

व्रथासी क्रियास्थ्यः क्षेत्रान्यन्यान्। यह्रवा न्यायास्य त्यं यायास्य

ROYAL GOVERNMENT OF BHUTAN NATIONAL STATISTICS BUREAU THIMPHU



Producer Price Index (PPI)

Second Quarter-2022

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 Second quarter (April – June), 2022. This is the 38th 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, Electricity, gas, steam and air

conditioning supply, 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 the future as well.

October, 2023

National Statistics Bureau

Thimphu: Bhutan

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Highlights

Year-on-Year inflation

The year-on-year (YoY) inflation rate (as measured by PPI) for April, May, and June as compared to the same months of the previous year is recorded at 9.36%, 6.59%, and 4.62% respectively. On average this is an increase of 6.87% from the second quarter of the previous year (i.e. 2021).

Manufacturing, Mining and quarrying, and transportation were the primary drivers of inflation. In the months of April, May, and June manufacturing sector recorded an increase of 21.22%, 12.33%, and 6.78% respectively. And the Mining and quarrying sector recorded an increase of 2.80%, 3.30%, and 3.02% in the months of April, May, and June respectively. The transportation sector was next, with a three-month average gain of 5.26% (April-June). The primary contributor to the total increase in the Manufacturing sector was an increase in the price of basic metals. In April, May, and June Information & Communication sector declined -10.19 %, -2.75 %, and -2.75 %, respectively, with an average drop of 5.23%. In each of the three months, the Electricity, gas, steam, and air conditioning supply sector increased by 0.31 %. Forestry and Logging sector prices remained unchanged.

Month-to-month inflation

The month-to-month PPI increased in April by 1.39%, while it decreased in May and June by 1.17% and 1.15% respectively. On average, it decreased by 0.31% in the second quarter due to a decrease in the price of the manufacturing sector by 3.85% and 3.51% in May and June respectively while it increased by 3.77% in April month. The Mining/Quarrying sector showed an increase of 2.77% and 0.49% in April and May but decreased by 0.27% in June. The transport sector showed a decrease of 0.03% in April but increased by 0.49% and 0.33% in May and June, respectively. Electricity, gas, steam, and air conditioning supply showed an increase of 0.21% in April month but in the months of May and June, there was no change in month-to-month inflation. Likewise, the Information and communication sector decreased in April by 2.75% but there is no change in May and June month.

Prices remained the same for the forestry and logging sector in all three months.

Table 1: Annual and monthly PPI and inflation by industry

		Weights			PPI Inde	x Level (20	17=100)	Monthly Inflation (%)			Annual Inflation (%)				
ISIC Code	Sectors	(%)	Apr-21	May-21	Jun-21	Mar-22	Apr-22	May-22	Jun-22	Apr-22	May-22	Jun-22	Apr-22	May-22	Jun-22
	All Industry	1.00	92.59	93.88	94.56	99.88	101.26	100.08	98.94	1.39	-1.17	-1.15	9.36	6.61	4.63
Α	Forestry & Logging	0.04	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
В	Mining and quarrying	0.09	101.23	101.23	101.23	101.32	104.06	104.57	104.29	2.71	0.49	-0.27	2.80	3.30	3.02
С	Manufacturing	0.34	84.54	87.71	89.04	98.79	102.47	98.52	95.07	3.73	-3.85	-3.51	21.22	12.33	6.78
	Electricity, gas, steam and air														
D	conditioning supply	0.27	99.89	99.89	99.89	100.00	100.21	100.21	100.21	0.21	0.00	0.00	0.31	0.31	0.31
Н	Transport	0.21	96.39	96.01	96.08	100.80	100.77	101.27	101.61	-0.03	0.49	0.33	4.54	5.48	5.75
J	Information and communication	0.05	108.28	100.00	100.00	100.00	97.25	97.25	97.25	-2.75	0.00	0.00	-10.19	-2.75	-2.75

Table 2: Annual and monthly PPI and inflation at sub-group level by industry classification

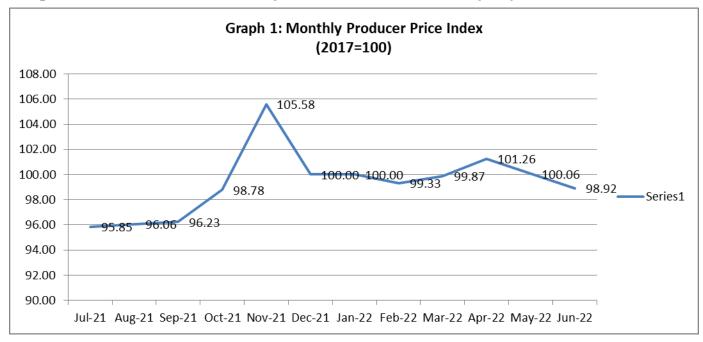
ISIC	ISIC description	Weights			PPI Inde	x Level (20	17=100)	Mont	hly Inflatio	on (%)	Annual Inflation (%)				
Code	isic description	(%)	Apr-21	May-21	Jun-21	Mar-22	Apr-22	May-22	Jun-22	Apr-22	May-22	Jun-22	Apr-22	May-22	Jun-22
	All Industry	1.00	92.59	93.88	94.56	99.88	101.26	100.08	98.94	1.39	-1.17	-1.15	9.36	6.61	4.63
Α	Forestry and Logging	0.0395	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
02	Forestry and logging	0.0395	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
022	logging	0.0395	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
В	Mining and quarrying	0.0910	101.23	101.23	101.23	101.32	104.06	104.57	104.29	2.71	0.49	-0.27	2.80	3.30	3.02
05	mining of coal and lignite	0.0282	97.64	97.64	97.64	102.01	102.01	102.01	102.01	0.00	0.00	0.00	4.47	4.47	4.47
051	mining of hard coal	0.0282	97.64	97.64	97.64	102.01	102.01	102.01	102.01	0.00	0.00	0.00	4.47	4.47	4.47
08	other mining and quarrying	0.0628	101.90	101.90	101.90	101.01	105.00	105.74	105.33	3.95	0.71	-0.39	3.04	3.77	3.37
081	quarrying of sand, stone and clay	0.0628	101.93	101.93	101.93	101.01	105.00	105.74	105.33	3.95	0.71	-0.39	3.01	3.73	3.33
С	Manufacturing	0.3357	84.54	87.71	89.04	98.79	102.47	98.52	95.07	3.73	-3.85	-3.51	21.22	12.33	6.78
10	Manufacturing of food products	0.0202	99.09	99.09	99.09	100.67	100.67	100.67	100.67	0.00	0.00	0.00	1.60	1.60	1.60
103	Processing and preserving of fruits and vegetables	0.0114	100.00	100.00	100.00	101.19	101.19	101.19	101.19	0.00	0.00	0.00	1.19	1.19	1.19
104	Manufacture of vegetables and animal oils and fats	0.0021	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
104		0.0031	100.00	100.00	100.00	100.00	100.00	100.00	100.00			0.00	0.00	0.00	
108	Prepared animal feeds	0.0057	99.09	99.09	99.09	100.00	100.00	100.00	100.00	0.00	0.00	0.00	0.92	0.92	0.92
11	Manufacture of beverages	0.0389	100.00	100.00	100.00	100.15	100.15	100.15	100.15	0.00	0.00	0.00	0.15	0.15	0.15
110	Manufacture of beverages	0.0389	100.95	100.95	100.95	100.15	100.15	100.15	100.15	0.00	0.00	0.00	-0.79	-0.79	-0.79

16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.0064	93.54	93.54	93.54	100.00	100.00	100.00	100.00	0.00	0.00	0.00	6.91	6.91	6.91
161	Sawmilling and planning of wood	0.0020	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
162	Manufacture of products of wood, cork, straw and plaiting materials	0.0044	92.19	92.19	92.19	100.00	100.00	100.00	100.00	0.00	0.00	0.00	8.48	8.48	8.48
18	Printing and reproduction of recorded media	0.0048	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
181	Printing and services related to printing	0.0048	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
20	Manufacture of chemical products	0.0269	100.00	100.00	100.00	102.04	100.00	103.66	102.04	-2.00	3.66	-1.56	0.00	3.66	2.04
201	Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms	0.0269	100.00	100.00	100.00	102.04	100.00	103.66	102.04	-2.00	3.66	-1.56	0.00	3.66	2.04
	Manufacture of rubber														
22	and plastic products manufacture of plastic	0.0248	101.71	101.10	101.10	102.07	102.21	102.21	102.21	0.13	0.00	0.00	0.49	1.09	1.09
222	products	0.0248	101.71	101.10	101.10	102.07	102.21	102.21	102.21	0.13	0.00	0.00	0.49	1.09	1.09
23	Manufacture of other non-metallic mineral products	0.0660	103.25	103.25	103.25	101.53	102.23	102.19	102.12	0.69	-0.04	-0.07	-0.99	-1.03	-1.10
239	Manufacture of non- metallic mineral products n.e.c	0.0660	103.25	101.10	101.10	101.53	102.23	102.19	102.12	0.69	-0.04	-0.07	-0.99	1.07	1.00

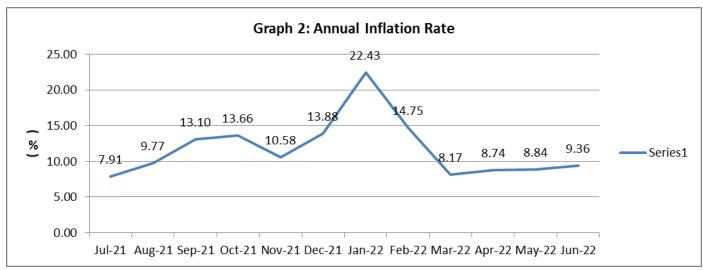
	Manufacture of basic				ĺ										
24	metals	0.1370	69.65	75.44	77.92	95.48	104.49	94.25	86.65	9.44	-9.80	-8.06	50.03	24.93	11.20
	manufacture of basic														
241	iron and steel	0.1370	69.65	75.44	77.92	95.48	104.49	94.25	86.65	9.44	-9.80	-8.06	50.03	24.93	11.20
	Manufacture of														
31	furniture	0.0108	96.01	96.01	96.01	100.00	100.00	100.00	100.00	0.00	0.00	0.00	4.15	4.15	4.15
	Manufacture of														
310	furniture	0.0108	96.01	96.01	96.01	100.00	100.00	100.00	100.00	0.00	0.00	0.00	4.15	4.15	4.15
	Electricity, gas, stream														
_	and air conditioning	0.3716	00.00	00.00	00.00	100.00	100 21	100 21	100 21	0.21	0.00	0.00	0.21	0.21	0.24
D	supply	0.2716	99.89	99.89	99.89	100.00	100.21	100.21	100.21	0.21	0.00	0.00	0.31	0.31	0.31
	Electricity, gas, steam and air conditioning														
35	supply	0.2716	99.89	99.89	99.89	100.00	100.21	100.21	100.21	0.21	0.00	0.00	0.31	0.31	0.31
	Electric power		00100									0.00			0.00
	generation,														
	transmission and														
351	distribution	0.2716	99.89	99.89	99.89	100.00	100.21	100.21	100.21	0.21	0.00	0.00	0.31	0.31	0.31
	1_														
Н	Transport and Storage	0.2099	96.39	96.01	96.08	100.80	100.77	101.27	101.61	-0.03	0.49	0.33	4.54	5.48	5.75
Н	Iand transport and	0.2099	96.39	96.01	96.08	100.80	100.77	101.27	101.61	-0.03	0.49	0.33	4.54	5.48	5.75
H 49	·	0.2099 0.0962	96.39 93.08	96.01 93.08	96.08 93.08	100.80	100.77	101.27 100.00	100.00	0.00	0.49	0.33	4.54 7.43	5.48 7.43	5.75 7.43
	land transport and														
49	land transport and transport via pipeline	0.0962	93.08	93.08	93.08	100.00	100.00	100.00	100.00	0.00	0.00	0.00	7.43	7.43	7.43
49 492	land transport and transport via pipeline Other land transport	0.0962 0.0962	93.08 93.08 99.98	93.08 93.08 99.27	93.08 93.08 99.40	100.00 100.00	100.00 100.00	100.00 100.00	100.00 100.00 103.05	0.00 0.00 -0.05	0.00 0.00 0.93	0.00 0.00 0.63	7.43 7.43	7.43 7.43	7.43 7.43 3.67
49 492	land transport and transport via pipeline Other land transport Air transport	0.0962 0.0962	93.08 93.08	93.08 93.08	93.08 93.08	100.00 100.00	100.00 100.00	100.00 100.00	100.00	0.00	0.00	0.00	7.43 7.43	7.43 7.43	7.43 7.43
49 492 51 511	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier	0.0962 0.0962 0.1105 0.1105	93.08 93.08 99.98 99.98	93.08 93.08 99.27 99.27	93.08 93.08 99.40 99.40	100.00 100.00 101.51 101.51	100.00 100.00 101.46 101.46	100.00 100.00 102.41 102.41	100.00 100.00 103.05 103.05	0.00 0.00 -0.05 -0.05	0.00 0.00 0.93 0.93	0.00 0.00 0.63 0.63	7.43 7.43 1.48	7.43 7.43 3.17 3.17	7.43 7.43 3.67 3.67
49 492 51	land transport and transport via pipeline Other land transport Air transport Passenger air transport	0.0962 0.0962 0.1105	93.08 93.08 99.98	93.08 93.08 99.27	93.08 93.08 99.40	100.00 100.00 101.51	100.00 100.00 101.46	100.00 100.00 102.41	100.00 100.00 103.05	0.00 0.00 -0.05	0.00 0.00 0.93	0.00 0.00 0.63	7.43 7.43 1.48	7.43 7.43 3.17	7.43 7.43 3.67
49 492 51 511	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier	0.0962 0.0962 0.1105 0.1105	93.08 93.08 99.98 99.98	93.08 93.08 99.27 99.27	93.08 93.08 99.40 99.40	100.00 100.00 101.51 101.51	100.00 100.00 101.46 101.46	100.00 100.00 102.41 102.41	100.00 100.00 103.05 103.05	0.00 0.00 -0.05 -0.05	0.00 0.00 0.93 0.93	0.00 0.00 0.63 0.63	7.43 7.43 1.48	7.43 7.43 3.17 3.17	7.43 7.43 3.67 3.67
49 492 51 511 53	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities	0.0962 0.0962 0.1105 0.1105 0.0032	93.08 93.08 99.98 99.98 80.98	93.08 93.08 99.27 99.27 80.92	93.08 93.08 99.40 99.40 80.93	100.00 100.00 101.51 101.51 100.34	100.00 100.00 101.46 101.46	100.00 100.00 102.41 102.41 100.70	100.00 100.00 103.05 103.05	0.00 0.00 -0.05 -0.05	0.00 0.00 0.93 0.93	0.00 0.00 0.63 0.63	7.43 7.43 1.48 1.48 24.17	7.43 7.43 3.17 3.17 24.45	7.43 7.43 3.67 3.67 24.79
49 492 51 511 53 531	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities Postal activities Courier activities Information and	0.0962 0.0962 0.1105 0.1105 0.0032 0.0027	93.08 93.08 99.98 99.98 80.98 79.72 99.97	93.08 93.08 99.27 99.27 80.92 79.72	93.08 93.08 99.40 99.40 80.93 79.72	100.00 100.00 101.51 101.51 100.34 100.00	100.00 100.00 101.46 101.46 100.56 100.00 102.33	100.00 100.00 102.41 102.41 100.70 100.00 103.84	100.00 100.00 103.05 103.05 100.99 100.00 104.87	0.00 0.00 -0.05 -0.05 0.22 0.00 -0.08	0.00 0.00 0.93 0.93 0.15 0.00 1.48	0.00 0.00 0.63 0.63 0.29 0.00 0.99	7.43 7.43 1.48 1.48 24.17 25.44	7.43 7.43 3.17 3.17 24.45 25.44	7.43 7.43 3.67 3.67 24.79 25.44 5.84
49 492 51 511 53 531	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities Postal activities Courier activities	0.0962 0.0962 0.1105 0.1105 0.0032 0.0027	93.08 93.08 99.98 99.98 80.98 79.72	93.08 93.08 99.27 99.27 80.92 79.72	93.08 93.08 99.40 99.40 80.93 79.72	100.00 100.00 101.51 101.51 100.34 100.00	100.00 100.00 101.46 101.46 100.56 100.00	100.00 100.00 102.41 102.41 100.70 100.00	100.00 100.00 103.05 103.05 100.99 100.00	0.00 0.00 -0.05 -0.05 0.22 0.00	0.00 0.00 0.93 0.93 0.15 0.00	0.00 0.00 0.63 0.63 0.29 0.00	7.43 7.43 1.48 1.48 24.17 25.44	7.43 7.43 3.17 3.17 24.45 25.44	7.43 7.43 3.67 3.67 24.79 25.44
49 492 51 511 53 531 532	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities Postal activities Courier activities Information and communication Telecommunication	0.0962 0.0962 0.1105 0.1105 0.0032 0.0027 0.0129	93.08 93.08 99.98 99.98 80.98 79.72 99.97	93.08 93.08 99.27 99.27 80.92 79.72 98.88	93.08 93.08 99.40 99.40 80.93 79.72 99.09	100.00 100.00 101.51 101.51 100.34 100.00 102.41	100.00 100.00 101.46 101.46 100.56 100.00 102.33	100.00 100.00 102.41 102.41 100.70 100.00 103.84	100.00 100.00 103.05 103.05 100.99 100.00 104.87	0.00 0.00 -0.05 -0.05 0.22 0.00 -0.08	0.00 0.00 0.93 0.93 0.15 0.00 1.48	0.00 0.00 0.63 0.63 0.29 0.00 0.99	7.43 7.43 1.48 1.48 24.17 25.44 2.36	7.43 7.43 3.17 3.17 24.45 25.44 5.01	7.43 7.43 3.67 3.67 24.79 25.44 5.84
49 492 51 511 53 531 532	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities Postal activities Courier activities Information and communication Telecommunication Wireless	0.0962 0.0962 0.1105 0.1105 0.0032 0.0027 0.0129 0.0522	93.08 93.08 99.98 99.98 80.98 79.72 99.97	93.08 93.08 99.27 99.27 80.92 79.72 98.88 100.00	93.08 93.08 99.40 99.40 80.93 79.72 99.09	100.00 100.00 101.51 101.51 100.34 100.00 102.41 100.00	100.00 100.00 101.46 101.46 100.56 100.00 102.33	100.00 100.00 102.41 102.41 100.70 100.00 103.84 97.25	100.00 100.00 103.05 103.05 100.99 100.00 104.87	0.00 0.00 -0.05 -0.05 0.22 0.00 -0.08	0.00 0.00 0.93 0.93 0.15 0.00 1.48	0.00 0.00 0.63 0.63 0.29 0.00 0.99	7.43 7.43 1.48 1.48 24.17 25.44 2.36	7.43 7.43 3.17 3.17 24.45 25.44 5.01	7.43 7.43 3.67 3.67 24.79 25.44 5.84
49 492 51 511 53 531 532	land transport and transport via pipeline Other land transport Air transport Passenger air transport Postal and Courier activities Postal activities Courier activities Information and communication Telecommunication	0.0962 0.0962 0.1105 0.1105 0.0032 0.0027 0.0129 0.0522	93.08 93.08 99.98 99.98 80.98 79.72 99.97	93.08 93.08 99.27 99.27 80.92 79.72 98.88 100.00	93.08 93.08 99.40 99.40 80.93 79.72 99.09	100.00 100.00 101.51 101.51 100.34 100.00 102.41 100.00	100.00 100.00 101.46 101.46 100.56 100.00 102.33	100.00 100.00 102.41 102.41 100.70 100.00 103.84 97.25	100.00 100.00 103.05 103.05 100.99 100.00 104.87	0.00 0.00 -0.05 -0.05 0.22 0.00 -0.08	0.00 0.00 0.93 0.93 0.15 0.00 1.48	0.00 0.00 0.63 0.63 0.29 0.00 0.99	7.43 7.43 1.48 1.48 24.17 25.44 2.36	7.43 7.43 3.17 3.17 24.45 25.44 5.01	7.43 7.43 3.67 3.67 24.79 25.44 5.84



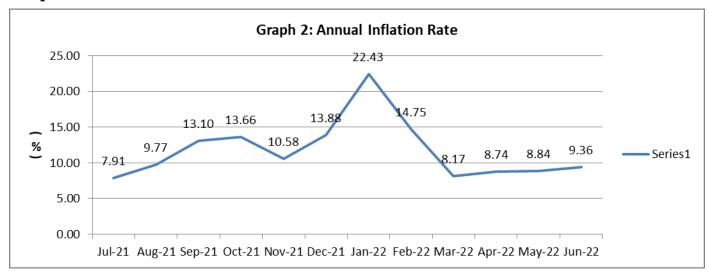
Graph 1: Time series of monthly Producer Price Index (PPI)



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 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 (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 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 January 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 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 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	Index accept about	
The less previous price index	101.25	Index percent change	
Equals index point change	3.25	Index point change	3.25
4		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).