

# Producer Price Index (PPI) - Maldives

Base period =2007 | Price reference = October 2012

**December 2013**

TIME OF RELEASE: MONDAY, 31 March 2013

## KEY FIGURES

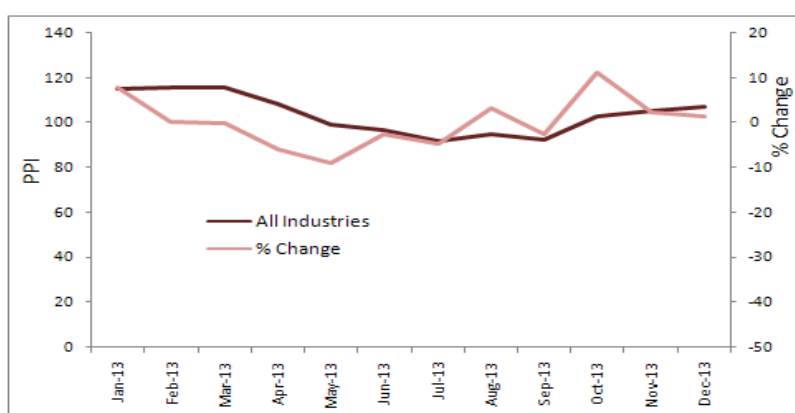
### PPI and Percentage changes -month on month

	PPI -All Industries		% Change
	2012	2013	2012/2013
Oct	100.00	102.92	2.92
Nov	102.65	105.25	2.54
Dec	106.63	106.95	0.30

*Note: whole series have been revised as new establishments provided data and revisions were made to previous data*

### PPI and Percentage change over previous month

	All Industries	% Change
Jan-13	115.14	7.98
Feb-13	115.54	0.34
Mar-13	115.38	-0.13
Apr-13	108.55	-5.92
May-13	98.88	-8.91
Jun-13	96.47	-2.44
Jul-13	91.90	-4.74
Aug-13	94.84	3.20
Sep-13	92.49	-2.48
Oct-13	102.92	11.27
Nov-13	105.25	2.27
Dec-13	106.95	1.61



## KEY POINTS — All Industries' PPI

Producer Price index has gone up in Q3-2013. October prices went up by 2.92% and November and December prices increased by 2.54% and 0.30% respectively when comparisons were made on the same month of previous year.

Producer Price Index for all Industries increased by 1.61% in December 2013, compared to the rise of 2.27% in November 2013 when comparisons were made to the previous month.

In 2013, PPI showed that prices were higher than the reference month-October 2012; in January to April and October to December. Prices of May till September were lower than October 2012.

The highest PPI of 2013 was recorded in February (115.54) and lowest PPI was in July 2013 (91.90).

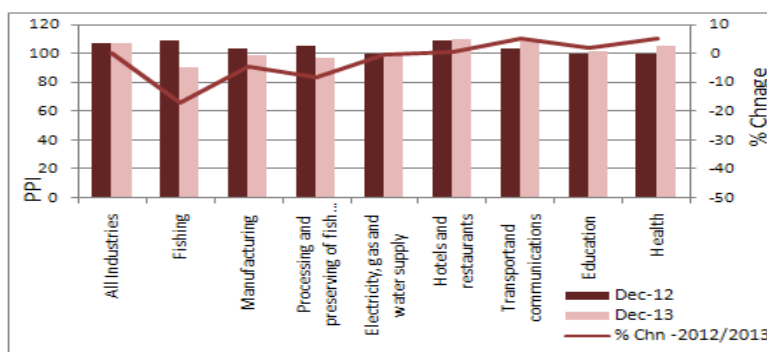
## OVERVIEW OF MOVEMENTS— December 2013/ December 2012

The most prominent price change was seen in Fishing where the prices fell by 16.74% when compared with 2012; followed by the processed fish products industry prices which showed a fall of 7.83%.

Health and Transport and Communication sectors showed an increase in prices of 5.33% and 5.17% respectively.

Hotels and restaurants industry prices went up marginally by 0.67%

### PPI and Percentage change –December 2013



## 1. Hotels and Restaurants Industry

### OVERVIEW OF HOTELS AND RESTAURANTS INDUSTRY MOVEMENTS

#### 1.1: PPI and Month on month Percentage

	PPI -Hotels & Restaurants		% Change
	2012	2013	2012/2013
Oct	100.00	104.36	4.36
Nov	104.08	107.75	3.53
Dec	109.33	110.07	0.67

Quarter 4 of Hotels and restaurants' industry prices were higher than the price reference (October 2012). When same periods were compared between 2013 and 2012, October prices went up by 4.36% while November and December also showed an increase of 3.53% and 0.67% respectively.

When compared with previous month (table 1.2), October prices increased by 20.42%. Both November and December prices also showed that prices went up.

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

#### 1.2: PPI and Percentage change over previous month

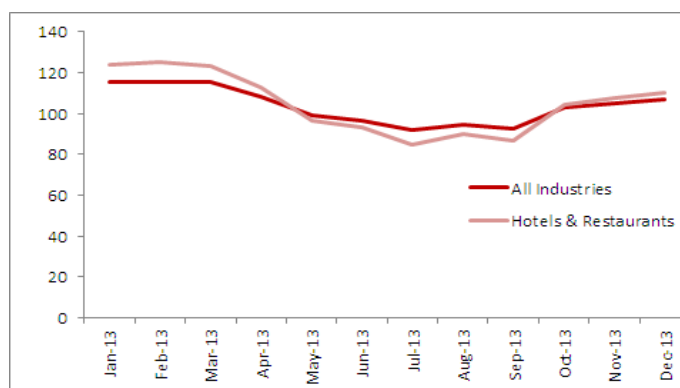
	All Industries	% Change	Hotels & Restaurants	% Change
Jan-13	115.14	7.98	123.89	13.32
Feb-13	115.54	0.34	125.51	1.30
Mar-13	115.38	-0.13	123.07	-1.95
Apr-13	108.55	-5.92	112.88	-8.27
May-13	98.88	-8.91	96.57	-14.45
Jun-13	96.47	-2.44	93.07	-3.63
Jul-13	91.90	-4.74	84.55	-9.15
Aug-13	94.84	3.20	89.87	6.29
Sep-13	92.49	-2.48	86.66	-3.57
Oct-13	102.92	11.27	104.36	20.42
Nov-13	105.25	2.27	107.75	3.25
Dec-13	106.95	1.61	110.07	2.15

### 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 March and deteriorates from April and starts picking up in October.

#### PPI - Hotels and Restaurants



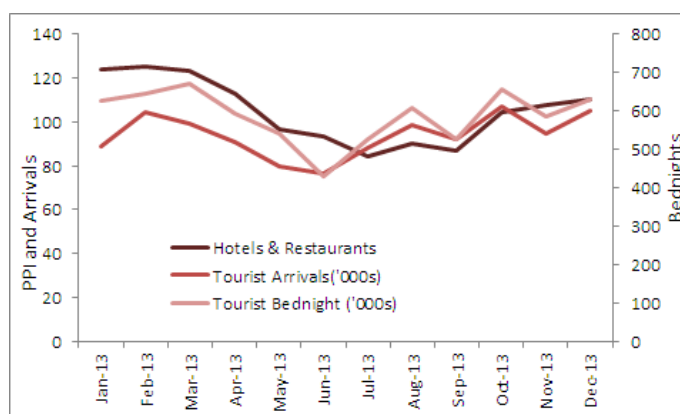
### COMPARISON WITH KEY SECTORIAL INDICATORS

PPI of Hotels and Restaurants sector and both indicators, arrivals and bednights exhibits a similar trend.

While PPI was lowest in July, both recorded arrivals and bednights were lowest in June where both periods fall in the low season of the industry.

Though PPI was highest in February (125.51), and Arrivals were highest on October (107,331); both months belong to high season where both demand and prices are high.

#### PPI - Hotels and Restaurants, Arrivals and Bednights



## 2. Fishing and Processing and Preserving of Fish and Fish Products Industries

### OVERVIEW AND INDUSTRY MOVEMENTS

In 2013, only October and December fishing prices were lower than the price reference- October 2012. Fishing prices were highest in May (116.01) while the lowest prices recorded were in December (90.49) when compared with October 2012.

Fishing prices of both October and December went down when compared the same period of previous year. October prices decreased by 2.24% while December prices plunged by 16.74%.

Processed fish prices also showed significant decrease in prices during the last quarter when compared to the same month of previous year. October prices dropped by 5.19% while November and December prices fell by 7.48% and 7.83% respectively.

Processed fish prices were lower between October to December when compared to price reference- October 2012. Highest PPI for Processed fish industry was in May 2013 (114.72) while the lowest was October (94.81).

**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.

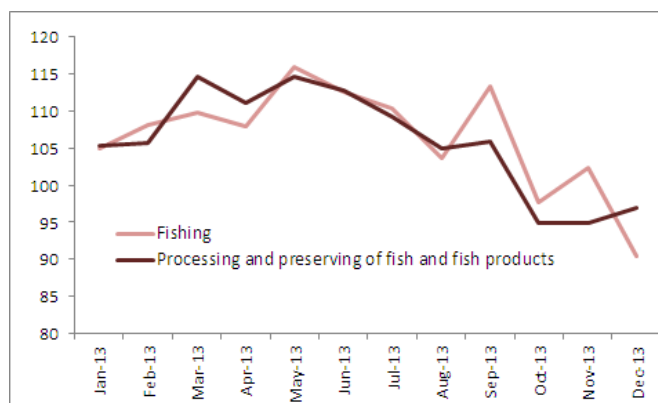
Similar to Fishing industry, YFT products leads the Processing and preservation of fishing industry also due to market structure.

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

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

	PPI		% Chn - month on month	
	Fishing	Processed fish	Fishing	Processed fish
Jan-13	105.02	105.34		
Feb-13	108.06	105.67		
Mar-13	109.88	114.67		
Apr-13	108.03	111.18		
May-13	116.01	114.72		
Jun-13	112.66	112.87		
Jul-13	110.38	109.18		
Aug-13	103.69	105.01		
Sep-13	113.37	105.96		
Oct-13	97.76	94.81	-2.24	-5.19
Nov-13	102.35	94.97	1.34	-7.48
Dec-13	90.49	96.94	-16.74	-7.83

**PPI—Fishing and Processed Fish**



## 3. Transport and Communications

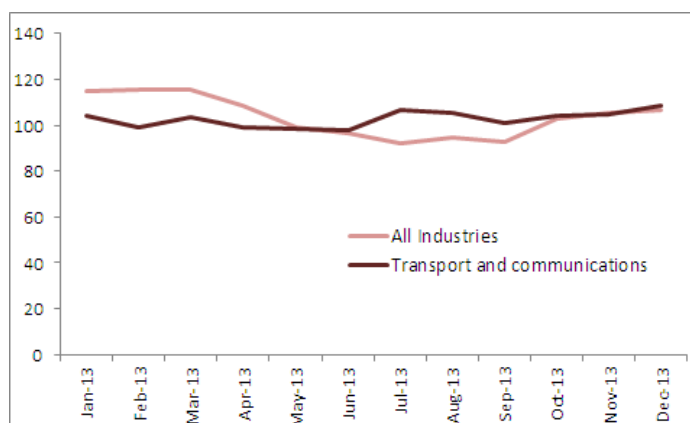
In general quarter 4 prices were higher compared to price reference (October 2012). And the highest PPI for the sector was also recorded in December (108.72).

When comparisons were made with the same month of previous year Transport and Telecommunication prices showed 3.86% increase in October and 4.61% and 5.17% increase in November and December respectively.

**Note:**

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

**PPI — Transport and Communication**



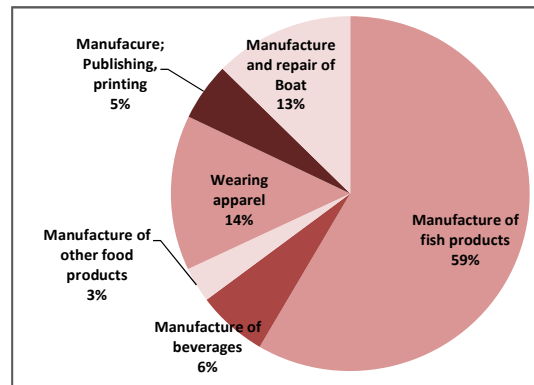
## 4. Manufacturing

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*



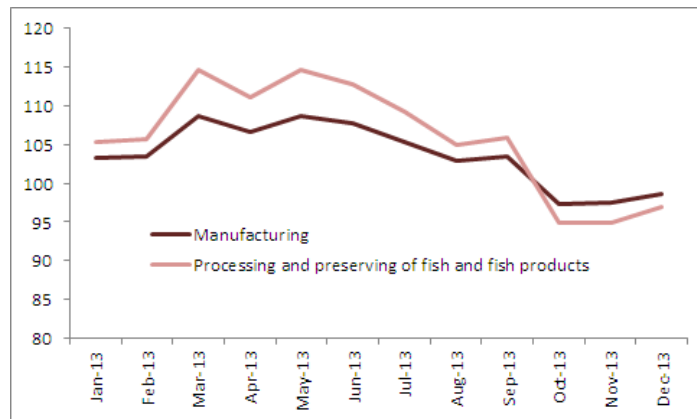
### OVERVIEW OF MANUFACTURING INDUSTRY MOVEMENTS

In contrast to the rest of the quarters of 2013, manufacturing industry's quarter 4 prices were lower than price reference. The lowest PPI was also recorded in October (97.33)

When comparisons were made with the same month of previous year manufacturing industry index showed 2.67% decrease in October. Additionally both November and December prices also dropped by 4.10% and 4.32% respectively.

Highest PPI for Manufacturing industry was recorded in May 2013 (108.74)

*PPI - Manufacturing*



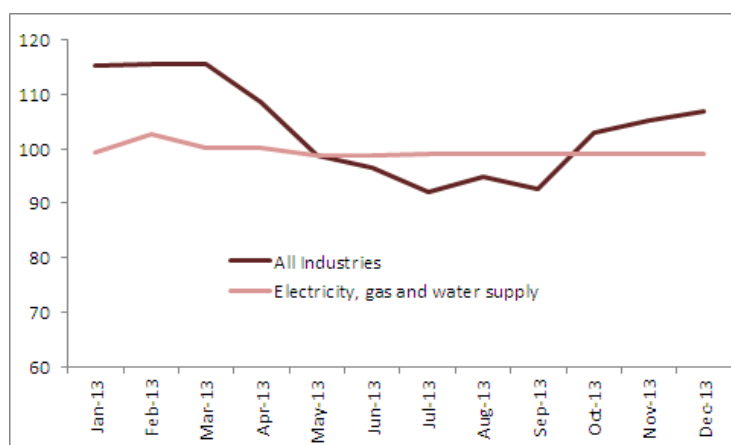
## 5. Electricity, Gas and Water Supply

While quarter 4 prices of 'electricity, gas and water supply' industry were lower than the price reference, the prices remained constant throughout the period.

October 2013 prices were 0.97% lower than October 2012. Furthermore, both November and December prices showed a decrease of 0.24%.

The lowest PPI recorded was in May and June 2013 (98.66) while the highest was in February (102.54).

*PPI – Electricity, gas and water supply*



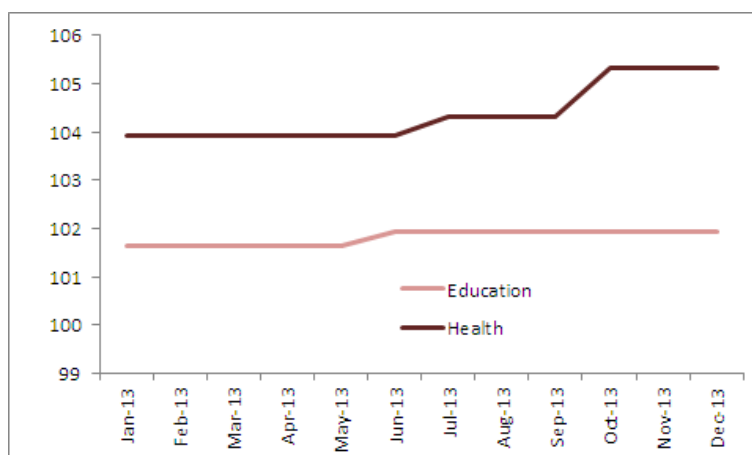
## 6. Education and Health

### PPI - Education and Health

Both Education and Health sector index were constant in quarter 4. Education sector prices are usually revised at the start of the year.

Education sector prices went up by 1.92% in quarter 4 of 2013 when compared with the same quarter of 2012.

Health sector prices went up by 5.33% in quarter 4 when compared with the same quarter of 2012.



## PPI Rebased to 2007

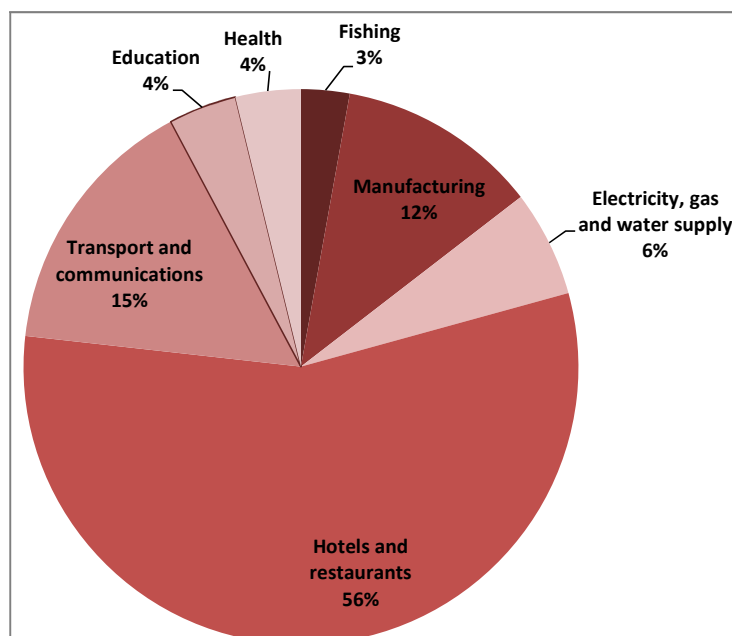
Producer price index (PPI) has been rebased to 2007 with price referenced to October 2012. The industry weights were drawn from the Maldives Supply and Use table (SUT) 2007 which was compiled under the ADB project 'RETA 6482 Supply and Use table for selected DMCs'. In SUT 2007, the data for the domestic 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 DNP 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 DNP 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.

## Notes

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### FORTHCOMING ISSUES

Issue (monthly)	Release date
December 2013	31 March 2014
March 2014	30 June 2014

### ROUNDING

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

### ABBREVIATIONS

DNP	Department of National Planning
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 Zumlath 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 process was provided by Ms. Aishath Laila and senior management of statistics division Ms Aishath Shahauda and Ms Mariyam Niyaf. All their valuable services are gratefully acknowledged.

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

	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
All Industries	100	102.65	106.63	115.14	115.54	115.38	108.55	98.88	96.47	91.90	94.84	92.49	102.92	105.25	106.95
Fishing	100	100.99	108.69	105.02	108.06	109.88	108.03	116.01	112.66	110.38	103.69	113.37	97.76	102.35	90.49
Manufacturing	100	101.59	103.09	103.22	103.41	108.64	106.71	108.74	107.68	105.26	102.82	103.39	97.33	97.42	98.63
Processing and preserving of fish and fish products	100	102.65	105.18	105.34	105.67	114.67	111.18	114.72	112.87	109.18	105.01	105.96	94.814	94.965	96.938
Electricity, gas and water supply	100	99.27	99.27	99.27	102.54	100.12	100.12	98.66	98.66	98.98	98.98	98.98	99.03	99.03	99.03
Hotels and restaurants	100	104.08	109.33	123.89	125.51	123.07	112.88	96.571	93.066	84.548	89.866	86.662	104.36	107.75	110.07
Transport and communications	100	100.33	103.37	103.88	98.76	103.37	99.18	98.35	98.00	106.41	105.35	101.17	103.86	104.96	108.72
Education	100	100.00	100.00	101.63	101.63	101.63	101.63	101.63	101.92	101.92	101.92	101.92	101.92	101.92	101.92
Health	100	100.00	100.00	103.92	103.92	103.92	103.92	103.92	103.92	104.31	104.31	104.31	105.33	105.33	105.33

*Note: Whole series have been revised as new establishments provided data and revisions were made to previous data*

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

	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
All Industries		2.65	3.88	7.98	0.34	-0.13	-5.92	-8.91	-2.44	-4.74	3.20	-2.48	11.27	2.27	1.61
Fishing		0.99	7.62	-3.37	2.90	1.68	-1.68	7.38	-2.88	-2.03	-6.06	9.33	-13.77	4.69	-11.59
Manufacturing		1.59	1.48	0.13	0.18	5.06	-1.78	1.91	-0.98	-2.24	-2.32	0.55	-5.86	0.10	1.25
Processing and preserving of fish and fish prod		2.65	2.47	0.16	0.31	8.52	-3.05	3.18	-1.61	-3.27	-3.82	0.91	-10.52	0.16	2.08
Electricity, gas and water supply		-0.73	0.00	0.00	3.29	-2.35	0.00	-1.46	0.00	0.32	0.00	0.00	0.05	0.00	0.00
Hotels and restaurants		4.08	5.05	13.32	1.30	-1.95	-8.27	-14.45	-3.63	-9.15	6.29	-3.57	20.42	3.25	2.15
Transport and communications		0.33	3.03	0.49	-4.92	4.66	-4.05	-0.84	-0.35	8.59	-1.00	-3.96	2.65	1.06	3.58
Education		0.00	0.00	1.63	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00
Health		0.00	0.00	3.92	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.97	0.00	0.00

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

	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
All Industries													2.92	2.54	0.30
Fishing													-2.24	1.34	-16.74
Manufacturing													-2.67	-4.10	-4.32
Processing and preserving of fish and fish products													-5.19	-7.48	-7.83
Electricity, gas and water supply													-0.97	-0.24	-0.24
Hotels and restaurants													4.36	3.53	0.67
Transport and communications													3.86	4.61	5.17
Education													1.92	1.92	1.92
Health													5.33	5.33	5.33