





ROYAL GOVERNMENT OF BHUTAN NATIONAL STATISTICS BUREAU

# Producer Price Index (PPI) Third Quarter-2024 July-September

Economic and Environmental Statistics Division National Statistics Bureau

## Foreword

The National Statistics Bureau (NSB) is pleased to release the Producer Price Index (PPI) Bulletin for the third quarter (July-September) 2024. This is the 47<sup>th</sup> edition of the PPI bulletin published by the NSB.

The PPI serves as a gauge of the average price changes of goods and services over time, providing insights from the producer's standpoint. It distinguishes itself from the Consumer Price Index (CPI), which reflects price variations from the consumer's viewpoint.

This bulletin of PPI encompasses sectors such as logging, mining and quarrying, manufacturing, electricity, gas, steam, air conditioning supply, transport, and information & communication. It covers domestically produced goods and services.

The NSB extends its heartfelt appreciation to all government agencies, corporations, and private enterprises for their invaluable contribution to data, which facilitated the publication of this bulletin. We anticipate similar continued support and collaboration in the future.

November, 2024

**National Statistics Bureau** 

Thimphu: Bhutan

# Highlights

#### Year-on-Year Inflation

Year-on-Year (YoY) inflation for July, August, and September 2024, as measured by the Producer Price Index (PPI), decreased to -2.52 percent, -3.25 percent, and -3.27 percent, respectively, reflecting an average decline of -3.01 percent during the third quarter compared to the same quarter of the previous year.

The Mining & Quarrying, Manufacturing, and Information & Communication sectors were the primary contributors to the decrease in inflation during the quarter. The Mining & Quarrying sector registered declines of -4.64 percent, -4.89 percent, and -5.16 percent during the months of third quarters, mainly due to a drop in the prices of coal and other mineral products in the third quarter. Similarly, the Manufacturing sector saw a decline of -6.05 percent, -5.79 percent, and -7.39 percent in July, August, and September, respectively.

The Information & Communication sector recorded an average inflation drop of -9.76 percent, primarily due to price reductions by Bhutan Telecom Ltd and TashiCell for post-paid and prepaid services, effective from November 2023.

On the other hand, the Transport sector experienced a YoY increase in inflation to 0.77 percent, mainly due to rising costs of public transportation services and higher postal service charges for both domestic and international deliveries.

Meanwhile, the Electricity, Gas, Steam, & Air Conditioning Supply, and Forestry & Logging sectors saw no change in prices during the third quarter of 2024 compared to the same period in the previous year.

#### **Month-on-Month Inflation**

Month-on-month inflation increased to 0.35 percent in September, up from -0.41 percent in the previous month. This rise was primarily driven by price increases in the Mining & Quarrying and Transport sectors, which saw average increases of 0.02 percent and 1.04 percent, respectively. However, the Manufacturing sector recorded a decline of 0.96 percent.

Meanwhile, the Forestry & Logging, Electricity, Gas, Steam, and Air Conditioning Supply, and Information & Communication sectors showed no change in prices during the months of the third quarter compared to the same period in the previous year.

BSIC		Weights		PPI I	ndex				
Code	Sectors	(%)	Jul-23	Aug-23	Sep-23	Jun-24	Jul-24	Aug-24	Sep-24
	All Industry	1.00	98.63	98.98	99.34	96.41	96.15	95.76	96.10
А	Forestry & Logging	0.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00
В	Mining and quarrying	0.09	98.26	98.68	98.84	93.68	93.70	93.86	93.74
С	Manufacturing	0.34	89.39	87.97	88.85	84.71	83.99	82.88	82.28
D	Electricity, gas, steam and	0.27	103.61	103.61	103.61	103.61	103.61	103.61	103.61
Н	Transport	0.21	108.96	113.44	113.56	111.59	111.65	111.77	115.06
J	Information and communication	0.05	95.94	95.94	95.94	86.58	86.58	86.58	86.58
			% Char	ige					
			Year-	on-Year			N	nth	
	All Industry	1.00	-2.52	-3.25	-3.27		-0.27	-0.41	0.35
Α	Forestry & Logging	0.04	0.00	0.00	0.00	••	0.00	0.00	0.00
В	Mining and quarrying	0.09	-4.64	-4.89	-5.16	•••	0.03	0.16	-0.12
С	Manufacturing	0.34	-6.05	-5.79	-7.39		-0.85	-1.32	-0.73
D	Electricity, gas, steam and	0.27	0.00	0.00	0.00		0.00	0.00	0.00
Н	Transport	0.21	2.46	-1.47	1.32		0.05	0.11	2.94
J	Information and communication	0.05	-9.76	-9.76	-9.76		0.00	0.00	0.00

# Table 1: Producer Price Index and % change by industry (2017 = 100)

# Table 2: Producer Price Index by sub-group and by industry (2017 = 100)

BSIC	BSIC description	Weights	Weights PPI Index								
Code	BSIC description	(%)	Jul-23	Aug-23	Sep-23	Jun-24	Jul-24	Aug-24	Sep-24		
	All Industry	1.00	98.63	98.98	99.34	96.41	96.15	95.76	96.10		
Α	Forestry and Logging	0.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00		
02	Forestry and logging	0.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00		
022	logging	0.04	100.00	100.00	100.00	100.00	100.00	100.00	100.00		
В	Mining and quarrying	0.09	98.26	98.68	98.84	93.68	93.70	93.86	93.74		
05	mining of coal and lignite	0.03	99.21	100.21	100.57	99.48	99.48	99.83	99.50		
051	mining of hard coal	0.03	99.21	100.21	100.57	99.48	99.48	99.83	99.50		
08	other mining and quarrying	0.06	97.84	98.01	98.08	91.18	91.22	91.29	91.26		
081	quarrying of sand, stone and clay	0.06	97.84	98.01	98.08	91.18	91.22	91.29	91.26		
С	Manufacturing	0.34	89.39	87.97	88.85	84.71	83.99	82.88	82.28		

BSIC	DCIC description	Weights				PPI Index			
Code	BSIC description	(%)	Jul-23	Aug-23	Sep-23	Jun-24	Jul-24	Aug-24	Sep-24
10	Manufacturing of food products	0.02	103.00	103.11	103.11	105.63	105.63	105.74	104.22
103	Processing and preserving of fruits and vegetables	0.01	110.16	110.36	110.36	109.85	93.28	110.06	110.06
	Manufacture of vegetables and animal oils and	0.00							
104	fats		110.16	110.36	110.36	109.85	109.85	110.06	110.06
108	Prepared animal feeds	0.01	91.45	91.45	91.45	100.59	100.59	100.59	95.54
11	Manufacture of beverages	0.04	100.34	100.34	100.34	100.14	100.12	100.12	100.12
110	Manufacture of beverages	0.04	100.34	100.34	100.34	100.14	100.12	100.12	100.12
	Manufacture of wood and of products of wood	0.01							
16	and		95.98	95.98	95.98	95.98	95.98	95.98	95.98
161	Sawmilling and planning of wood	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	Manufacture of products of wood, cork, straw	0.00							
162	and		94.21	94.21	94.21	94.21	94.21	94.21	94.21
18	Printing and reproduction of recorded media	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
181	Printing and services related to printing	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
20	Manufacture of chemical and chemical products	0.03	92.99	92.99	92.99	67.26	66.43	66.43	66.43
201	Manufacture of basic chemicals, fertilizers and	0.03	92.99	92.99	92.99	67.26	66.43	66.43	66.43
22	Manufacture of rubber and plastic products	0.02	104.72	104.72	104.49	94.87	95.19	95.19	95.15
222	manufacture of plastic products	0.02	104.72	104.72	104.49	94.87	95.19	95.19	95.15
	Manufacture of other non-metallic mineral	0.07							
23	products		110.19	112.10	112.10	111.13	109.78	109.26	109.26
	Manufacture of non-metallic mineral products	0.07							
239	n.e.c		110.19	112.10	112.10	111.13	109.78	109.26	109.26
24	Manufacture of basic metals	0.14	72.53	69.15	70.88	68.47	67.57	65.55	64.53
241	manufacture of basic iron and steel	0.14	72.53	69.15	70.88	68.47	67.57	65.55	64.53
31	Manufacture of furniture	0.01	102.67	102.67	102.67	102.67	102.67	102.67	102.67
310	Manufacture of furniture	0.01	102.67	102.67	102.67	102.67	102.67	102.67	102.67
	Electricity, gas, stream and air conditioning	0.27							
D	supply		103.61	103.61	103.61	103.61	103.61	103.61	103.61
35	Electricity, gas, steam and air conditioning supply	0.27	103.61	103.61	103.61	103.61	103.61	103.61	103.61
351	Electric power generation, transmission and	0.27	103.61	103.61	103.61	103.61	103.61	103.61	103.61
Н	Transport and Storage	0.21	108.96	113.44	113.56	111.59	111.65	111.77	115.06
49	land transport and transport via pipeline	0.10	110.32	119.82	119.82	113.98	113.98	113.98	121.51
492	Other land transport	0.10	110.32	119.82	119.82	113.98	113.98	113.98	121.51
51	Air transport	0.11	108.01	108.50	108.71	109.05	109.17	109.39	109.32

BSIC	PSIC description	Weights	Weights PPI Index						
Code	BSIC description	(%)	Jul-23	Aug-23	Sep-23	Jun-24	Jul-24	Aug-24	Sep-24
511	Passenger air transport	0.11	108.01	108.50	108.71	109.05	109.17	109.39	109.32
53	Postal and Courier activities	0.00	101.47	101.58	101.63	130.58	130.61	130.68	130.66
531	Postal activities	0.00	100.00	100.00	100.00	134.07	134.07	134.07	134.07
532	Courier activities	0.01	110.38	111.20	111.56	112.12	112.31	112.69	112.56
J	Information and communication	0.05	95.94	95.94	95.94	86.58	86.58	86.58	86.58
61	Telecommunication	0.05	95.94	95.94	95.94	86.58	86.58	86.58	86.58
612	Wireless telecommunication activities	0.05	95.94	95.94	95.94	86.58	86.58	86.58	86.58

# Table 3: Year -on-Year and Month-on-Month % change by sub-group and by industry (2017 = 100)

BSIC			Month-on-Month		Year-on-Year		ar	
Code	BSIC description	Weights (%)	Jul-23	Aug-23	Sep-23	Jul-24	Aug-24	Sep-24
	All Industry	1.00	-0.27	-0.41	0.35	-2.52	-3.25	-3.27
Α	Forestry and Logging	0.04	0.00	0.00	0.00	0.00	0.00	0.00
02	Forestry and logging	0.04	0.00	0.00	0.00	0.00	0.00	0.00
022	logging	0.04	0.00	0.00	0.00	0.00	0.00	0.00
В	Mining and quarrying	0.09	0.03	0.16	-0.12	-4.64	-4.89	-5.16
05	mining of coal and lignite	0.03	0.00	0.35	-0.33	0.28	-0.38	-1.07
051	mining of hard coal	0.03	0.00	0.35	-0.33	0.28	-0.38	-1.07
08	other mining and quarrying	0.06	0.04	0.08	-0.03	-6.77	-6.86	-6.95
081	quarrying of sand, stone and clay	0.06	0.04	0.08	-0.03	-6.77	-6.86	-6.95
С	Manufacturing	0.34	-0.85	-1.32	-0.73	-6.05	-5.79	-7.39
10	Manufacturing of food products	0.02	0.00	0.10	-1.44	2.56	2.56	1.08
103	Processing and preserving of fruits and vegetables	0.01	-15.09	17.98	0.00	-15.32	-0.28	-0.28
104	Manufacture of vegetables and animal oils and fats	0.00	0.00	0.18	0.00	-0.28	-0.28	-0.28
108	Prepared animal feeds	0.01	0.00	0.00	-5.02	10.00	10.00	4.47
11	Manufacture of beverages	0.04	-0.02	0.00	0.00	-0.22	-0.21	-0.21
110	Manufacture of beverages	0.04	-0.02	0.00	0.00	-0.22	-0.21	-0.21
16	Manufacture of wood and of products of wood and cork, except	0.01	0.00	0.00	0.00	0.00	0.00	0.00
161	Sawmilling and planning of wood	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	Manufacture of products of wood, cork, straw and plaiting	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	Printing and reproduction of recorded media	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	Printing and services related to printing	0.00	0.00	0.00	0.00	0.00	0.00	0.00

BSIC			Month-on-Month		Year-on-Year		ar	
Code	BSIC description	Weights (%)	Jul-23	Aug-23	Sep-23	Jul-24	Aug-24	Sep-24
20	Manufacture of chemical and chemical products	0.03	-1.23	0.00	0.00	-28.56	-28.56	-28.56
201	Manufacture of basic chemicals, fertilizers and nitrogen	0.03	-1.23	0.00	0.00	-28.56	-28.56	-28.56
22	Manufacture of rubber and plastic products	0.02	0.33	0.00	-0.04	-9.11	-9.11	-8.94
222	manufacture of plastic products	0.02	0.33	0.00	-0.04	-9.11	-9.11	-8.94
23	Manufacture of other non-metallic mineral products	0.07	-1.21	-0.47	0.00	-0.38	-2.53	-2.53
239	Manufacture of non-metallic mineral products n.e.c	0.07	-1.21	-0.47	0.00	-0.38	-2.53	-2.53
24	Manufacture of basic metals	0.14	-1.30	-3.00	-1.56	-6.83	-5.21	-8.96
241	manufacture of basic iron and steel	0.14	-1.30	-3.00	-1.56	-6.83	-5.21	-8.96
31	Manufacture of furniture	0.01	0.00	0.00	0.00	0.00	0.00	0.00
310	Manufacture of furniture	0.01	0.00	0.00	0.00	0.00	0.00	0.00
D	Electricity, gas, stream and air conditioning supply	0.27	0.00	0.00	0.00	0.00	0.00	0.00
35	Electricity, gas, steam and air conditioning supply	0.27	0.00	0.00	0.00	0.00	0.00	0.00
351	Electric power generation, transmission and distribution	0.27	0.00	0.00	0.00	0.00	0.00	0.00
Н	Transport and Storage	0.21	0.05	0.11	2.94	2.46	-1.47	1.32
49	land transport and transport via pipeline	0.10	0.00	0.00	6.61	3.31	-4.88	1.41
492	Other land transport	0.10	0.00	0.00	6.61	3.31	-4.88	1.41
51	Air transport	0.11	0.10	0.21	-0.07	1.07	0.82	0.56
511	Passenger air transport	0.11	0.10	0.21	-0.07	1.07	0.82	0.56
53	Postal and Courier activities	0.00	0.02	0.05	-0.02	28.73	28.65	28.57
531	Postal activities	0.00	0.00	0.00	0.00	34.07	34.07	34.07
532	Courier activities	0.01	0.17	0.34	-0.11	1.74	1.34	0.89
J	Information and communication	0.05	0.00	0.00	0.00	-9.76	-9.76	-9.76
61	Telecommunication	0.05	0.00	0.00	0.00	-9.76	-9.76	-9.76
612	Wireless telecommunication activities	0.05	0.00	0.00	0.00	-9.76	-9.76	-9.76



#### Graph 1: Month-on-Month Producer Price Index (PPI)







### Graph 3: Month-on-month inflation rate

# **Technical Notes**

#### 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 of goods and services with reference to a particular reference period known as Index reference.

#### Scope and Coverage

The PPI covers domestically produced goods and services that are destined for domestic as well as export markets. The sectors included are logging, mining and quarrying, manufacturing, utilities (electricity and water), transport, and the Information & communication sector. PPI is classified and compiled by activity (BSIC 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 Economic Census of Bhutan ECoB 2017 which is carried out by the National Statistics Bureau (NSB).

#### Index Reference

The index reference for the calculation of the PPI is 2017 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 Laspeyres'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 a lead indicator of inflationary trends
- 3. Indexation of cost escalation in long-term contracts of goods and services
- 4. Business Analysis
- 5. Current cost accounting

#### **Calculating Index Changes**

Movement of the Price index from one month to another is usually expressed in terms 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 points and percent changes.

#### Index point change

All industry's Price Index	104.50
The 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 are marked as "Provisional" and it is revised and finalized when the next quarter index is published.

#### Dissemination

PPI Bulletin is compiled and published on a quarterly basis. It is made available in electronic version through our office website (www.nsb.gov.bt).