#### **CONSTRUCTION PRICE INDEX**

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

#### 3rd Quarter 2017

#### 1. Introduction

This issue of the Economic and Social Indicators presents the monthly Construction Price Index (residential) for the third quarter of 2017 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 (October 2016 to September 2017)

The Construction Price index which stood at 114.1 in October 2016 remained at that same level up to December 2016. In January 2017, the index rose to 114.6, and did not register any change in February and March 2017. It then increased to 114.7 in April 2017 and maintained the same level up to June 2017. In July 2017 the index registered another increase to reach 114.8, remained at the same point in August 2017 and increased to 114.9 in September 2017.

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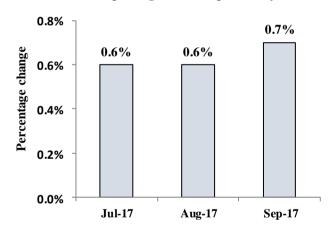
## 3. Changes in the Construction Price Index (July to September 2017)

The overall Construction Price Index, which stood at 114.7 at the end of June 2017, increased to 114.8 in July 2017.

In August 2017, no change was registered in the overall index.

From August to September 2017, it went up to 114.9 as a result of increases of 0.7% in the prices of steel bars, 1.0% in timber carpentry and 0.1% in sanitary installation.

Chart 2: Percentage change from corresponding month of previous year



Compared to the corresponding months of the previous year, the index increased by 0.6% in July, 0.6% in August 2017 and 0.7% in September 2017 (Table 1.3).

### 4. Changes by Input Categories

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

During the third quarter of 2017, no change was registered in the "Labour", "Hire of plant" and "Transport" sub-indices.

The "Materials" sub-index which stood at 112.1 in June 2017 increased by 0.1% to reach 112.2 in July 2017 as a result of the following price increases: 0.3% in steel bars 0.3% in timber joinery, 0.2% in electrical installation and 0.1% in plumbing and sanitary installation. The sub-index remained unchanged in August 2017 and increased by 0.2% in September 2017 as a result of price increases of 0.7% in steel bars, 1.0% in timber carpentry and 0.1% in electrical installation

The net monthly contributions of the input categories to the index during the period October 2016 to September 2017 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 July 2017, the increase of 0.3% in the prices of steel bars resulted in an increase of 0.2% in the "Reinforcement" work category. The "Softwood joinery" work category registered an increase of 0.1% following the 0.3% increase in the prices of timber joinery. The rise of 0.2% in the prices of electrical materials increased the "Electrical installation" work category by 0.2%.

In August 2017, all work categories remained unchanged as no changes were observed in the prices of the input categories.

In September 2017, the 0.7% increase in the prices of steel bars contributed to a rise of 0.5% in the "Reinforcement" work category. The 1.0% increase in the prices of timber carpentry resulted in an increase of 0.5% in the "Formwork" work category and the 0.1% increase in the prices of electrical materials increased the "Electrical installation" work category by 0.1%.

Table 2.4 shows the net monthly contributions of the work categories to the index since October 2016.

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 2004. 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
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Contact persons: Mr. K. Persand (Statistician)

Ms. F. Victor (Senior Statistical Officer)

**Statistics Mauritius** 

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

Email: cso\_construction@ govmu.org

Table 1.1: Monthly sub-indices by input category, October 2016 to September 2017

Input Categories	Weight		2016						2017				
input Categories	weight	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LABOUR	28.2	120.8	120.8	120.8	122.3	122.3	122.3	122.3	122.3	122.3	122.3	122.3	122.3
HIRE OF PLANT	3.3	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:	64.2	111.8	111.8	111.9	111.9	111.9	111.9	112.1	112.1	112.1	112.2	112.2	112.4
Hardcore (remplissage)	1.8	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	12.7	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5	120.5
Sand	4.2	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	3.4	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	5.2	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)	10.6	91.7	91.7	92.0	92.0	92.0	92.7	92.7	92.7	92.7	93.0	93.0	93.7
Galvanised corrugated cast iron sheeting	0.6	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7	97.7
Timber: (a) Carpentry	3.9	111.9	111.9	111.9	111.9	111.8	111.8	111.8	112.5	112.5	112.5	112.5	113.6
(b) Joinery	1.6	113.7	113.7	113.7	113.7	113.7	113.7	113.8	113.8	113.8	114.1	114.1	114.1
Aluminium openings	4.1	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	2.7	108.6	108.6	108.6	108.5	108.5	108.5	108.5	108.4	108.4	108.4	108.4	108.4
Ceramic tiles	0.8	120.7	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4
Adhesive	1.7	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.7	106.7	106.7	106.7	106.7
Paint	2.5	129.4	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9	129.9
Plumbing	1.5	103.7	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.6	103.7	103.7	103.7
Sanitary installation	2.2	109.3	109.4	109.4	109.4	109.4	109.2	113.9	113.9	113.9	113.9	113.9	113.9
Electrical installation	4.7	112.2	111.8	111.8	111.9	112.1	111.0	111.0	111.0	111.0	111.3	111.3	111.3
TRANSPORT	4.3	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	100.0	114.1	114.1	114.1	114.6	114.6	114.6	114.7	114.7	114.7	114.8	114.8	114.9

(Base: 2nd Quarter 2009 = 100)

Table 1.2: Percentage change from previous month by input category, October 2016 to September 2017

						Percentag	ge change	from prev	ious mon	th			
Input Categories	Weight	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17
LABOUR	28.2	0.0	0.0	0.0	1.2	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	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2
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	0.0	0.0	0.0	0.0	0.0	0.0	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	-0.4	0.0	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.3	0.0	0.7
Galvanised corrugated cast iron sheeting	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timber: (a) Carpentry	3.9	0.3	0.0	0.0	0.0	-0.1	0.0	0.0	0.6	0.0	0.0	0.0	1.0
(b) Joinery	1.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	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	0.0	0.0	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Ceramic tiles	0.8	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adhesive	1.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Paint	2.5	1.3	0.3	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	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Sanitary installation	2.2	0.3	0.1	0.0	0.0	0.0	-0.2	4.3	0.0	0.0	0.1	0.0	0.0
Electrical installation	4.7	-0.3	-0.3	0.0	0.1	0.2	-1.0	0.0	0.0	0.0	0.2	0.0	0.1
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	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1

(Base: 2nd Quarter 2009 = 100)

Table 1.3: Percentage change from corresponding month of previous year by input category, October 2016 to September 2017

				Pero	entage cl	nange fro	m corresp	onding n	nonth of p	revious y	ear		
Input Categories	Weight	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17
LABOUR	28.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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	-0.6	-0.4	-0.1	0.0	0.3	0.5	0.6	0.5	0.5	0.4	0.4	0.6
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	0.4	0.4	0.4	0.0	0.0	0.0	0.0	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	-5.6	-4.4	-2.4	-1.3	1.0	2.9	2.9	1.8	1.8	0.8	0.9	1.7
Galvanised corrugated cast iron sheeting	0.6	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0
Timber: (a) Carpentry	3.9	0.1	0.4	0.4	0.4	0.3	0.3	0.3	0.9	0.9	0.9	0.8	1.8
(b) Joinery	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.4	1.4	1.4
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	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.2	-0.2	-0.2
Ceramic tiles	0.8	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
Adhesive	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7	1.7	1.7	1.7
Paint	2.5	1.5	1.9	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Plumbing	1.5	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
Sanitary installation	2.2	0.5	0.4	0.4	0.4	0.4	0.2	4.5	4.5	4.5	4.6	4.6	4.6
Electrical installation	4.7	-0.2	-0.5	-0.5	-0.4	-0.3	-1.3	-1.3	-1.3	-1.3	-1.1	-1.1	-1.0
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	0.0	0.1	0.3	0.3	0.5	0.7	0.7	0.7	0.7	0.6	0.6	0.7

(Base: 2nd Quarter 2009 = 100)

Table 1.4: Net monthly contributions of input categories to the index, October 2016 to September 2017

				20	16							2017				
Input Categories	Weight	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LABOUR	28.2	0.00	0.00	0.00	0.00	0.00	0.00	0.41	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	0.00	0.00	0.00
MATERIALS:	64.2	0.13	-0.01	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.05	0.02	0.00	0.02	0.00	0.05
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	0.00	0.00	0.00
Cement	12.7	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
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	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	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	0.00	0.00	0.00
Steel bars (armature)	10.6	0.13	-0.01	0.00	-0.11	0.01	0.08	0.00	0.00	0.19	0.00	0.00	0.00	0.08	0.00	0.20
Galvanised corrugated cast iron sheeting	0.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Timber: (a) Carpentry	3.9	0.00	0.00	0.00	0.09	0.00	0.00	0.00	-0.03	0.00	0.00	0.19	0.00	0.00	0.00	0.33
(b) Joinery	1.6	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.10	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	0.00	0.00	0.00
Metal openings	2.7	0.00	0.00	0.00	0.00	0.00	0.00	-0.03	0.00	0.01	-0.02	-0.01	0.00	0.00	-0.01	-0.01
Ceramic tiles	0.8	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adhesive	1.7	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
Paint	2.5	0.00	0.00	0.00	0.48	0.12	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	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Sanitary installation	2.2	0.00	0.00	0.00	0.09	0.03	0.00	0.00	0.00	-0.07	1.34	-0.01	0.00	0.02	0.00	0.00
Electrical installation	4.7	0.00	0.00	0.00	-0.08	-0.09	0.00	0.02	0.06	-0.33	0.00	0.00	0.00	0.08	0.00	0.02
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	0.00	0.00	0.00
Total	100.0	0.13	-0.01	0.00	0.04	0.01	0.03	0.41	0.01	0.01	0.10	0.04	0.00	0.05	0.00	0.12

Table 1.5: Quarterly average of monthly indices and percentage changes by input category, 4th Quarter 2016 to 3rd Quarter 2017

		2016		2017		%	Change from	previous quar	ter
Input Categories	Weight	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr 2016	1st Qr 2017	2nd Qr 2017	3rd Qr 2017
LABOUR	28.2	120.8	122.3	122.3	122.3	0.0	1.2	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	111.9	111.9	112.1	112.3	0.1	0.0	0.2	0.1
Hardcore (remplissage)	1.8	118.7	118.7	118.7	118.7	0.0	0.0	0.0	0.0
Cement	12.7	120.5	120.5	120.5	120.5	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
Steel bars (armature)	10.6	91.8	92.3	92.7	93.2	-0.4	0.5	0.5	0.5
Galvanised corrugated cast iron sheeting	0.6	97.7	97.7	97.7	97.7	0.0	0.0	0.0	0.0
Timber: (a) Carpentry	3.9	111.9	111.9	112.3	112.9	0.3	-0.1	0.4	0.5
(b) Joinery	1.6	113.7	113.7	113.8	114.1	1.0	0.0	0.0	0.3
Aluminium openings	4.1	100.9	100.9	100.9	100.9	0.0	0.0	0.0	0.0
Metal openings	2.7	108.6	108.5	108.4	108.4	0.0	-0.1	-0.1	0.0
Ceramic tiles	0.8	121.2	121.4	121.4	121.4	0.4	0.2	0.0	0.0
Adhesive	1.7	106.0	106.0	106.5	106.7	1.0	0.0	0.4	0.2
Paint	2.5	129.7	129.9	129.9	129.9	1.6	0.1	0.0	0.0
Plumbing	1.5	103.6	103.6	103.6	103.7	0.0	0.0	0.0	0.1
Sanitary installation	2.2	109.4	109.3	113.9	113.9	0.4	0.0	4.2	0.1
Electrical installation	4.7	112.0	111.7	111.0	111.3	-0.4	-0.2	-0.6	0.3
TRANSPORT	4.3	109.1	109.1	109.1	109.1	0.0	0.0	0.0	0.0
Total	100.0	114.1	114.6	114.7	114.8	0.0	0.4	0.1	0.1

(Base: 2nd Quarter 2009 = 100)

Table 2.1: Monthly sub-indices by work category, October 2016 to September 2017

Work Categories	Weight		2016						2017				
work Categories	weight	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1. Setting up	1.5	109.5	109.5	109.5	109.7	109.7	109.7	109.7	110.0	110.0	110.0	110.0	110.0
2. Setting out	0.5	128.0	128.0	128.0	128.7	128.7	128.7	128.8	128.8	128.8	128.8	128.8	128.8
3. Earthworks	3.3	114.9	114.9	114.9	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2	115.2
4. Concrete	21.3	118.9	118.9	118.9	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3
5. Reinforcement	14.6	99.7	99.7	99.9	100.3	100.3	100.8	100.8	100.8	100.8	101.0	101.0	101.5
6. Formwork (coffrage)	8.5	113.0	113.0	113.0	113.4	113.3	113.3	113.3	113.6	113.6	113.6	113.6	114.2
7. Blockwork	8.7	120.4	120.4	120.4	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6	120.6
8. Softwood joinery	1.5	118.6	118.6	118.6	119.0	119.0	119.0	119.0	119.1	119.1	119.2	119.2	119.2
9. Aluminium doors and openings	6.0	106.6	106.6	106.6	106.9	106.9	106.9	106.9	106.9	106.9	106.9	106.9	106.9
10. Metal openings	4.1	112.8	112.8	112.8	113.1	113.1	113.2	113.1	113.1	113.1	113.1	113.1	113.1
11. Rendering to wall/ceiling (crepissage)	10.4	120.1	120.1	120.1	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0	121.0
12. Bed & screed to floor/roof	3.8	119.1	119.1	119.1	119.6	119.6	119.6	119.6	119.9	119.9	119.9	119.9	119.9
13. Tiling	1.6	118.5	118.9	118.9	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3	119.3
14. Painting	3.2	125.7	126.0	126.0	126.3	126.3	126.3	126.3	126.3	126.3	126.3	126.3	126.3
15. Plumbing and Drainage	5.0	110.1	110.1	110.1	110.4	110.4	110.3	112.4	112.4	112.4	112.5	112.5	112.5
16. Electrical installation	6.0	113.9	113.6	113.6	114.0	114.1	113.2	113.2	113.2	113.2	113.5	113.5	113.5
Total	100.0	114.1	114.1	114.1	114.6	114.6	114.6	114.7	114.7	114.7	114.8	114.8	114.9

 $\infty$ 

(Base: 2nd Quarter 2009 = 100)

Table 2.2: Percentage change from previous month by work category, October 2016 to September 2017

					l	Percentag	e change	from pre	vious mon	th			
Work Categories	Weight	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17
1. Setting up	1.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
2. Setting out	0.5	0.3	0.0	0.0	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
3. Earthworks	3.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Concrete	21.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Reinforcement	14.6	-0.3	0.0	0.2	0.4	0.0	0.5	0.0	0.0	0.0	0.2	0.0	0.5
6. Formwork (coffrage)	8.5	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.5
7. Blockwork	8.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8. Softwood joinery	1.5	0.7	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
9. Aluminium doors and openings	6.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Metal openings	4.1	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11. Rendering to wall/ceiling (crepissage)	10.4	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12. Bed & screed to floor/roof	3.8	0.4	0.0	0.0	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
13. Tiling	1.6	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. Painting	3.2	0.9	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. Plumbing and Drainage	5.0	0.1	0.0	0.0	0.3	0.0	-0.1	1.9	0.0	0.0	0.0	0.0	0.0
16. Electrical installation	6.0	-0.2	-0.2	0.0	0.3	0.2	-0.8	0.0	0.0	0.0	0.2	0.0	0.1
Total	100.0	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1

Table 2.3: Percentage change from corresponding month of previous year by work category, October 2016 to September 2017

					% chang	e from co	rrespond	ling mont	th of prev	ious year	r		
Work Categories	Weight	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17
1. Setting up	1.5	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5
2. Setting out	0.5	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
3. Earthworks	3.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
4. Concrete	21.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5. Reinforcement	14.6	-3.5	-2.6	-1.3	-0.4	1.1	2.4	2.4	1.6	1.6	0.9	1.0	1.5
6. Formwork (coffrage)	8.5	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.8	0.8	0.8	0.7	1.2
7. Blockwork	8.7	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8. Softwood joinery	1.5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.3	1.3	1.3
9. Aluminium doors and openings	6.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
10. Metal openings	4.1	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
11. Rendering to wall/ceiling (crepissage)	10.4	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
12. Bed & screed to floor/roof	3.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.1
13. Tiling	1.6	0.3	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
14. Painting	3.2	1.4	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4
15. Plumbing and Drainage	5.0	0.5	0.4	0.4	0.5	0.4	0.3	2.3	2.2	2.2	2.3	2.3	2.3
16. Electrical installation	6.0	0.1	-0.1	-0.1	-0.1	0.0	-0.8	-0.8	-0.8	-0.8	-0.6	-0.6	-0.5
Total	100.0	0.0	0.1	0.3	0.3	0.5	0.7	0.7	0.7	0.7	0.6	0.6	0.7

Table 2.4: Net monthly contributions of work categories to the index, October 2016 to September 2017

			2016						2017				
Work Categories	Weight	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1. Setting up	1.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Setting out	0.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Earthworks	3.3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. Concrete	21.3	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Reinforcement	14.6	-0.04	0.00	0.03	0.06	0.00	0.07	0.00	0.00	0.00	0.03	0.00	0.07
6. Formwork (coffrage)	8.5	0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.05
7. Blockwork	8.7	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. Softwood joinery	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
9. Aluminium doors and openings	6.0	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10. Metal openings	4.1	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11. Rendering to wall/ceiling (crepissage)	10.4	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12. Bed & screed to floor/roof	3.8	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
13. Tiling	1.6	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14. Painting	3.2	0.04	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15. Plumbing and Drainage	5.0	0.01	0.00	0.00	0.02	0.00	-0.01	0.10	0.00	0.00	0.00	0.00	0.00
16. Electrical installation	6.0	-0.01	-0.01	0.00	0.02	0.01	-0.05	0.00	0.00	0.00	0.01	0.00	0.00
Total	100.0	0.04	0.01	0.03	0.41	0.01	0.01	0.10	0.04	0.00	0.05	0.00	0.12

Table 2.5 Quarterly average of monthly indices and percentage changes by work category, 4th Quarter 2016 to 3rd Quarter 2017

		2016		2017		% Ch	ange from	previous qu	ıarter
Work Categories	Weight	4th Qr	1st Qr	2nd Qr	3rd Qr	4th Qr 2016	1st Qr 2017	2nd Qr 2017	3rd Qr 2017
1. Setting up	1.5	109.5	109.7	109.9	110.0	0.0	0.2	3.0	0.1
2. Setting out	0.5	128.0	128.7	128.8	128.8	0.3	0.6	0.1	0.0
3. Earthworks	3.3	114.9	115.2	115.2	115.2	0.0	0.3	0.0	0.0
4. Concrete	21.3	118.9	119.3	119.3	119.3	0.0	0.3	0.0	0.0
5. Reinforcement	14.6	99.8	100.5	100.8	101.2	-0.2	0.7	0.3	0.4
6. Formwork (coffrage)	8.5	113.0	113.3	113.5	113.8	0.2	0.3	0.1	0.3
7. Blockwork	8.7	120.4	120.6	120.6	120.6	0.0	0.1	0.0	0.0
8. Softwood joinery	1.5	118.6	119.0	119.1	119.2	0.7	0.4	0.0	0.1
9. Aluminium doors and openings	6.0	106.6	106.9	106.9	106.9	0.0	0.3	0.0	0.0
10. Metal openings	4.1	112.8	113.1	113.1	113.1	0.1	0.3	0.0	0.0
11. Rendering to wall/ceiling (crepissage)	10.4	120.1	121.0	121.0	121.0	0.0	0.8	0.0	0.0
12. Bed & screed to floor/roof	3.8	119.1	119.6	119.8	119.9	0.4	0.5	0.2	0.1
13. Tiling	1.6	118.8	119.3	119.3	119.3	0.2	0.4	0.0	0.0
14. Painting	3.2	125.9	126.3	126.3	126.3	1.1	0.3	0.0	0.0
15. Plumbing and Drainage	5.0	110.1	110.4	112.4	112.5	0.2	0.3	1.8	0.0
16. Electrical installation	6.0	113.7	113.8	113.2	113.5	-0.3	0.1	-0.5	0.2
Total	100.0	114.1	114.6	114.7	114.8	0.0	0.4	0.1	0.1

Table 3.1: Construction Price Index - January 2004 to September 2017

	(.	Base: 4i	th Quar	ter 2001	' = <b>100</b> )				(Base	e: <b>2nd</b> Q	Quarter I	2009 = I	100)		
	2004	2005	2006	2007	2008	2009	2009	2010	2011	2012	2013	2014	2015	2016	2017
January	109.5	118.7	126.7	140.7	159.0	166.0		100.3	102.8	106.7	109.8	112.6	113.8	114.2	114.6
February	112.2	122.5	127.3	140.7	159.0	166.0		100.3	104.1	106.8	110.5	112.6	113.7	113.9	114.6
March	112.3	122.5	127.3	141.2	157.9	163.5		98.8	104.5	106.8	110.4	112.6	113.9	113.8	114.6
1st Quarter	111.3	121.3	127.1	140.9	158.7	165.2		99.8	103.8	106.8	110.2	112.6	113.8	114.0	114.6
April	112.3	122.5	127.9	144.1	157.9		100.2	98.8	104.5	108.6	110.9	112.6	114.0	113.8	114.7
May	112.3	122.7	127.9	144.3	157.9		100.0	100.2	104.4	108.6	110.9	112.5	114.0	113.9	114.7
June	115.5	122.7	129.9	147.4	161.2		99.8	100.4	104.4	108.6	111.0	112.5	114.1	113.9	114.7
2nd Quarter	113.4	122.6	128.6	145.2	159.0		100.0	99.8	104.4	108.6	110.9	112.5	114.0	113.9	114.7
July	116.4	124.6	134.4	150.5	165.2		100.6	100.9	104.3	108.7	111.0	112.4	114.1	114.1	114.8
August	116.4	124.6	135.1	151.3	167.5		100.2	100.8	105.0	108.7	111.1	112.3	114.2	114.1	114.8
September	117.0	124.6	135.1	151.6	169.2		100.2	100.8	105.2	108.8	111.1	112.3	114.2	114.1	114.9
3rd Quarter	116.6	124.6	134.9	151.1	167.3		100.3	100.9	104.8	108.7	111.0	112.4	114.2	114.1	114.8
October	117.3	125.3	135.1	152.9	170.0		100.3	101.4	105.4	108.8	111.2	112.4	114.2	114.1	
November	117.8	126.1	136.9	151.1	168.7		100.3	101.6	105.4	108.8	111.2	112.3	114.0	114.1	
December	118.4	126.1	137.1	151.4	167.2		100.3	101.7	105.5	108.9	111.5	112.3	113.8	114.1	
4th Quarter	117.8	125.8	136.4	151.8	168.6		100.3	101.6	105.4	108.8	111.3	112.3	114.0	114.1	
Yearly average	114.8	123.6	131.8	147.2	163.4			100.5	104.6	108.2	110.9	112.5	114.0	114.0	
% change in the yearly average	6.3	7.7	6.6	11.8	11.0		0.1	-0.1	4.1	3.5	2.4	1.4	1.4	0.0	

 $Table \ 3.2: Construction \ Price \ Index \ - \ January \ 2004 \ to \ September \ 2017 \ (Base \ period \ 2nd \ Qtr \ 2009=100)$ 

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
January	67.3	73.0	77.9	86.5	97.8	102.1	100.3	102.8	106.7	109.8	112.6	113.8	114.2	114.6
February	69.0	75.3	78.3	86.5	97.8	102.1	100.3	104.1	106.8	110.5	112.6	113.7	113.9	114.6
March	69.1	75.3	78.3	86.8	97.1	100.6	98.8	104.5	106.8	110.4	112.6	113.9	113.8	114.6
1st Quarter	68.5	74.6	78.2	86.6	97.6	101.6	99.8	103.8	106.8	110.2	112.6	113.8	114.0	114.6
April	69.1	75.3	78.7	88.6	97.1	100.2	98.8	104.5	108.6	110.9	112.6	114.0	113.8	114.7
May	69.1	75.5	78.7	88.7	97.1	100.0	100.2	104.4	108.6	110.9	112.5	114.0	113.9	114.7
June	71.0	75.5	79.9	90.6	99.2	99.8	100.4	104.4	108.6	111.0	112.5	114.1	113.9	114.7
2nd Quarter	69.7	75.4	79.1	89.3	97.8	100.0	99.8	104.4	108.6	110.9	112.5	114.0	113.9	114.7
July	71.6	76.6	82.7	92.5	101.6	100.6	100.9	104.3	108.7	111.0	112.4	114.1	114.1	114.8
August	71.6	76.6	83.1	93.0	103.0	100.2	100.8	105.0	108.7	111.1	112.3	114.2	114.1	114.8
September	72.0	76.6	83.1	93.2	104.1	100.2	100.8	105.2	108.8	111.1	112.3	114.2	114.1	114.9
3rd Quarter	71.7	76.6	82.9	92.9	102.9	100.3	100.9	104.8	108.7	111.0	112.4	114.2	114.1	114.8
October	72.2	77.1	83.1	94.0	104.6	100.3	101.4	105.4	108.8	111.2	112.4	114.2	114.1	
November	72.4	77.6	84.2	92.9	103.7	100.3	101.6	105.4	108.8	111.2	112.3	114.0	114.1	
December	72.8	77.6	84.3	93.1	102.8	100.3	101.7	105.5	108.9	111.5	112.3	113.8	114.1	
4th Quarter	72.5	77.4	83.9	93.3	103.7	100.3	101.6	105.4	108.8	111.3	112.3	114.0	114.1	
Yearly average % change in the yearly	70.6	76.0	81.0	90.6	100.5	100.6	100.5	104.6	108.2	110.9	112.5	114.0	114.0	
average	6.3	7.7	6.6	11.8	11.0	0.1	-0.1	4.1	3.5	2.4	1.4	1.4	0.0	

#### **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.

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

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

$$\mathbf{I_t} = \frac{\sum W_i (P_{it} / P_{io})}{\sum W_i} \times 100$$

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 meters (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.