# **CONSUMER PRICE INDEX**

(Base period: January – December 2017 = 100)

### 1st Quarter 2020

## **1. INTRODUCTION**

This issue of Economic and Social Indicators presents the Consumer Price Index (CPI) for the first quarter 2020. The methodology used for computing the CPI and the inflation rate is given in the technical note at Annex.

## 2. KEY POINTS

## 2.1 <u>The overall CPI</u>

The Consumer Price Index, which stood at 103.3 in December 2019, registered a net increase of 4.1 points (or 4.0%) to reach 107.4 in March 2020 (Table 1a).

On a monthly basis, the CPI increased by 2.6 points in January, 0.7 point in February and 0.8 point in March.

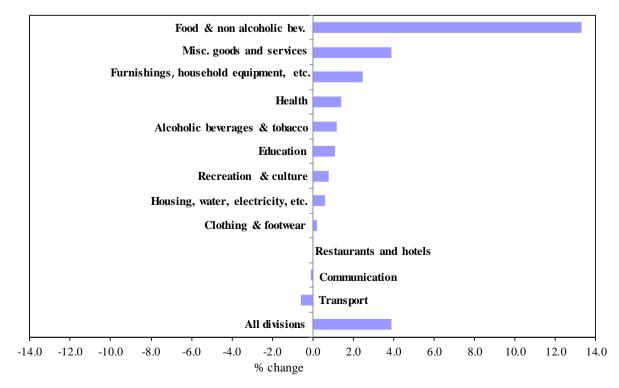
## 2.2 <u>Overview of CPI movements</u>

The main contributors for the net increase in the CPI from December 2019 to March 2020 (Table 2) were:

- (a) higher prices of vegetables (+2.7 points), traders' rice (+0.1 point), culinary herbs (+0.1 point), fruits (+0.1 point), ginger (+0.1 point), powdered milk (+0.1 point), and some other food products (+0.2 point);
- (b) higher prices of whisky (+0.1 point);
- (c) higher workman's wages (+0.1 point);
- (d) higher prices of washing materials and softeners (+0.1 point);
- (e) higher prices of goods for personal care (+0.1 point); and
- (f) higher prices of some other goods and services (+0.4 point); partly offset by
- (g) lower prices of air tickets (-0.1 point).

# 3. MOVEMENT OF CPI SUB INDICES

### Percentage change in CPI sub indices from December 2019 to March 2020



The changes in the sub-indices (Table 3) for the twelve divisions of consumption expenditure from December 2019 to March 2020 were as follows:

Division of consumption expenditure	Main contributors to change
Food and non-alcoholic beverages (+13.3%)	Higher prices of vegetables (+63.2%), traders' rice (+6.2%), culinary herbs (+21.3%), fruits (+4.8%) ginger (+47.0%), powdered milk (+2.9%), ice cream and sweets (+15.6%), pulses (+18.2%), meat (+1.0%) and cooking oil (5.8%).
Alcoholic beverages and tobacco $(+1.2\%)$	Higher prices of whisky $(+7.7\%)$ , rum and other cane spirits $(+2.2\%)$ and wine $(+3.8\%)$ .
Clothing and footwear (+0.2%)	Higher prices of ready-made clothing (+0.3%).
Housing, water, electricity, gas and other fuels (+0.6%)	Higher workman's wages $(+9.7\%)$ and higher prices of materials for the maintenance and repair of dwellings $(+0.8\%)$ , partly offset by lower interest rates on housing loan $(-0.4\%)$ .
Furnishings, household equipment and routine household maintenance (+2.5%)	Higher prices of washing materials and softeners $(+6.5\%)$ and higher charges for domestic services $(+5.6\%)$ .
<i>Health</i> (+1.4%)	Higher doctor's fees $(+3.1\%)$ and higher prices of medicinal products $(+0.7\%)$ .
Transport (-0.6%)	Lower prices of air tickets $(-5.1\%)$ , partly offset by higher prices motor vehicles $(+0.4\%)$ .
Communication (-0.1%)	Lower prices of mobile phones (-0.7%).
<i>Recreation and culture (+0.8%)</i>	Higher prices of audio visual equipment (+3.3%) and books (+1.5%).
Education (+1.1%)	Higher university fees in private institutions $(+1.1\%)$ and higher fees in private primary and secondary schools $(+4.1\%)$ .
Restaurants and hotels	The sub-index remained unchanged following lower fees for accommodation services (- 4.3%), offset by higher prices of prepared foods (+0.3%).
Miscellaneous goods and services (+3.9%)	Higher prices of goods for personal care $(+6.3\%)$ , medical insurance $(+4.8\%)$ , nursery fees $(+17.9\%)$ and motor vehicle insurance $(+1.0\%)$ .

### 4. INFLATION RATE

The headline inflation rate was 0.5% for year 2019 compared to 3.2% for year 2018 (Table 5).

The headline inflation rate excluding 'Alcoholic beverages and tobacco' was 0.4% for year 2019 compared to 3.1% for year 2018.

The headline inflation rate for the twelve months ending March 2020 works out to 1.2%, compared to 1.4% for the twelve months ending March 2019.

The headline inflation rate excluding "Alcoholic beverages and tobacco" for the twelve months ending March 2020 works out to 1.2% compared to 1.4% for the twelve months ending March 2019.

### 5. INTERNATIONAL COMPARISON OF INFLATION RATE

The table below compares the inflation rate (as measured by the percentage change in the average CPI for a given year relative to the previous year) of Mauritius with those of our main importing countries and some countries in the region for the year 2019.

Country	Inflation rate (%)	Country	Inflation rate (%)
France	1.3	Australia	1.6
United Kingdom	1.8	United States	1.8
China	2.9	Botswana	2.8
India	4.5	Mauritius	0.5
Japan	0.5	Seychelles	1.8
Singapore	0.6	South Africa	4.1

#### Inflation rate (%) of selected countries, year 2019

Source – World Economic Outlook Database, April 2020

Statistics Mauritius Ministry of Finance and Economic Development Port Louis May 2020 Note :

- (i) This publication is available on the website of Statistics Mauritius at <u>http://statsmauritius.govmu.org</u> From the homepage, choose "Publications" followed by "Economic and Social Indicators", then "Consumer Price Index".
- (ii) The monthly CPI is also available on our website. It is posted within 5 working days after the reference month.
- (iii) More detailed information on CPI can be made available upon request.

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		<u>( Bas</u>	e : Jan to D	ec 2012 = 1	<u>(Base :</u>	Jan - Dec 2017	= 100 )		
<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
January	102.0	107.2	107.9	108.3	110.2	117.0		103.8	105.9
February	102.7	108.5	110.7	110.1	111.5	119.3		104.4	106.6
March	103.1	107.7	110.1	111.1	112.5	120.0		104.4	107.4
April	103.4	107.7	110.0	110.2	113.4		103.8	104.4	
May	103.3	106.8	107.3	108.2	114.6		103.6	104.4	
June	103.4	106.8	107.2	108.4	115.3		102.8	103.4	
July	103.6	106.8	107.4	108.5	114.3		102.6	103.4	
August	103.3	107.2	108.4	109.4	114.4		101.9	103.7	
September	103.5	106.5	108.6	109.6	113.4		102.0	103.3	
October	103.9	105.9	107.5	109.1	112.9		102.4	102.8	
November	105.0	105.9	107.0	109.4	113.3		102.8	103.1	
December	105.3	105.5	106.9	109.4	114.0		102.4	103.3	
Yearly average	103.5	106.9	108.3	109.3	113.3			103.7	
Annual change (%) (Inflation rate)	+ 3.5	+ 3.2	+ 1.3	+ 1.0	+ 3.7		+ 3.2	+ 0.5	

 Table 1A - Monthly Consumer Price Index, January 2013 - March 2020

<u>Month</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
January	90.0	94.6	95.2	95.6	97.3	103.2	103.8	105.9
February	90.6	95.7	97.7	97.2	98.4	105.3	104.4	106.6
March	90.9	95.0	97.1	98.1	99.3	105.9	104.4	107.4
April	91.2	95.0	97.1	97.3	100.1	103.8	104.4	
May	91.1	94.2	94.7	95.5	101.1	103.6	104.4	
June	91.2	94.2	94.5	95.7	101.7	102.8	103.4	
July	91.4	94.2	94.8	95.7	100.9	102.6	103.4	
August	91.1	94.6	95.6	96.5	100.9	101.9	103.7	
September	91.3	94.0	95.8	96.7	100.1	102.0	103.3	
October	91.7	93.4	94.9	96.2	99.6	102.4	102.8	
November	92.7	93.4	94.4	96.5	100.0	102.8	103.1	
December	92.9	93.1	94.3	96.5	100.6	102.4	103.3	
Yearly average	91.4	94.3	95.5	96.5	100.0	103.2	103.7	
Annual change ( (Inflation rate)	+ 3.5	+ 3.2	+ 1.3	+ 1.0	+ 3.7	+ 3.2	+ 0.5	

Table 1B - Comparative Monthly Consumer Price Index , January 2013 - March 2020 $^{1/}$ (Base: January - December 2017 = 100)

<sup>1/</sup> The CPI for January 2013 to March 2018, originally based on Jan to Dec 2012, has been converted to the new base January - December 2017=100 using a linking factor of 1.133167. Example: the monthly CPI for January 2018 has been converted to the new base by dividing 117.0 by 1.133167 (=103.2)

Commodity	Contribution to change in overall index point	Percentage change in price index
Vegetables	+ 2.7	+ 63.2
Trader's Rice	+ 0.1	+ 6.2
Culinary herbs	+ 0.1	+ 21.3
Fruits	+ 0.1	+ 4.8
Ginger	+ 0.1	+ 47.0
Powdered milk whole	+ 0.1	+ 2.9
Other food products	+ 0.2	+ 2.2
Whisky	+ 0.1	+ 7.7
Workman's wages	+ 0.1	+ 9.7
Washing materials and Softners	+ 0.1	+ 6.5
Air Tickets	- 0.1	- 5.1
Goods for personal care	+ 0.1	+ 6.3
Other goods and Services	+ 0.4	+ 0.6
Overall	+ 4.1	+ 4.0

Table 2 - Net contribution of main commodities that affected the index from December 2019 toMarch 2020

 Table 3 : Monthly sub-indices by division of consumption expenditure, December 2019 to March 2020 - (Base: January - December 2017 = 100)

Division	Description	Weight	Dec-19	Jan-20	Feb-20	Mar-20	Percentage change <sup>1</sup> between December 2019 to March 2020
01	Food and non-alcoholic beverages	248	104.8	112.8	116.0	118.7	+ 13.3
02	Alcoholic beverages and tobacco	110	104.3	105.3	105.4	105.5	+ 1.2
03	Clothing and footwear	46	105.7	105.9	105.9	105.9	+ 0.2
04	Housing, water, electricity, gas and other fuels	112	97.6	98.3	98.3	98.2	+ 0.6
	Furnishings, household equipment and routine household maintenance	59	103.5	105.4	105.0	106.1	+ 2.5
06	Health	38	105.2	106.7	106.7	106.7	+ 1.4
07	Transport	147	105.2	105.1	104.5	104.5	-0.6
08	Communication	44	98.7	98.7	98.7	98.6	-0.1
09	Recreation and culture	42	102.8	103.3	103.0	103.6	+ 0.8
10	Education	50	101.1	101.5	102.2	102.2	+ 1.1
11	Restaurants and hotels	54	106.4	106.4	106.4	106.4	+ 0.0
12	Miscellaneous goods and services	50	101.4	103.9	104.7	105.3	+ 3.9
	All Divisions	1000	103.3	105.9	106.6	107.4	+ 4.0

<sup>1/</sup>% change has been computed from unrounded indices and hence may vary slightly from the change in rounded indices.

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Table 4 - Monthly CPI by division and group of consumption expenditure,

December 2019 to March 2020 (*Base: January - December 2017 = 100*)

Description	Wgt	Dec-19	Jan-20	Feb-20	Mar-20
Division 01 - Food and non alcoholic beverages	248	104.8	112.8	116.0	118.7
Group 1 - Food	230	104.9	113.4	116.8	119.6
Group 2 - Non-alcoholic beverages	18.0	103.1	105.4	105.3	106.4
Division 02 - Alcoholic beverages and tobacco	110	104.3	105.3	105.4	105.5
Group 1 - Alcoholic beverages	61	101.8	103.6	103.7	104.0
Group 2 - Tobacco	49	107.4	107.4	107.4	107.4
Division 03 - Clothing and footwear	46	105.7	105.9	105.9	105.9
Group 1 - Clothing	36	105.5	105.7	105.7	105.7
Group 2 - Footwear	10	106.5	106.5	106.5	106.5
Division 04 - Housing, water, electricity, gas and other fuels	112	97.6	98.3	98.3	98.2
Group 1 - Actual rentals for housing	10	101.8	101.8	101.8	101.8
Group 2 - Mortgage interest on housing loan	31	94.4	94.4	94.4	94.0
Group 3 - Maintenance and repair of the dwelling	13	108.1	114.1	114.2	114.2
Group 4 - Water supply and miscellaneous services relating to the dwelling	11	100.0	100.0	100.0	100.0
Group 5 - Electricity, gas and other fuels	47	95.3	95.3	95.3	95.3
Division 05 - Furnishings, household equipment and routine household maintenance	59	103.5	105.4	105.0	106.1
Group 1 - Furniture and furnishings, carpets and other floor coverings	14	101.3	101.3	101.3	101.7
Group 2 - Household textiles	5	103.5	103.7	103.7	104.4
Group 3 - Household appliances	12	102.8	103.5	103.5	103.4

## Table 4 (contd.) - Monthly CPI by division and group of consumption expenditure,

# December 2019 to March 2020 (*Base: January - December 2017 = 100*)

Description	Wgt	Dec-19	Jan-20	Feb-20	Mar-20
Group 4 - Glassware, tableware and household utensils	2	100.4	101.2	100.4	99.5
Group 5 - Tools and equipment for house and garden	2	103.4	103.2	103.1	103.4
Group 6 - Goods and services for routine household maintenance	24	105.4	109.7	108.8	111.2
Division 06 - Health	38	105.2	106.7	106.7	106.7
Group 1 - Medical products, appliances and equipment	14	100.9	101.3	101.3	101.4
Group 2 - Outpatient services	15	107.4	110.4	110.4	110.4
Group 3 - Hospital services	9	108.2	108.9	108.9	108.9
Division 07 - Transport	147	105.2	105.1	104.5	104.5
Group 1 - Purchase of vehicles	50	103.8	104.2	104.2	104.2
Group 2 - Operation of personal transport equipment	64	102.3	102.3	102.3	102.3
Group 3 - Transport services	33	112.7	111.7	109.4	109.4
Division 08 - Communication	44	98.7	98.7	98.7	98.6
Group 2 - Telephone and telefax equipment	5	88.3	88.3	88.3	87.7
Group 3 - Telephone and telefax services	39	100.0	100.0	100.0	100.0
Division 09 - Recreation and culture	42	102.8	103.3	103.0	103.6
Group 1 - Audio-visual, photographic and information processing equipment	9	96.3	97.3	96.1	98.6
Group 3 - Other recreational items and equipment, gardens and pets	6	102.9	103.5	102.6	103.6

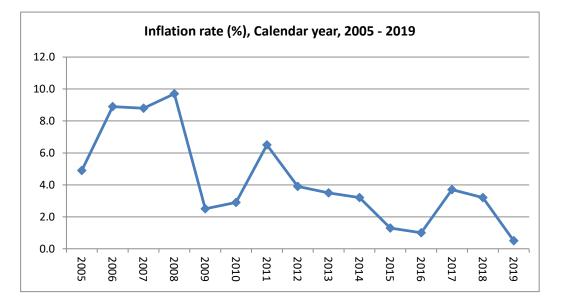
## Table 4 (contd.) - Monthly CPI by division and group of consumption expenditure,

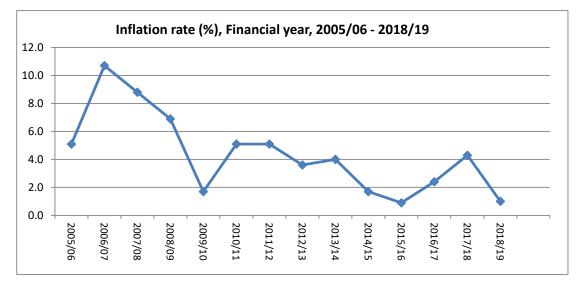
December 2019 to March 2020 (*Base: January - December 2017 = 100*)

Description	Wgt	Dec-19	Jan-20	Feb-20	Mar-20
Group 4 - Recreational and cultural services	15	102.1	102.1	102.1	102.1
Group 5 - Newspapers, books and stationery	12	108.5	109.0	109.3	109.4
Division 10 - Education	50	101.1	101.5	102.2	102.2
Group 1 - Pre-primary and primary education	5	110.6	112.7	112.7	112.7
Group 2 - Secondary education	10	109.1	109.8	109.8	109.8
Group 3 - Post-secondary and non-tertiary		107.1	107.0	107.0	107.0
education	0.5	125.0	135.0	135.0	135.0
Group 4 - Tertiary education	34	97.6	97.6	98.6	98.6
Group 5 - Education not definable by level	0.5	55.2	55.2	55.2	55.2
Division 11 - Restaurants and hotels	54	106.4	106.4	106.4	106.4
Group 1 - Catering services	51	105.9	106.1	106.2	106.2
Group 2 - Accomodation services	3	115.2	110.3	110.3	110.3
Division 12 - Miscellaneous goods and services	50	101.4	103.9	104.7	105.3
Group 1 - Personal care	22	98.4	100.8	102.6	104.0
Group 3 - Personal effects, not elsewhere classified	2	110.0	112.2	112.2	112.2
Group 4 - Social protection	1	100.0	117.9	117.9	117.9
Group 5 - Insurance	21	103.7	106.2	106.2	106.2
Group 6 - Financial services not elsewhere classified	1	100.0	100.0	100.0	100.0
Group 7 - Other services not elsewhere classified	3	101.9	101.9	101.9	101.9
All divisions	1000	103.3	105.9	106.6	107.4

Calendar year	Inflation rate	Financial Year	Inflation rate
2005	4.9	2005/06	5.1
2006	8.9	2006/07	10.7
2007	8.8	2007/08	8.8
2008	9.7	2008/09	6.9
2009	2.5	2009/10	1.7
2010	2.9	2010/11	5.1
2011	6.5	2011/12	5.1
2012	3.9	2012/13	3.6
2013	3.5	2013/14	4.0
2014	3.2	2014/15	1.7
2015	1.3	2015/16	0.9
2016	1.0	2016/17	2.4
2017	3.7	2017/18	4.3
2018	3.2	2018/19	1.0
2019	0.5		

Table 5 - Headline inflation rate (%), 2005 - 2019





### **Technical note**

# 1. Methodology used for the computation of the Consumer Price Index (Base period: January - December 2017 = 100)

### (a) Definition

The **Consumer Price Index** (CPI) is an indicator of changes over time in the general level of prices of goods and services acquired by Mauritian consumers.

#### (b) Measurement of the CPI

The CPI measures price change by comparing, through time, the cost of a fixed basket of goods and services. As prices vary over time, the total cost of the basket also changes and thus the CPI measures the change in the cost of this basket. It provides a way to compare what this basket costs at a given period relative to a reference or base period.

The cost of the CPI basket is assigned a value of 100 in the base period and the costs in other periods are expressed as percentage changes compared to the base period. For example, if the CPI is 110, this means that there has been an increase of 10% in the cost of the basket since the base year; similarly an index of 90 means a 10% decrease in the cost of the basket.

#### (c) The CPI basket

The CPI basket is based on the expenditures of private households in a reference period, currently January to December 2017. The composition of the current CPI basket has been derived from the 2017 Household Budget Survey (HBS) data. It has been determined in accordance with latest ILO and SADC recommendations.

The items constituting the basket have been selected on the basis of the importance of household consumption expenditure on them. The basket includes all important items on which consumption expenditure is significant, i.e. accounting for around 0.1% or more of total household consumption expenditure. Each item's relative importance, which is called the "weight" (usually expressed on a total of 1000), is the expenditure share of the item. Non-consumption items such as income tax, social security contributions, purchase of land, shares and life insurance are excluded.

The commodities in the basket are classified according to the UN COICOP (Classification of Consumption Expenditure according to Purpose) with 12 divisions, 42 groups and 80 classes.

#### (d) Price coverage

The prices used in the CPI calculation are those that any member of the public would have to pay to purchase the specified goods or services. Any taxes on products attached to the goods are included.

Price collection is done on a regular basis. Each month, around 8,000 price quotations are collected in respect of 1,093 item indicators from some 520 outlets selected to be representative of regions across the islands of Mauritius and Rodrigues.

Prices of non-perishable items are collected monthly in the nine geographical districts of the island of Mauritius and in Rodrigues.

Prices of fresh fruits, vegetables, meat and fish are collected on a weekly basis from 9 markets in Port Louis, Rose Hill, Quatre Bornes, Vacoas, Mahebourg, Flacq, Goodlands, Pamplemousses and Port Mathurin.

Information on rent is obtained from a quarterly rent survey of some 100 rented dwellings.

## (e) Formula for computation of the CPI

The CPI is computed according to the Laspeyres Formula as a weighted average of price relatives of individual items. The weights are fixed and correspond to the base period expenditures. The Laspeyres Index measures the cost of a basket of goods and services at different points in time, relative to the cost of the same basket in the base period.

The formula used for computing the CPI at time *t* is

$$\mathbf{I}_{t} = \frac{\sum \mathbf{W}_{i} (\mathbf{P}_{it} / \mathbf{P}_{i0})}{\sum \mathbf{W}_{i}} \mathbf{X} \mathbf{100}$$

where,

 $\mathbf{I}_{\mathbf{t}}$  : CPI for period t with reference to a base period 0

**P**<sub>io</sub> : Price of item *i* at time 0, i.e. during base period

- $\mathbf{P_{it}}$ : Price of item *i* at time t
- $W_i$  : Weight of item *i*

The base period is January to December 2017, the period during which the latest HBS was conducted.

## (a) <u>Definition of Inflation</u>

Inflation is the percentage change in the level of prices (as measured by the CPI) from one period to another.

### (b) Calculating the Inflation Rate

The headline inflation rate in Mauritius, like in many other countries, is calculated by using the annual average method, i.e. by comparing the average level of prices during a twelve-month period with the average level during the corresponding previous twelve-month period. This type of inflation rate is more appropriate for adjusting wages, salaries and pensions to compensate for loss of purchasing power. *All inflation rates presented in this publication relate to the headline inflation.* 

Another commonly used method of calculating the inflation rate is the so called 'year-on-year' method. The year-on-year inflation rate is calculated as the percentage change in the CPI for a given month with respect to the CPI for the corresponding month of the previous year. It is generally used by central banks for monetary policy decisions. Year-on-year inflation rates are not presented in this publication but can be easily calculated through the available monthly CPI.

Note: More information about the concept, computation and use of the CPI is available online in the publication '<u>HBS 2017 Methodological Report and updated CPI</u>'