

# Producer Price Index (PPI) - Maldives

Base period =2007 | Price reference = October 2012

**MARCH 2015**

TIME OF RELEASE: THURSDAY, 30 June 2015

## KEY FIGURES

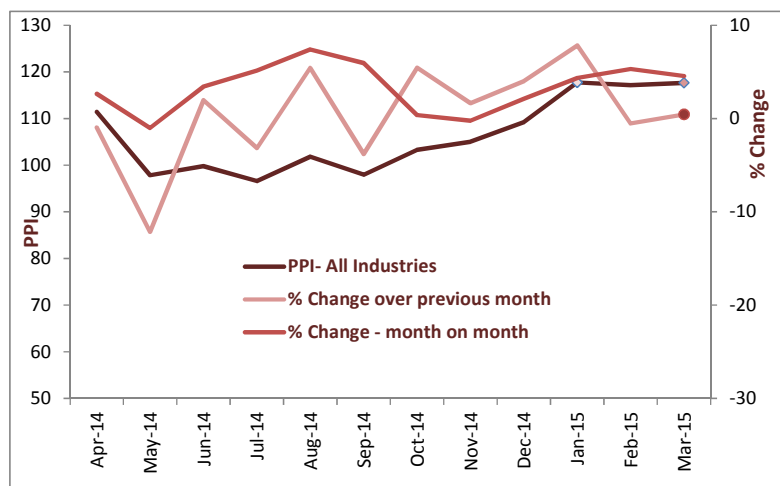
### PPI and Month on month Percentage Change

	PPI -All Industries		% Change
	2014	2015	2014/2015
Jan	112.85	117.75	4.34
Feb	111.24	117.14	5.30
Mar	112.52	117.65	4.56

### Monthly PPI and Percentage Change

	PPI- All Industries	% Change over previous month	% Change - month on month
Apr-14	111.41	-0.98	2.63
May-14	97.87	-12.15	-1.03
Jun-14	99.79	1.96	3.44
Jul-14	96.61	-3.18	5.13
Aug-14	101.85	5.42	7.39
Sep-14	97.98	-3.80	5.93
Oct-14	103.30	5.44	0.37
Nov-14	105.01	1.66	-0.23
Dec-14	109.20	3.99	2.11
Jan-15	117.75	7.82	4.34
Feb-15	117.14	-0.52	5.30
Mar-15	117.65	0.43	4.56

### Monthly PPI and Percentage Change



## KEY POINTS — All Industries' PPI– Quarter 1, 2015

Producer Price index have increased in all three months of quarter 1 compared to price reference (October 2012), of which January showed the all time highest index with 117.75. When comparisons were made on the same period of previous year, prices of February 2015 showed the highest increase with 5.30% while January and March prices increased by 4.34% and 4.56% respectively.

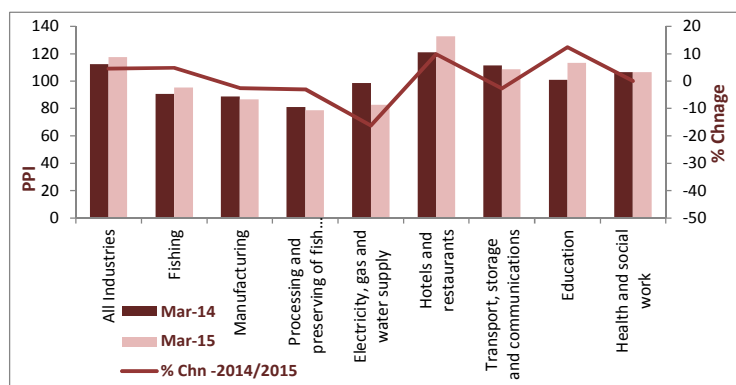
When Producer Price Index comparisons were made to the previous month, January 2015 increased significantly by 7.82% and prices remained relatively the same throughout the quarter. February prices decreased slightly by 0.52%.

## OVERVIEW OF MOVEMENTS— March 2015/ March2014

The most prominent price increase was seen in education industry by 12.36% while the turing Industry (-6.99%). Electricity, Gas and water industry prices also dropped by 4.98%.

Hotels and Restaurant industry prices went up by 5.38% fishing industry prices went up by 5.11%. Health and Education industries showed an increase of 1.06% and 1.75% respectively.

### PPI and Percentage change –March 2015



# 1. Hotels and Restaurants Industry

## OVERVIEW OF HOTELS AND RESTAURANTS INDUSTRY MOVEMENTS

Quarter 4, 2014 prices of Hotels and restaurants' industry were higher compared to the same period of 2013. December prices hiked at 5.38% increase in prices compared to December 2013. October and November prices increased by 1.56% and 3.17% respectively.

When comparisons were made with the price reference (October 2012) all 3 months showed higher prices, where December 2014 prices(116.0) increase by 16.0% and November 2014 by 11.2%

Hotels and Restaurant industry's prices are demand driven and hence Q1 and Q4 prices are higher than Q2 and Q3.

1.1: PPI and Percentage change (month on month)

	All Industries		Hotels & Restaurants			Tourist Arrivals ('000s)	Tourist Bednights ('000s)
	PPI	% Chn month on month	PPI	% Chn month on month	% Chn over previous		
Apr-14	111.4	2.6	121.3	7.4	0.2	105.3	647.7
May-14	97.9	-1.0	96.6	0.0	-20.3	91.3	566.0
Jun-14	99.8	3.4	98.9	6.3	2.4	83.3	466.4
Jul-14	96.6	5.1	95.9	13.4	-3.1	100.2	575.9
Aug-14	101.8	7.4	103.8	15.5	8.2	104.2	630.0
Sep-14	98.0	5.9	98.4	13.6	-5.1	95.1	540.3
Oct-14	103.3	0.4	106.0	1.6	7.7	110.3	664.6
Nov-14	105.0	-0.2	111.2	3.2	4.9	89.8	552.7
Dec-14	109.2	2.1	116.0	5.4	4.3	103.7	617.7
Jan-15	117.7	4.3	131.5	8.7	13.4	97.07	630.84
Feb-15	117.1	5.3	133.9	10.2	1.8	120.47	682.42
Mar-15	117.6	4.6	132.9	9.8	-0.7	112.43	656.25

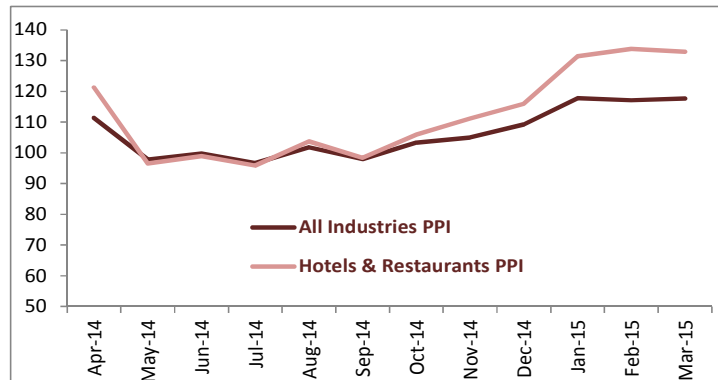
When PPI of Hotels and Restaurants' was compared with the previous month, October showed the highest price increase with 7.67% and November and December prices increased by 4.89% and 4.35% when compared with the previous month.

### COMPARISON WITH PPI—ALL INDUSTRIES

Hotels and Restaurants sector accounts for about 56% of PPI weights, which therefore is the most influential sector and plays a major role in the movements of the overall index.

The figure (right) shows the correlation between overall PPI and Hotels and Restaurants sector PPI. Both series shows that prices are highest during January to April and declines from May and starts picking up from October.

PPI - Hotels and Restaurants



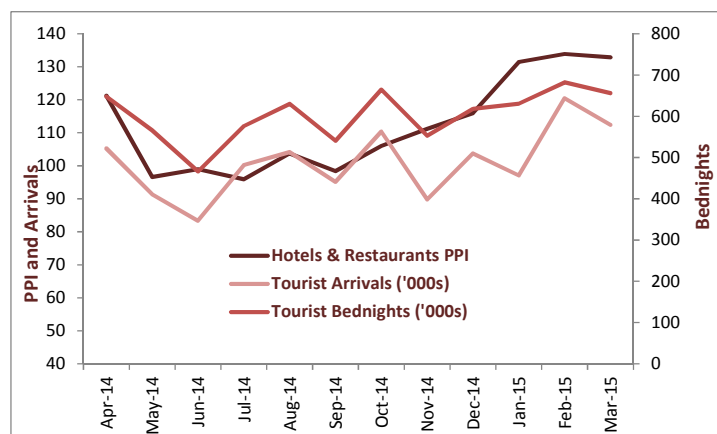
### COMPARISON WITH KEY SECTORIAL INDICATORS

PPI of Hotels and Restaurants sector and both indicators, arrivals and bed-nights exhibits a similar trend.

However, Q4 of 2014 numbers were very different from previous years. Prices were high but arrivals and bed-nights fell in November by 5.1% and 5.9% respectively when compared with the same month of 2013. Similarly December also showed a decline of 1.2% and 2.7% in arrivals and bed-nights.

In 2014 the highest PPI was in February (121.4) while arrivals also peaked in February (110,705 tourists) and bed-nights were highest in March (685,333).

PPI - Hotels and Restaurants, Tourist Arrivals and Bed-nights



## 2. Fishing and

### Processing and Preserving of Fish and Fish Products Industries

#### OVERVIEW AND INDUSTRY MOVEMENTS

Similar to previous quarters, quarter 4 of 2014 fishing prices were lower than the price reference- October 2012. In 2014 lowest Fishing prices were recorded in November (88.7) when compared with October 2012.

Fishing prices of October and November showed a decline of 0.26% and 13.29% when compared the corresponding month of 2013. However December prices showed 5.11% increase in prices compared to December 2013.

Processed fish prices of all three months of quarter 4 were lower than the corresponding month of 2013. Both November and December prices were significantly low at 82.5 and 85.5 respectively. This is a decline of 13.11% and 11.77% respectively when compared same month of 2013.

When comparisons were made with the previous month October 2014 prices went up by 15.18% due the increase of fishing price which also went up by 10.62% in the same period.

#### 2.1: PPI—Fishing and Processed Fish

	PPI		Change - month on month	
	Fishing	Processed fish	Fishing	Processed fish
Apr-14	93.2	73.7	-13.7	-33.7
May-14	99.0	84.6	-14.6	-26.3
Jun-14	97.3	97.9	-13.7	-13.2
Jul-14	93.1	80.1	-15.7	-26.6
Aug-14	90.7	82.6	-12.6	-21.4
Sep-14	92.6	78.7	-18.3	-25.7
Oct-14	97.5	90.7	-0.3	-4.4
Nov-14	88.7	82.5	-13.3	-13.1
Dec-14	95.1	85.5	5.1	-11.8
Jan-15	94.6	86.1	4.5	0.8
Feb-15	94.9	83.3	6.6	9.9
Mar-15	95.3	78.8	4.9	-3.0

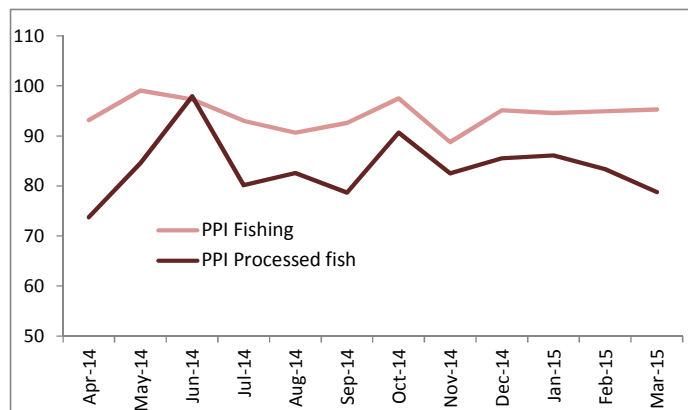
#### Note:

As for Fishing Industry, prices of both skipjack tuna and yellow-fin tuna (YFT) are included. However skipjack prices variations are minimal in contrast to YFT which is volatile. And due to market structure YFT price movements dominates the fishing industry of PPI.

Similar to Fishing industry, YFT products leads the Processing and preservation of fishing industry also due to market structure.

Fish prices depend on landings while fish exports market depends on international fish prices. Hence these two sectors do not adhere a direct correlation.

#### PPI—Fishing and Processed Fish



## 3. Transport and Communications

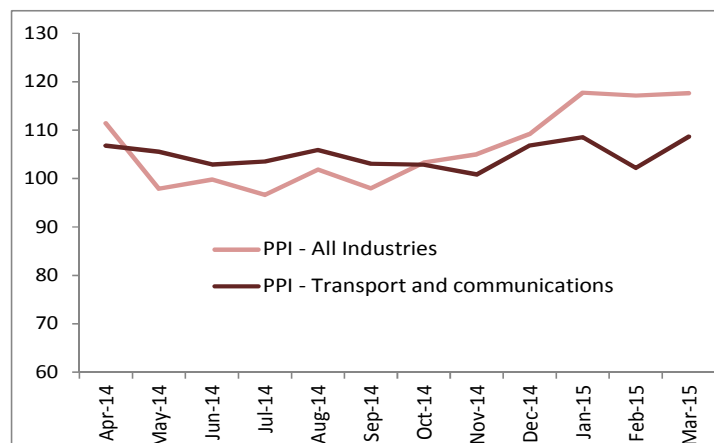
In general quarter 4 prices were higher compared to price reference (October 2012).

However when comparisons were made with the same month of 2013 Transport and Telecommunication prices showed a decline in all three months; October (-0.94%), November (-3.93%) and December (-1.73%).

#### Note:

For telecommunications sector average revenue is used as an indicator of price movements.

#### PPI — Transport and Communication



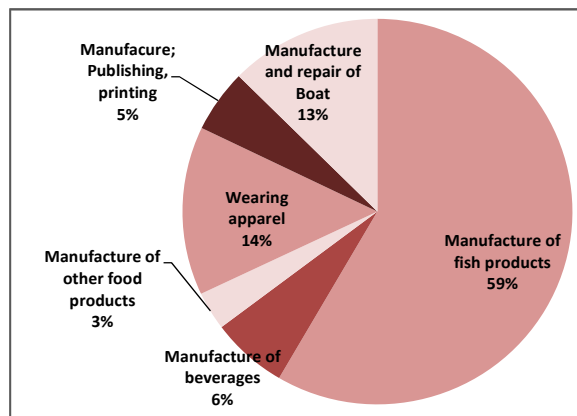
## 4. Manufacturing

Manufacturing industry shares 12% in the overall PPI.

Within the manufacturing sector Manufacture of processed or preserved fish products shares 59%

Hence Manufacturing sector is dominated by the movements of Manufacture of processed or preserved fish products .

*Manufacturing Sector's weight structure*



### OVERVIEW OF MANUFACTURING INDUSTRY MOVEMENTS

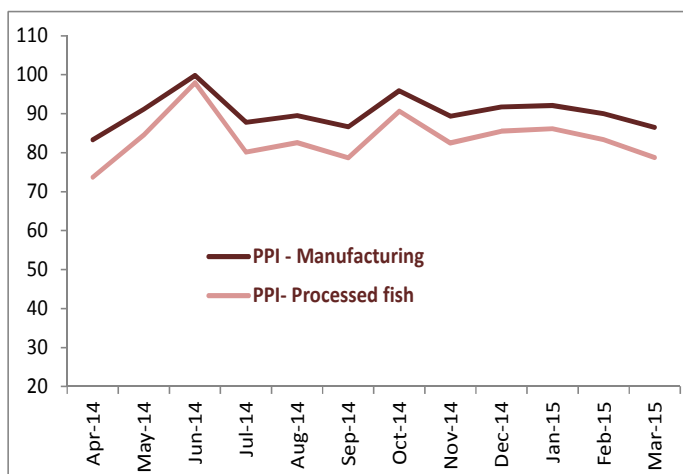
PPIs of manufacturing continued to remain lower than price reference in quarter 3 of 2014. Similar to Processed Fish PPI, lowest PPI of Manufacturing industry for 2014 was in April. (83.32)

When comparisons were made with the same month of previous year, prices remained lower since October 2013. November and December 2014 prices declined by 8.23% and 6.99% respectively, while October prices decreased by 1.51%.

However when comparisons were made with the previous month manufacturing prices went up by 10.62% due to the increase in processed fish prices.

Additionally, the highest PPI for Manufacturing industry in 2014 was recorded in June (99.79).

*PPI - Manufacturing*

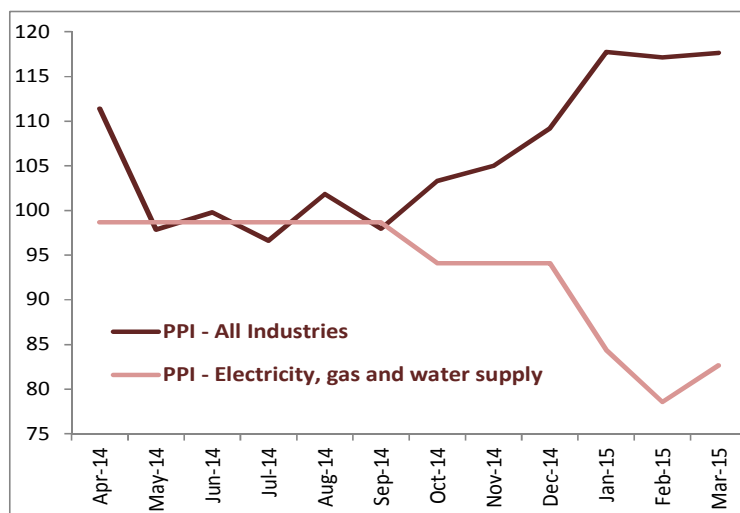


## 5. Electricity, Gas and Water Supply

*PPI – Electricity, gas and water supply*

Quarter 4 PPIs of 'electricity, gas and water supply' industry remained constant through out the quarter ( 94.09) where prices declined by 4.65% in October compared to September 2014. This was primarily due to the decline in fuel surcharge on electricity prices in October 2014.

Quarter 4 prices were 4.98% lower than quarter 4 of 2013.



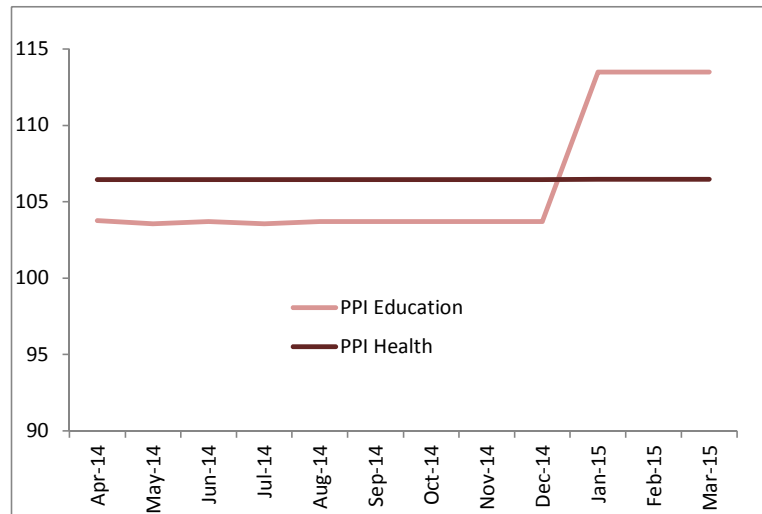
## 6. Education and Health

### PPI - Education and Health

Both Education and Health sector index continued to remain constant during quarter 4, 2014 at 103.71 and 106.44 respectively, as both sectors do not revise the prices very often.

Education sector prices increased by 1.75% in quarter 4 when compared with the same period of 2013.

Health industry prices went up by 1.06% when comparisons were made with the same period of 2013. Health sector prices have remained constant since February 2014.



## PPI Rebased to 2007

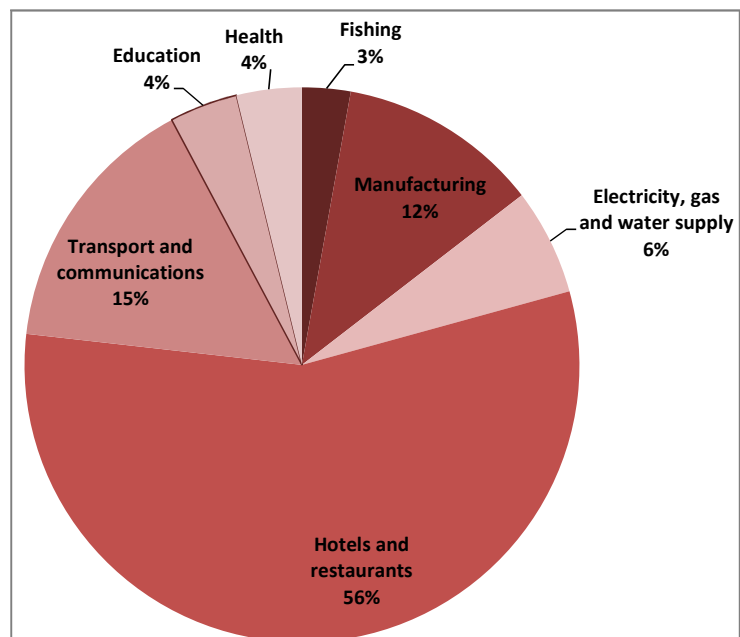
Producer price index (PPI) has been rebased to 2007 with price referenced to October 2012. The industry weights were drawn from the Maldives Supply and Use table (SUT) 2007 which was compiled under the ADB project 'RETA 6482 Supply and Use table for selected DMCs'. In SUT 2007, the data for the domestic production in the supply table as well as intermediate consumption in the use table were predominantly taken from the Economic Survey 2007 (ES).

This is the initial publication from the new series. The index is compiled from 661 transactions among 280 products from a sample of 93 establishments.

### Weight structure

Tourism is the main industry in the economy, contributing a third to its GDP. This sector accounts for about 56% of PPI weights, which therefore is the most influential sector and plays a major role in the movements of the overall index. Hence, It is crucial to comprehend the pricing strategies of the sector and how it feeds into the overall inflation.

Other prime sectors include transport and telecommunications sector and manufacturing sector with 15% and 12% respectively



## What is Producer Price Index

The Producer Price Index (PPI) measures the average change over time in the prices received by domestic producers of goods and services.

The PPI provides a weighted average of price change in a group of products between one time period and another. The average price change over time cannot be directly observed and must be estimated by measuring actual prices at different points in time. Price index numbers are compiled from the collected price observations through time. PPI is an index designed to measure the average change in the price of goods and services either as they leave the place of production or as they enter the production process.

PPI with detailed industry data will serve as a leading indicator of price change in the economy. The PPI enables business owners to make a comparison of trends in their own business with those of the industry group. The PPI can be used as an escalator to index long-term contracts for goods and services. In this case, the PPI can be used to adjust the value of the monetary amounts stipulated in the goods and services based on the increase or decrease in the level of a specific index. Additionally PPI could be used as an important tool during the design and formulation of policies and analysis of inflation by the Maldives Monetary Authority and other governmental ministries

Price instability inherently introduces ambiguity into economic analysis and decision making, so the main use of PPI relate to efforts to reduce the uncertainty. PPI is used as a short-term indicator of inflationary trends in a wide spectrum of countries. It is also used in current cost accounting, indexation in legal contracts and as a national accounts deflator. Furthermore, it is used by researchers as well as the business community as an analytical tool to understand the situation of business.

The PPI does not represent prices at the consumer level - this is left to the Consumer Price Index (CPI). CPI is compiled on a monthly basis by National Bureau of Statistics (NBS) and released every month. Like the CPI, the PPI uses a benchmark year in which a basket of goods was measured, and every year after it is compared to the base year, which has a value of 100. For the PPI, that year is 2007.

Non-responding sample establishments are estimated by imputing the price changes at the establishment level or industry level.. Revisions to the estimates are done upon receipts of actual reports from late respondents.

The current PPI produced by NBS is not without limitations. Those inbuilt in the system mainly arising from lack of adequate and clear information of the economic structure and players in the country, which determines the weight of the Index system and the sample frame. The limitations are stated in more detail in the methodology paper available on the website. To overcome these limitations, there is a need enhance the list of establishments in sample.

Producer' price indices are constructed from data collected through quarterly surveys of selected establishments. The establishment and product selection procedures and index calculation methods are available in the website [www.planning.gov.mv](http://www.planning.gov.mv).

## Measurement of changes in the price index

**Change over previous quarter (monthly)** compares the index of the month with that of the preceding month. Such comparisons measure the change in the average prices between two consecutive months. They serve as useful short-term indicators of the price movements in the non seasonal industries.

**Change over previous quarter (Quarterly)** compares the index of the quarter with that of the preceding quarter. Such comparisons measure the change in the average prices between two consecutive quarters. They serve as useful short-term indicators of the price movements.

**Change over same month of previous year (month on month)** compares the index of the month with same month of previous year. The measure gives how an industry is growing over 12 months. It reduces the seasonality effects in the indices, especially that in the tourism industry.

### FORTHCOMING ISSUES

**Issue (monthly)**

June 2015

**Release date**

30 September 2015

### ROUNDING

Any discrepancies between totals and sum of components in this publication are due to rounding.

### ABBREVIATIONS

NBS	National Bureau of Statistics
PPI	Producer Price Index
IMF	International Monetary Fund
SUT	Supply and Use Table
ADB	Asian Development Bank
RETA	Regional Technical Assistance
CPI	Consumer Price Index

### ACKNOWLEDGEMENT

The release of the new PPI was made possible through the generous support of the government of Japan which financed the technical assistance provided by the International Monetary Fund (IMF). Consultant from IMF, Mr Brian E. Graf guided in the formulation and compilation of the index.

Industry Weights were developed by late Ms Zumloth Mohamed and Mr Ali Abdul Raheem. The entire process of data validation, compilation and updating has been done in close collaboration with all the data providing establishments. The initiation process was carried out by Ms Sajida Ahmed and Ms Hana Mansoor with the assistance of Ms. Aishath Laila, Ms. Maimoona Moosa and Ms Mariyam Mirfath. Establishment, product and transaction level weights were developed by Ms Sajida Ahmed. Data collection, verification and compilation has been carried out by Ms Sajida Ahmed and Ms Hana Mansoor with assistance from Ms. Hawwa Wifsha. The support provided by Mr. Paul Armknecht, IMF consultant and the developer of PIPS software, for the processing related issues is also duly recognized. Analysis and report writing together with methodology paper was formulated by Ms. Hana Mansoor. Additionally the indirect support rendered by all staff of 'Prices and Economics statistics unit' and National accounts unit are appreciable. Entire process from design to output was carried out with invaluable assistance from Ms Mariyam Niyaf.

Overall guidance and support throughout the development process was provided by Ms. Aishath Laila and senior management of statistics division Ms Aishath Shahuda and Ms Mariyam Niyaf. All their valuable services are gratefully acknowledged.

The quarterly Producer price Index is compiled by Ms Hana Mansoor under the supervision of Ms Aishath Shahuda.



**Producer Price Index** Base period =2007| Price reference = October 2012

	Oct-12	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
<b>All Industries</b>	<b>100</b>	<b>111.41</b>	<b>97.87</b>	<b>99.79</b>	<b>96.61</b>	<b>101.85</b>	<b>97.98</b>	<b>103.30</b>	<b>105.01</b>	<b>109.20</b>	<b>117.75</b>	<b>117.14</b>	<b>117.65</b>
Fishing	100	93.20	99.05	97.28	93.06	90.66	92.62	97.50	88.75	95.11	94.59	94.91	95.26
Manufacturing	100	83.32	91.17	99.79	87.77	89.50	86.65	95.85	89.40	91.74	92.12	89.98	86.54
Processing and preserving of fish and fish products	100	73.72	84.60	97.95	80.14	82.58	78.71	90.66	82.52	85.53	86.12	83.34	78.77
Electricity, gas and water supply	100	98.68	98.68	98.68	98.68	98.68	98.68	94.09	94.09	94.09	84.41	78.58	82.67
Hotels and restaurants	100	121.26	96.58	98.94	95.88	103.77	98.43	105.98	111.16	116.00	131.50	133.88	132.89
Transport and communications	100	106.81	105.54	102.93	103.52	105.89	103.06	102.89	100.83	106.84	108.57	102.22	108.63
Education	100	103.76	103.56	103.71	103.56	103.71	103.71	103.71	103.71	103.71	113.49	113.49	113.49
Health	100	106.44	106.44	106.44	106.44	106.44	106.44	106.44	106.44	106.44	106.47	106.47	106.47

**PPI - Percentage Change over previous month.**

	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
<b>All Industries</b>	<b>-0.98</b>	<b>-12.15</b>	<b>1.96</b>	<b>-3.18</b>	<b>5.42</b>	<b>-3.80</b>	<b>5.44</b>	<b>1.66</b>	<b>3.99</b>	<b>7.82</b>	<b>-0.52</b>	<b>0.43</b>
Fishing	2.62	6.27	-1.78	-4.34	-2.57	2.16	5.27	-8.98	7.16	-0.54	0.34	0.37
Manufacturing	-6.15	9.43	9.46	-12.05	1.97	-3.18	10.62	-6.73	2.61	0.42	-2.32	-3.82
Processing and preserving of fish & fish products	-9.17	14.76	15.78	-18.18	3.04	-4.69	15.18	-8.98	3.65	0.69	-3.24	-5.49
Electricity, gas and water supply	0.00	0.00	0.00	0.00	0.00	0.00	-4.65	0.00	0.00	-10.30	-6.90	5.21
Hotels and restaurants	0.20	-20.35	2.45	-3.10	8.23	-5.14	7.67	4.89	4.35	13.36	1.81	-0.74
Transport and communications	-4.30	-1.19	-2.47	0.58	2.29	-2.67	-0.17	-1.99	5.95	1.62	-5.84	6.27
Education	2.72	-0.19	0.15	-0.15	0.15	0.00	0.00	0.00	0.00	9.43	0.00	0.00
Health	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00

**PPI -Percentage Change-month on month**

	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15
<b>All Industries</b>	<b>2.63</b>	<b>-1.03</b>	<b>3.44</b>	<b>5.13</b>	<b>7.39</b>	<b>5.93</b>	<b>0.37</b>	<b>-0.23</b>	<b>2.11</b>	<b>4.34</b>	<b>5.30</b>	<b>4.56</b>
Fishing	-13.73	-14.62	-13.65	-15.69	-12.57	-18.30	-0.26	-13.29	5.11	4.53	6.58	4.89
Manufacturing	-21.92	-16.16	-7.33	-16.62	-12.96	-16.19	-1.51	-8.23	-6.99	0.61	5.62	-2.51
Processing and preserving of fish and fish products	-33.69	-26.25	-13.22	-26.60	-21.36	-25.72	-4.38	-13.11	-11.77	0.82	9.93	-2.95
Electricity, gas and water supply	-1.44	0.02	0.02	-0.30	-0.30	-0.30	-4.98	-4.98	-4.98	-14.47	-20.37	-16.22
Hotels and restaurants	7.42	0.01	6.31	13.40	15.47	13.58	1.56	3.17	5.38	8.67	10.24	9.82
Transport and communications	7.70	7.31	5.03	-2.71	0.51	1.87	-0.94	-3.93	-1.73	-2.67	-2.84	-2.67
Education	2.10	1.90	1.75	1.60	1.75	1.75	1.75	1.75	1.75	12.03	12.36	12.36
Health	2.43	2.43	2.43	2.04	2.04	2.04	1.06	1.06	1.06	-0.54	0.03	0.03

Source: National Bureau of Statistics