

Producer Price Index (PPI) - Maldives

Index references = December 2018 (Education), January 2019 (Info-Comm)

January-March 2022 TIME OF RELEASE: Tuesday, 31st May 2022

KEY FIGURES 2022, Q1— PPI EDUCATION; INFO & COMM

Tab1:Monthly PPI–Education and Information and Communication

Month	PPI- Education	PPI– Information and Communication
Jul-20	98.39	85.90
Aug-20	98.69	83.47
Sep-20	98.30	82.26
Oct-20	98.40	82.79
Nov-20	97.76	81.50
Dec-20	97.54	83.21
Jan-21	103.01	83.77
Feb-21	103.35	81.48
Mar-21	103.34	79.39
Apr-21	103.35	83.08
May-21	103.36	75.66
Jun-21	103.43	78.69
Jul-21	102.62	80.63
Aug-21	106.45	78.38
Sep-21	106.45	75.34
Oct-21	106.45	74.25
Nov-21	106.45	74.88
Dec-21	106.45	73.45
Jan-22	106.77	72.59
Feb-22	106.84	72.84
Mar-22	106.84	72.68

In quarter 1 (Q1) of 2022, the Producer Price Index for Education sector increased slightly compared to 2021 Q4, from 106.45 in December 2021 to 106.84 in March 2022.

The communication sector PPI for March 2022 was 72.68. Unlike education, this sector experiences a downward trend and varies more frequently (Figure 1, Tab1).

LONG TERM TREND IN PPI

Figure 1 below illustrates the monthly changes in the Education as well as Information and Communication PPIs over the past two years. The two sectors follow different trends.

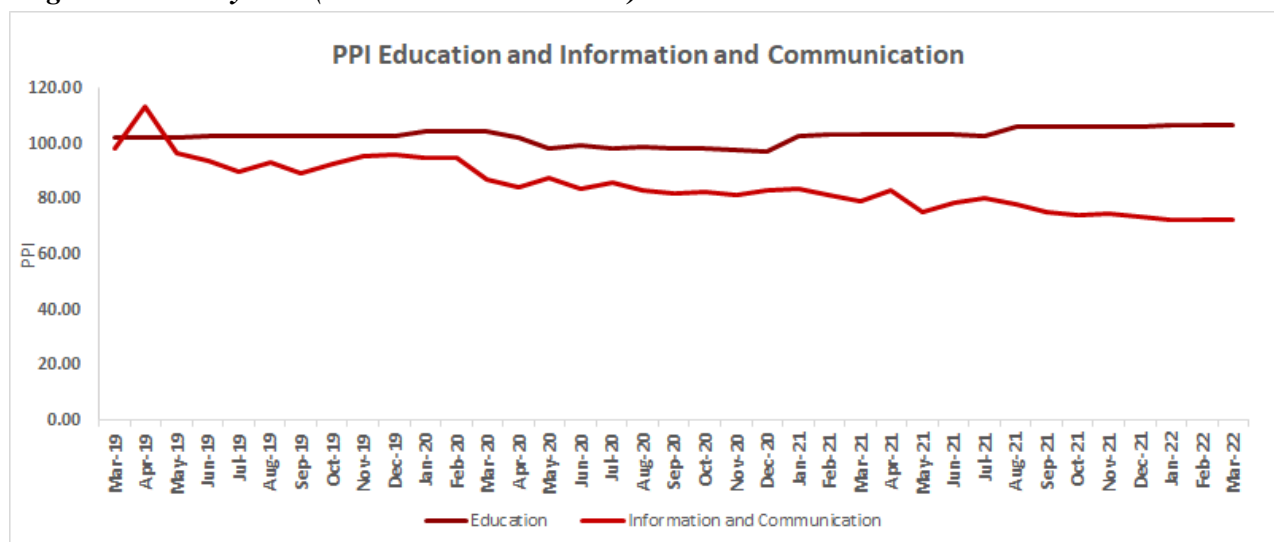
However, as a result of Covid-19 pandemic, both sectors experienced falling prices. Yet, after a year, education sector prices have reached the pre-pandemic level and it continues to increase gradually.

The Information and Communication prices continue to follow a downward trend even though Maldives has overcome the Covid-19 situation. This is due to government policies introduced in mid-2021, aimed at reducing prices to make internet more accessible to the people.

The sector-wise trends are explained in the following pages.

PRICE MOVEMENTS-EDUCATION, INFO-COMM-(March 2019-2022)

Figure 1: Monthly PPI (March 2019-March 2022)



Producer Price Index (PPI) Education Sector - Maldives

Price reference =2018 | Index reference = Dec 2018

January-March 2022 TIME OF RELEASE: Tuesday, 31st May 2022

KEY FIGURES 2022 , Q1 — PPI FOR EDUCATION

Tab2: Monthly & Month on month change

Month	PPI -Education 2022	2021	% Change 2021-2022
Jan	106.77	103.01	3.65
Feb	106.84	103.35	3.38
Mar	106.84	103.34	3.39

In quarter 1 (Q1) of 2022, the Producer Price Index for Education sector rose slightly, reaching 106.84 by March 2022. This quarter shows positive growth with slight fluctuations in all three months compared to 2021 Q1, with January peaking at 3.65%.

Tab 3:Monthly PPI and Percentage

Month	PPI- Education	% Change over previous month	% Change - month on month
Jan-21	103.01	5.61	-1.31
Feb-21	103.35	0.32	-0.99
Mar-21	103.34	-0.01	-1.00
Apr-21	103.35	0.01	1.20
May-21	103.36	0.01	5.22
Jun-21	103.43	0.07	4.07
Jul-21	102.62	-0.78	4.31
Aug-21	106.45	3.73	7.86
Sep-21	106.45	0.00	8.28
Oct-21	106.45	0.00	8.18
Nov-21	106.45	0.00	8.89
Dec-21	106.45	0.00	9.14
Jan-22	106.77	0.30	3.65
Feb-22	106.84	0.07	3.38
Mar-22	106.84	0.00	3.39

LONG TERM TREND IN PPI

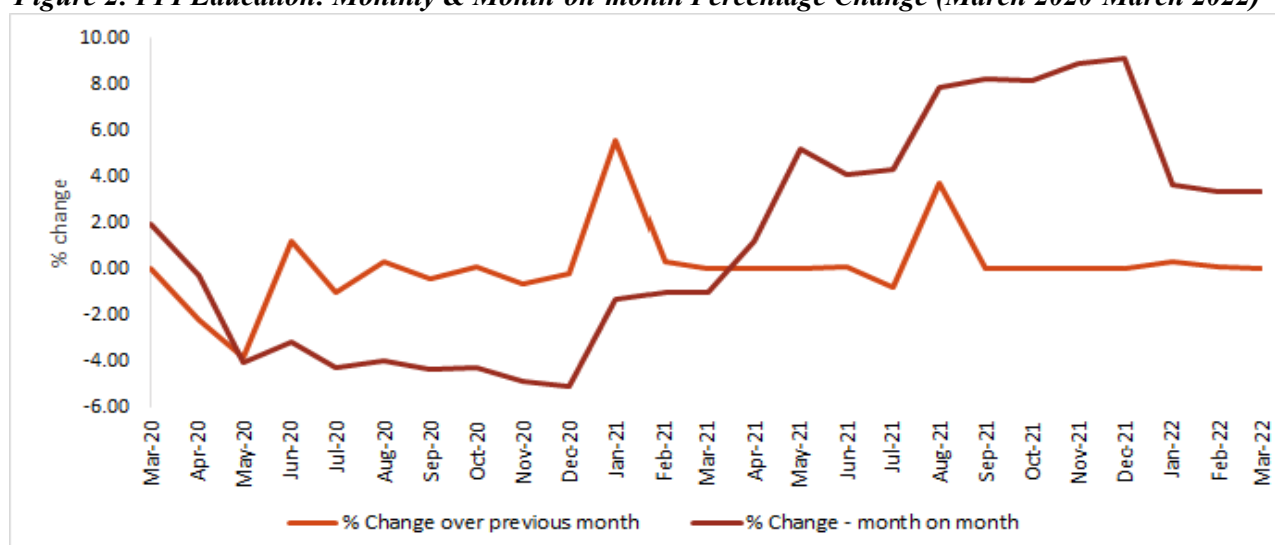
Figure 2 below illustrates the monthly and month-on-month changes in Education PPI over the past two years. The monthly indices increased in January and February and remained stable in March 2022 (Tab3, Figure 3) at 0.30%, 0.07% and 0.00 % respectively. These changes are caused by change in fee structures of some institutions.

The month-on-month prices were positive and relatively stable between January to March 2022, at 3.65%, 3.38% and 3.39% respectively.

Since August 2021, the education sector PPI has surpassed the pre-covid level of 104.39, and remained constant for five months until it started increasing in 2022 Q1.

PRICE MOVEMENT IN EDUCATION SECTOR-(March 2020-2022)

Figure 2: PPI Education: Monthly & Month-on-month Percentage Change (March 2020-March 2022)



Education Level

Tab 4: PPI -Education Levels, and Month on month percentage change

Education levels	Mar-21	Mar-22	% Change 2021-2022
Education	103.34	106.84	3.39
Pre-primary and primary education	104.63	112.17	7.21
General Secondary Education	106.27	107.49	1.15
Higher Education	101.33	102.00	0.66

As illustrated in Table 4, all education levels show price increases over the twelve months from March 2021 to March 2022. The Pre-primary and Primary education had the most significant increase of 7.21%. The General Secondary education had a relatively low growth at 1.15%. The Higher education category had the least growth rate at 0.66% during the period. Higher education prices have been quite stable over the years.

Figure 3: PPI – Education Sector PPI (March 2020-March 2022)

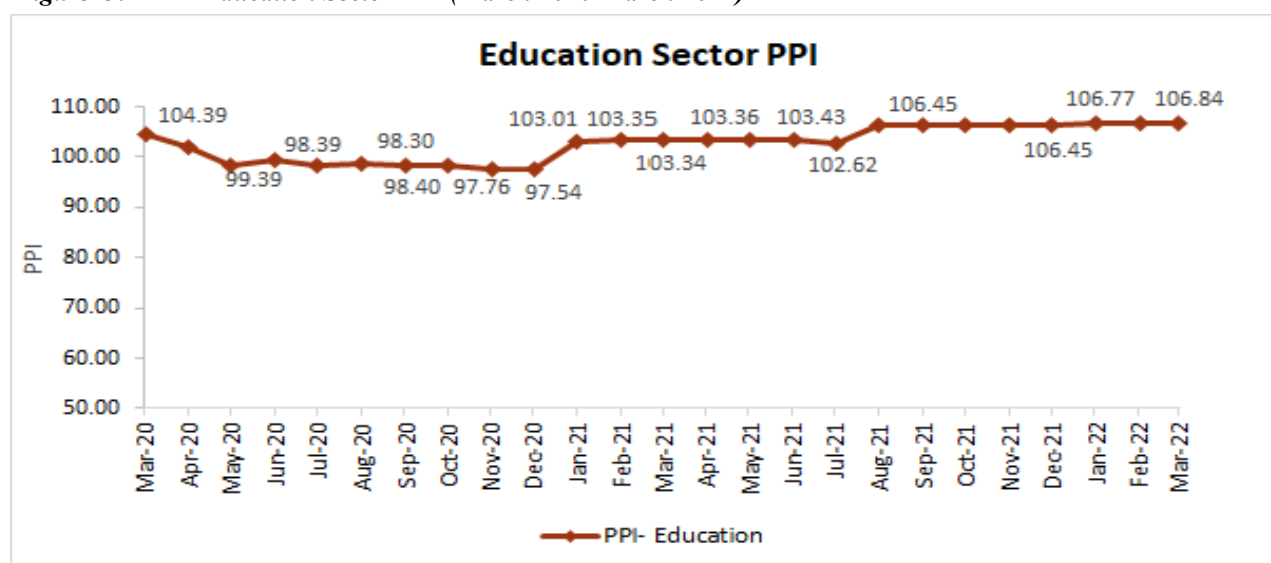


Figure 4: PPI – Preprimary and Primary Education Index (March 2020-March 2022)

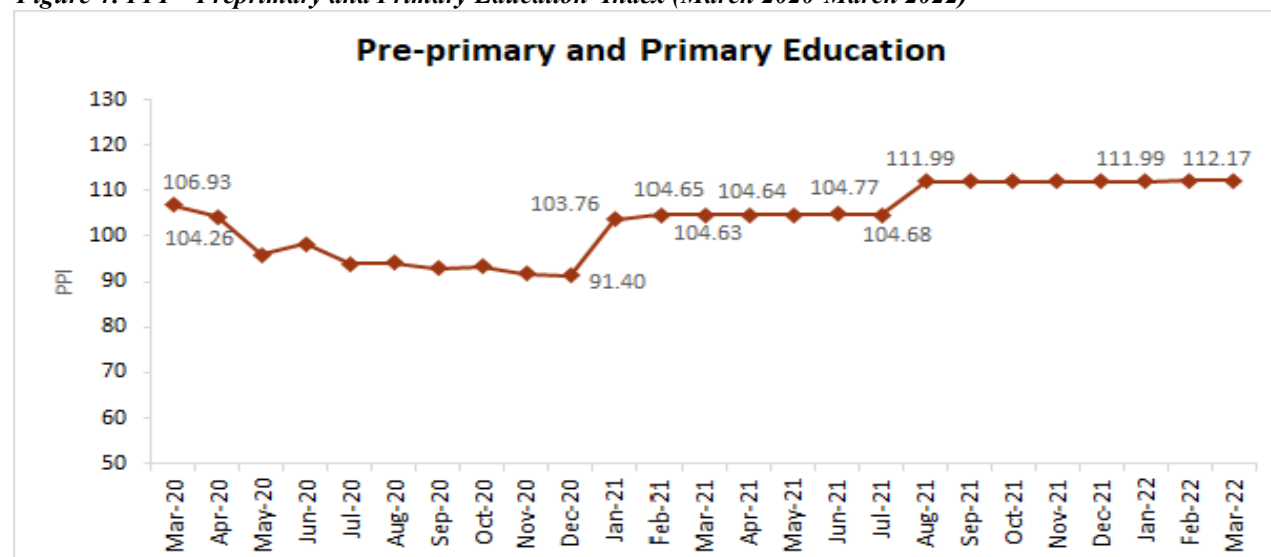


Figure 4, shows that the price of pre-primary and primary education increased in February 2022 to 112.17. This is an increase of 0.16% compared to January 2022. The twelve month growth rate between March 2021 to March 2022 was 7.21%, making this the largest upward contributor to the overall education sector PPI in 2022 Q1 compared to 2021 Q1. This is due to recovery from Covid-19 situation and steady rise in prices of preprimary and primary education over the period.

Education Level

Figure 5: PPI – General Secondary Education Index (March 2020-March 2022)
(includes Lower and Higher secondary education)

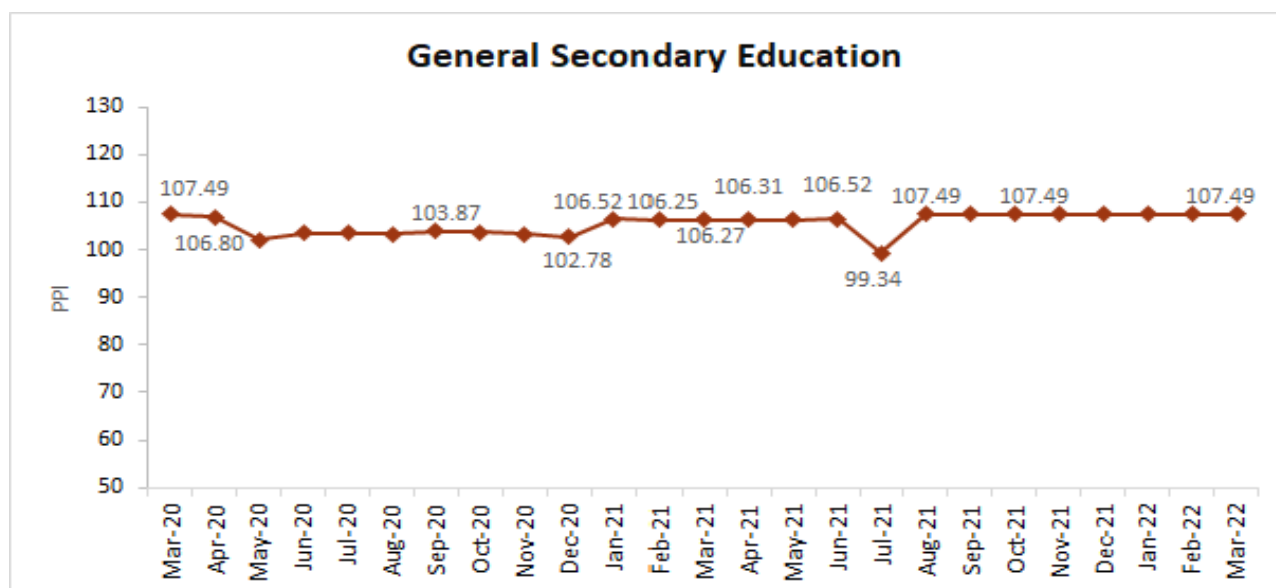


Figure 5, illustrates that prices for general secondary education remained stable since August through 2022 Q1. The month-on-month prices have had a positive growth of 1.15% in March 2022. The secondary education has been more stable compared to pre-primary and primary education sector.

Figure 6: PPI – Higher Education Index (March 2020-March 2022)

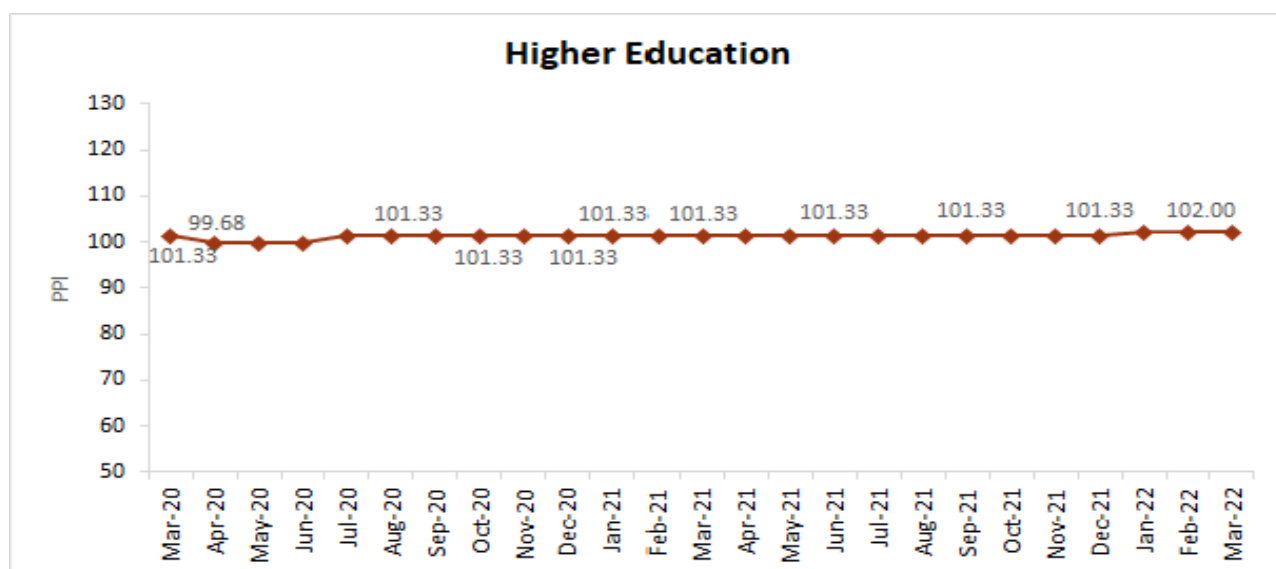


Figure 6 illustrates prices of higher education. The higher education prices increased in 2022 Q1 compared with 2021 Q4, due to change in fee structures of some institutions. Since January 2022, the higher education PPI was at 102.00. This is the first time it has surpassed the pre-covid level.

The higher education prices remained somewhat steady for most of the period except from April to June 2020. However, in July 2020, higher education prices returned to the pre-COVID level and remained constant till December 2021.

Producer Price Index (PPI) Information & Communication - Maldives

Price reference = January 2019 | Index reference = January 2019

January-March 2022 TIME OF RELEASE: Tuesday, 31st May 2022

KEY FIGURES 2022, Q1 — PPI FOR INFO & COMM

Tab 5: Monthly & Month on month change

Month	PPI –Info & Comm 2022	2021	% Change 2021-2022
Jan	72.59	83.77	-13.34
Feb	72.84	81.48	-10.61
Mar	72.68	79.39	-8.45

Tab 6: Monthly PPI and Percentage

Month	PPI– Info & Comm	% Change over previous month	% Change - month on month
Jan-21	83.77	0.67	-12.06
Feb-21	81.48	-2.72	-14.20
Mar-21	79.39	-2.56	-9.15
Apr-21	83.08	4.65	-1.23
May-21	75.66	-8.93	-13.94
Jun-21	78.69	4.01	-6.35
Jul-21	80.63	2.46	-6.14
Aug-21	78.38	-2.79	-6.10
Sep-21	75.34	-3.87	-8.40
Oct-21	74.25	-1.46	-10.32
Nov-21	74.88	0.85	-8.12
Dec-21	73.45	-1.91	-11.73
Jan-22	72.59	-1.18	-13.34
Feb-22	72.84	0.34	-10.61
Mar-22	72.68	-0.21	-8.45

In quarter 1 (Q1) of 2022, the Producer Price Index for Info & Comm sector remained fairly stable compared to quarter 1 of 2021. The index was at 72.68 in March 2022. Info & Comm prices in 2022 Q1 remained significantly low in all three months compared to 2021 Q1.

LONG TERM TREND IN PPI

Figure 7 below illustrates the monthly changes in Information & Communication PPI over the past two years. The monthly indices experienced a decreasing trend with varying degrees of fluctuations over the years.

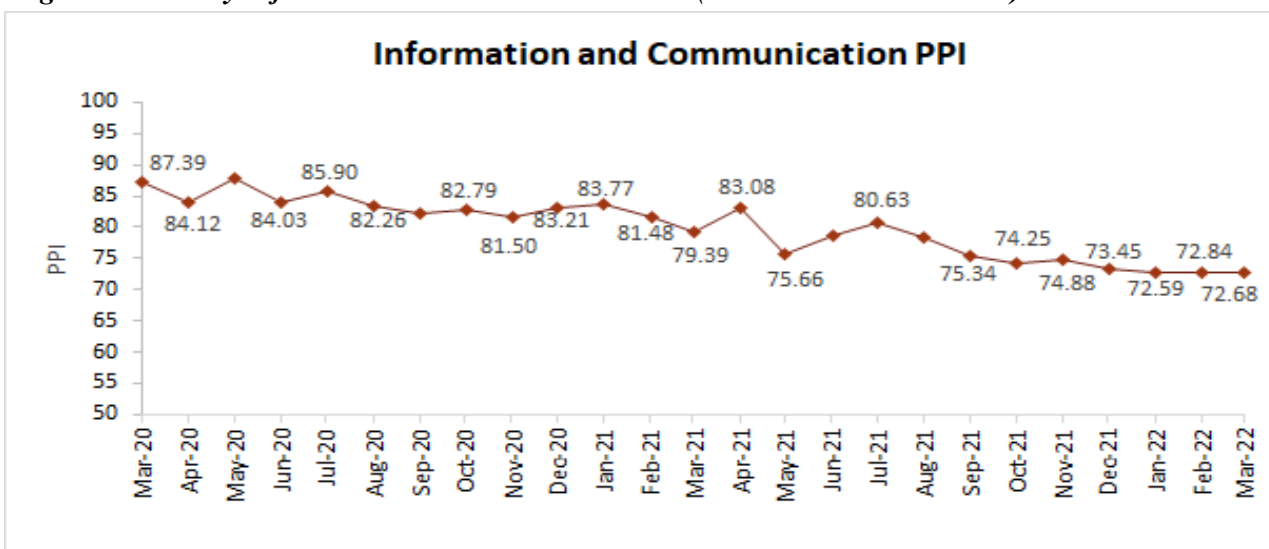
However, prices remained somewhat stable between January and March 2022 (Tab 6, Figure 7) at 72.59%, 72.84%, and 72.68% respectively.

These prices show a sign of stabilization, potentially as result of policy changes after covid-19.

This sector consists of broadcasting and telecommunication. The Info & Comm PPI is mainly influenced by changes in prices of telecommunication services.

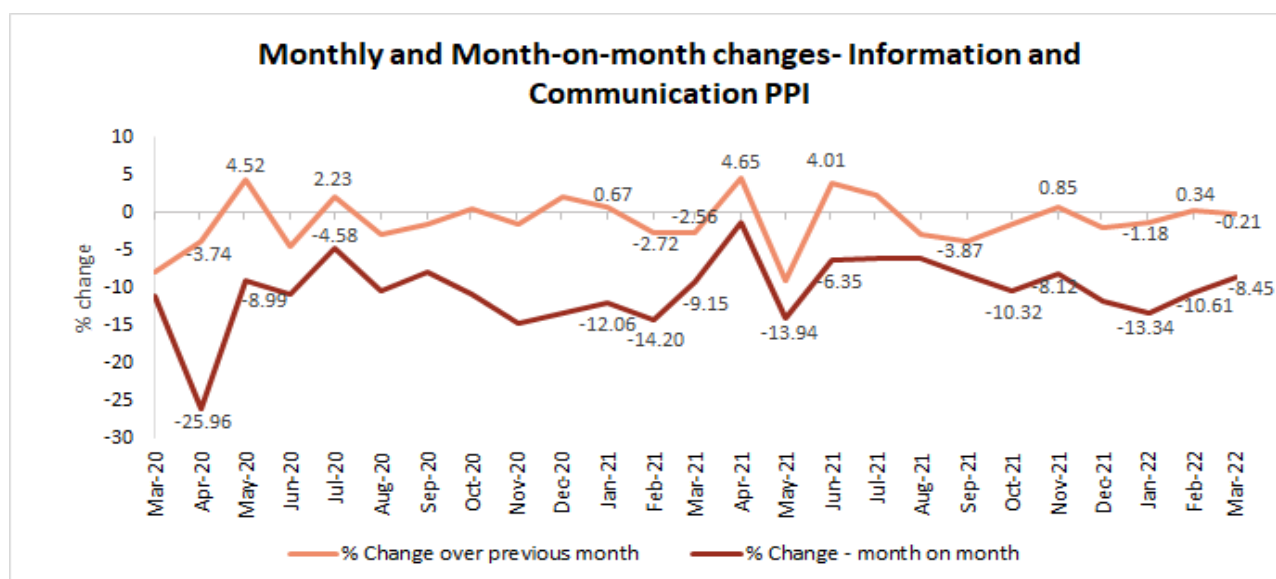
PRICE MOVEMENT IN INFO COMM SECTOR-(March 2020-2022)

Figure 7: Monthly Information & Communication PPI (March 2020-March 2022)



Information and Communication

Figure 8: PPI – Information & Communication Sector PPI (March 2020-March 2022)



The Figure 8 and Table 6 , shows the monthly and month-on-month changes in prices of Information and Communication sector during the past two years.

The monthly changes compare prices of each month with that of the previous month, whereas the month-on-month values compare prices of each month with that of the same month in the previous year.

The monthly indices experienced slight fluctuations between January and March 2022 at -1.18%, 0.34%, and -0.21% respectively. This is mainly due to changes in offers provided for wired telecommunication services. Even though the month-on-month prices were negative in 2022 Q1, compared to corresponding quarter of 2021, prices have been stabilizing causing a decrease in growth rate from -13.34% in January 2022 to -8.45 in March 2022.

The communication sector prices are expected to vary over time. However, the significant decrease in month-on-month prices between March and April 2020 reflects the impact of Covid-19 pandemic-related free data offers provided by the telecommunication sector. It increased in April 2021 due to removal of special offers, as the Covid pandemic situation improved over the year. April to May 2021 prices also coincide with changes in consumer behaviour and telecommunication usage during Ramadan.

Future plan for Information and Communication PPI

The Information and Communication PPI would be expended in the future, providing data users with information at more disaggregated levels, while maintaining the confidentiality of data providers. The Maldives Bureau of Statistics aims at publishing the index at programming and broadcasting, and telecommunication levels once sufficient data is available.

PPI weights and Price collection

The PPI for Education is introduced with a price reference of 2018. The index for Education is compiled based on 110 transactions from a sample of 17 establishments. The PPI for Information and Communication is introduced with a price reference of January 2019. The Communication sector index is compiled based on 55 transactions from a sample of 6 establishments.

Future plan for PPI

PPI initiation works on Water, Sewerage and Waste Management; Electricity; Construction; as well as Tourism sectors are ongoing.

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. It 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 Maldives Bureau of Statistics (MBS) and released every month.

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 MBS 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.statisticsmaldives.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.

Notes

FORTHCOMING ISSUES

Issue (monthly)
April - June 2022

Release date
31 August 2022

ROUNDING

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

ABBREVIATIONS

MBS	Maldives Bureau of Statistics
PPI	Producer Price Index
IMF	International Monetary Fund
SUT	Supply and Use Table
CPI	Consumer Price Index

ACKNOWLEDGEMENT

The release of the new PPI was made possible through the generous support of IMF South Asia Regional Training and Technical Assistance Centre (SARTTAC). Consultant from IMF, Mr Brian Graf guided in the formulation and compilation of the index.

The entire process of data validation, compilation and updating has been done in close collaboration with all the data providing establishments.

The quarterly Producer price Index is compiled by Ms. Sajida Ahmed and Ms. Lizama Faheem; Industry Weights were developed by Ms. Aishath Hassan and Ms. Mariyam Shadheena; Publication report was prepared by Ms. Lizama Faheem and methodology paper was reviewed by Mr. Brian Graf.

The PPI development process was carried out under overall technical support and guidance from Mr. Brian Graf and the supervision of senior management of statistics division Ms. Aishath Shahuda and Ms. Aishath Hassan. All their valuable services are gratefully acknowledged.

The support rendered by all staff of 'Prices and Economics statistics Section' and National accounts Section' are appreciable.

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
Education	102.77	102.77	102.77	102.77	102.77	102.77	104.39	104.39	104.39	104.39	104.39	98.23	99.39	98.39	98.69	98.30	98.40	97.76	97.54	103.01	103.35	103.34	103.398	103.36	103.43	102.62	106.45	106.45	106.45	106.45	106.45	106.77	106.84	106.84
Pre-primary and primary education	104.26	104.26	104.26	104.26	104.26	104.26	106.93	106.93	106.93	104.26	95.91	98.40	93.99	94.05	92.97	93.25	91.81	91.40	103.76	104.65	104.63	104.64	104.66	104.77	104.68	111.99	111.99	111.99	111.99	111.99	111.99	112.17	112.17	
General Secondary Education	102.86	102.86	102.86	102.86	102.86	102.86	107.49	107.49	107.49	106.80	102.18	103.52	103.55	103.36	103.87	103.69	103.24	102.78	106.52	106.25	106.27	106.3061	106.31	106.52	99.34	107.49	107.49	107.49	107.49	107.49	107.49	107.49	107.49	
Higher Education	101.51	101.51	101.51	101.51	101.51	101.51	101.33	101.33	101.33	99.68	99.68	99.68	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	101.33	102.00	102.00	102.00	

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Education	0.15	0.00	0.00	0.00	0.00	0.00	1.58	0.00	0.00	-2.16	-3.82	1.18	-1.01	0.31	-0.39	0.10	-0.65	-0.22	5.61	0.32	-0.01	0.01	0.01	0.07	-0.78	3.73	0.00	0.00	0.00	0.00	0.30	0.07	0.00
Pre-primary and primary education	0.00	0.00	0.00	0.00	0.00	0.00	2.57	0.00	0.00	-2.50	-8.01	2.60	-4.48	0.06	-1.15	0.30	-1.54	-0.45	13.53	0.85	-0.02	0.01	0.02	0.11	-0.09	6.98	0.00	0.00	0.00	0.00	0.00	0.16	0.00
General Secondary Education	0.00	0.00	0.00	0.00	0.00	0.00	4.51	0.00	0.00	-0.64	-4.33	1.31	0.03	-0.18	0.50	-0.18	-0.43	-0.45	3.64	-0.26	0.02	0.03	0.01	0.20	-6.75	8.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Higher Education	0.31	0.00	0.00	0.00	0.00	0.00	-0.17	0.00	0.00	-1.63	0.00	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00

	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Education	na	na	na	na	na	2.77	1.94	1.94	1.94	-0.27	-4.08	-3.15	-4.26	-3.97	-4.34	-4.25	-4.88	-5.09	-1.31	-0.99	-1.00	1.20	5.22	4.07	4.31	7.86	8.28	8.18	8.89	9.14	3.65	3.38	3.39
Pre-primary and primary education	na	na	na	na	na	4.26	2.57	2.57	2.57	0.00	-8.01	-5.62	-9.84	-9.79	-10.83	-10.56	-11.94	-12.34	-2.96	-2.14	-2.16	0.36	9.12	6.48	11.37	19.07	20.46	20.10	21.98	22.53	7.93	7.19	7.21
General Secondary Education	na	na	na	na	na	2.86	4.51	4.51	4.51	3.84	-0.66	0.65	0.67	0.49	0.99	0.81	0.37	-0.08	-0.91	-1.16	-1.14	-0.47	4.05	2.90	-4.07	4.00	3.49	3.67	4.12	4.59	0.91	1.17	1.15
Higher Education	na	na	na	na	na	1.51	0.57	0.57	0.57	-1.06	-1.06	-1.50	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	0.00	0.00	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.66	0.66

Source: Maldives Bureau of Statistics

Info & Comm PPI - Percentage changes over previous month and month-on-month

Index Reference = January 2019

Year	Month	Communication PPI	% change over previous month	Percent change-month-on-month
2019	Jan	100		
	Feb	95.43	-4.57	na
	Mar	98.17	2.87	na
	Apr	113.61	15.73	na
	May	96.60	-14.97	na
	Jun	94.13	-2.56	na
	Jul	90.02	-4.36	na
	Aug	93.19	3.52	na
	Sep	89.27	-4.21	na
	Oct	92.83	3.99	na
	Nov	95.44	2.81	na
	Dec	95.98	0.57	na
2020	Jan	95.26	-0.76	-4.74
	Feb	94.97	-0.30	-0.49
	Mar	87.39	-7.98	-10.98
	Apr	84.12	-3.74	-25.96
	May	87.92	4.52	-8.99
	Jun	84.03	-4.43	-10.73
	Jul	85.90	2.23	-4.58
	Aug	83.47	-2.83	-10.43
	Sep	82.26	-1.45	-7.85
	Oct	82.79	0.65	-10.81
	Nov	81.50	-1.56	-14.60
	Dec	83.21	2.10	-13.31
2021	Jan	83.77	0.67	-12.06
	Feb	81.48	-2.72	-14.20
	Mar	79.39	-2.56	-9.15
	Apr	83.08	4.65	-1.23
	May	75.66	-8.93	-13.94
	Jun	78.69	4.01	-6.35
	Jul	80.63	2.46	-6.14
	Aug	78.38	-2.79	-6.10
	Sep	75.34	-3.87	-8.40
	Oct	74.25	-1.46	-10.32
	Nov	74.88	0.85	-8.12
	Dec	73.45	-1.91	-11.73
2022	Jan	72.59	-1.18	-13.34
	Feb	72.84	0.34	-10.61
	Mar	72.68	-0.21	-8.45

Note: *na: Not available*

Source: Maldives Bureau of Statistics

Ministry of National Planning, Housing and Infrastructure