0.00        | 0.00         | 48.78                | 48.78        | 48.78        |
| 081       | quarrying of sand, stone and clay                                  | 4.82          | 119.45                           | 119.45 | 119.45 | 182.36 | 178.90 | 178.90 | 178.90 | -1.90                 | 0.00        | 0.00         | 49.76                | 49.76        | 49.76        |
| 089       | Mining and Quarrying n.e.c.  | 0.10          | 132.61                           | 132.61 | 132.61 | 141.53 | 141.53 | 141.53 | 141.53 | 0.00                  | 0.00        | 0.00         | 6.73                 | 6.73         | 6.73         |
| C         | Manufacturing  | 47.66         | 126.91                           | 125.34 | 128.14 | 151.95 | 160.73 | 184.86 | 164.81 | 5.78                  | 15.01       | -10.84       | 26.65                | 47.48        | 28.62        |
| 10        | manufacturing of food products                                     | 1.55          | 116.53                           | 116.53 | 116.53 | 119.56 | 120.66 | 120.66 | 120.66 | 0.92                  | 0.00        | 0.00         | 3.55                 | 3.55         | 3.55         |
| 103       | processing and preserving of fruits and vegetables                 | 0.57          | 124.38                           | 124.38 | 124.38 | 133.34 | 133.34 | 133.34 | 133.34 | 0.00                  | 0.00        | 0.00         | 7.20                 | 7.20         | 7.20         |
| 104       | manufacture of vegetables and animal oils and fats                 | 0.89          | 108.25                           | 108.25 | 108.25 | 108.25 | 108.25 | 108.25 | 108.25 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| 106       | Manufacturing of grain mill products, starches and starch products | 0.02          | 205.44                           | 205.44 | 205.44 | 205.44 | 205.44 | 205.44 | 205.44 | 0.00                  | 0.00        | 0.00         | 0.00                 | 0.00         | 0.00         |
| 107       | manufacture of other food products                                 | 0.06          | 146.77                           | 146.77 | 146.77 | 146.77 | 184.15 | 184.15 | 184.15 | 25.47                 | 0.00        | 0.00         | 25.47                | 25.47        | 25.47        |
| 11        | Manufacture of beverages   | 2.01          | 113.33                           | 113.33 | 113.33 | 112.62 | 112.62 | 112.62 | 112.62 | 0.00                  | 0.00        | 0.00         | -0.63                | -0.63        | -0.63        |
| 110       | manufacture of beverages   | 2.01          | 113.33                           | 113.33 | 113.33 | 112.62 | 112.62 | 112.62 | 112.62 | 0.00                  | 0.00        | 0.00         | -0.63                | -0.63        | -0.63        |

|     |   |      |        |        |        |        |        |        |        |       |      |      |      |      |      |
|-----|---|------|--------|--------|--------|--------|--------|--------|--------|-------|------|------|------|------|------|
| 16  | Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials | 1.16 | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 161 | sawmilling and planing of wood  | 0.21 | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 162 | Manufacture of products of wood, cork, straw and plaiting materials   | 0.95 | 325.15 | 325.15 | 325.15 | 325.15 | 325.15 | 325.15 | 325.15 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17  | Manufacture of paper and paper products   | 0.07 | 132.91 | 132.91 | 132.91 | 135.36 | 135.36 | 135.36 | 135.36 | 0.00  | 0.00 | 0.00 | 1.84 | 1.84 | 1.84 |
| 170 | manufacture of paper and paper products   | 0.07 | 132.91 | 132.91 | 132.91 | 135.36 | 135.36 | 135.36 | 135.36 | 0.00  | 0.00 | 0.00 | 1.84 | 1.84 | 1.84 |
| 18  | Printing and reproduction of recorded media   | 0.35 | 193.30 | 193.30 | 193.30 | 196.85 | 196.85 | 196.85 | 196.85 | 0.00  | 0.00 | 0.00 | 1.84 | 1.84 | 1.84 |
| 181 | Printing and services related to printing   | 0.35 | 193.30 | 193.30 | 193.30 | 196.85 | 196.85 | 196.85 | 196.85 | 0.00  | 0.00 | 0.00 | 1.84 | 1.84 | 1.84 |
| 20  | Manufacture of chemical and chemical products   | 5.52 | 97.81  | 97.81  | 97.81  | 97.81  | 97.81  | 97.81  | 97.81  | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 201 | Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and sythetic rubber in primary forms               | 5.34 | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 202 | manufacture of other chemical products  | 0.19 | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22  | Manufacture of rubber and plastic products  | 1.13 | 117.72 | 117.72 | 117.72 | 125.44 | 125.36 | 125.36 | 125.36 | -0.06 | 0.00 | 0.00 | 6.49 | 6.49 | 6.49 |
| 222 | manufacture of plastic products   | 1.13 | 117.72 | 117.72 | 117.72 | 125.44 | 125.36 | 125.36 | 125.36 | -0.06 | 0.00 | 0.00 | 6.49 | 6.49 | 6.49 |

|     |   |       |        |        |        |        |        |        |        |       |       |        |       |        |       |
|-----|---|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|--------|-------|
| 23  | Manufacture of other non-metallic mineral products                  | 6.55  | 118.93 | 118.93 | 118.93 | 117.32 | 118.37 | 118.37 | 121.09 | 0.90  | 0.00  | 2.29   | -0.47 | -0.47  | 1.82  |
| 239 | manufacture of non-metallic mineral products n.e.c                  | 6.55  | 118.93 | 118.93 | 118.93 | 117.32 | 118.37 | 118.37 | 121.09 | 0.90  | 0.00  | 2.29   | -0.47 | -0.47  | 1.82  |
| 24  | Manufacture of basic metals   | 22.11 | 110.31 | 107.39 | 112.62 | 162.32 | 182.64 | 246.92 | 191.50 | 12.52 | 35.20 | -22.45 | 65.56 | 129.93 | 70.04 |
| 241 | manufacture of basic iron and steel                                 | 22.11 | 110.31 | 107.39 | 112.62 | 162.32 | 182.64 | 246.92 | 191.50 | 12.52 | 35.20 | -22.45 | 65.56 | 129.93 | 70.04 |
| 27  | Manufacture of electrical equipment                                 | 6.64  | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 273 | manufacture of wiring and wiring devices                            | 6.64  | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 31  | Manufacture of furniture  | 0.58  | 125.52 | 125.52 | 125.52 | 131.03 | 131.03 | 131.03 | 131.03 | 0.00  | 0.00  | 0.00   | 4.38  | 4.38   | 4.38  |
| 310 | Manufacture of furniture  | 0.58  | 125.52 | 125.52 | 125.52 | 131.03 | 131.03 | 131.03 | 131.03 | 0.00  | 0.00  | 0.00   | 4.38  | 4.38   | 4.38  |
| D   | Electricity, gas, steam and air conditioning supply                 | 35.35 | 124.65 | 124.65 | 124.65 | 124.78 | 124.78 | 124.78 | 124.78 | 0.00  | 0.00  | 0.00   | 0.11  | 0.11   | 0.11  |
| 35  | Electricity, gas, steam and air conditioning supply                 | 35.35 | 124.65 | 124.65 | 124.65 | 124.78 | 124.78 | 124.78 | 124.78 | 0.00  | 0.00  | 0.00   | 0.11  | 0.11   | 0.11  |
| 351 | Electric power generation, transmission and distribution            | 35.35 | 124.65 | 124.65 | 124.65 | 124.78 | 124.78 | 124.78 | 124.78 | 0.00  | 0.00  | 0.00   | 0.11  | 0.11   | 0.11  |
| E   | Water supply; sewerage, waste management and remediation activities | 0.08  | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 36  | water collection, treatment and supply                              | 0.08  | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 360 | water collection, treatment and supply                              | 0.08  | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| H   | Transport and Storage   | 5.91  | 130.59 | 130.98 | 130.68 | 138.86 | 139.50 | 139.29 | 139.83 | 0.47  | -0.16 | 0.39   | 6.83  | 6.34   | 7.00  |
| 49  | land transport and  | 2.45  | 144.17 | 144.17 | 144.17 | 166.66 | 166.66 | 166.66 | 166.66 | 0.00  | 0.00  | 0.00   | 15.60 | 15.60  | 15.60 |



|     |   |      |        |        |        |        |        |        |        |      |       |      |       |       |       |
|-----|---|------|--------|--------|--------|--------|--------|--------|--------|------|-------|------|-------|-------|-------|
|     | transport via pipeline  |      |        |        |        |        |        |        |        |      |       |      |       |       |       |
| 492 | Other land transport  | 2.45 | 144.17 | 144.17 | 144.17 | 166.66 | 166.66 | 166.66 | 166.66 | 0.00 | 0.00  | 0.00 | 15.60 | 15.60 | 15.60 |
| 51  | Air transport   | 3.25 | 119.97 | 120.62 | 120.13 | 120.12 | 121.13 | 120.79 | 121.65 | 0.85 | -0.28 | 0.71 | 0.97  | 0.14  | 1.27  |
| 511 | Passenger air transport   | 3.25 | 119.97 | 120.62 | 120.13 | 120.12 | 121.13 | 120.79 | 121.65 | 0.85 | -0.28 | 0.71 | 0.97  | 0.14  | 1.27  |
| 53  | Postal and Courier activities                                   | 0.21 | 154.20 | 154.29 | 154.22 | 154.22 | 154.36 | 154.31 | 154.42 | 0.09 | -0.03 | 0.07 | 0.10  | 0.01  | 0.13  |
| 531 | Postal activities   | 0.20 | 150.55 | 150.55 | 150.55 | 150.55 | 150.55 | 150.55 | 150.55 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 532 | Courier activities  | 0.01 | 212.40 | 214.14 | 212.80 | 212.78 | 215.52 | 214.60 | 216.92 | 1.29 | -0.43 | 1.08 | 1.47  | 0.22  | 1.94  |
| J   | Information and communication                                   | 4.47 | 82.17  | 82.17  | 82.17  | 75.89  | 75.89  | 75.89  | 75.89  | 0.00 | 0.00  | 0.00 | -7.65 | -7.65 | -7.65 |
| 58  | Publishing activities   | 0.33 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 581 | Publishing of books, periodical and other publishing activities | 0.33 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 60  | Programming and broadcasting activities                         | 0.08 | 248.37 | 248.37 | 248.37 | 248.37 | 248.37 | 248.37 | 248.37 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 601 | Radio Broadcasting  | 0.02 | 164.93 | 164.93 | 164.93 | 164.93 | 164.93 | 164.93 | 164.93 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 602 | Television programming and broadcasting activities              | 0.06 | 275.00 | 275.00 | 275.00 | 275.00 | 275.00 | 275.00 | 275.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 61  | Telecommunication   | 4.07 | 79.16  | 79.16  | 79.16  | 72.53  | 72.53  | 72.53  | 72.53  | 0.00 | 0.00  | 0.00 | -8.38 | -8.38 | -8.38 |
| 612 | Wireless telecommunication activities                           | 4.07 | 79.16  | 79.16  | 79.16  | 72.53  | 72.53  | 72.53  | 72.53  | 0.00 | 0.00  | 0.00 | -8.38 | -8.38 | -8.38 |

**Table 4: Annual and monthly PPI and inflation at sub-sector level by product classification**

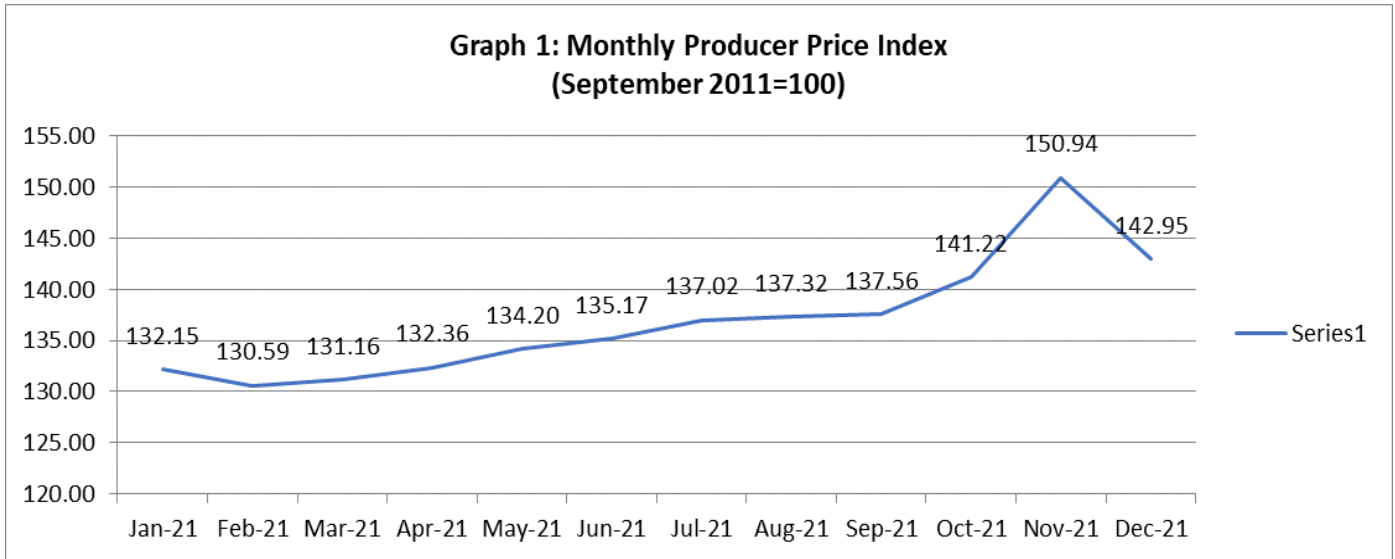
| CPC Code    | Description   | Share (%) | Index Level (September 2011=100) |        |        |        |        |        |        | Monthly Inflation (%) |        |        | Annual Inflation (%) |        |        |
|-------------|---|-----------|----------------------------------|--------|--------|--------|--------|--------|--------|-----------------------|--------|--------|----------------------|--------|--------|
|             |   |           | Oct-20                           | Nov-20 | Dec-20 | Sep-21 | Oct-21 | Nov-21 | Dec-21 | Oct-21                | Nov-21 | Dec-21 | Oct-21               | Nov-21 | Dec-21 |
|             | All Product   | 100.00    | 124.00                           | 123.29 | 124.57 | 137.56 | 141.22 | 150.94 | 142.95 | 2.66                  | 6.88   | -5.29  | 13.88                | 22.43  | 14.75  |
| Section 0   | Agriculture, Forestry and Fishery Products  | 0.72      | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00   | 0.00   | 0.00                 | 0.00   | 0.00   |
| Division 03 | Forestry and Logging Products   | 0.72      | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00   | 0.00   | 0.00                 | 0.00   | 0.00   |
| 031         | Wood in Rough   | 0.72      | 134.36                           | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 134.36 | 0.00                  | 0.00   | 0.00   | 0.00                 | 0.00   | 0.00   |
| Section 1   | Ores and Minerals; Electricity, gas and water   | 5.81      | 128.29                           | 128.29 | 128.29 | 173.52 | 171.00 | 171.00 | 171.41 | -1.46                 | 0.00   | 0.24   | 33.29                | 33.29  | 33.62  |
| Division 11 | Coal and lignite; peat  | 0.89      | 188.05                           | 188.05 | 188.05 | 135.57 | 136.67 | 136.67 | 138.85 | 0.81                  | 0.00   | 1.60   | -27.33               | -27.33 | -26.16 |
| 110         | Coal and lignite; peat  | 0.89      | 188.05                           | 188.05 | 188.05 | 135.57 | 136.67 | 136.67 | 138.85 | 0.81                  | 0.00   | 1.60   | -27.33               | -27.33 | -26.16 |
| Division 15 | Stone, sand and clay  | 2.47      | 118.84                           | 118.84 | 118.84 | 129.90 | 129.90 | 129.90 | 129.90 | 0.00                  | 0.00   | 0.00   | 9.30                 | 9.30   | 9.30   |
| 151         | Monumental or building stone  | 0.08      | 172.49                           | 172.49 | 172.49 | 172.49 | 172.49 | 172.49 | 172.49 | 0.00                  | 0.00   | 0.00   | 0.00                 | 0.00   | 0.00   |
| 152         | Gypsum; anhydrite; limestone flux; limestone and other calcareous stone, of a kind used for the manufacture of lime or cement | 1.71      | 109.94                           | 109.94 | 109.94 | 125.03 | 125.03 | 125.03 | 125.03 | 0.00                  | 0.00   | 0.00   | 13.72                | 13.72  | 13.72  |
| 153         | Sands, pebbles, gravel, broken or crushed stone, natural bitumen and asphalt  | 0.68      | 138.32                           | 138.32 | 138.32 | 138.32 | 138.32 | 138.32 | 138.32 | 0.00                  | 0.00   | 0.00   | 0.00                 | 0.00   | 0.00   |
| Division 16 | Other minerals  | 2.45      | 120.56                           | 120.56 | 120.56 | 254.08 | 244.68 | 244.68 | 244.68 | -3.70                 | 0.00   | 0.00   | 102.95               | 102.95 | 102.95 |
| 163         | Precious and semi-precious stone; pumice stone; emery; natural abrasives; other minerals                                      | 2.45      | 120.56                           | 120.56 | 120.56 | 254.08 | 244.68 | 244.68 | 244.68 | -3.70                 | 0.00   | 0.00   | 102.95               | 102.95 | 102.95 |
| Section 2   | Food products, beverages and tobacco; textiles, apparel and leather products  | 3.56      | 114.71                           | 114.71 | 114.71 | 115.59 | 116.05 | 116.05 | 116.05 | 0.40                  | 0.00   | 0.00   | 1.16                 | 1.16   | 1.16   |
| Division 21 | Meat, fish, fruit, vegetables, oils and fats  | 1.46      | 114.29                           | 114.29 | 114.29 | 117.44 | 117.44 | 117.44 | 117.44 | 0.00                  | 0.00   | 0.00   | 2.76                 | 2.76   | 2.76   |
| 213         | Prepared and preserved vegetables, pulses and potatoes  | 0.08      | 151.59                           | 151.59 | 151.59 | 162.83 | 162.83 | 162.83 | 162.83 | 0.00                  | 0.00   | 0.00   | 7.42                 | 7.42   | 7.42   |
| 214         | Prepared and preserved fruit and nuts   | 0.49      | 120.60                           | 120.60 | 120.60 | 129.25 | 129.25 | 129.25 | 129.25 | 0.00                  | 0.00   | 0.00   | 7.17                 | 7.17   | 7.17   |

|             |  |       |        |        |        |        |        |        |        |       |      |      |       |       |       |
|-------------|--|-------|--------|--------|--------|--------|--------|--------|--------|-------|------|------|-------|-------|-------|
| 215         | Animal and vegetable oils and fats   | 0.89  | 108.25 | 108.25 | 108.25 | 108.25 | 108.25 | 108.25 | 108.25 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| Division 23 | Grain mill products, starches and starch products; other food products   | 0.09  | 161.30 | 161.30 | 161.30 | 161.30 | 189.89 | 189.89 | 189.89 | 17.73 | 0.00 | 0.00 | 17.73 | 17.73 | 17.73 |
| 231         | Grain mill products  | 0.02  | 205.44 | 205.44 | 205.44 | 205.44 | 205.44 | 205.44 | 205.44 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 234         | Bakery products  | 0.06  | 146.77 | 146.77 | 146.77 | 146.77 | 184.15 | 184.15 | 184.15 | 25.47 | 0.00 | 0.00 | 25.47 | 25.47 | 25.47 |
| Division 24 | Beverages  | 2.01  | 113.33 | 113.33 | 113.33 | 112.62 | 112.62 | 112.62 | 112.62 | 0.00  | 0.00 | 0.00 | -0.63 | -0.63 | -0.63 |
| 243         | Malt liquors and malt  | 1.29  | 105.96 | 105.96 | 105.96 | 104.91 | 104.91 | 104.91 | 104.91 | 0.00  | 0.00 | 0.00 | -0.99 | -0.99 | -0.99 |
| 244         | Soft drinks; bottled mineral waters  | 0.72  | 127.88 | 127.88 | 127.88 | 127.88 | 127.88 | 127.88 | 127.88 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| Section 3   | Other transportable goods, except metal products, machinery and equipment  | 15.36 | 119.81 | 119.81 | 119.81 | 119.92 | 120.38 | 120.38 | 121.54 | 0.38  | 0.00 | 0.97 | 0.48  | 0.48  | 1.45  |
| Division 31 | Products of wood, cork, straw and plaiting materials   | 1.16  | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 280.91 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 311         | Wood, sawn or chipped lengthwise, sliced or peeled, of a thickness exceeding 6 mm; railway or tramway sleepers (cross-ties) of wood, not impregnated | 0.21  | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 143.49 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 314         | Boards and panels  | 0.91  | 341.93 | 341.93 | 341.93 | 341.93 | 341.93 | 341.93 | 341.93 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 316         | Builders' joinery and carpentry of wood (including cellular wood panels, assembled parquet panels, shingles and shakes)                              | 0.04  | 115.48 | 115.48 | 115.48 | 115.48 | 115.48 | 115.48 | 115.48 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 319         | Other products of wood; articles of cork, plaiting materials and straw   | 0.00  | 137.57 | 137.57 | 137.57 | 137.57 | 137.57 | 137.57 | 137.57 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| Division 32 | Pulp, paper and paper products; printed matter and related articles  | 0.42  | 181.17 | 181.17 | 181.17 | 184.50 | 184.50 | 184.50 | 184.50 | 0.00  | 0.00 | 0.00 | 1.84  | 1.84  | 1.84  |
| 321         | Pulp, paper and paperboard   | 0.07  | 132.91 | 132.91 | 132.91 | 135.36 | 135.36 | 135.36 | 135.36 | 0.00  | 0.00 | 0.00 | 1.84  | 1.84  | 1.84  |
| 326         | Stamps, cheque forms, banknotes, stock certificates, brochures and leaflets, advertising material and other printed matter                           | 0.35  | 193.30 | 193.30 | 193.30 | 196.85 | 196.85 | 196.85 | 196.85 | 0.00  | 0.00 | 0.00 | 1.84  | 1.84  | 1.84  |
| Division 34 | Basic chemicals  | 5.34  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| 342         | Basic inorganic chemicals n.e.c.   | 5.34  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 96.79  | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |
| Division 35 | Other chemical products; man-made fibres   | 0.25  | 128.66 | 128.66 | 128.66 | 128.66 | 128.66 | 128.66 | 128.66 | 0.00  | 0.00 | 0.00 | 0.00  | 0.00  | 0.00  |

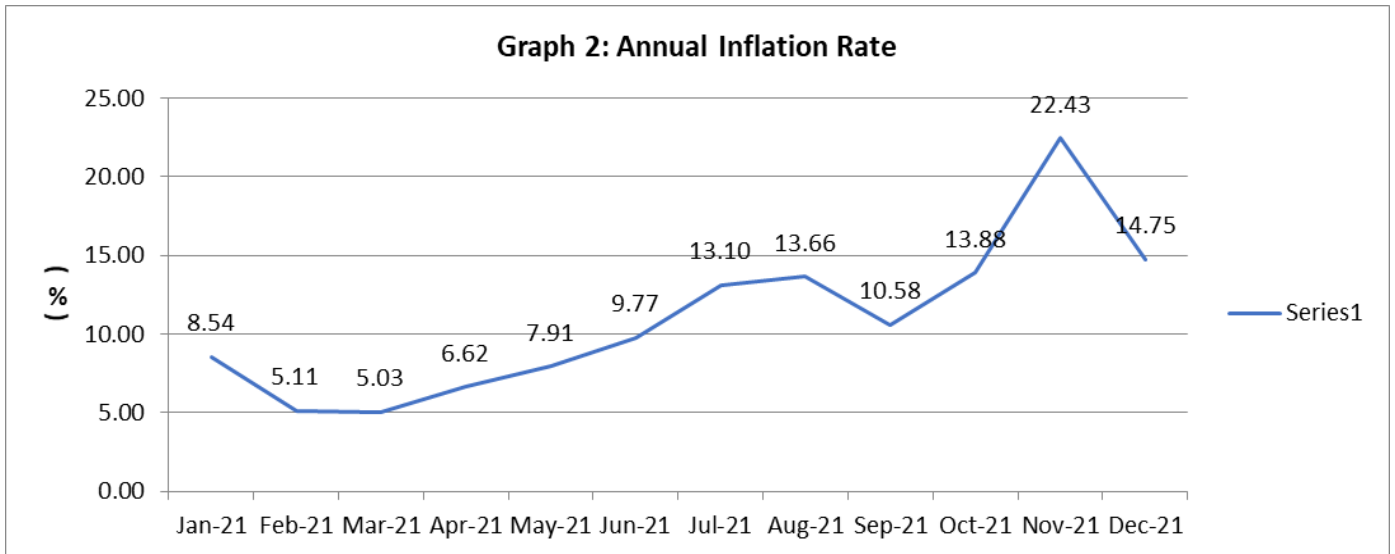
|             |  |       |        |        |        |        |        |        |        |       |       |        |       |        |       |
|-------------|--|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|--------|-------|
| 353         | Soap, cleaning preparations, perfumes and toilet preparations  | 0.19  | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 132.02 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 355         | Man-made fibres  | 0.07  | 119.64 | 119.64 | 119.64 | 119.64 | 119.64 | 119.64 | 119.64 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| Division 36 | Rubber and plastics products   | 1.06  | 117.61 | 117.61 | 117.61 | 125.81 | 125.73 | 125.73 | 125.73 | -0.06 | 0.00  | 0.00   | 6.91  | 6.91   | 6.91  |
| 364         | Packaging products of plastics   | 0.78  | 108.47 | 108.47 | 108.47 | 119.96 | 119.86 | 119.86 | 119.86 | -0.09 | 0.00  | 0.00   | 10.50 | 10.50  | 10.50 |
| 363         | Semi-manufactures of plastics  | 0.28  | 147.65 | 147.65 | 147.65 | 143.85 | 143.85 | 143.85 | 143.85 | 0.00  | 0.00  | 0.00   | -2.57 | -2.57  | -2.57 |
| Division 37 | Glass and glass products and other nonmetallic products n.e.c  | 6.55  | 118.93 | 118.93 | 118.93 | 117.32 | 118.37 | 118.37 | 121.09 | 0.90  | 0.00  | 2.29   | -0.47 | -0.47  | 1.82  |
| 374         | Plaster, lime and cement   | 6.22  | 118.95 | 118.95 | 118.95 | 117.26 | 118.37 | 118.37 | 121.23 | 0.95  | 0.00  | 2.42   | -0.49 | -0.49  | 1.91  |
| 375         | Articles of concrete, cement and plaster   | 0.09  | 120.47 | 120.47 | 120.47 | 120.47 | 120.47 | 120.47 | 120.47 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 376         | Monumental or building stone and articles thereof  | 0.24  | 117.60 | 117.60 | 117.60 | 117.60 | 117.60 | 117.60 | 117.60 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| Division 38 | Furniture; other transportable goods n.e.c.  | 0.58  | 125.52 | 125.52 | 125.52 | 131.03 | 131.03 | 131.03 | 131.03 | 0.00  | 0.00  | 0.00   | 4.38  | 4.38   | 4.38  |
| 381         | Furniture  | 0.58  | 125.52 | 125.52 | 125.52 | 131.03 | 131.03 | 131.03 | 131.03 | 0.00  | 0.00  | 0.00   | 4.38  | 4.38   | 4.38  |
| Section 4   | Metal products, machinery and equipment  | 28.75 | 132.53 | 129.82 | 134.65 | 178.36 | 195.29 | 246.26 | 202.54 | 9.49  | 26.10 | -17.76 | 47.36 | 89.70  | 50.41 |
| Division 41 | Basic metals   | 22.11 | 110.31 | 107.39 | 112.62 | 162.32 | 182.64 | 246.92 | 191.50 | 12.52 | 35.20 | -22.45 | 65.56 | 129.93 | 70.04 |
| 411         | Basic iron and steel   | 16.80 | 113.62 | 110.71 | 115.90 | 173.68 | 198.10 | 296.85 | 214.01 | 14.06 | 49.85 | -27.91 | 74.36 | 168.15 | 84.65 |
| 412         | Products of iron or steel  | 5.31  | 100.48 | 97.53  | 102.83 | 131.05 | 141.23 | 137.88 | 134.72 | 7.77  | -2.38 | -2.29  | 40.56 | 41.37  | 31.02 |
| Division 46 | Electrical machinery and apparatus   | 6.64  | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| 463         | Insulated wire and cable; optical fibre cables   | 6.64  | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 244.09 | 0.00  | 0.00  | 0.00   | 0.00  | 0.00   | 0.00  |
| Section 6   | Distributive trade services; accommodation, food and beverage serving services; transport services; and electricity, gas and water distribution services | 41.34 | 125.45 | 125.50 | 125.46 | 126.67 | 126.75 | 126.73 | 126.80 | 0.07  | -0.02 | 0.06   | 1.04  | 0.98   | 1.06  |
| Division 64 | Passenger transport services   | 5.70  | 129.89 | 130.29 | 129.99 | 138.39 | 139.05 | 138.83 | 139.39 | 0.48  | -0.16 | 0.40   | 7.05  | 6.55   | 7.23  |
| 641         | Local transport and sightseeing transportation services of passengers  | 2.18  | 147.06 | 147.06 | 147.06 | 168.87 | 168.87 | 168.87 | 168.87 | 0.00  | 0.00  | 0.00   | 14.83 | 14.83  | 14.83 |
| 642         | Long-distance transport services of passengers   | 3.52  | 120.21 | 120.80 | 120.35 | 122.22 | 123.17 | 122.85 | 123.65 | 0.78  | -0.26 | 0.65   | 2.47  | 1.69   | 2.74  |
| Division 68 | Postal and courier services  | 0.21  | 154.20 | 154.29 | 154.22 | 154.22 | 154.36 | 154.31 | 154.42 | 0.09  | -0.03 | 0.07   | 0.10  | 0.01   | 0.13  |

|             |  |       |        |        |        |        |        |        |        |      |       |      |       |       |       |
|-------------|--|-------|--------|--------|--------|--------|--------|--------|--------|------|-------|------|-------|-------|-------|
| 681         | Postal and courier services                                      | 0.21  | 154.20 | 154.29 | 154.22 | 154.22 | 154.36 | 154.31 | 154.42 | 0.09 | -0.03 | 0.07 | 0.10  | 0.01  | 0.13  |
| Division 69 | Electricity, gas and water distribution (on own account)         | 35.43 | 124.61 | 124.61 | 124.61 | 124.74 | 124.74 | 124.74 | 124.74 | 0.00 | 0.00  | 0.00 | 0.11  | 0.11  | 0.11  |
| 691         | Electricity and gas distribution (on own account)                | 35.35 | 124.65 | 124.65 | 124.65 | 124.78 | 124.78 | 124.78 | 124.78 | 0.00 | 0.00  | 0.00 | 0.11  | 0.11  | 0.11  |
| 692         | Water distribution (on own account)                              | 0.08  | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 109.39 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| Section 8   | Business and production services                                 | 4.47  | 82.17  | 82.17  | 82.17  | 75.89  | 75.89  | 75.89  | 75.89  | 0.00 | 0.00  | 0.00 | -7.65 | -7.65 | -7.65 |
| Division 83 | Other professional, technical and business services              | 0.40  | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| 836         | Advertising services and provision of advertising space or time  | 0.40  | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 119.59 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |
| Division 84 | Telecommunications, broadcasting and information supply services | 4.07  | 79.16  | 79.16  | 79.16  | 72.53  | 72.53  | 72.53  | 72.53  | 0.00 | 0.00  | 0.00 | -8.38 | -8.38 | -8.38 |
| 841         | Telephony and other telecommunications services                  | 3.77  | 97.93  | 97.93  | 97.93  | 89.11  | 89.11  | 89.11  | 89.11  | 0.00 | 0.00  | 0.00 | -9.00 | -9.00 | -9.00 |
| 842         | Internet telecommunications services                             | 0.30  | 5.22   | 5.22   | 5.22   | 5.22   | 5.22   | 5.22   | 5.22   | 0.00 | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  |

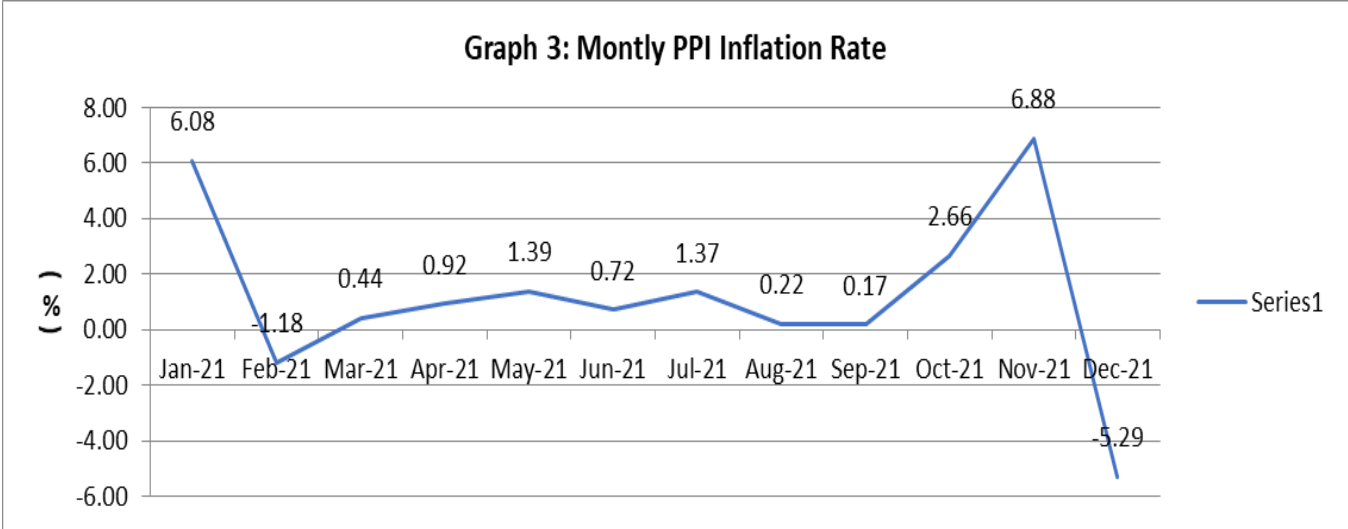
**Graph 1: Time series of monthly Producer Price Index (PPI)**



**Graph 2: Year-on-year inflation rate**



**Graph 3: Month-to-month inflation rate**



## Technical Note

### Definition

Producer Price Index (PPI) is the measure of average change over time in the prices received by the domestic producer of goods and services. It shows the average change in the prices goods and services with reference to a particular reference period known as Index reference.

### Scope and Coverage

The PPI covers domestic produced goods and services that are destined for domestic as well as export market. The sectors included are logging, mining and quarrying, manufacturing, utilities (electricity and water), transport and communication sector. PPI is classified and compiled by activity (ISIC rev. 4) and also by product (CPC rev. 2).

### Weights

Weights denote the significance or relative importance of each level or group to the total. PPI weights are developed using the total value of turnover figure from the establishment census 2010 by the Ministry of Labor and Human Resource and also the data collected on turnover of each establishment by the National Statistics Bureau.

### Index Reference

The index reference for the calculation of the PPI is the September, 2011 which is normally set as 100.

### Price Collection

Point-in-time prices are collected for the PPI compilation i.e. price of a product on the 15th day of every month or the nearest trading day to the 15th of the month.

### Index calculation methodology

Geometric Modified Laspeyre's formula is used for compiling PPI

$$P_{gyo} = \prod_{i=1}^n \left( \frac{P_i^t}{P_i^0} \right)^{w_i^b}$$



## Uses of PPI

1. As deflator in National Accounts to estimate the real growth rate
2. As lead indicator of inflationary trends
3. Indexation of cost escalation in long term contract of goods and services
4. Business analysis
5. Current cost accounting

## Calculating Index Changes

Movement of Price index from one month to another is usually expressed in term of percent changes, rather than as changes in index points. Index point changes are affected by the level of the index in relation to its base period, whereas percent changes are not. The following example shows the computation of index point and percent changes.

### *Index point change*

|                            |        |
|----------------------------|--------|
| All industries Price Index | 104.50 |
| Less previous price index  | 101.25 |
| Equals index point change  | 3.25   |

### *Index percent change*

|                                 |             |
|---------------------------------|-------------|
| Index point change              | 3.25        |
| Divided by Previous Price Index | 101.25      |
| Equals                          | 0.032       |
| Result multiplied by 100        | 0.032 x 100 |
| Equals percent changes          | 3.2         |

## Revision Policy

If the data are not received on time from the sources, the index published for that particular quarter will be marked as “Provisional” and this will be finalized when the next quarter index is published.

## Dissemination

PPI Bulletin will be compiled and published on a quarterly basis. It will be made available in hard copy as well as in electronic version through our website ([www.nsb.gov.bt](http://www.nsb.gov.bt)).