## **CONSUMER PRICE INDEX**

(Base period: January – December 2012 = 100)

## 3<sup>rd</sup> Quarter 2013

## **1. INTRODUCTION**

This issue of Economic and Social Indicators presents the Consumer Price Index (CPI) for the third quarter of 2013. The methodology used for computing the CPI and the inflation rate is given in the technical note at Annex.

## 2. KEY POINTS

## 2.1 The overall CPI

The Consumer Price Index, which stood at 103.4 in June 2013, registered a net increase of 0.1 point (or 0.1%) to reach 103.5 in September 2013 (Table 2a).

On a monthly basis, the CPI increased by 0.2 point in July, then decreased by 0.3 point in August, to increase again by 0.2 point in September 2013.

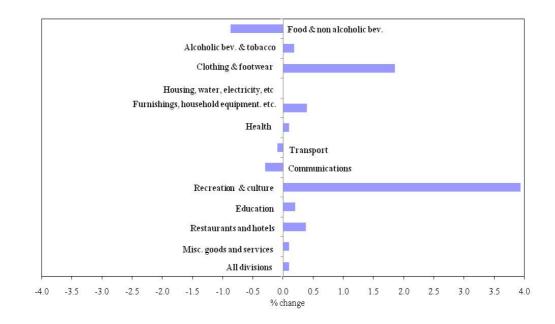
## 2.2 **Overview of CPI movements**

The main reasons for the net increase in the CPI from June to September 2013 (Table 3) were:

- (a) higher prices of milk and some other food products;
- (b) higher prices for ready-made clothing;
- (c) higher bus fares;
- (d) higher MBC TV licence fee; offset by
- (e) lower prices of vegetables;
- (f) lower prices of motor vehicles.

## **3. MOVEMENT OF CPI SUB INDICES**

## Figure 1: % change in CPI sub indices from June to September 2013



The changes in the sub-indices for the twelve divisions of consumption expenditure from June to September 2013 were as follows:

Food and non-alcoholic beverages (-0.9%) Alcoholic beverages and tobacco (+0.2%)	The decrease of 0.9% was mainly the result of lower prices of vegetables (-13.5%), partly offset by higher prices of powdered milk (+5.3%), trader's rice (+2.2%) and fruits (+4.2%). The increase of 0.2% was due to higher prices of rum and other cane spirits (+0.4%) and, beer and stout (+0.1%).
Clothing and footwear (+1.9%)	The increase of 1.9% was mainly due to higher prices of some ready-made garments (+1.9%).
Housing, water, electricity, gas and other fuels	Unchanged
Furnishings, household equipment and routine household maintenance (+0.4%)	The increase of 0.4% was due to higher prices of some furniture $(+0.8\%)$ and household appliances $(+0.6\%)$ .
Health (+0.1%)	The increase of $0.1\%$ was mainly the effect of higher clinic fees (+1.0%).
Transport (-0.1%)	The decrease of $0.1\%$ was mainly due to lower prices of some motor vehicles (-2.3%), partly offset by higher bus fares (+7.7%).
Communication (-0.3%)	The decrease of 0.3% was mainly the result of lower prices of mobile phones (-3.2%).
<i>Recreation and culture (+3.9%)</i>	The increase of 3.9% was mainly due to higher MBC TV licence fee (+50%).
Education (+0.2%)	The increase of 0.2% was due to higher school fees (+1.9%) for primary and secondary education.
Restaurants and hotels (+0.4%)	The rise of 0.4% was mainly the result of price increases of prepared foods $(+0.8\%)$ .
Miscellaneous goods and services (+0.1%)	The increase of 0.1% was mainly attributable to higher prices of some goods for personal care $(+0.5\%)$ .

## 4. INFLATION RATE

The headline inflation rate was 3.9% for year 2012 compared to 6.5% for year 2011. On the basis of trends in previous years and recent price changes, the inflation rate for calendar year 2013 is estimated at around 3.7%.

The headline inflation rate excluding 'Alcoholic beverages and tobacco' was 2.6% for year 2012 compared to 5.3% for year 2011.

The headline inflation rate for the twelve months ending September 2013 works out to 3.5% compared to 4.4% for the twelve months ending September 2012.

The headline inflation rate excluding 'Alcoholic beverages and tobacco' for the twelve months ending September 2013 works out to 2.4% compared to 3.0% for the twelve months ending September 2012.

## 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 latest available year, mainly 2012.

Country	Inflation rate (%)	Country	Inflation rate (%)
France	2.2	Australia	1.8
United Kingdom	2.8	United States	2.1
China	2.6	Botswana	7.5
India	10.4	Mauritius	3.9
Japan	0.0	Seychelles	7.1
Singapore	4.6	South Africa	5.7

 Table 1 - Inflation rate (%) of selected countries, year 2012

Source - World Economic Outlook Database, October 2013

Statistics Mauritius Ministry of Finance and Economic Development Port Louis October 2013. Note:

- (i) This publication is available on the website of Statistics Mauritius at <a href="http://statsmauritius.gov.mu">http://statsmauritius.gov.mu</a>. 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>( Base : July 2006 - June 2007 = 100 )</u>						( Base : Jan - Dec 2012 = 100 )
<u>Month</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2013</u>
January	109.6	115.3	118.2	125.8	131.9	135.7	
February	110.7	115.8	118.6	126.7	131.9	136.6	
March	110.8	116.1	118.8	127.4	132.3	137.1	
April	111.9	116.2	119.3	127.6	132.5		103.4
May	113.0	116.2	119.1	127.6	132.5		103.3
June	113.4	117.1	119.9	127.8	132.8		103.4
July	115.6	117.8	120.2	128.2	133.0		103.6
August	116.3	117.5	120.6	128.4	133.2		103.3
September	116.7	117.8	120.7	128.3	133.3		103.5
October	117.2	117.3	121.0	128.2	133.6		
November	116.5	117.3	121.9	130.4	134.4		
December	115.5	117.2	124.4	130.4	134.6		
Yearly average	113.9	116.8	120.2	128.1	133.0		
Annual change (%) (Inflation rate)	+ 9.7	+ 2.5	+ 2.9	+ 6.5	+ 3.9		

## Table 2a - Monthly Consumer Price Index, January 2008 - September 2013

<u>Month</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
January	82.4	86.7	88.9	94.6	99.2	102.0
February	83.2	87.1	89.2	95.3	99.2	102.7
March	83.3	87.3	89.3	95.8	99.5	103.1
April	84.1	87.4	89.7	95.9	99.6	103.4
May	85.0	87.4	89.5	95.9	99.6	103.3
June	85.3	88.0	90.2	96.1	99.8	103.4
July	86.9	88.6	90.4	96.4	100.0	103.6
August	87.4	88.3	90.7	96.5	100.2	103.3
September	87.7	88.6	90.8	96.5	100.2	103.5
October	88.1	88.2	91.0	96.4	100.5	
November	87.6	88.2	91.7	98.0	101.1	
December	86.8	88.1	93.5	98.0	101.2	
Yearly average	85.7	87.8	90.4	96.3	100.0	
Annual change (%) (Inflation rate)	+ 9.7	+ 2.5	+ 2.9	+ 6.5	+ 3.9	

<sup>1/</sup> The CPI for January 2008 to March 2013, originally based on July 2006-June 2007, has been converted to the new base January - December 2012=100

Commodity	Contribution to change in overall index point	% change in price index
Vegetables	-0.6	-13.5
Milk	+0.1	+5.3
Other food products	+0.3	+1.2
Ready made clothing	+0.1	+1.9
Personal transport	-0.1	-2.3
Bus fare	+0.1	+7.7
MBC TV licence fee	+0.2	+50.0
All commodities	+0.1	+0.1

 Table 3 - Net contribution of main commodities that affected the index from June to September 2013

## Table 4 : Monthly sub-indices by division of consumption expenditure, April - September 2013(Base: January - December 2012 = 100)

Division	Description	Weight	April 2013	May 2013	June 2013	July 2013	August 2013	September 2013	% change between June and September 2013
01	Food and non-alcoholic beverages	273	103.7	103.3	103.9	103.7	102.5	103.0	- 0.9
02	Alcoholic beverages and tobacco	96	109.9	109.8	109.9	110.0	109.7	110.1	+ 0.2
03	Clothing and footwear	45	103.1	103.3	102.7	103.4	104.0	104.6	+ 1.9
04	Housing, water, electricity, gas and other fuels	120	100.8	100.8	100.3	100.3	100.3	100.3	-
05	Furnishings, household equipment and routine household maintenance	61	102.6	102.5	102.6	103.1	102.5	103.0	+ 0.4
06	Health	40	103.6	103.6	103.9	103.8	103.9	104.0	+ 0.1
07	Transport	151	103.1	103.1	103.1	102.9	103.6	103.0	- 0.1
08	Communication	39	100.0	100.0	100.1	100.1	100.1	99.8	- 0.3
09	Recreation and culture	44	99.2	99.2	99.2	102.6	102.6	103.1	+ 3.9
10	Education	45	101.7	101.7	101.7	101.7	101.9	101.9	+ 0.2
11	Restaurants and hotels	45	106.1	105.9	106.4	106.9	106.4	106.8	+ 0.4
12	Miscellaneous goods and services	41	102.6	102.4	102.4	102.9	102.4	102.5	+ 0.1
	All Divisions	1,000	103.4	103.3	103.4	103.6	103.3	103.5	+ 0.1

# Table 5 - Monthly CPI by division and group of consumption expenditure, April - September 2013(Base: January - December 2012 = 100)

Description	Weight	April 2013	May 2013	June 2013	July 2013	August 2013	September 2013
Division 01 - Food and non alcoholic beverages	273	103.7	103.3	103.9	103.7	102.5	103.0
Group 1 - Food	254	103.6	103.3	103.8	103.5	102.2	102.7
Group 2 - Non-alcoholic beverages	19	105.5	104.6	105.2	106.2	106.2	107.2
Division 02 - Alcoholic beverages and tobacco	96	109.9	109.8	109.9	110.0	109.7	110.1
Group 1 - Alcoholic beverages	51	110.2	109.9	110.2	110.3	109.8	110.5
Group 2 - Tobacco	45	109.7	109.7	109.7	109.7	109.7	109.7
Division 03 - Clothing and footwear	45	103.1	103.3	102.7	103.4	104.0	104.6
Group 1 - Clothing	34	103.1	103.3	102.6	103.2	103.8	104.4
Group 2 - Footwear	11	103.1	103.1	103.1	104.1	104.6	105.2
Division 04 - Housing, water, electricity, gas and other fuels	120	100.8	100.8	100.3	100.3	100.3	100.3
Group 1 - Actual rentals for housing	13	100.0	100.0	100.0	100.0	100.0	100.0
Group 2 - Mortgage interest on housing loan	30	99.3	99.3	97.0	97.0	97.0	97.0
Group 3 - Maintenance and repair of the dwelling	12	108.2	108.2	108.3	108.4	108.4	108.6
Group 4 - Water supply and miscellaneous services relating to the dwelling	12	100.0	100.0	100.0	100.0	100.0	100.0
Group 5 - Electricity, gas and other fuels	53	100.4	100.4	100.4	100.4	100.4	100.4
Division 05 - Furnishings, household equipment and routine household maintenance	61	102.6	102.5	102.6	103.1	102.5	103.0
Group 1 - Furniture and furnishings, carpets and other floor coverings	16	100.7	100.0	99.2	100.1	100.1	100.1
Group 2 - Household textiles	3	104.2	104.2	104.3	104.3	104.3	104.3
Group 3 - Household appliances	12	101.3	101.5	101.7	102.1	102.1	102.4
Group 4 - Glassware, tableware and household utensils	2	100.8	103.7	104.3	105.6	105.8	105.9
Group 5 - Tools and equipment for house and garden	2	99.3	99.8	100.5	101.1	101.0	103.6

## Table 5 - Monthly CPI by division and group of consumption expenditure, April - September 2013

(*Base: January - December 2012 = 100*)

Description	Weight	April 2013	May 2013	June 2013	July 2013	August 2013	September 2013
Group 6 - Goods and services for routine household maintenance	26	104.6	104.3	104.8	105.3	103.9	104.8
Division 06 - Health	40	103.6	103.6	103.9	103.8	103.9	104.0
Group 1 - Medical products, appliances and equipment	14	101.3	101.3	102.2	101.8	102.0	101.8
Group 2 - Outpatient services	17	105.9	105.9	105.9	105.9	105.9	105.9
Group 3 - Hospital services	9	103.0	103.0	103.0	103.0	103.0	104.1
Division 07 - Transport	151	103.1	103.1	103.1	102.9	103.6	103.0
Group 1 - Purchase of vehicles	52	100.8	100.6	101.3	99.5	99.3	98.9
Group 2 - Operation of personal transport equipment	66	105.3	105.4	105.4	105.4	105.4	105.4
Group 3 - Transport services	33	102.4	102.2	101.1	103.2	106.5	104.4
Division 08 - Communication	39	100.0	100.0	100.1	100.1	100.1	99.8
Group 2 - Telephone and telefax equipment	3	100.0	100.0	101.7	101.7	101.7	98.5
Group 3 - Telephone and telefax services	36	100.0	100.0	100.0	100.0	99.9	99.9
Division 09 - Recreation and culture	44	99.2	99.2	99.2	102.6	102.6	103.1
Group 1 - Audio-visual, photographic and information processing equipment	12	94.9	94.9	94.9	92.8	92.8	93.7
Group 3 - Other recreational items and equipment, gardens and pets	5	101.9	101.9	101.9	102.1	102.5	103.6
Group 4 - Recreational and cultural services	12	99.8	99.8	99.6	114.2	114.6	114.6
Group 5 - Newspapers, books and stationery	15	101.4	101.4	101.4	101.3	101.0	101.2
Division 10 - Education	45	101.7	101.7	101.7	101.7	101.9	101.9
Group 1 - Pre-primary and primary education	7	105.5	105.5	105.5	105.5	106.4	106.4
Group 2 - Secondary education	16	101.9	101.9	101.9	101.9	102.1	102.1
Group 3 - Post-secondary and non-tertiary education	1	100.0	100.0	100.0	100.0	100.0	100.0

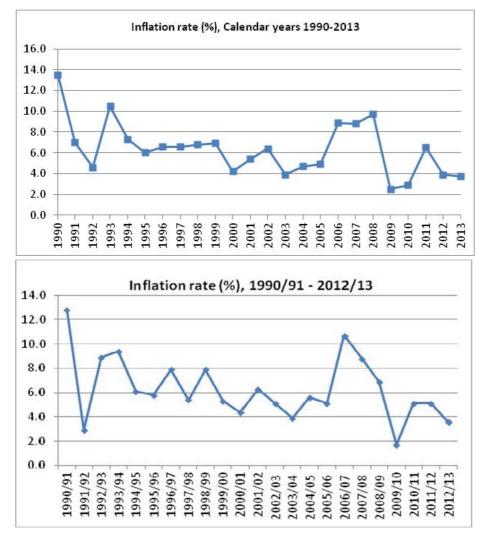
# Table 5 - Monthly CPI by division and group of consumption expenditure, April - September 2013(Base: January - December 2012 = 100)

Description	Weight	April 2013	May 2013	June 2013	July 2013	August 2013	September 2013
Group 4 - Tertiary education	20	100.4	100.4	100.4	100.4	100.4	100.4
Group 5 - Education not definable by level	1	100.0	100.0	100.0	100.0	100.0	100.0
Division 11 - Restaurants and hotels	45	106.1	105.9	106.4	106.9	106.4	106.8
Group 1 - Catering services	43	106.6	106.6	107.1	107.5	107.6	107.7
Group 2 - Accomodation services	2	95.2	92.1	92.1	92.1	79.9	86.4
Division 12 - Miscellaneous goods and services	41	102.6	102.4	102.4	102.9	102.4	102.5
Group 1 - Personal care	21	102.5	101.9	101.8	103.0	102.0	102.3
Group 3 - Personal effects, not elsewhere classified	3	101.7	102.6	102.4	101.2	101.4	101.4
Group 4 - Social protection	1	110.1	110.1	110.1	110.1	110.1	110.1
Group 5 - Insurance	12	100.0	100.0	100.0	100.0	100.0	100.0
Group 6 - Financial services not elsewhere classified	1	100.0	100.0	100.0	100.0	100.0	100.0
Group 7 - Other services not elsewhere classified	3	113.7	113.7	113.7	113.7	113.7	113.7
All divisions	1000	103.4	103.3	103.4	103.6	103.3	103.5

Table 6 - Inflation rate (%), 1990 - 2013

Calendar year	Inflation rate	Year	Inflation rate
1990	13.5	1990/91	12.8
1991	7.0	1991/92	2.9
1992	4.6	1992/93	8.9
1993	10.5	1993/94	9.4
1994	7.3	1994/95	6.1
1995	6.0	1995/96	5.8
1996	6.6	1996/97	7.9
1997	6.6	1997/98	5.4
1998	6.8	1998/99	7.9
1999	6.9	1999/00	5.3
2000	4.2	2000/01	4.4
2001	5.4	2001/02	6.3
2002	6.4	2002/03	5.1
2003	3.9	2003/04	3.9
2004	4.7	2004/05	5.6
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*	Around 3.7		

\* Forecast



### **Technical note**

## **1.** Methodology used for the computation of the Consumer Price Index (Base period: January - December 2012 = 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 2012. The composition of the current CPI basket has been derived from the 2012 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 7,800 price quotations are collected in respect of 1,020 item indicators from some 500 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,

I<sub>t</sub> : CPI for period t with reference to a base period 0 Pio

: Price of item *i* at time 0, i.e. during base period

- : Price of item *i* at time t Pit
- Wi : Weight of item *i*

The base period is January to December 2012, the period during which the latest HBS was conducted.

## 2. Inflation

## (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 twelvemonth 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-onyear' 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 "HBS 2006/07 and updated CPI" [ <u>http://statsmauritius.gov.mu/English/Pages/Household-Budget-Survey-2006-07.aspx</u> ]