WAGE RATE INDEX - 2003

1. Introduction

This issue of 'Economic and Social Indicators' presents the wage rate index for year 2003. It is the eleventh of the series published annually by the Central Statistics Office since 1993.

The index, having year 2000 as base, is computed from wage data collected through the Survey of Employment, Earnings and Hours of work carried out in September 2003 among a sample of large establishments, that is, those employing 10 or more persons. Weights used are according to the occupational structure of the working population at the 2000 Population Census and distribution of earnings in large establishments at March 2000. The methodology used is described at Annex.

The wage/salary rates of specific occupations, used in the calculation of the index, are the rates paid for normal time work, comprising basic wages and salaries, cost of living allowances, and other guaranteed and regular allowances paid at the end of each pay period. Overtime payments are therefore excluded.

Current estimates are subject to revision in later issues, as additional information becomes available.

2. Index 2003

2.1 Wage rate index by industry

The overall wage rate index, which stood at 109.9 at September 2002, rose by 12.8 points (or 11.6%) to reach 122.7 in September 2003. The increase of 12.8 points in the index is higher than increases noted during recent past years mainly as a result of the implementation of the PRB report in July 2003.

Table 1 gives the sub-indices of the major industry groups. A general upward movement is noted in the sub-indices of all industry groups. The sub-indices ranged from 114.9 for 'Financial intermediation' to 137.1 for 'Electricity and water'. Sub-indices for 'Manufacturing, mining & quarrying' and 'Public administration and defence', which have strong effects on the overall index because of their important weights, were 122.5 and 120.4 respectively.

2.2 Contribution of the industry groups to the index

The contribution of the industry groups to the overall index is shown in Table 2. The main contributors to the increase of 12.8 points in the overall index were: 'Public administration and defence; compulsory social security' (2.9 points), 'Manufacturing, mining & quarrying' (2.3 points), 'Education' (1.3 points) and 'Transport, storage & communications' (1.3 points). Contributions of the remaining industry groups ranged from 0.2 to 0.9 point.

2.3 *Change in wage rate index by industry*

Between September 2002 and September 2003, the overall index increased by 11.6%. Table 3 shows the changes in the wage rate index by industry group. The highest increases were observed in 'Public administration and defence; compulsory social security' (16.3%), 'Education' (14.5%), 'Health & social work' (14.1%) and 'Transport, storage & communication' (14.1%).

'Construction', 'Hotels and restaurants', 'Wholesale & retail trade; repair of motor vehicles, motorcycles, personal & household goods' and 'Electricity and water' registered increases of 12.8%, 12.6%, 11.7% and 11.4% respectively. Increases, ranging from 4.6% to 9.6%, were noted in the remaining industry groups.

2.4 Wage rate index by sector

The wage rate index in the General Government sector, which comprises the Central Government and the Local Government, increased by 17.4 points (or 16.5%) to reach 122.9 in 2003. This is the result of the implementation of the PRB report in 2003. The sector, which accounts for around one third of the total weight, contributed 5.4 points to the increase of 12.8 points in the overall index.

The wage rate index in the EPZ sector stood at 122.9 in September 2003, that is, an increase of 11.6 points (or 10.4%) over the 2002 figure of 111.3. The contribution of the EPZ sector to the overall increase was 1.7.

3. Comparison with previous indices

Table 4 gives a series of wage rate indices since 1993. Indices for the year 1993 to 2000 have been computed using September 1992 as base. As from 2001, the index has been worked out with September 2000 as base.

The two series are not strictly comparable since they are based on different weighting patterns. However, for some particular purposes, users may want to compare the old indices with the new ones. A crude method of converting an index from the new base to the old base is by multiplying the new index by the 1.994. Conversely, an index on the old base can be converted to the new base by dividing the old index by 1.994.

The conversion factor (1.994) is obtained as the ratio of the wage rate index of year 2000 on old base (199.4) to wage rate index of year 2000 on new base (100.0).

Central Statistics Office Ministry of Finance and Economic Development Port Louis

April 2004

Contact person: Mrs. M.Ganoo Statistician, Labour Unit Central Statistics Office LIC Centre Port Louis Tel: 2122316 Fax: 2114150 Email: cso_labour@mail.gov.mu

Table 1 - Wage rate index by industry group, 2002 - 2003 (Base : September 2000 = 100)

Industry group	Weights	Index 2002 ¹	Index 2003
Agriculture and fishing	92	113.9	123.8
Manufacturing, mining & quarrying	231	112.6	122.5
Electricity and water	18	123.1	137.1
Construction	49	116.0	130.9
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal & household goods	68	109.8	122.7
Hotels and restaurants	47	113.9	128.2
Transport, storage & communications	83	105.4	120.3
Financial intermediation	42	109.8	114.9
Real estate, renting and business activities	38	113.0	121.1
Public administration and defence; compulsory social security	173	103.5	120.4
Education	86	106.9	122.4
Health & social work	54	108.3	123.6
Other community, social and personal services	19	112.0	122.8
All sectors	1,000	109.9	122.7
of which General Government	310	105.5	122.9
EPZ	147	111.3	122.9

Table 2 - Contribution of industry groups to change in index, 2001 - 2002 and 2002 - 2003

Industry group	2001 - 2002 ¹	2002 - 2003
Agriculture and fishing	0.3	0.9
Manufacturing, mining & quarrying	2.0	2.3
Electricity and water	0.1	0.3
Construction	0.5	0.7
Wholesale & retail trade; repair of motor vehicles, motorcycles, personal & household goods	0.3	0.9
Hotels and restaurants	0.4	0.7
Transport, storage & communications	0.1	1.3
Financial intermediation	0.2	0.2
Real estate, renting and business activities	0.2	0.3
Public administration and defence; compulsory social security	0.2	2.9
Education	0.3	1.3
Health & social work	0.2	0.8
Other community, social and personal services	0.1	0.2
All sectors	4.9	12.8
of which General Government	0.8	5.4
EPZ	1.2	1.7

¹Revised

Table 3 - Annual percentage change i	n wage rate index by industry group	, 2001 - 2002 and 2002 - 2003
--------------------------------------	-------------------------------------	-------------------------------

Industry group	2001 to 2002 ¹	2002 to 2003
Agriculture and fishing	2.9	8.7
Manufacturing, mining & quarrying	8.2	8.8
Electricity and water	5.9	11.4
Construction Wholesale & retail trade; repair of motor vehicles, motorcycles, personal & household goods	8.8 3.8	12.8 11.7
Hotels and restaurants	7.9	12.6
Transport, storage & communications	1.9	14.1
Financial intermediation	5.0	4.6
Real estate, renting and business activities	5.5	7.2
Public administration and defence; compulsory social security	1.3	16.3
Education	3.2	14.5
Health & social work	3.2	14.1
Other community, social and personal services	7.2	9.6
All sectors	4.7	11.6
of which General Government	2.4	16.5
EPZ	8.2	10.4

Table 4 - Wage rate index, 1993 - 2003

Year	Wage Rate Index		Annual percentage change
	Base : September 1992 = 100	Base : September 2000 = 100	
1993	115.5		15.5
1994	127.6		10.5
1995	136.6		7.1
1996	144.0		5.4
1997	160.7		11.6
1998	177.5		10.5
1999	191.0		7.6
2000	199.4	100.0	4.4
2001 1		105.0	5.0
2002 1		109.9	4.7
2003		122.7	11.6

Table 5 - Average wage per hour of selected occupations by industry group(excluding General Government), September 2002 - September 2003

Industry group	Occupation		Average wage ¹ per hour (Rs)	
		2002	2003	2002 to 2003
Agriculture				
Sugarcane plantations				
	Overseer - Grade I	61.19	64.20	
	Field worker (other than special category)	45.23	48.55	7.3
Tea plantations				
	Field worker	24.68	26.44	
	Sirdar/Gangman	35.34	36.91	4.4
Manufacturing				
Poultry & other meat				
	Farm worker	31.98	34.26	7.1
	Factory worker	29.72	30.61	3.0
Biscuits & confectionery				
	Machine operator	27.66	29.16	5.4
	Factory worker	17.88	18.52	3.6
Sugar				
	Fitter - Grade I	43.08	44.75	
	Welder - Grade I	48.96	49.00	
	Motor mechanic (Heavy Mechanical Unit)	45.08	45.13	
	Factory operator - Grade I	37.14	37.61	1.3
Tea				
	Factory worker	25.46	26.36	
	Factory operator	28.47	29.09	2.2
Soft drinks				
	Beverage machine operator	30.64	31.29	
	Driver/Salesman	47.65	55.43	
	Lorry helper	39.34	37.73	-4.1

¹ Wages include remuneration for normal time work inclusive of cost of living allowances and other guaranteed and regularly paid allowances

Table 5 (cont'd) - Average wage per hour of selected occupations by industry group(excluding General Government), September 2002 - September 2003

Industry group	Occupation	Average wage ¹ pe hour (Rs)		er Change (%) 2002 to	
		2002	2003		
Textiles					
(excluding wearing apparel)					
	Factory worker	22.18	22.52	1.	
	Cleaner/Helper	17.12^2	18.46	7.	
	Machine operator	26.55	27.39	3.	
Wearing apparel					
(excluding footwear)					
	Machine operator	20.48	23.35	14	
	Weaver/Knitter	25.20	25.33	0	
	Cleaner/Helper	18.17	20.51	12	
Leather products					
	Machine operator	24.67	24.83	0.	
Footwear		21.00	22.10	0	
	Shoemaking machine operator	31.96	32.10	0	
Paper products					
	Machine operator	32.52	31.89	-1	
Printing & publishing					
	Reporter/Journalist	124.11	131.69	6	
	Photo-type setting operator	53.82	59.38	10	
Chemical products					
	Mixing/Blending machine operator	47.69	51.85	8	
	Cleaner/Helper	30.14	31.64	5	
Rubber products					
	Machine operator	30.60	33.05	8	
Plastic products					
	Machine operator/Factory operator	25.60	27.81	8	

¹ Wages include remuneration for normal time work inclusive of cost of living allowances and other guaranteed and regularly paid allowances

² Revised

Industry group	Occupation		Average wage ¹ per hour (Rs)		
		2002	2003	2002 to 003 2003	
Basic metals					
	Machine operator	34.04	35.77	5.1	
	Factory worker	37.08	33.87	-8.7	
Fabricated metal products					
	Factory worker	40.59	43.30	6.7	
Electrical machinery & apparatus					
	Technician	33.00	29.54		
	Electrician	40.10	37.53	-6.4	
Furniture (wooden)					
	Cabinet Maker/Varnisher	36.72	40.66	10.	
Jewellery & related articles					
	Diamond cutter/Polisher	29.75	28.98	-2.	
Electricity					
	Lineman	75.07	77.36		
	Power generating machine operator	76.89	80.79		
	Meter reader	81.41	100.59	23.	
Water					
	Meter reader	56.83	68.76		
	Tradesmen/Assistant tradesman	48.89	56.33		
	Labourer/Unskilled worker	37.45	42.39	13.	
Construction		2			
	Mason - Grade I	45.24 ²	46.82	3.	
	Carpenter - Grade I	42.95	42.24		
	Labourer/Helper	28.74	28.59	-0.	
Wholesale, retail trade, repair of motor vehicles					
Wholesale trade					
	Salesperson/Sales representative	79.11	99.66	26.	

Table 5 (cont'd) - Average wage per hour of selected occupations by industry group(excluding General Government), September 2002 - September 2003

¹ Wages include remuneration for normal time work inclusive of cost of living allowances and other guaranteed and regularly paid allowances

² Revised

Industry group	Occupation	Average wage ¹ per hour (Rs)		Change (%) 2002 to
	-	2002	2003	2003
Retail trade				
	Salesperson	44.01	45.50	3.4
Repair of motor vehicles				
	Garage mechanic - Grade I Panel beater - Grade I	28.56 36.09	39.36 36.78	
	raici beater - Grade r	50.09	50.78	1.9
Hotels				
	Receptionist	37.69	39.36	4.4
	Waiter	27.49	31.31	13.9
	Cook	38.57	44.40	
	Maid/Servant	29.27	33.96	16.0
Transport, storage &				
communication				
Bus Transport				
	Bus driver	40.37	41.57	
	Bus conductor	37.30	36.84	-1.2
Communication				
	Telephone installer/Servicer	69.47	71.14	
	Telephone operator	96.44	104.53	
	Telecom technician	111.20	119.36	7.3
Financial intermediation				
Banks				
	Bank teller	79.61	82.59	
	Clerk/Senior clerk	98.86	106.18	
	Messenger	43.43	55.48	27.7
Insurance				
	Insurance clerk	56.70	58.37	2.9
	Clerk/Senior clerk	80.58	82.00	1.8

Table 5 (cont'd) - Average wage per hour of selected occupations by industry group(excluding General Government), September 2002 - September 2003

¹ Wages include remuneration for normal time work inclusive of cost of living allowances and other guaranteed and regularly paid allowances

Table 5 (cont'd) - Average wage per hour of selected occupations by industry group(excluding General Government), September 2002 - September 2003

Industry group	Occupation		Average wage ¹ per hour (Rs)	
		2002	2003	2003
Real estate, renting and business activities				
Accounting & auditing services				
	Accountant/Auditor	162.24	193.00	19.0
	Accounts clerk	39.45	39.26	-0.5
Architectural & engineering services				
	Draughtmans	70.21	87.96	25.3
	Engineers	157.77	169.53	7.5
Private education services				
	Pre-primary education teacher	38.35	43.34	13.0
	Primary education teacher	117.93	127.77	
	Education officer	127.45	133.36	
	Cleaner/Caretaker	35.40	37.99	7.3
Private health services				
	Qualified/Professional nurse	53.33	52.36	-1.8
	Nursing aid	30.77	28.55	-7.2
Cleaning Services				
	Office/Building cleaner	16.61 ²	18.81	13.2
	Scavenger/Garbage collector	22.45	21.17	-5.7

¹ Wages include remuneration for normal time work inclusive of cost of living allowances and other guaranteed and regularly paid allowances

² Revised

Table 6 Average wage/salary per month of selected occupations in General Government,

September 2002 - September 2003

Occupation	2002 (Rs)	2003 (Rs)	Change (%) 2002 to 2003
Ministries/Departments			
Medical and Health officer	28,268	32,427	14.7
Education officer	17,464	19,546	11.9
Nursing officer	11,366	12,916	13.6
Teacher/Senior teacher	11,478	13,917	21.2
Clerical officer/Higher clerical officer	8,613	9,969	15.7
Police constable	9,529	11,180	17.3
Mason	8,313	9,806	18.0
Carpenter	8,981	10,274	14.4
Driver	7,993	9,293	16.3
Hospital servant	7,408	8,536	15.2
Labourer	6,581	7,665	16.5
Municipalities/District Councils			
Inspector/Assistant Inspector (Health)	11,247	12,802	13.8
Clerical officer	8,082	9,219	14.1
Gardener	6,725	7,837	16.5
Mason	8,208	9,551	16.4
Carpenter	7,894	9,178	16.3
Driver	7,694	8,592	11.7
Refuse collector	6,212	7,071	13.8
Labourer	5,983	6,716	12.3

Annex

Methodology used for the computation of the Wage rate index

1. Approach adopted and limitations.

Ideally to show genuine changes in the price of labour, it would have been necessary for wages of specific individual workers at specific establishments to be measured over time. Since this is practically impossible, the next best approach has been adopted, that is, to follow changes in the wages of groups of employees performing the same jobs. This gives a measure of changes in wage rates of specific occupations.

The following limitations as regards the approach adopted are to be noted:

- (i) any changes in the mix of employees within the selected occupations is bound to affect the calculated rates and hence the corresponding sectoral indices. Such changes can occur, for example, with a new intake of employees in a specific group - when the wages of the new recruits pull down the average wages for the whole group from one period to the next.
- (ii) wage adjustments resulting from changes in the tasks associated with a particular occupation, which cannot be separated from pure price changes.
- (iii) it is difficult to separate the effects of productivity from the overall change.
- 2. Index calculation

A Laspeyres type fixed base-weighted formula is used, where the occupational structure is held constant with reference to base year 2000. The changes in average wage rates are measured at the occupational level and the magnitude of these changes are then weighted to give a combined measure of the change for a given industry group. The following formula is used

$$I_{t} = \sum \frac{W_{i} (R_{it} / R_{io})}{\sum W_{i}} X 100$$

where I_t = index for year t compared to base year o for a given industry

W_i = weight of occupation i

 R_{io} = wage rate of occupation i in base year o

 R_{it} = wage rate of occupation i in year t

The aggregate indices for industry groups at higher level of classification or for all economic activities as a whole, are computed by taking a weighted average of the individual industry group indices.

3. Weightings

- Census 2000 data on employment by occupation and wage rates at base year are used to determine the weighting pattern of occupations (W_i) for given industry groups.
- (ii) Distribution of earnings by industry group obtained at the March 2000 Survey of Employment and Earnings in large establishments is used as weights in the computation of aggregate indices for higher levels of industry groups or for all economic activities.