#### CONSTRUCTION PRICE INDEX

### (Input Cost Index for the construction of a single storey house)

### 4th Quarter 2014

#### 1. Introduction

This issue of the Economic and Social Indicators presents the monthly Construction Price Index (residential) for the fourth quarter of 2014 with second quarter 2009 as base period. Figures showing the evolution of the index during the past twelve months are also included.

The methodology used for compiling the index is given in the annexed technical notes. Figures have been rounded to one or two decimal places although they have been calculated to many decimal places.

# 2. Evolution of the Construction Price Index (January to December 2014)

Chart 1 shows the movement of the Construction Price Index from January to December 2014 with the second quarter of 2009 as base. The index which stood at 112.6 in January remained at the same level up to April. In May the index dropped to 112.5, remained unchanged in June and decreased to 112.4 in July. In August the index registered a further drop to reach 112.3 and remained at the same level in September. In October the index increased to 112.4 then dropped to 112.3 in November and remained unchanged in December.



# 3. Changes in the Construction Price Index (October to December 2014)

The Construction Price Index, which stood at 112.3 at the end of September 2014 increased to 112.4 in October 2014 mainly due to increases in the prices of sanitary installation (2.6%) and metal openings (0.4%), partly offset by a decrease in the prices of steel bars (-0.1%).

In November 2014, the index dropped to 112.3 as a result of lower prices of ceramic tiles (-4.3%) and sanitary installation (-0.8%).

The overall index remained at the same level in December 2014 despite a decrease of 0.5% in the price of adhesive.

0.2%
0.1%
0.0%
Oct-14
Nov-14
Dec-14

Chart 2: Percentage change from previous month

Compared to the corresponding months of the previous year, the index shows overall increases of 1.1% for October 2014, 1.0% for November 2014 and 0.7% for December 2014 (Table1.3).



#### 4. Changes by Input Categories

Changes by input categories are shown in Tables 1.1 to 1.5.

During the fourth quarter of 2014, no change was registered in the "Labour", "Hire of plant" and "Transport" sub-indices.

The "Materials" sub-index which stood at 111.9 in September 2014 increased to 112.0 in October 2014 mainly due to higher prices of sanitary installation (2.6%) and metal openings (0.4%), partly offset by a decrease in the prices of steel bars (-0.1%).

In November 2014, the sub-index dropped to 111.9 as a result of lower prices of ceramic tiles (-4.3%) and sanitary installation (-0.8%).

The sub-index remained at the same level in December 2014 despite a decrease of 0.5% in the price of adhesive.

The net monthly contributions of the input categories to the index during the period January to December 2014 are shown in Table 1.4.

Quarterly averages of the monthly indices by input category and the percentage change from quarter to quarter are shown in Table 1.5.

## 5. Changes by Work Category

Changes by work category are shown in Tables 2.1 to 2.5.

During the month of October 2014, the "Plumbing and Drainage" work category registered an increase of 1.2% following an increase of 2.6% in the prices of sanitary installation. The increase of 0.4% in the prices of metal openings resulted in an increase of 0.3% in the "Metal Openings" work category. and the "Reinforcement" work category decreased by 0.1% due to a drop of 0.1% in the prices of steel bars

In November 2014, the "Tiling" work category dropped by 2.2% due to lower price of ceramic tiles (-4.3%) and the "Plumbing and Drainage" work category decreased by 0.4% as a result of a decrease of 0.8% in the prices of sanitary installation.

In December 2014, The "Bed and screed to floor/roof" work category decreased by 0.2% following a decrease of 0.5% in the price of adhesive.

Table 2.4 shows the net monthly contributions of the work categories to the index since January 2014.

Quarterly averages of the monthly indices by work category and the percentage changes from quarter to quarter are shown in Table 2.5.

#### 6. Past Trends

Table 3.1 summarises the monthly indices, the quarterly and yearly averages as well as the percentage changes in the yearly average since 2002. The base period for the calculation of the index as from 2002 up to the first quarter of 2009 is the fourth quarter of 2001. As from April 2009 the base period used is the second quarter of 2009.

The series are not strictly comparable because of different base periods. However, for some particular purposes, comparison between the series may be necessary. A chain linked series with base period second quarter 2009 has been worked out and is given in Table 3.2.

Statistics Mauritius
Ministry of Finance and Economic Development
Port Louis
October 2014

Contact persons: Mr. L. Persand (Statistician)

Ms. F. Victor (Senior Statistical Officer)

**Statistics Mauritius** 

LIC Centre Port-Louis Tel: 2081800 Fax: 213 0234

 $Email: cso\_construction@govmu.org\\$ 

(Base: 2nd Quarter 2009 = 100)

Table 1.1: Monthly sub-indices by input category, January to December 2014

Toward Code continu						20	14					
Input Categories	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LABOUR	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3	114.3
HIRE OF PLANT	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5
MATERIALS:	112.4	112.4	112.3	112.3	112.1	112.1	112.0	111.9	111.9	112.0	111.9	111.9
Hardcore (remplissage)	118.7	118.7	118.7	118.7	118.7	118.7	118.7	118.7	118.7	118.7	118.7	118.7
Cement	117.1	117.7	117.7	118.0	118.0	118.0	117.9	117.9	117.9	117.9	117.9	117.9
Sand	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3
Aggregate	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7	120.7
Block	122.6	122.6	122.6	122.6	122.6	122.6	122.6	122.6	122.6	122.6	122.6	122.6
Steel bars (armature)	104.8	103.9	103.6	103.5	102.3	102.3	101.2	100.7	100.4	100.3	100.3	100.3
Galvanised corrugated cast iron sheeting	101.5	101.5	101.5	99.3	99.3	98.9	98.2	98.2	98.2	98.2	98.2	98.2
Timber: (a) Carpentry	107.4	107.4	107.4	107.6	107.6	107.7	107.7	107.7	107.7	107.7	107.7	107.7
(b) Joinery	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6
Aluminium openings	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9	100.9
Metal openings	108.4	108.4	108.4	108.2	108.2	108.1	108.6	108.6	108.6	109.0	109.0	109.0
Ceramic tiles	110.7	110.7	110.7	110.7	110.7	110.7	117.1	117.1	117.1	117.1	112.1	112.1
Adhesive	104.5	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	104.4
Paint	120.7	120.7	120.7	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8	120.8
Plumbing	103.8	103.8	103.7	103.7	103.7	103.7	103.3	103.3	103.3	103.3	103.1	103.1
Sanitary installation	105.9	105.9	105.7	105.7	105.7	105.7	106.1	106.1	106.1	108.9	108.0	108.0
Electrical installation	112.0	112.0	112.0	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6
TRANSPORT	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1	109.1
Total	112.6	112.6	112.6	112.6	112.5	112.5	112.4	112.3	112.3	112.4	112.3	112.3

w

(Base: 2nd Quarter 2009 = 100)

Table 1.2: Percentage change from previous month by input category, January to December 2014

						% cha	nge from	previous	month				
Input Categories	Weight	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14
LABOUR	28.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HIRE OF PLANT	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MATERIALS:	64.2	0.0	0.0	0.0	0.0	-0.2	0.0	-0.1	-0.1	0.0	0.1	-0.1	0.0
Hardcore (remplissage)	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cement	12.7	0.0	0.5	0.0	0.3	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Sand	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aggregate	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Block	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Steel bars (armature)	10.6	-0.2	-0.9	-0.3	-0.1	-1.2	0.0	-1.1	-0.4	-0.3	-0.1	0.0	0.0
Galvanised corrugated cast iron sheeting	0.6	0.0	0.0	0.0	-2.2	0.0	-0.5	-0.7	0.0	0.0	0.0	0.0	0.0
Timber: (a) Carpentry	3.9	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
(b) Joinery	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aluminium openings	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metal openings	2.7	0.1	0.0	0.0	-0.2	0.0	-0.1	0.5	0.0	0.0	0.4	0.0	0.0
Ceramic tiles	0.8	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	-4.3	0.0
Adhesive	1.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5
Paint	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Plumbing	1.5	0.0	0.0	0.0	0.0	0.0	0.0	-0.4	0.0	0.0	0.0	-0.2	0.0
Sanitary installation	2.2	0.0	0.0	-0.2	0.0	0.0	0.0	0.4	0.0	0.0	2.6	-0.8	0.0
Electrical installation	4.7	0.6	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TRANSPORT	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	1.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.1	-0.1	0.0

4

Table 1.3: Percentage change from corresponding month of previous year by input category, January to December 2014

					% chan	ge from co	orrespond	ling montl	ı of previo	us year			
Input Categories	Weight	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14
LABOUR	28.2	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
HIRE OF PLANT	3.3	2.4	2.4	2.4	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0
MATERIALS:	64.2	2.3	1.2	1.3	0.7	0.5	0.4	0.3	0.2	0.1	0.1	-0.1	-0.5
Hardcore (remplissage)	1.8	2.4	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cement	12.7	6.4	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Sand	4.2	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aggregate	3.4	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Block	5.2	7.3	7.3	7.3	4.4	4.4	4.4	4.4	4.0	4.0	4.0	4.0	0.0
Steel bars (armature)	10.6	-2.9	-2.1	-1.4	-1.5	-2.6	-2.6	-3.8	-4.1	-4.4	-4.5	-4.5	-4.5
Galvanised corrugated cast iron sheeting	0.6	0.0	0.0	0.0	-2.2	-2.2	-2.6	-3.3	-3.3	-3.3	-3.3	-3.3	-3.3
Timber: (a) Carpentry	3.9	1.3	1.3	1.3	1.5	1.5	0.9	0.9	0.5	0.5	0.3	0.3	0.3
(b) Joinery	1.6	1.4	1.1	1.1	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Aluminium openings	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metal openings	2.7	0.5	0.0	0.1	-0.1	-0.1	-0.2	0.3	0.3	0.3	0.7	0.7	0.7
Ceramic tiles	0.8	6.4	5.5	4.8	3.5	3.5	0.0	5.8	5.8	5.8	5.8	1.3	1.3
Adhesive	1.7	0.4	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.0
Paint	2.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	1.9	0.5	0.1
Plumbing	1.5	0.2	0.2	-0.1	-0.3	-0.3	-0.3	-0.1	-0.1	-0.1	-0.2	-0.7	-0.7
Sanitary installation	2.2	1.3	1.7	1.5	1.0	1.0	1.0	1.4	1.4	0.3	2.9	2.4	2.0
Electrical installation	4.7	1.6	1.6	1.6	1.2	1.2	1.2	1.2	1.2	1.3	0.3	0.3	0.3
TRANSPORT	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	2.6	1.9	2.0	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1.0	0.7

Table 1.4: Net monthly contributions of input categories to the index, January to December 2014

							20	14					
Input Categories	Weight	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LABOUR	28.2	1.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HIRE OF PLANT	3.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MATERIALS:	64.2	0.01	-0.01	-0.03	0.00	-0.13	0.00	-0.07	-0.05	-0.03	0.06	-0.07	-0.01
Hardcore (remplissage)	1.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cement	12.7	0.00	0.08	0.00	0.04	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00
Sand	4.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aggregate	3.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Block	5.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Steel bars (armature)	10.6	-0.02	-0.10	-0.03	-0.02	-0.13	0.00	-0.12	-0.05	-0.03	-0.01	0.00	0.00
Galvanised corrugated cast iron sheeting	0.6	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Timber: (a) Carpentry	3.9	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
(b) Joinery	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminium openings	4.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Metal openings	2.7	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00
Ceramic tiles	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	-0.04	0.00
Adhesive	1.7	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
Paint	2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plumbing	1.5	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
Sanitary installation	2.2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	-0.02	0.00
Electrical installation	4.7	0.03	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TRANSPORT	4.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.0	1.16	-0.01	-0.03	0.00	-0.13	0.00	-0.07	-0.05	-0.03	0.06	-0.07	-0.01

Table 1.5: Quarterly average of monthly indices and percentage changes by input category, 1st Quarter 2014 to 4th Quarter 2014

Input Categories	Weight		20:	14		%	Change from	previous quai	rter
input Categories	Weight	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr 2014	2nd Qr 2014	3rd Qr 2014	4th Qr 2014
LABOUR	28.2	114.3	114.3	114.3	114.3	3.7	0.0	0.0	0.0
HIRE OF PLANT	3.3	107.5	107.5	107.5	107.5	0.0	0.0	0.0	0.0
MATERIALS:	64.2	112.4	112.2	111.9	111.9	0.3	-0.2	-0.2	0.0
Hardcore (remplissage)	1.8	118.7	118.7	118.7	118.7	0.0	0.0	0.0	0.0
Cement	12.7	117.5	118.0	117.9	117.9	0.4	0.5	-0.1	0.0
Sand	4.2	121.3	121.3	121.3	121.3	0.0	0.0	0.0	0.0
Aggregate	3.4	120.7	120.7	120.7	120.7	0.0	0.0	0.0	0.0
Block	5.2	122.6	122.6	122.6	122.6	2.6	0.0	0.0	0.0
Steel bars (armature)	10.6	104.1	102.7	100.8	100.3	-0.9	-1.4	-1.9	-0.4
Galvanised corrugated cast iron sheeting	0.6	101.5	99.2	98.2	98.2	0.0	-2.3	-1.0	0.0
Timber: (a) Carpentry	3.9	107.4	107.6	107.7	107.7	0.0	0.2	0.1	0.0
(b) Joinery	1.6	111.6	111.6	111.6	111.6	0.0	0.0	0.0	0.0
Aluminium openings	4.1	100.9	100.9	100.9	100.9	0.0	0.0	0.0	0.0
Metal openings	2.7	108.4	108.1	108.6	109.0	0.1	-0.2	0.4	0.4
Ceramic tiles	0.8	110.7	110.7	117.1	113.8	0.0	0.0	5.8	-2.9
Adhesive	1.7	104.8	105.0	105.0	104.8	0.3	0.2	0.0	-0.2
Paint	2.5	120.7	120.8	120.8	120.8	0.7	0.0	0.0	0.0
Plumbing	1.5	103.8	103.7	103.3	103.2	0.1	-0.1	-0.4	-0.1
Sanitary installation	2.2	105.8	105.7	106.1	108.3	0.1	-0.1	0.4	2.1
Electrical installation	4.7	112.0	111.6	111.6	111.6	0.6	-0.3	0.0	0.0
TRANSPORT	4.3	109.1	109.1	109.1	109.1	0.0	0.0	0.0	0.0
Total	100.0	112.6	112.5	112.4	112.3	1.2	-0.1	-0.1	0.0

(Base: 2nd Quarter 2009 = 100)

Table 2.1: Monthly sub-indices by work category, January to December 2014

Work Catagories	Waiaht						201	4					
Work Categories	Weight	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Setting up	1.5	109.7	109.7	109.7	108.9	108.9	108.8	108.5	108.5	108.5	108.5	108.5	108.5
2. Setting out	0.5	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4
3. Earthworks	3.3	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7	113.7
4. Concrete	21.3	116.0	116.2	116.2	116.3	116.3	116.3	116.3	116.3	116.3	116.3	116.3	116.3
5. Reinforcement	14.6	107.5	106.8	106.6	106.5	105.6	105.6	104.8	104.5	104.2	104.2	104.2	104.2
6. Formwork (coffrage)	8.5	109.2	109.2	109.2	109.2	109.2	109.3	109.3	109.3	109.3	109.3	109.3	109.3
7. Blockwork	8.7	119.1	119.2	119.2	119.3	119.3	119.3	119.2	119.2	119.2	119.2	119.2	119.2
8. Softwood joinery	1.5	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6	114.6
9. Aluminium doors and openings	6.0	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8
10. Metal openings	4.1	110.6	110.6	110.6	110.5	110.5	110.4	110.8	110.8	110.8	111.1	111.1	111.1
11. Rendering to wall/ceiling (crepissage)	10.4	115.4	115.5	115.5	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6
12. Bed & screed to floor/roof	3.8	115.5	115.7	115.7	115.8	115.8	115.8	115.7	115.7	115.7	115.7	115.7	115.5
13. Tiling	1.6	111.4	111.4	111.4	111.4	111.4	111.4	114.7	114.7	114.7	114.7	112.1	112.1
14. Painting	3.2	117.8	117.8	117.8	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9	117.9
15. Plumbing and Drainage	5.0	107.2	107.2	107.1	107.1	107.1	107.1	107.1	107.1	107.1	108.4	107.9	107.9
16. Electrical installation	6.0	112.4	112.4	112.4	112.1	112.1	112.1	112.1	112.1	112.1	112.1	112.1	112.1
Total	100.0	112.6	112.6	112.6	112.6	112.5	112.5	112.4	112.3	112.3	112.4	112.3	112.3

 $\alpha$ 

Table 2.2: Percentage change from previous month by work category, January to December 2014

						% cha	nge from	previous	month				
Work Categories	Weight	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14
1. Setting up	1.5	0.5	0.0	0.0	-0.7	0.0	-0.1	-0.3	0.0	0.0	0.0	0.0	0.0
2. Setting out	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Earthworks	3.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Concrete	21.3	0.8	0.2	0.0	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
5. Reinforcement	14.6	0.9	-0.6	-0.2	-0.1	-0.8	0.0	-0.8	-0.3	-0.2	-0.1	0.0	0.0
6. Formwork (coffrage)	8.5	1.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
7. Blockwork	8.7	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Softwood joinery	1.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Aluminium doors and openings	6.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Metal openings	4.1	1.1	0.0	0.0	-0.1	0.0	-0.1	0.3	0.0	0.0	0.3	0.0	0.0
11. Rendering to wall/ceiling (crepissage)	10.4	2.2	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12. Bed & screed to floor/roof	3.8	1.3	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
13. Tiling	1.6	1.2	0.1	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	-2.2	0.0
14. Painting	3.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. Plumbing and Drainage	5.0	0.9	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	1.2	-0.4	0.0
16. Electrical installation	6.0	1.3	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	1.0	0.0	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	0.1	-0.1	0.0

## Input Cost Index for the construction of a single storey house (Base: 2nd Quarter 2009 = 100)

Table 2.3: Percentage change from corresponding month of previous year by work category, January to December 2014

					% chan	ge from co	rrespond	ing montl	of previo	ous year			
Work Categories	Weight	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14
1. Setting up	1.5	1.2	0.9	0.9	-0.1	-0.1	-0.2	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6
2. Setting out	0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
3. Earthworks	3.3	1.9	1.9	1.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
4. Concrete	21.3	4.0	1.7	1.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
5. Reinforcement	14.6	-1.1	-0.5	0.0	0.0	-0.9	-0.9	-1.7	-1.9	-2.2	-2.2	-2.2	-2.2
6. Formwork (coffrage)	8.5	2.6	2.6	2.6	2.3	2.3	2.0	2.0	1.2	1.2	1.1	1.1	1.1
7. Blockwork	8.7	5.8	5.1	5.1	3.3	3.3	3.3	3.3	3.0	3.0	3.0	3.0	0.6
8. Softwood joinery	1.5	2.4	2.2	2.2	1.8	1.8	1.8	1.8	1.6	1.6	1.3	1.3	1.2
9. Aluminium doors and openings	6.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
10. Metal openings	4.1	1.6	1.3	1.3	1.1	1.2	1.1	1.4	1.4	1.5	1.5	1.5	1.5
11. Rendering to wall/ceiling (crepissage)	10.4	3.7	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4
12. Bed & screed to floor/roof	3.8	3.3	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.3
13. Tiling	1.6	4.7	4.0	3.6	3.0	3.0	1.3	4.2	4.2	4.2	4.2	1.9	1.9
14. Painting	3.2	3.4	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	2.5	1.4	1.1
15. Plumbing and Drainage	5.0	1.5	1.6	1.5	1.2	1.2	1.2	1.5	1.4	1.0	2.1	1.7	1.6
16. Electrical installation	6.0	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.0	1.0	1.0
Total	100.0	2.6	1.9	2.0	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1.0	0.7

Table 2.4: Net monthly contributions of work categories to the index, January to December 2014

							20	14					
Work Categories	Weight	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1. Setting up	1.5	0.01	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Setting out	0.5	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Earthworks	3.3	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Concrete	21.3	0.20	0.05	0.00	0.03	0.00	0.00	-0.01	0.00	0.00	0.00	0.00	0.00
5. Reinforcement	14.6	0.13	-0.10	-0.03	-0.02	-0.13	0.00	-0.12	-0.05	-0.03	-0.01	0.00	0.00
6. Formwork (coffrage)	8.5	0.09	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
7. Blockwork	8.7	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Softwood joinery	1.5	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Aluminium doors and openings	6.0	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10. Metal openings	4.1	0.05	0.00	0.00	-0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00
11. Rendering to wall/ceiling (crepissage)	10.4	0.26	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12. Bed & screed to floor/roof	3.8	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01
13. Tiling	1.7	0.02	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	-0.04	0.00
14. Painting	3.2	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15. Plumbing and Drainage	5.0	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	-0.02	0.00
16. Electrical installation	6.0	0.08	0.00	0.00	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.0	1.16	-0.01	-0.03	0.00	-0.13	0.00	-0.07	-0.05	-0.03	0.06	-0.07	-0.01

Table 2.5: Quarterly average of monthly indices and percentage changes by work category, 1st Quarter 2014 to 4th Quarter 2014

			20	14		%	Change from	previous quai	ter
Work Categories	Weight	1st Qr	2nd Qr	3rd Qr	4th Qr	1st Qr 2014	2nd Qr 2014	3rd Qr 2014	4th Qr 2014
1. Setting up	1.5	109.7	108.9	108.5	108.5	0.5	-0.7	-0.3	0.0
2. Setting out	0.5	124.4	124.4	124.4	124.4	1.5	0.0	0.0	0.0
3. Earthworks	3.3	113.7	113.7	113.7	113.7	0.6	0.0	0.0	0.0
4. Concrete	21.3	116.1	116.3	116.3	116.3	1.0	0.2	-0.1	0.0
5. Reinforcement	14.6	106.9	105.9	104.5	104.2	0.4	-1.0	-1.3	-0.3
6. Formwork (coffrage)	8.5	109.2	109.3	109.3	109.3	1.0	0.1	0.0	0.0
7. Blockwork	8.7	119.2	119.3	119.2	119.2	2.1	0.1	0.0	0.0
8. Softwood joinery	1.5	114.6	114.6	114.6	114.6	1.3	0.0	0.0	0.0
9. Aluminium doors and openings	6.0	104.8	104.8	104.8	104.8	1.2	0.0	0.0	0.0
10. Metal openings	4.1	110.6	110.5	110.8	111.1	1.1	-0.1	0.3	0.2
11. Rendering to wall/ceiling (crepissage)	10.4	115.5	115.6	115.6	115.6	2.3	0.1	0.0	0.0
12. Bed & screed to floor/roof	3.8	115.6	115.8	115.7	115.6	1.4	0.1	0.0	-0.1
13. Tiling	1.7	111.4	111.4	114.7	113.0	1.2	0.0	2.9	-1.5
14. Painting	3.2	117.8	117.9	117.9	117.9	1.6	0.0	0.0	0.0
15. Plumbing and Drainage	5.0	107.1	107.1	107.1	108.1	0.9	-0.1	0.1	0.9
16. Electrical installation	6.0	112.4	112.1	112.1	112.1	1.3	-0.3	0.0	0.0
Total	100.0	112.6	112.5	112.4	112.3	1.2	-0.1	-0.1	0.0

**Table 3.1: Construction Price Index - January 2002 to December 2014** 

			(Base: 4	Ith Quart	er 2001 =	= <b>100</b> )				(Base:2	and Quari	ter 2009 =	= 100)	
	2002	2003	2004	2005	2006	2007	2008	2009	2009	2010	2011	2012	2013	2014
January	100.3	105.8	109.5	118.7	126.7	140.7	159.0	166.0		100.3	102.8	106.7	109.8	112.6
February	100.5	106.8	112.2	122.5	127.3	140.7	159.0	166.0		100.3	104.1	106.8	110.5	112.6
March	100.6	107.0	112.3	122.5	127.3	141.2	157.9	163.5		98.8	104.5	106.8	110.4	112.6
1st Quarter	100.5	106.5	111.3	121.3	127.1	140.9	158.7	165.2		99.8	103.8	106.8	110.2	112.6
April	100.7	107.1	112.3	122.5	127.9	144.1	157.9		100.2	98.8	104.5	108.6	110.9	112.6
May	101.5	107.1	112.3	122.7	127.9	144.3	157.9		100.0	100.2	104.4	108.6	110.9	112.5
June	101.5	107.1	115.5	122.7	129.9	147.4	161.2		99.8	100.4	104.4	108.6	111.0	112.5
2nd Quarter	101.3	107.1	113.4	122.6	128.6	145.2	159.0		100.0	99.8	104.4	108.6	110.9	112.5
July	105.4	108.1	116.4	124.6	134.4	150.5	165.2		100.6	100.9	104.3	108.7	111.0	112.4
August	105.4	108.6	116.4	124.6	135.1	151.3	167.5		100.2	100.8	105.0	108.7	111.1	112.3
September	105.4	109.4	117.0	124.6	135.1	151.6	169.2		100.2	100.8	105.2	108.8	111.1	112.3
3rd Quarter	105.4	108.7	116.6	124.6	134.9	151.1	167.3		100.3	100.9	104.8	108.7	111.0	112.4
October	105.2	109.4	117.3	125.3	135.1	152.9	170.0		100.3	101.4	105.4	108.8	111.2	112.4
November	105.3	109.5	117.8	126.1	136.9	151.1	168.7		100.3	101.6	105.4	108.8	111.2	112.3
December	105.3	109.5	118.4	126.1	137.1	151.4	167.2		100.3	101.7	105.5	108.9	111.5	112.3
4th Quarter	105.3	109.5	117.8	125.8	136.4	151.8	168.6		100.3	101.6	105.4	108.8	111.3	112.3
Yearly average	103.1	107.9	114.8	123.6	131.8	147.2	163.4			100.5	104.6	108.2	110.9	112.5
% change in the yearly average	4.6	4.7	6.3	7.7	6.6	11.8	11.0		0.1	-0.1	4.1	3.5	2.4	1.4

Table 3.2: Construction Price Index - January 2002 to December 2014 (Base period 2nd Qtr 2009=100)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	61.7	65.0	67.3	73.0	77.9	86.5	97.8	102.1	100.3	102.8	106.7	109.8	112.6
February	61.8	65.7	69.0	75.3	78.3	86.5	97.8	102.1	100.3	104.1	106.8	110.5	112.6
March	61.9	65.8	69.1	75.3	78.3	86.8	97.1	100.6	98.8	104.5	106.8	110.4	112.6
1st Quarter	61.8	65.5	68.5	74.6	78.2	86.6	97.6	101.6	99.8	103.8	106.8	110.2	112.6
April	61.9	65.9	69.1	75.3	78.7	88.6	97.1	100.2	98.8	104.5	108.6	110.9	112.6
May	62.4	65.9	69.1	75.5	78.7	88.7	97.1	100.0	100.2	104.4	108.6	110.9	112.5
June	62.4	65.9	71.0	75.5	79.9	90.6	99.2	99.8	100.4	104.4	108.6	111.0	112.5
2nd Quarter	62.3	65.9	69.7	75.4	79.1	89.3	97.8	100.0	99.8	104.4	108.6	110.9	112.5
July	64.8	66.5	71.6	76.6	82.7	92.5	101.6	100.6	100.9	104.3	108.7	111.0	112.4
August	64.8	66.8	71.6	76.6	83.1	93.0	103.0	100.2	100.8	105.0	108.7	111.1	112.3
September	64.8	67.3	72.0	76.6	83.1	93.2	104.1	100.2	100.8	105.2	108.8	111.1	112.3
3rd Quarter	64.8	66.9	71.7	76.6	82.9	92.9	102.9	100.3	100.9	104.8	108.7	111.0	112.4
October	64.7	67.3	72.2	77.1	83.1	94.0	104.6	100.3	101.4	105.4	108.8	111.2	112.4
November	64.8	67.3	72.4	77.6	84.2	92.9	103.7	100.3	101.6	105.4	108.8	111.2	112.3
December	64.8	67.3	72.8	77.6	84.3	93.1	102.8	100.3	101.7	105.5	108.9	111.5	112.3
4th Quarter	64.7	67.3	72.5	77.4	83.9	93.3	103.7	100.3	101.6	105.4	108.8	111.3	112.3
Yearly average	63.4	66.4	70.6	76.0	81.0	90.6	100.5	100.6	100.5	104.6	108.2	110.9	112.5
% change in the yearly average	4.6	4.7	6.3	7.7	6.6	11.8	11.0	0.1	-0.1	4.1	3.5	2.4	1.4

#### **Technical Note**

## **Methodology for the compilation of the Construction Price Index**

### (i) Introduction

A Construction Price Index measures the change in the level of construction prices. The construction industry is very broad and highly diversified with considerable variations from one type of construction to another. This makes it difficult to derive generalized indices that would be applicable to the industry as a whole. Hence, separate indices for the different types of construction need to be compiled. At present, Statistics Mauritius publishes an index that covers residential buildings only.

### (ii) Types of Construction Price Indices

Different approaches to index number compilation are used depending on the purpose for which the index is required. There are two main types of construction price indices:

## The Output Price Index

In this approach, specific projects representative of the various categories of construction works are selected as models and construction firms are surveyed and asked to provide estimates of the prevailing market prices for each of the projects. As such, the output price indices respond to the changes in prices of materials used and cost of labour, as well as changes in overhead costs and profits.

#### The Input Price Index

The index is based on prices of a representative selection of basic inputs (labour, plant, materials and transport) that go into the construction work. Hence, the input price index measures the change in the cost of resources to the contractor, and not the change in the price that the client pays.

The office opted for the input price index which, though more limiting than the output price index, is simpler and less expensive to construct and maintain.

#### (iii) Selection of representative dwelling

Since it would have been too time-consuming and costly to include all major types of residential dwellings, it was decided to restrict the index to a model dwelling, representing the most common type of dwelling in 2007. This model dwelling was determined on the basis of the 2000 Housing Census data and developments assumed to have taken place during the period 2000 to 2007. The drawings of the prototype model dwelling were provided by the Mauritius Housing Company Ltd. A description of the model is given at paragraph (viii) below.

#### (iv) Weighting scheme

The quantity survey work to determine the weighting pattern for the index was entrusted to a private Quantity Surveyor following established procedures.

Any given construction consists of an assembly of a certain number of stages or work categories. Sixteen stages or broad work categories were identified and detailed costs of inputs in terms of labour, plant, materials and transport that go into the construction of the selected model were calculated under each of the 16 work categories. The weights have been worked out in such a way that they can be presented in terms of inputs as well as work categories. For publication purposes, weights and sub-indices are shown not only for the 16 work categories, but also for the 4 broad input categories of labour, plant, materials and transport, the "materials" category being further sub-divided into 17 sub-categories.

Changes in the weight structure from 2001 to 2009 are given at the end of this technical note. It is noted that there has been some reclassification within work categories while new ones have been identified. Also within work categories there has been some changes in the product mix as well as the introduction of some new products.

#### **(v) Data collection**

The data needed for the computation of the index are collected every month from a sample of 50 outlets in 8 regions of the island. Prices are collected in respect of some 109 items, representative of all items that go into the computation of the index.

#### Calculation of the Construction Price Index (vi)

The Construction Price Index is a weighted average of price relatives of individual items, based on the modified Laspeyres formula:

$$\mathbf{I_t} \quad = \quad \frac{\sum W_i \; (P_{it} \, / \, P_{io}) \quad x \quad 100}{\sum W_i}$$

where  $I_t$  = index for current period t

 $P_{io}$  = price of item i at base period 0

 $P_{it}$  = price of item i at current period t

 $W_i$  = weight of item i

The base period is the  $2^{nd}$  quarter of 2009.

#### (vii) Uses

- a) Construction price indices give an indication of the change in the level of prices of construction works. As such, they are used as deflators for the measurement of real growth in the construction sector.
- b) They are also useful for evaluating cost fluctuations in contracts regarding construction works and for renegotiating owner-tenant agreements.

## (viii) Description of model dwelling

The model used is a single storey (ground floor) detached house of 138 square metres (1,485 square feet) in floor area measured at plinth level to the external face of the external walls. The overall area is inclusive of 18.55 square metres (200 square feet) in respect of a garage.

It comprises three bedrooms, a living-dining room, a kitchen, two toilets, a utility room, a bathroom, a verandah and an attached garage. The building has concrete block walls, reinforced concrete flat roof, internal flush plywood doors, aluminium openings for windows and entrance door, screeded floor and roof, tiling to floor and walls of w.c. and bathroom and kitchen worktop; the ceilings and walls are rendered and painted both internally and externally. Plumbing, sanitary installation and electrical installation are included as well as drainage which is to be connected to the sewerage system.

Provision has been made, in the form of more substantial foundations and of stub columns on the roof, for converting the single into a two-storey house eventually. Site works are restricted to spreading and leveling surplus excavated material around the site.

The index excludes the cost of the building permit and the draughtman's fee.

It is assumed that although the house is not constructed by a contractor, the client has recourse to the services of a foreman.