

## Labour force, Employment and Unemployment – Second quarter 2010

### Introduction

1. This issue of Economic and Social Indicators (ESI) presents a set of estimates of labour force, employment and unemployment for the second quarter of 2010, based on the results of the Continuous Multi-Purpose Household Survey (CMPHS) from April to June 2010. The estimates refer to the Mauritian population aged 16 years and above.
2. Annual estimates of labour force including foreign workers derived after integrating data from CMPHS with other sources are given at Annex 3.

### Key figures

	Q2 2009	Q1 2010	Q2 2010	Change	
				Q2 2010 - Q2 2009	Q2 2010 - Q1 2010
Labour force	564,500	572,400	586,700	+22,200	+14,300
Employment	517,700	524,400	541,900	+24,200	+17,500
Unemployment	46,800	48,000	44,800	-2,000	-3,200
Unemployment rate (%)	8.3	8.4	7.6	-0.7	-0.8
Seasonally adjusted unemployment rate (%)	7.7	7.8	7.1	-0.6	-0.7

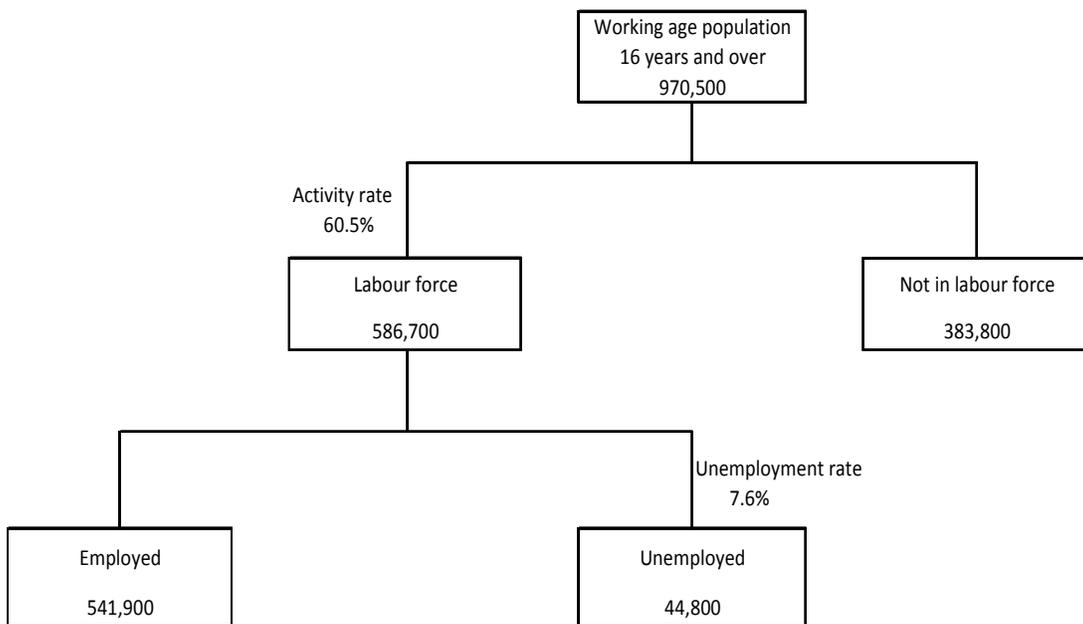
### Forecast of employment and unemployment - Year 2010

	Year 2009	Forecast Year 2010	Change
Employment	524,800	531,100	+6,300
Unemployment	41,500	42,900	+1,400
Unemployment rate (%)	7.3	7.5	+0.2

## Labour market overview, second quarter 2010

3. Compared with the corresponding quarter of 2009, there has been an increase in the labour force (+22,200); employment increased by 24,200 while unemployment decreased by 2,000.
4. Compared with the previous quarter, labour force increased by 14,300; employment increased by 17,500 while unemployment decreased by 3,200.

Chart 1: The Labour Market, 2nd quarter 2010



## Labour force participation

5. The activity rate for second quarter 2010 was 60.5%, up by 1.6 percentage points from 58.9% in the corresponding period one year earlier. Male activity rate increased by 0.6 percentage point to 76.6% while female activity rate increased by 2.4 percentage points to 44.9%.
6. Compared with the previous quarter, the activity rate increased by 1.3 percentage points (from 59.2% to 60.5%) with an increase in male activity rate by 1.2 percentage points and in female activity rate by 1.4 percentage points.

## Employment

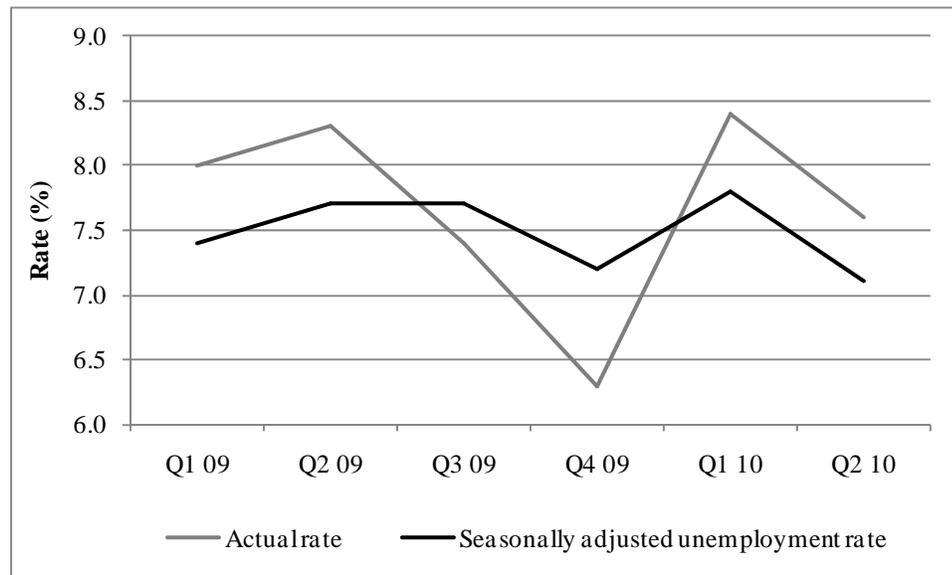
7. From second quarter 2009 to second quarter 2010, employment rose by 24,200 (+4.7%) to 541,900. This rise was driven by an increase of 18,200 in female employment to 195,600 while male employment increased by 6,000 to 346,300.
8. Compared with the previous quarter, employment increased by 17,500 with a rise of 7,900 in male employment and 9,600 in female employment.

## Unemployment

9. From second quarter 2009 to second quarter 2010, the number of unemployed persons decreased by 2,000 to 44,800. This fall was due to a decrease of 3,100 in the number of unemployed females, partly offset by a rise of 1,100 in the unemployed males.
10. The main characteristics of the unemployed as at second quarter 2010 were as follows:
  - (i) The 44,800 unemployed comprised 18,100 males (40%) and 26,700 females (60%).
  - (ii) Around 19,800 (44%) of them were aged below 25 years.
  - (iii) Slightly more than half (23,700) of the unemployed were single. Among males, the majority (81%) was single while among females, the majority (66%) was ever married.
  - (iv) Some 8,200 or 18% had not reached the Certificate of Primary Education (CPE) level or equivalent and a further 20,000 (45%) did not have the Cambridge School Certificate (SC) or equivalent.
  - (v) Around 34,200 (76%) had been looking for work for up to one year and the remaining 10,600 (24%) for more than one year.
  - (vi) About 29,300 (65%) had working experience and 15,500 (35%) were looking for a job for the first time.
  - (vii) Around 19,600 (44%) were registered at the Employment Service.
  - (viii) There were 11,300 (25%) young persons aged 16 to 24 years, not yet married and looking for a first job. Some 5,400 (48%) of them had not passed SC.
  - (ix) Ever married (including widowed, divorced or separated) unemployed persons aged 25 to 44 years and having worked before numbered 12,300. Among them, about 9,300 (76%) had not passed SC.
  - (x) 3,600 or 8% of the unemployed were heads of households.
  - (xi) 5,300 (12%) lived in households with no employed persons.

11. The unemployment rate went down by 0.7 percentage point to 7.6% from second quarter 2009 to second quarter 2010. Male unemployment rate increased by 0.2 percentage point to 5.0% whilst female unemployment rate decreased by 2.4 percentage points to 12.0%.
12. When compared with first quarter of 2010, the number of unemployed persons fell by 3,200 (1,200 males and 2,000 females) and the unemployment rate by 0.8 percentage point.

Chart 2: Actual and seasonally adjusted unemployment rate by quarter, 1st quarter 2009 – 2nd quarter 2010



13. Unemployment rate is usually higher in the first half of the year because of school leavers joining the labour market, and lower in the second half with more casual jobs being available mainly in the trade sector (street vendors, salespersons in shops, etc.) at the end of the year. In order to observe the real trend over time, adjustments have to be made for seasonal fluctuations. Seasonally adjusted unemployment rate for the second quarter of 2010 was 7.1%, lower than the rate of 7.8% for the first quarter of 2010 and 7.7% for the second quarter of 2009.

### **Economically inactive population**

14. The number of persons aged 16 years and over, not forming part of the labour force (inactive population) was estimated at 383,800 at second quarter 2010.
15. Among them, 2,100 persons were not working and available for work but were not actively looking for work. These persons have not been classified as unemployed since

they did not satisfy all the three criteria for unemployment, i.e. not working, looking for work and available for work. From the survey responses, about 52% of those inactives either believed that suitable jobs were not available or did not know where to look for work.

16. The inactive population was made up of 111,400 males and 272,400 females. Among inactive males, 44% were 'retired or old persons' and 41% were students. Among females, 62% were homemakers and 16% students.

### **Sampling errors**

17. The estimates in this publication are based on the results of a sample survey and are thus subject to sample variability. Standard errors and confidence intervals give an indication of this variability.
18. The standard error of the estimates and the 95% confidence interval which represent a 95% chance that the true value lies within that interval, are given in the table that follows.

Estimated labour force, employment and unemployment by sex, 2nd quarter 2009 –  
2nd quarter 2010

Both Sexes

		Estimates	Standard Error	95% confidence interval	
				Lower limit	Upper limit
Labour force					
	2009 Q2	564,500	16,600	531,800	597,100
	Q3	569,400	13,300	543,300	595,500
	Q4	572,200	15,900	540,800	603,500
	2010 Q1	572,400	12,100	548,500	596,300
	Q2	586,700	15,900	555,300	617,800
Employment					
	2009 Q2	517,700	14,800	488,500	546,900
	Q3	527,300	12,500	502,600	551,800
	Q4	536,400	15,400	505,900	566,600
	2010 Q1	524,400	11,400	502,000	546,900
	Q2	541,900	15,400	511,400	572,100
Unemployment					
	2009 Q2	46,800	3,300	40,200	53,300
	Q3	42,100	3,000	36,200	48,000
	Q4	35,800	2,800	30,500	41,300
	2010 Q1	48,000	3,000	42,100	53,800
	Q2	44,800	2,800	39,200	50,400
Unemployment rate					
	2009 Q2	8.3	0.5	7.3	9.2
	Q3	7.4	0.5	6.4	8.4
	Q4	6.3	0.5	5.4	7.2
	2010 Q1	8.4	0.5	7.4	9.3
	Q2	7.6	0.5	6.7	8.6
Activity rate					
	2009 Q2	58.9	0.7	57.6	60.3
	Q3	59.3	0.6	58.0	60.5
	Q4	59.4	0.7	58.0	60.7
	2010 Q1	59.2	0.6	57.9	60.4
	Q2	60.5	0.6	59.3	61.6

Estimated labour force, employment and unemployment by sex, 2nd quarter 2009 –  
2nd quarter 2010

Male

		Estimates	Standard Error	95% confidence interval	
				Lower limit	Upper limit
Labour force					
	2009 Q2	357,300	11,300	335,000	379,700
	Q3	357,700	8,500	341,000	374,300
	Q4	360,300	10,300	340,000	380,600
	2010 Q1	357,700	7,800	342,300	373,200
	Q2	364,400	11,700	341,200	387,400
Employment					
	2009 Q2	340,300	10,700	319,200	361,400
	Q3	342,800	8,300	326,300	359,100
	Q4	346,800	10,200	326,600	366,900
	2010 Q1	338,400	7,500	323,600	353,300
	Q2	346,300	11,300	323,900	368,500
Unemployment					
	2009 Q2	17,000	1,700	13,700	20,400
	Q3	14,900	1,800	11,500	18,400
	Q4	13,500	1,700	10,300	16,900
	2010 Q1	19,300	1,900	15,600	23,000
	Q2	18,100	1,700	14,700	21,500
Unemployment rate					
	2009 Q2	4.8	0.4	3.9	5.6
	Q3	4.2	0.5	3.2	5.1
	Q4	3.7	0.5	2.9	4.7
	2010 Q1	5.4	0.5	4.4	6.4
	Q2	5.0	0.5	4.1	5.8
Activity rate					
	2009 Q2	76.0	0.7	74.5	77.5
	Q3	75.8	0.8	74.3	77.4
	Q4	76.2	0.8	74.7	77.7
	2010 Q1	75.4	0.7	74.0	76.8
	Q2	76.6	0.8	75.0	78.1

Estimated labour force, employment and unemployment by sex, 2nd quarter 2009 –  
2nd quarter 2010

Female

		Estimates	Standard Error	95% confidence interval	
				Lower limit	Upper limit
Labour force					
	2009 Q2	207,200	7,400	192,400	221,800
	Q3	211,700	6,500	198,900	224,600
	Q4	211,900	7,000	198,100	225,600
	2010 Q1	214,700	6,400	202,100	227,200
	Q2	222,300	6,400	209,700	234,900
Employment					
	2009 Q2	177,400	6,000	165,500	189,200
	Q3	184,500	6,000	172,800	196,300
	Q4	189,600	6,800	176,200	202,900
	2010 Q1	186,000	6,000	174,200	197,700
	Q2	195,600	6,200	183,400	207,700
Unemployment					
	2009 Q2	29,800	2,900	23,900	35,600
	Q3	27,200	2,200	22,900	31,600
	Q4	22,300	2,000	18,500	26,200
	2010 Q1	28,700	2,200	24,400	33,000
	Q2	26,700	2,000	22,700	30,700
Unemployment rate					
	2009 Q2	14.4	1.2	12.1	16.7
	Q3	12.8	1.0	11.0	14.7
	Q4	10.5	0.9	8.8	12.3
	2010 Q1	13.4	0.9	11.5	15.2
	Q2	12.0	0.9	10.3	13.8
Activity rate					
	2009 Q2	42.5	1.0	40.5	44.5
	Q3	43.3	0.9	41.4	45.1
	Q4	43.2	1.0	41.3	45.1
	2010 Q1	43.5	1.0	41.6	45.4
	Q2	44.9	0.9	43.1	46.8

## Longer time series

19. The following graphs show the series for employment, unemployment and activity rate over a six year period.

Chart 3: Employment by quarter, 1st quarter 2004 – 2nd quarter 2010

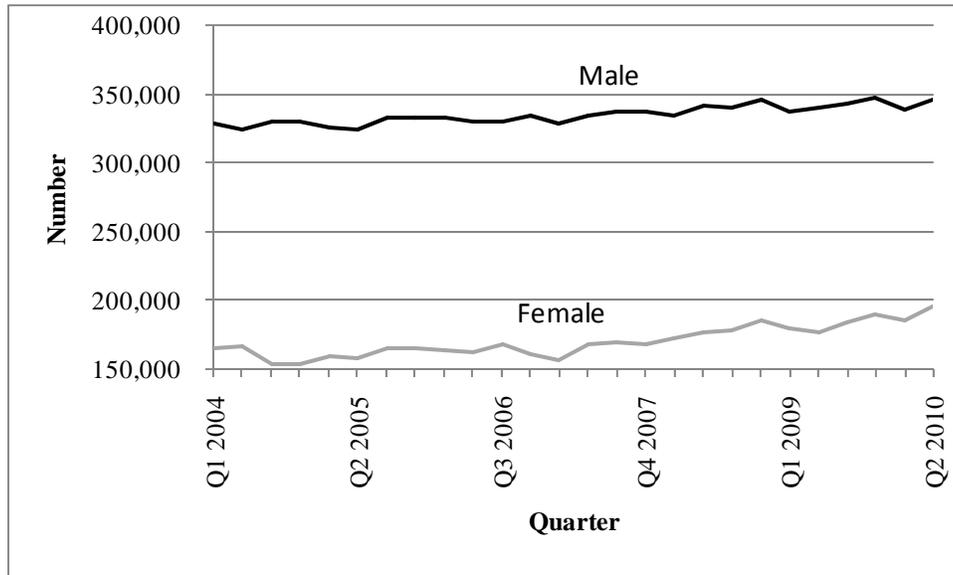


Chart 4: Unemployment rate by quarter, 1st quarter 2004 – 2nd quarter 2010

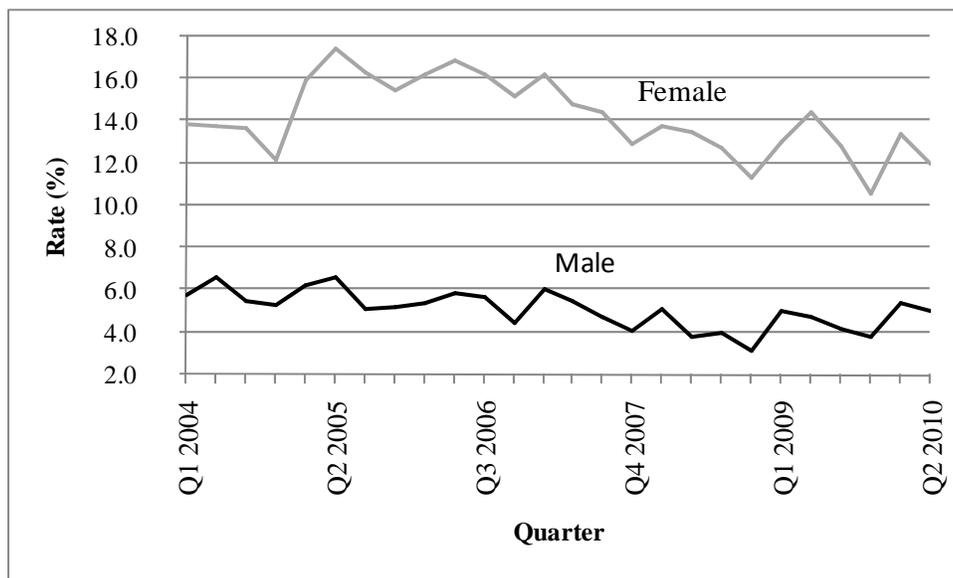


Chart 5: Activity rate by quarter, 1st quarter 2004 – 2nd quarter 2010

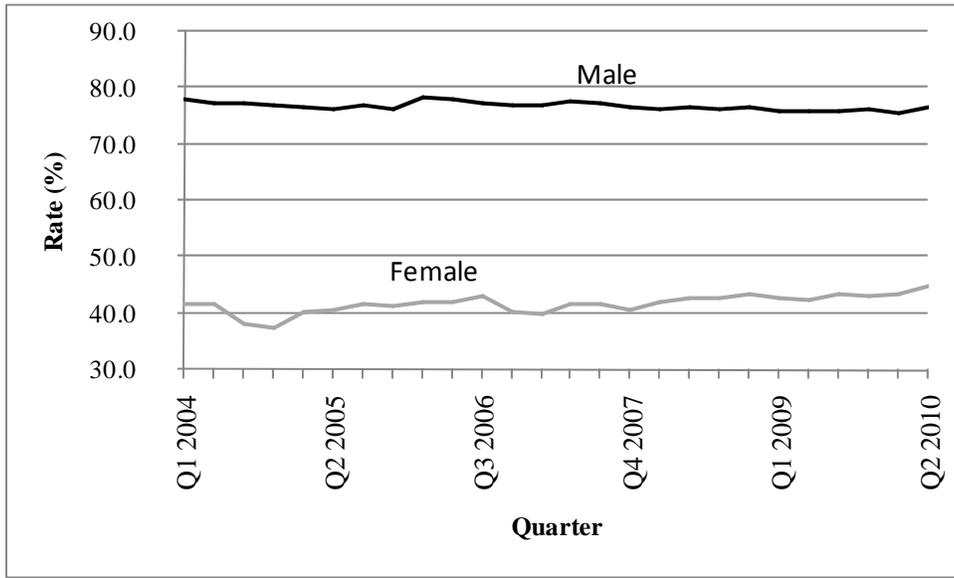
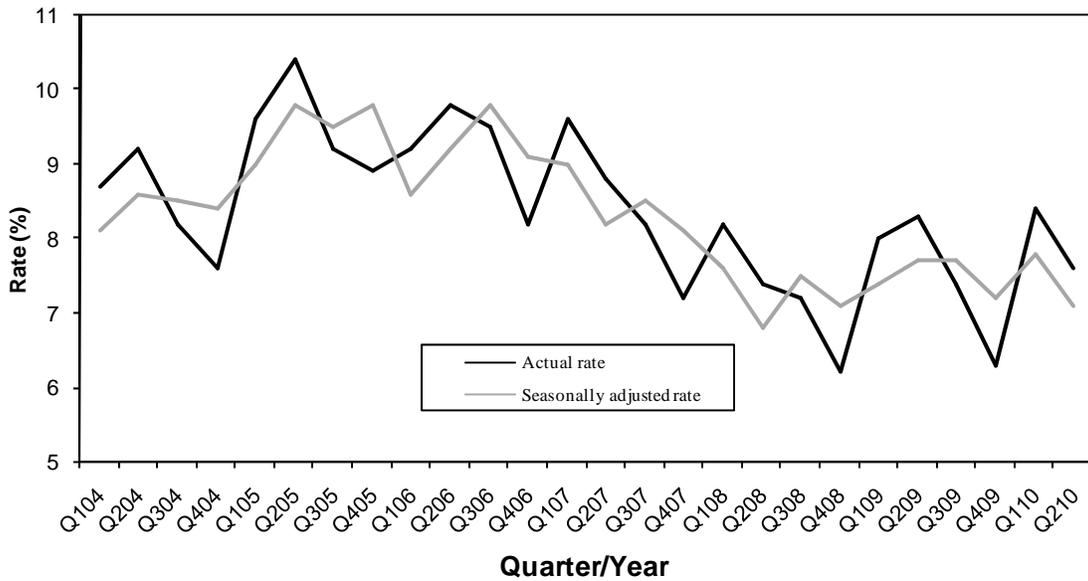


Chart 6: Actual and seasonally adjusted unemployment rate, 1st quarter 2004 – 2nd quarter 2010



The following tables are available together with the web version of this publication and can be downloaded from the CSO website at <http://statsmauritius.gov.mu>. From the homepage, click on 'Statistics by subject' followed by 'labour' then select the appropriate publication under the heading 'Publications – Economic and Social Indicators'.

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## NOTES

### **Release of Labour Force data**

Labour Force statistics are compiled and published in the “Economic and Social Indicators” in March, June, September and December according to an advance calendar posted on the website of the Central Statistics Office (<http://statsmauritius.gov.mu>). This issue provides data for the second quarter 2010 compared to the same quarter a year ago.

However, where appropriate, historical series are also provided for the main indicators.

### **The CMPHS Survey methodology**

#### **Data collection**

Face to face interviews of household members are carried out by qualified interviewers recruited by the office.

#### **Frequency of data collection**

Data collection is carried out monthly except in 2004 when it was carried out every quarter. Up to 2005, the reference period for data on labour force was the last week of the survey month. As from 2006, the reference week has been changed to the second week of the survey month so that estimates can be published within one quarter of the reference period, as required by the IMF Special Data Dissemination System (SDDS) to which the country expects to graduate by January 2011.

#### **Scope and coverage of collection**

All private Mauritian households in the islands of Mauritius and Rodrigues are covered.

#### **Sampling method**

A Stratified two-stage sampling design is used. At the first stage, Primary Sampling Units (PSUs) are selected with probability proportional to size and at the second stage, a fixed number of households is selected from each selected PSU.

Prior to 2005, the first stage stratification factors were urban, semi urban and rural geographical locations. As from 2005, the Relative Development Index (RDI) is used as the spatial stratification factor. This index is based on 12 variables encompassing housing and living conditions, literacy and education, and employment derived from the 2000 Housing and Population Census to rank PSUs. A set of RDIs for administrative regions has been published in the series "Economic and Social Indicators" - Issue No. 393.

The second stage stratification criteria are community, household size and average monthly expenditure of the household.

### **Sample size**

From 1999 to 2003, around 6,500 households were covered each year. In 2004, the sample was increased to 8,640 so that reliable quarterly estimates of labour force, employment and unemployment could be worked out. As from 2005, the sample for the year has been further increased to 11,280. Furthermore, in order to measure quarterly changes, 50% of the households sampled in a quarter are re-interviewed in the following quarter; for example, 50% of the households sampled in the first quarter of 2005 have been re-interviewed in the second quarter of 2005.

### **Questionnaire**

The CMPHS questionnaire comprises three modules: a basic module common to all rounds of the survey covering the general characteristics of the population (b) a second module covering labour force with in-depth investigation and a core set of questions which are kept constant at all rounds of the survey and (c) a third module grouping other topics of interest but investigated in less details.

### **Estimation and reliability of results**

Estimates worked out from household survey data are inevitably subject to sampling variability since they are based on information collected from only a sample of households rather than from all households. The Standard Error (S.E) which is a measure of this variability, used to set confidence intervals for any estimate (whether a total or a rate) derived from the sample. For example, a 95% confidence interval indicates that there is 95% chance that the upper and lower limits of the interval enclose the true value (which would be obtained if all households had been surveyed). Standard errors and confidence intervals are calculated for the main labour force estimates.

## **Definitions**

### **Household**

A household is defined as either a person living on his/her own or a group of two or more persons, who may or may not be related, but who live together and make common provision for food and other essentials for living.

### **Employment**

Employed population consists of Mauritians aged 16 years and above (16+) who have worked for pay, profit or family gain for at least one hour during the reference week of a month. It includes those who are temporarily absent from work for reasons such as leave with pay, leave without pay and temporary disorganisation of work (bad weather, break down of equipment, lack of order, etc.).

It is to be noted that as from year 2007, labour force estimates are based on population aged 16 years and above, following the amendment to the Labour Act in December 2006 whereby the minimum legal working age is 16 years, and the subsequent recommendation by the ILO to be in line with the amended Labour Act.

### **Unemployment**

Unemployed population comprises all Mauritians aged 16+ who are not working but who are looking for work and are available for work during the reference period.

### **Labour force**

Labour force or active population is made up of employed and unemployed population.

### **Unemployment rate**

Unemployment rate is the ratio (%) of unemployment to labour force.

### **Inactive population**

Inactive population includes all Mauritians aged 16+ years, not forming part of the labour force for reasons such as attendance at educational institutions, engagement in household duties, retirement, old age and infirmity/disablement.

### **Activity rate**

Activity rate is the ratio (%) of labour force to population aged 16+ (active and inactive population).

**Employer**

An employer is a person who operates his/her own business or trade and hires one or more employees.

**Own account worker**

An Own account worker is a person who operates his/her own business or trade but does not hire employees. He/She may be working alone or with the help of contributing family workers.

**Employee**

An Employee is a person who works for pay for someone else, even in a temporary capacity.

**Apprentice**

An Apprentice is a person being trained for a job or trade and does not receive pay or may just receive some pocket money; an apprentice is considered as an employee.

**Contributing family worker**

A Contributing family worker is a person who works without pay in an enterprise operated by a family member.

**Educational attainment**

*Primary:* comprises persons who have studied up to a “Standard” between Standard 1 and the Certificate of Primary Education (CPE) or equivalent.

*Secondary:* comprises persons who have studied up to a “Form” between Form 1 and the Higher School Certificate (HSC) or equivalent.

*Tertiary:* comprises persons who in addition to their secondary educational certificates (SC and HSC or equivalent) also possess either a certificate/diploma (which is above the HSC but below a first degree) or a degree.

## Annual labour force estimates based on data from various sources, 2002 - 2010

	Labour force			Employment				Unemployment <sup>1</sup>	
	Mauritians aged 16+	Foreign workers	Total	in large establishments	outside large establishments	Total	of whom Mauritians	Number	Rate
	(000s)	(000s)	(000s)	(000s)	(000s)	(000s)	(000s)	(000s)	(%)
<b>Both sexes</b>									
2002	513.0	17.0	<b>530.0</b>	297.2	196.0	<b>493.2</b>	476.2	36.8	7.2
2003	520.9	18.2	<b>539.1</b>	296.9	202.1	<b>499.0</b>	480.8	40.1	7.7
2004	531.3	17.5	<b>548.8</b>	293.3	210.9	<b>504.2</b>	486.7	44.6	8.4
2005	542.5	16.6	<b>559.1</b>	292.2	215.0	<b>507.2</b>	490.6	51.9	9.6
2006	548.4	16.7	<b>565.1</b>	295.1	220.2	<b>515.3</b>	498.6	49.8	9.1
2007	548.9	21.6	<b>570.5</b>	302.0	221.7	<b>523.7</b>	502.1	46.8	8.5
2008	559.4	24.0	<b>583.4</b>	311.6	231.4	<b>543.0</b>	519.0	40.4	7.2
2009	566.3	21.0	<b>587.3</b>	306.0	239.8	<b>545.8</b>	524.8	41.5	7.3
2010 <sup>2</sup>	574.0	22.2	<b>596.2</b>	310.0	243.3	<b>553.3</b>	531.1	42.9	7.5
<b>Change current year over previous:</b>	7.7	1.2	<b>8.9</b>	4.0	3.5	<b>7.5</b>	6.3	1.4	0.2
<b>Male</b>									
2002	339.8	6.4	<b>346.2</b>	188.2	140.0	<b>328.2</b>	321.8	18.0	5.3
2003	343.1	7.9	<b>351.0</b>	188.2	143.2	<b>331.4</b>	323.5	19.6	5.7
2004	347.8	9.0	<b>356.8</b>	189.1	147.7	<b>336.8</b>	327.8	20.0	5.8
2005	349.6	9.1	<b>358.7</b>	189.3	149.2	<b>338.5</b>	329.4	20.2	5.8
2006	351.4	8.3	<b>359.7</b>	190.0	150.5	<b>340.5</b>	332.2	19.2	5.5
2007	353.6	12.1	<b>365.7</b>	195.6	151.5	<b>347.1</b>	335.0	18.6	5.3
2008	355.6	14.7	<b>370.3</b>	201.0	154.7	<b>355.7</b>	341.0	14.6	4.1
2009	358.1	13.0	<b>371.1</b>	198.0	157.3	<b>355.3</b>	342.3	15.8	4.4
2010 <sup>2</sup>	361.3	13.2	<b>374.5</b>	199.0	158.3	<b>357.3</b>	344.1	17.2	4.8
<b>Change current year over previous:</b>	3.2	0.2	<b>3.4</b>	1.0	1.0	<b>2.0</b>	1.8	1.4	0.4
<b>Female</b>									
2002	173.2	10.6	<b>183.8</b>	109.0	56.0	<b>165.0</b>	154.4	18.8	10.9
2003	177.8	10.3	<b>188.1</b>	108.7	58.9	<b>167.6</b>	157.3	20.5	11.5
2004	183.5	8.5	<b>192.0</b>	104.2	63.2	<b>167.4</b>	158.9	24.6	13.4
2005	192.9	7.5	<b>200.4</b>	102.9	65.8	<b>168.7</b>	161.2	31.7	16.4
2006	197.0	8.4	<b>205.4</b>	105.1	69.7	<b>174.8</b>	166.4	30.6	15.5
2007	195.3	9.5	<b>204.8</b>	106.4	70.2	<b>176.6</b>	167.1	28.2	14.4
2008	203.8	9.3	<b>213.1</b>	110.6	76.7	<b>187.3</b>	178.0	25.8	12.7
2009	208.2	8.0	<b>216.2</b>	108.0	82.5	<b>190.5</b>	182.5	25.7	12.3
2010 <sup>2</sup>	212.7	9.0	<b>221.7</b>	111.0	85.0	<b>196.0</b>	187.0	25.7	12.1
<b>Change current year over previous:</b>	4.5	1.0	<b>5.5</b>	3.0	2.5	<b>5.5</b>	4.5	0.0	-0.2

**Note:**

The above figures have been worked out in order to give a set of comparable labour force estimates obtained from various sources. Users are cautioned in the use of these figures given that there are differences related to the reference period, coverage and methodology. The different sources from which these estimates have been obtained are as follows:

- i CMPHS for Mauritian labour force estimates which are subject to sampling variability as mentioned at paragraph 17.
- ii The Annual Survey of Employment and Earnings (SEE) carried out in March of each year. Employment figures refer to jobs in large establishments employing 10 or more persons and include both Mauritians and foreign workers.
- iii Employment in 'other than large' establishments has been estimated after reconciling data from CMPHS, SEE and administrative sources.

<sup>1</sup> Unemployment figures and rates refer to Mauritians

<sup>2</sup> Forecast