## Continuous Multi-Purpose Household Survey - First Quarter 2004 Main results

## 1. Introduction

The Continuous Multi-Purpose Household Survey (CMPHS), which started in 1999, is a permanent household survey carried out continuously over a year to collect information on topics of current interest. In November 2003, a Technical Committee set up to analyse the findings of a World Bank study on unemployment, recommended that, as from 2004, the CMPHS be the dedicated instrument for measuring labour force, employment and unemployment on a quarterly basis. Up to now, 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.

This issue of Economic and Social Indicators presents the main results of the CMPHS for the first quarter of 2004. It is to be stressed that these results are based on a sample of 2,160 households and relate to the first quarter of 2004. Hence the estimates of labour force, employment and unemployment are not strictly comparable with the mid-year estimates published so far. Comparable estimates for mid-2004 will be released in April 2005 when survey data for all four quarters of 2004 become available.

## 2. The sample

The CMPHS will spread over the whole of 2004 and will cover a total of 8,640 households ( 7,920 in the Island of Mauritius and 720 in Rodrigues). The results for each quarter will be 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 the representativeness of all regions in the Republic.

## 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) is a measure of this variability. It can be used to set confidence intervals for any estimate (whether a total or a rate) derived from the sample. A 95\% confidence interval indicates that there is $95 \%$ confidence 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.

## 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 unemployment rate is defined as the percentage of the Mauritian labour force who is unemployed.

### 4.2 Activity status

The total population estimated from CMPHS data for the first quarter of 2004 was 1,217,000. The population aged 15 years and over was 908,800: among them, some 494,100 (55\%) had a job, 47,000 (5\%) were unemployed, 156,900 (17\%) were homemakers, 78,600 (9\%) were students, 89,000 ( $10 \%$ ) were retired or too old to work, and 28,000 (3\%) were disabled.

Table 1 - Estimated Labour Force, Employment,Unemployment and Inactive Population by sex, March 2004

|  | Estimate | Standard Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lower Limit | Upper Limit |
| Labour Force |  |  |  |  |
| Both Sexes | 541,100 | 15,500 | 510,800 | 571,400 |
| Male | 348,700 | 10,200 | 328,800 | 368,600 |
| Female | 192,400 | 6,900 | 178,900 | 205,900 |
| Employment |  |  |  |  |
| Both Sexes | 494,100 | 13,900 | 466,800 | 521,400 |
| Male | 328,400 | 9,700 | 309,500 | 347,400 |
| Female | 165,700 | 6,100 | 153,600 | 177,700 |
| Unemployment |  |  |  |  |
| Both Sexes | 47,000 | 4,400 | 38,400 | 55,600 |
| Male | 20,300 | 2,300 | 15,800 | 24,700 |
| Female | 26,700 | 3,100 | 20,700 | 32,800 |
| Unemployment rate (\%) |  |  |  |  |
| Both Sexes | 8.7 | 0.7 | 7.3 | 10.1 |
| Male | 5.8 | 0.6 | 4.6 | 7.0 |
| Female | 13.9 | 1.4 | 11.1 | 16.7 |
| Inactive Population |  |  |  |  |
| Both Sexes | 367,700 | 11,500 | 345,100 | 390,400 |
| Male | 98,800 | 4,900 | 89,100 | 108,500 |
| Female | 268,900 | 9,000 | 251,400 | 286,500 |

It is to be noted that an estimated 5,900 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).

### 4.3 Employed population

The number of persons at work was estimated at 494,100, comprising 328,400 males ( $66 \%$ ) and 165,700 females ( $34 \%$ ). Employment sex ratio works out to 2 males to 1 female. The mean age of the employed population was 37.8 years ( 38.2 years for males and 37.1 years for females).

### 4.3.1 Employment by industrial sector

Table 2 shows that the primary sector, comprising the agricultural, mining and quarrying industries, provided jobs to about $10 \%$ of the working population. The secondary sector, which includes manufacturing, electricity \& water, and construction industries employed another $33 \%$, and the tertiary sector, which covers trade, hotels \& restaurants, transport and all service industries, $57 \%$.

Table 2 - Percentage distribution of the employed population by industrial sector and sex - March 2004

| Industrial sector | Both Sexes (\%) | Male (\%) | Female (\%) |
| :--- | :---: | :---: | :---: |
| Primary | 9.6 | 10.9 | 7.3 |
| Secondary | 33.0 | 33.7 | 31.7 |
| Tertiary | 57.4 | 55.4 | 61.0 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

### 4.3.2 Employment by occupation

Table 3 shows the distribution of the employed population by occupation. Some 15\% were engaged as "legislators, senior officials and managers; professionals; technicians and associate professionals", $9 \%$ as "clerks", $17 \%$ as "service workers and shop and market sales workers", $36 \%$ as "skilled agricultural and fishery workers; craft and related trades workers; and plant and machine operators and assemblers" and the remaining $23 \%$ in "elementary occupations".

Table 3 - Percentage distribution of the employed population by occupation group and sex - March 2004

| ISCO $^{\mathbf{1}}$ | Occupation group | Both Sexes (\%) | Male (\%) | Female (\%) |
| :---: | :--- | ---: | ---: | :---: |
| $1-3$ | Legislators, senior officials and managers; professionals; and |  |  |  |
|  | technicians and associate professionals | 14.9 | 13.5 | 17.6 |
| 4 | Clerks | 8.9 | 5.2 | 16.2 |
| 5 | Service workers and shop and market sales workers | 17.3 | 17.2 | 17.4 |
| $6-8$ | Skilled agricultural and fishery workers; craft and related |  |  |  |
|  | trades workers; plant and machine operators and assemblers |  | 36.4 | 42.7 |
| 9 | Elementary occupations | 22.5 | 21.4 | 23.6 |
|  | Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

${ }^{1}$ International Standard Classification of Occupations

A higher proportion (64\%) of employed 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 (49\%). On the other hand, a larger proportion of females (51\%) was engaged in the higher occupation groups, namely "clerks; service workers and shop and market sales workers; legislators, senior officials and managers; professionals; technicians and associate professionals" compared to males (36\%).

### 4.3.3 Employment status

The majority, 80\%, of workers were employees. Employers and own account workers made up around $17 \%$ of the workers and unpaid family workers the remaining $3 \%$.

The proportion of employees was higher among working women (84\%) than among working men ( $78 \%$ ) while the proportion of employers and own-account workers was higher among men (21\%) than among women (9\%). Unpaid family workers constituted $6 \%$ of working women compared to $1 \%$ among working men (Table 4).

Table 4 - Percentage distribution of the employed population by employment status and sex - March 2004

| Employment status | Both Sexes (\%) | Male (\%) | Female (\%) |
| :--- | ---: | ---: | ---: |
| Employer | 3.2 | 4.5 | 0.8 |
| Own account worker | 13.9 | 16.6 | 8.6 |
| Employee | 80.0 | 77.7 | 84.5 |
| Unpaid family worker | 2.9 | 1.2 | 6.1 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

### 4.3.4 Hours of work

About 2\% of employed persons did not work during the reference week, either because they were sick or on leave (Table 5). Some $47 \%$ reported having worked for more than 40 hours. These workers were mostly in manufacturing, trade, hotels \& restaurants and construction industries.

On the average, the number of hours worked during the reference week, including overtime but excluding all leaves and lunchtime was 40.2 hours ( 42.1 for men and 36.5 for women).

Table 5 - Percentage distribution of the employed population by sex and number of hours worked during reference week - March 2004

| Actual number of hours <br> worked per week | Both Sexes (\%) | Male (\%) | Female (\%) |
| :---: | :---: | :---: | :---: |
| 0 | 2.3 | 2.3 | 2.2 |
| $1-23$ | 8.4 | 5.7 | 13.7 |
| $24-40$ | 42.4 | 41.0 | 45.3 |
| $41-50$ | 31.3 | 33.2 | 27.6 |
| 51 and above | 15.6 | 17.8 | 11.2 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

### 4.4 Unemployment

For the first quarter of 2004, the number of unemployed is estimated at 47,000 ( 20,300 males and 26,700 females). The unemployment rate, defined as the percentage of the labour force who is unemployed, works out to $8.7 \%$ ( $5.8 \%$ for males and $13.9 \%$ for females). As shown in Table 1, the $95 \%$ Confidence Interval for the unemployment rate is $7.3 \%$ to 10.1\%.

### 4.4.1 Characteristics of unemployed persons

(i) Age and sex

Table 6 shows that unemployed males are younger than unemployed females. Thus, $63 \%$ of the males were under 25 years compared to $48 \%$ for females. On the other hand, $22 \%$ of unemployed males were 30 years or more compared to $39 \%$ for females. The mean age of the unemployed works out to 26 years for males and 28 years for females.
Table 6 - Percentage distribution of unemployed population by age and sex - March 2004

| Age group (years) | Both Sexes (\%) | Male (\%) | Female (\%) |
| :---: | :---: | :---: | :---: |
| Below 20 | 17.8 | 20.9 | 15.5 |
| $20-24$ | 36.5 | 42.1 | 32.3 |
| $25-29$ | 14.1 | 15.3 | 13.2 |
| $30-39$ | 17.5 | 14.5 | 19.7 |
| $40-49$ | 10.9 | 4.8 | 15.5 |
| $50 \&$ over | 3.2 | 2.4 | 3.8 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

(ii) Marital status

The majority of the unemployed (57\%) were single, $35 \%$ were married and the remaining $8 \%$ were widowed, divorced or separated. Unemployed males were mostly single (79\%) while unemployed females were mostly married (48\%), as given in Table 7.

Table 7 - Percentage distribution of the unemployed population by marital status and sex - March 2004

| Marital status | Both Sexes (\%) | Male (\%) | Female (\%) |
| :--- | :---: | :---: | :---: |
| Married | 35.1 | 17.7 | 48.3 |
| Widowed, divorced or separated | 7.5 | 3.2 | 10.7 |
| Single | 57.4 | 79.1 | 41.0 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

(iii) Educational attainment

Among the unemployed, $24 \%$ had not passed CPE, and a further $38 \%$ had not passed SC. The proportions of unemployed with SC, HSC and tertiary education were $17 \%$, $11 \%$ and $10 \%$ respectively. In general, unemployed females had higher educational level than unemployed males (Table 8).
Table 8 - Percentage distribution of unemployed population by educational attainment and sex - March 2004

| Educational level | Both Sexes (\%) | Male (\%) | Female (\%) |
| :---: | :---: | :---: | :---: |
| Primary | $\mathbf{3 6 . 4}$ | $\mathbf{3 8 . 6}$ | $\mathbf{3 4 . 9}$ |
| Below CPE | 24.4 | 28.1 | 21.7 |
| Passed CPE | 12.0 | 10.5 | 13.2 |
| Secondary | $\mathbf{5 4 . 1}$ | $\mathbf{5 2 . 6}$ | $\mathbf{5 5 . 1}$ |
| Below SC | 25.9 | 31.9 | 21.3 |
| Passed SC | 16.8 | 12.4 | 20.0 |
| Passed HSC | 11.4 | 8.3 | 13.8 |
| Tertiary | $\mathbf{9 . 5}$ | $\mathbf{8 . 8}$ | $\mathbf{1 0 . 0}$ |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

(iv) Duration of unemployment

About $68 \%$ of the unemployed reported having been looking for work for up to one year, $14 \%$ for one to two years and the remaining $18 \%$ for more than two years. The survey results indicate that unemployed women had been looking for work for longer periods than their male counterparts (Table 9).

Table 9 - Percentage distribution of unemployed persons by duration of unemployment and sex - March 2004

| Duration of unemployment | Both Sexes (\%) | Male (\%) | Female (\%) |
| :--- | :---: | :---: | :---: |
| Up to 12 months | 67.8 | 71.4 | 65.0 |
| 13-24 months | 14.5 | 13.2 | 15.5 |
| More than 24 months | 17.7 | 15.4 | 19.5 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

(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, $60 \%$ had worked before while the corresponding proportion among females was $56 \%$.
(vi) Job search

As regards job search, some of the unemployed had recourse to more than one method. The most common answer was "applied to prospective employers", reported by $51 \%$ of the unemployed, followed by "checked at factories, worksites, etc." reported by $44 \%$. Some $41 \%$ were registered at the Employment Service (Table 10).

Table 10 - Percentage distribution of unemployed persons by main job search method and sex - March 2004

| Main job search method | Both Sexes (\%) | Male (\%) | Female (\%) |
| :--- | :---: | :---: | :---: |
| Applied to prospective employers | 50.9 | 52.6 | 49.7 |
| Checked at factories, worksites, etc. | 44.3 | 49.6 | 40.2 |
| Registration at Employment Service | 40.5 | 43.0 | 38.7 |
| Placed or answered advertisements | 23.6 | 19.2 | 26.9 |
| Sought assistance or advice | 12.0 | 8.7 | 14.5 |

## 5. Energy use

The 2004 CMPHS questionnaire is also investigating the main types of energy used by households as well as measures taken to save energy.

Table 11 shows the main types of energy used for cooking purposes. A large majority of households (91\%) reported using gas.

Table 11 - Principal fuel used for cooking purposes - March 2004

| Principal fuel used | \% of households reporting |
| :--- | :---: |
| Gas |  |
| Wood | 91.0 |
| Kerosene | 4.1 |
| Electricity | 2.6 |
| Other | 2.2 |
| Total | 0.1 |

Gas was also the main source of energy used by $50 \%$ of households to heat water for bathing purposes: around $38 \%$ reported using gas stoves, and a further $12 \%$ had gas water heaters inside their bathrooms. The next most common source of energy used for heating water for bathing was electricity (28\%), with $22 \%$ of households having an electrical water heating system inside the bathroom, and another $6 \%$ using electric kettle. The various sources of energy reported are given in Table 12.

Table 12 - Main source of energy used for heating water for bathing purposes - March 2004

| Main source of energy used | \% of households reporting |
| :---: | :---: |
| Gas <br> of which <br> Stove <br> Water Heater <br> Electricity <br> of which <br> Electrical system inside bathroom <br> Electric kettle <br> Wood <br> Solar water heater <br> Kerosene stove <br> Other <br> Do not use hot water for bathing | 49.7 $(38.0)$ $(11.7)$ 27.7 $(22.3)$ $(5.4)$ 10.1 4.1 4.1 0.3 4.0 |
| Total | 100.0 |

Less than $5 \%$ of surveyed households reported having solar water heaters. Around $85 \%$ of those without solar water heaters were not interested in acquiring one. Among them, about $46 \%$ reported that they found the price of the equipment too expensive.

Table 13 shows the various measures taken by households to reduce consumption of electrical energy.

Table 13 - Measures taken to reduce electrical energy consumption - March 2004

| Measure | \% of households reporting |
| :--- | :---: |
| Turning off lights/electrical appliances when not in use | 83.5 |
| Use of other types of fuel instead of electricity for cooking | 51.5 |
| Use of low consumption electrical bulbs | 43.9 |
| Use of other types of fuel instead of electricity for water heating | 39.3 |
| Use of low consumption electrical appliances | 27.6 |

## 6. Safety and security

Among the 2,160 households surveyed, 1983 or $92 \%$ reported having taken security measures at their dwellings to minimise risks of burglary. The percentages of households taking the various measures are given in Table 14.

Table 14 - Measures taken to improve the security of the dwellings - March 2004

| Security measure | \% of households reporting |
| :--- | :---: |
| Lock gates/entrance to building | 59.2 |
| Keep dog | 51.5 |
| Burglar proof windows/doors or shutters installed | 45.0 |
| Alarm system installed | 2.4 |
| Watchperson/security guard engaged | 1.8 |

It is interesting to note that less than $6 \%$ of surveyed households reported to be insured against theft.

Approximately 6\% of the households reported having been victims of burglary during the twelve months preceding the survey month. During the same period, around $4 \%$ of households 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 2\% 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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