

## **Continuous Multi-Purpose Household Survey - Fourth Quarter 2004**

### **Main results**

#### **1. Introduction**

This issue of Economic and Social Indicators presents the main results of the Continuous Multi-Purpose Household Survey (CMPHS) for the fourth quarter of 2004. The CMPHS, which started in 1999, is a permanent household survey carried out continuously over a year to collect information on topics of current interest.

Following the recommendations of a Technical Committee set up to analyse the findings of a World Bank study on unemployment, the CMPHS is used as the instrument for measuring labour force, employment and unemployment on a quarterly basis as from 2004. Up to 2003, only mid-year estimates have been made on the basis of the latest Population Census or Labour Force Sample Survey, updated with data from surveys of establishments and information from various administrative sources. The Technical Committee also recommended that the lower age cut-off point for the labour force should be 15 years instead of 12 years used hitherto.

It is to be stressed that the labour force, employment and unemployment estimates given in this report are based on information collected from a sample of households and relate to the last week of the quarter. Estimates for year 2004 given in Table 2 have been worked out from data cumulated over the whole year and hence are not strictly comparable with the mid-year estimates published up to 2003.

#### **2. The sample**

The 2004 CMPHS covered a total of 8,640 households (7,920 in the Island of Mauritius and 720 in Rodrigues), spread over the whole year. The results for each quarter are based on a sample of 2,160 households (1,980 in the Island of Mauritius and 180 in Rodrigues).

The sampling method used is a stratified two-stage design, which ensures representativeness of all regions and all households in the country.

#### **3. 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, can be 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% chances 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 have been calculated for the main labour force estimates and are shown in Table 1. Although the survey results for September 2004 are also given in this report, the margins of uncertainty associated with the sample estimates do

not support the monitoring of trends in the short term. All the changes observed, lie within the error range determined by the 95% confidence intervals for the December estimates.

## **Survey results**

### **4. Labour force characteristics**

#### **4.1 Definitions**

Definitions of labour force, employment and unemployment used are according to the ILO recommendations.

The labour force or active population is made up of the employed and the unemployed populations. The employed population consists of persons who are working while the unemployed population consists of persons who are *not working* but who are *looking for work* and are *available for work*.

The inactive population is neither employed nor unemployed and consists mainly of students, homemakers, retired persons and the disabled.

The activity rate is defined as the percentage of the Mauritian population aged 15 years and over who is active.

The unemployment rate is the percentage of the Mauritian labour force who is unemployed.

#### **4.2 Activity status**

The total population estimated from the CMPHS data as at December 2004 was 1,224,500. The population aged 15 years and over was 914,500. Among them, some 482,400 (53%) had a job, 39,900 (4%) were unemployed, 180,000 (20%) were homemakers, 76,500 (8%) were students, 93,300 (10%) were retired or too old to work, and 25,200 (3%) were disabled.

It is to be noted that an estimated 5,400 persons were not working but were available for work; however, they were not actively looking for work. These persons have been classified among the inactive; they have not been considered as unemployed since they do not satisfy all the three criteria for unemployment (i.e. not working, looking for work and available for work).

From the survey responses, about 31% of these 5,400 persons believed that suitable jobs were not available. Another 34%, mostly women, were not actively looking for work because of household responsibilities.

**Table 1 - Estimated labour force, employment, unemployment and inactive population by sex, September & December 2004**

	September 2004 Estimates	December 2004			
		Estimates	Standard Error	95% Confidence Interval	
				Lower Limit	Upper Limit
<b>Labour Force</b>					
Both Sexes	527,800	522,300	11,400	499,600	544,900
Male	349,400	346,900	7,800	331,200	362,500
Female	178,400	175,400	6,300	162,900	187,900
<b>Employment</b>					
Both Sexes	483,500	482,400	10,500	461,500	503,200
Male	329,800	328,400	7,400	313,700	343,100
Female	153,700	154,000	5,800	142,400	165,500
<b>Unemployment</b>					
Both Sexes	44,300	39,900	3,500	33,000	46,800
Male	19,600	18,500	2,000	14,400	22,500
Female	24,700	21,400	2,400	16,700	26,200
<b>Unemployment rate (%)</b>					
Both Sexes	8.4	7.6	0.6	6.4	8.9
Male	5.6	5.3	0.6	4.2	6.4
Female	13.8	12.2	1.3	9.7	14.7
<b>Inactive Population</b>					
Both Sexes	386,100	392,200	9,100	374,100	410,400
Male	100,000	103,200	4,300	94,600	111,800
Female	286,100	289,000	7,400	274,400	303,700

Table 2 shows estimates of labour force, employment and unemployment for the four quarters of 2004 and also averages worked out for the year.

The quarterly estimates show that the number of inactive females has been increasing while the number of both employed and unemployed has been decreasing. Hence, both activity rate and unemployment rate for females have been going down. This may be due to some women moving out of the labour market on losing their jobs.

Based on data collected throughout the year, the average number of employed and unemployed persons in 2004 was estimated at 487,000 and 45,100 respectively. Unemployment rate worked out to 8.5% ( 5.8% for males and 13.5% for females).

**Table 2 - Estimated labour force, employment, unemployment and inactive population by sex, 2004**

	<b>March 2004</b>	<b>June 2004</b>	<b>September 2004</b>	<b>December 2004</b>	<b>Average 2004</b>
<b>Labour Force</b>					
Both Sexes	541,100	540,700	527,800	522,300	532,100
Male	348,700	347,500	349,400	346,900	348,200
Female	192,400	193,200	178,400	175,400	183,900
<b>Employment</b>					
Both Sexes	494,100	491,200	483,500	482,400	487,000
Male	328,400	324,600	329,800	328,400	327,900
Female	165,700	166,600	153,700	154,000	159,100
<b>Unemployment</b>					
Both Sexes	47,000	49,500	44,300	39,900	45,100
Male	20,300	22,900	19,600	18,500	20,300
Female	26,700	26,600	24,700	21,400	24,800
<b>Inactive Population</b>					
Both Sexes	367,700	373,000	386,100	392,200	381,500
Male	98,800	102,400	100,000	103,200	101,600
Female	268,900	270,600	286,100	289,000	279,900
<b>Activity rate (%)</b>					
Both Sexes	59.6	59.2	57.8	57.1	58.2
Male	78.0	77.2	77.7	77.1	77.4
Female	41.7	41.7	38.4	37.8	39.7
<b>Unemployment rate (%)</b>					
Both Sexes	8.7	9.2	8.4	7.6	8.5
Male	5.8	6.6	5.6	5.3	5.8
Female	13.9	13.8	13.8	12.2	13.5

### 4.3 Employed population

At December 2004, the number of persons at work was estimated at 482,400 (328,400 males and 154,000 females) as shown in Table 1. Employment sex ratio works out to approximately, 2 males to 1 female.

#### 4.3.1 Employment by industrial sector

Table 3 shows that, at December 2004 the primary sector, comprising the agricultural and mining & quarrying industries, provided jobs to about 10% of the working population. The secondary sector, which includes manufacturing, electricity & water, and construction industries employed another 34%, and the tertiary sector, which covers trade, hotels & restaurants, transport and all service industries, 56%.

**Table 3 - Percentage distribution of employed population by industrial sector and sex, September & December 2004**

Industrial sector	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Primary	11.3	12.5	9.0	9.7	10.3	8.6
Secondary	34.4	35.9	31.0	33.7	35.1	30.6
Tertiary	54.3	51.6	60.0	56.6	54.6	60.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

#### 4.3.2 Employment by occupation

Table 4 shows the distribution of the employed population by occupation. At December 2004, some 16% were “legislators, senior officials and managers; professionals; technicians and associate professionals”, 9% were “clerks”, 17% “service workers and shop and market sales workers”, 37% “skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers”, and the remaining 21% were engaged in “elementary occupations”.

**Table 4 - Percentage distribution of employed population by occupation group and sex, September & December 2004**

ISCO <sup>1</sup> Major occupational group	Occupation group	September 2004			December 2004		
		Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
1 - 3	Legislators, senior officials and managers; professionals; technicians and associate professionals	15.9	14.7	18.4	16.2	15.7	17.6
4	Clerks	9.2	5.9	16.4	8.6	5.1	15.8
5	Service workers and shop and market sales workers	16.5	16.0	17.7	16.8	16.3	18.1
6 - 8	Skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers	38.2	44.4	24.9	36.8	42.6	24.0
9	Elementary occupations	20.2	19.0	22.6	21.6	20.3	24.5
	<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

<sup>1</sup> International Standard Classification of Occupations

A higher proportion (63%) of males was employed as “skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers” and in “elementary occupations” compared to females (48%). On the other hand, a larger proportion of females (52%) was engaged in the higher occupation groups, namely “legislators, senior officials and managers; professionals; technicians and associate

professionals; clerks; service workers and shop and market sales workers” compared to 37% among males.

#### 4.3.3 *Employment status*

At December 2004, the majority, 79%, of workers were employees and the remaining 21% were working in their own or family enterprises as employers, own account workers or contributing family workers.

**Table 5 - Percentage distribution of employed population by employment status and sex, September & December 2004**

Employment status	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Employer	2.4	3.2	0.9	3.2	4.3	0.9
Own account worker	14.9	17.0	10.2	15.7	18.8	9.1
Employee	80.8	79.2	84.3	79.1	76.0	85.5
Contributing family worker	1.9	0.6	4.6	2.0	0.9	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

The data at December 2004 also show that the proportion of employees was higher among working women (86%) than among working men (76%) while the proportion of employers and own-account workers was higher among men (23%) than among women (10%). Contributing family workers constituted about 4% of working women compared to one per cent among working men (Table 5).

#### 4.3.4 *Hours of work*

**Table 6 - Percentage distribution of employed population by sex and number of hours worked during the survey reference week, September & December 2004**

Actual number of hours worked per week	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
0	2.6	3.1	1.6	5.8	4.6	8.1
1 - 23	6.9	5.1	10.8	7.8	5.4	13.1
24 - 40	42.3	40.2	46.7	36.8	36.5	37.4
41 - 50	31.6	32.6	29.5	31.2	32.4	28.8
51 and above	16.6	19.0	11.4	18.4	21.1	12.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

About 6% of employed persons did not work during the reference week, either because they were sick or on leave (Table 6). Some 50% reported having worked for more

than 40 hours. These workers were mostly in manufacturing enterprises and wholesale & retail trade.

About 8% of the total employed population had worked for less than 24 hours during the reference week. Among them, 29% had worked less than 24 hours because they were on leave during part of the reference week. It is also worthwhile noting that for 27%, the usual working hours were in fact less than 24 hours per week while another 16% had worked less than 24 hours because of insufficient work, and a further 8% because of the temporary or part-time nature of their jobs.

The average number of hours worked during the reference week of December 2004, including overtime but excluding all leaves and lunchtime, was 39.4 hours (41.2 for men and 35.3 for women).

#### 4.4 Unemployment

The number of unemployed at December 2004 is estimated at 39,900 (18,500 males and 21,400 females). The unemployment rate, defined as the percentage of the labour force who is unemployed, works out to 7.6% (5.3% for males and 12.2% for females). As shown in Table 1, the 95% Confidence Interval for the December 2004 estimate of unemployment rate is 6.4% to 8.9%.

##### 4.4.1 Characteristics of unemployed persons

###### (i) Age and sex

**Table 7 - Percentage distribution of unemployed population by age and sex, September & December 2004**

Age group (years)	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Below 20	12.3	12.7	11.9	17.8	23.2	13.1
20 - 24	36.9	43.8	31.5	31.1	38.4	24.8
25 - 29	16.7	19.7	14.2	13.8	14.0	13.6
30 - 39	17.1	10.7	22.3	21.7	14.4	28.0
40 - 49	11.3	7.6	14.2	12.3	9.7	14.6
50 & over	5.7	5.5	5.9	3.3	0.3	5.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 7 shows that unemployed males are younger than unemployed females. Thus, 62% of the males were under 25 years compared to 38% for females. On the other hand, 10% of unemployed males were 40 years or more compared to 20% for females. The mean age of the unemployed works out to 26 years for males and 31 years for females.

(ii) *Marital status***Table 8 - Percentage distribution of unemployed population by marital status and sex, September & December 2004**

Marital status	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Married	36.9	18.0	51.9	30.4	13.7	44.7
Widowed, divorced or separated	5.7	4.9	6.3	9.0	2.0	15.0
Single	57.4	77.1	41.8	60.6	84.3	40.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

A high proportion of the unemployed (61%) were single, 30% were married and the remaining 9% were widowed, divorced or separated. Unemployed males were mostly single (84%) while 45% of unemployed females were married and 40% single (Table 8).

(iii) *Educational attainment*

The December 2004 figures show that among the unemployed, 25% had not passed CPE, and a further 40% had not passed SC. The proportions of unemployed with SC, HSC and tertiary education were 23%, 7% and 5% respectively (Table 9).

**Table 9 - Percentage distribution of unemployed population by educational attainment and sex, September & December 2004**

Educational attainment	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
<b>Primary</b>	<b>31.3</b>	<b>33.1</b>	<b>29.9</b>	<b>34.7</b>	<b>34.2</b>	<b>35.0</b>
Below CPE	23.9	27.2	21.3	25.3	24.0	26.4
Passed CPE	7.4	5.9	8.6	9.4	10.2	8.7
<b>Secondary</b>	<b>64.1</b>	<b>62.5</b>	<b>65.4</b>	<b>60.5</b>	<b>60.7</b>	<b>60.3</b>
Below SC	34.4	40.2	29.8	31.1	36.3	26.6
Passed SC	23.3	17.6	27.9	22.5	16.9	27.3
Passed HSC	6.4	4.7	7.7	6.9	7.5	6.4
<b>Tertiary</b>	<b>4.6</b>	<b>4.4</b>	<b>4.7</b>	<b>4.8</b>	<b>5.1</b>	<b>4.6</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Analysis by sex shows that 70% of the unemployed males had only primary or lower secondary education, that is they had not reached the School Certificate level, compared to 62% of unemployed females. The proportion of unemployed having a School Certificate was 17% among males and 27% among females; and corresponding figures for Higher School Certificate holders were 8% and 6%.



*(iv) Duration of unemployment*

At December 2004, 67% of the unemployed reported having been looking for work for up to one year and 33% for more than one year. Analysis by sex shows that unemployed women had been looking for work for longer periods than their male counterparts (Table 10).

**Table 10 - Percentage distribution of unemployed population by duration of unemployment and sex, September & December 2004**

Duration of unemployment (months)	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Up to 12	59.0	62.4	56.2	67.1	71.6	63.2
13 - 24	20.6	17.0	23.4	15.5	12.4	18.2
More than 24	20.4	20.6	20.4	17.4	16.0	18.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

*(v) Work experience*

Around 58% of the unemployed had worked before while the remaining 42% were looking for a job for the first time. Among unemployed males, 63% had worked before while the corresponding proportion among females was 53%.

*(vi) Job search*

As regards job search, some of the unemployed had recourse to more than one method. At December 2004, the most common method was “checked at factories, worksites, etc.”, reported by 51%, followed by “applied to prospective employers” reported by 48%. Around 43% were registered at the Employment Service. Only about 2% had taken steps to start a business of their own (Table 11).

**Table 11 - Percentage distribution of unemployed persons by main job search method and sex, September & December 2004**

Main job search method	September 2004			December 2004		
	Both Sexes (%)	Male (%)	Female (%)	Both Sexes (%)	Male (%)	Female (%)
Checked at factories, worksites, etc.	41.3	50.6	33.9	51.2	57.0	46.3
Applied to prospective employers	43.8	45.2	42.7	48.2	54.8	42.6
Registration at Employment Service	32.8	31.8	33.6	42.9	39.2	46.0
Placed or answered advertisements	22.4	17.4	26.3	15.1	11.5	18.2
Sought assistance or advice	22.2	16.1	27.1	10.7	7.9	13.1
Tried to set up own business	2.2	0.7	3.4	1.5	2.2	1.0

#### 4.5 Inactive population

The number of persons aged 15 years and over, not forming part of the labour force (inactive population) was estimated at 392,200 (103,200 males and 289,000 females) at December 2004. The male inactives comprised mainly old, retired or disabled persons (58,800) and students (38,100). Inactive females were mostly homemakers (178,900) while, old, retired or disabled persons was estimated at 59,700 and students 38,400.

Among women engaged in household activities, 85% were married, 84% had not reached the School Certificate level and approximately one out of four had worked in the past.

#### 5. Energy use

The 2004 CMPHS also investigated the main types of energy used by households as well as measures taken to reduce electrical energy consumption.

**Table 12 - Principal fuel used for cooking purposes, 3rd quarter and 4th quarter, 2004**

Principal fuel used	% of households reporting	
	3rd quarter 2004	4th quarter 2004
Gas	93.1	92.0
Wood	3.7	5.2
Kerosene	2.3	1.9
Electricity	0.7	0.8
Other	0.2	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Table 12 shows the main types of energy used for cooking. It is noted that gas is by far the most common source of energy used for cooking purposes during the fourth quarter of 2004. The proportion of households who reported using gas for cooking was 92%.

The various sources of energy used to heat water for bathing purposes are given in Table 13. Gas was again the main source of energy used, reported by more than half of the households. Nearly 18% of households reported having a gas water heater inside the bathroom, while 34 % reported heating water on a gas stove. Electricity was the next most common source of energy for heating water for bathing purposes, reported by about 27% of households.

Only 3% of households were using solar water heaters. About 87% of the households who did not have solar water heaters were not interested in acquiring one. The main reason for this lack of interest was the high cost of the equipment, as reported by 44% of them.

**Table 13 - Main source of energy used for heating water for bathing purposes,  
3rd quarter and 4th quarter, 2004**

Main source of energy used	% of households reporting	
	3rd quarter 2004	4th quarter 2004
Gas	53.1	51.7
<i>of which</i>		
Stove	35.6	34.2
Water Heater	17.5	17.5
Electricity	24.3	27.1
<i>of which</i>		
Electrical system inside bathroom	18.7	22.3
Electric kettle	5.6	4.8
Wood	11.5	11.3
Solar water heater	4.4	3.1
Kerosene stove	3.7	2.5
Other	0.2	0.3
Do not use hot water for bathing	2.8	4.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>

A large proportion (85%) of the households surveyed reported taking various measures to reduce electrical energy consumption. The most common measures taken were 'turning off lights/electrical appliances when not in use', 'use of other types of fuel instead of electricity for cooking' and 'use of other types of fuel instead of electricity for water heating' (Table 14).

**Table 14 - Measures taken to reduce electrical energy consumption,  
3rd quarter and 4th quarter, 2004**

Measure	% of households reporting	
	3rd quarter 2004	4th quarter 2004
Turning off lights/electrical appliances when not in use	83.5	82.1
Use of other types of fuel instead of electricity for cooking	43.6	35.4
Use of other types of fuel instead of electricity for water heating	34.1	25.8
Use of low consumption electrical bulbs	30.7	27.1
Use of low consumption electrical appliances	18.1	15.1

## 6. Safety and security

Another topic covered by the survey was 'safety and security' and the data relate to the twelve months preceding the interview.

**Table 15 - Measures taken to improve the security of dwellings,  
3rd quarter and 4th quarter, 2004**

Security measure	% of households reporting	
	3rd quarter 2004	4th quarter 2004
Lock gates/entrance to building	48.8	56.0
Burglar proof windows/doors or shutters installed	46.9	50.9
Keep dog	51.3	49.8
Alarm system installed	2.1	1.9
Watchperson/security guard engaged	1.3	1.9

Around 90% of households surveyed during the fourth quarter reported having taken security measures at their dwellings to minimise risks of burglary. The measures taken are shown in Table 15.

However, only about 3% of households surveyed reported to be insured against theft.

The percentage of households who reported having been victims of house burglary during the twelve months preceding their interviews was around 4%. During the same period, approximately the same proportion (3%) of households surveyed reported having been victims of theft related to vehicles (that is, vehicles or accessories or objects placed inside).

Apart from house burglary and vehicle theft, around 1% of households reported that during the twelve months preceding the survey, one or more of their members had been victims of theft in a public place.

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