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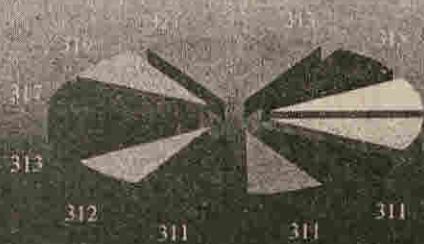
Consumer Price Index Numbers (All India) for Industrial Workers



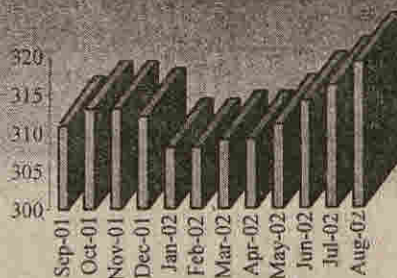
Consumer Price Index (All India) for Manual Workers



Consumer Price Index (All India) for Rural Laboures



Consumer Price Index (All India) for Agricultural Labourers



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**WORKERS IN CENSUS 2001**

Sanjay Kumar, N.K. Sharma -

**Some Pertinent Issues**

The recently released Census 2001 data on the number of workers has thrown up several issues which impinge on the estimation of the workforce in the country and its structure.. While the growth of all workers overall is quite close to the approximations of the Planning Commission for the Ninth Plan, disaggregated for main and marginal workers, the data show startling variations.

As per the census 2001, the total number of workers was 402.51 million, consisting of 313.17 million main workers and 89.34 million marginal workers whereas in census 1991, the corresponding

numbers were 314.13 million, 285.93 million and 28.20 million, respectively, giving an annual growth of 2.51 percent (total), 0.91 percent (main) and 12.22 percent (marginal). Table 1 gives the inter census annual growth rates of main and marginal workers in rural/ urban sectors:-

From Table 1, it may be seen that the main contributor to the overall growth in workforce is the significantly higher growth in the marginal workers, particularly males in both rural as well as urban areas. The issue is whether the growth rate of marginal workers is real or it is due to underreporting/ omission of workers in 1991 Census.

**Table 1: Intercensus (1991-2001)****Growth Rate of Workers**

Sector	Annual Growth during 1991-2001 in workers		
	Total	Main	Marginal
<b>Total</b>			
Persons	2.51	0.91	12.22
Males	2.07	0.82	29.16
Females	3.53	1.23	7.87
<b>Rural</b>			
Persons	2.24	0.33	11.72
Males	1.68	0.18	29.20
Females	3.32	0.75	7.66
<b>Urban</b>			
Persons	3.50	2.75	19.06
Males	3.18	2.55	28.93
Females	5.26	4.05	11.96

Visaria (1998) had observed that the probability of undercount of female workers in 1991 Census, particularly in rural areas could not be ruled out; in view of the fact that in 1991, in 7.5 percent

villages, no female was listed either as main or as marginal worker. But, the Census 2001 results indicate the growth is higher in males in comparison to females in both areas. Also, the overall growth of marginal

# Workers in Census 2001

workers is more in urban areas which are predominantly non-agriculture. Further, if it is assumed that the coverage of workers was better in Census 2001 than that in 1991, due to intensive training of enumerators and more stress on capturing the marginal workers in the Census schedule itself, then the actual growth of workers should be lower than 2.5 percent shown.

However, the assumption of higher growth rate of marginal workers (i.e, under implicit assumption that absolute number of marginal workers in Census 2001 is correct) in 2001 due to better coverage (i.e, in comparison to 1991) gets diluted when the results of 2001 Census are compared with other concurrent trends. From Table 2, it may be seen that the relative shares of marginal workers in the

1991 census was compatible, albeit slightly lower, with the 43<sup>rd</sup> round results (pertaining to 1987-88). The share of marginal workers in Census 1991 may have been slightly lower on account of the perceived omission underreporting. The overall share of marginal workers was almost same in 43<sup>rd</sup> (1987-88) and 50<sup>th</sup> round (1993-94); but the declining trend of share of marginal workers during 1993-94 to 1999-2000 has been observed in respect of both the urban and rural sectors for male as well as female. Therefore, the share of marginal workers in Census 2001 is comparable neither with Census 1991 nor with the NSS surveys pertaining to almost same time frame. The trends indicated by the two data sets are also diametrically opposite. The implication of these trends shall be discussed later.

**Table 2: Percentage Share of Marginal Workers from different Surveys/ Censuses**

Sector	Share of Marginal Workers* in Total in				
	Census		NSS Rounds** (using the WPRs)		
	2001	1991	43 <sup>rd</sup> (1987-88)	50 <sup>th</sup> (1993-94)	55 <sup>th</sup> (1999-2000)
<b>Total</b>					
Persons	22.20	8.97	10.32 (10.46)	10.58 (10.71)	7.66 (7.87)
Males	12.69	1.20	3.66 (3.71)	2.34 (2.36)	1.44 (1.46)
Females	42.81	28.42	23.83 (23.85)	27.69 (27.77)	21.52 (21.66)
<b>Rural</b>					
Persons	26.07	10.71	11.33 (11.36)	11.96 (12.00)	8.88 (8.98)
Males	14.99	1.36	4.15 (4.15)	2.65 (2.65)	1.64 (1.64)
Females	45.86	30.38	24.03 (24.03)	28.70 (28.70)	22.58 (22.58)
<b>Urban</b>					
Persons	9.10	2.25	6.44 (6.53)	5.70 (5.72)	3.85 (3.85)
Males	6.66	0.72	2.14 (2.14)	1.45 (1.45)	0.93 (0.93)
Females	21.03	11.43	22.49 (22.49)	21.62 (21.62)	15.71 (15.71)

Notes \* Due to definitional differences in classifying a worker as main/ marginal in census and principal/ subsidiary in NSS, the share of subsidiary workers in NSS should be slightly lower than marginal workers in Census (though in this paper these two terms are being used interchangeably). Also, some persons (e.g. engaged in production of agriculture produce for own consumption including forestry, gathering of uncultivated crops, hunting, fishing, collection of firewood, etc.) are treated as workers whereas in census, such persons are not treated as workers. Therefore, the shares of marginal workers in census are not strictly comparable with those of NSS; the two data sets may differ marginally - either side. Yet, the broad conclusions would not be effected by such differences in concept and coverage.

\*\* Figures within the parentheses are those based on NSS published results.

Earlier, there was a prominent opinion that the number of workers in census was lower than that of NSS quinquennial rounds on account of incomplete capturing of workers in the census round and particularly in the case of females. It is important to note that these comparisons were not based on the workers as published by NSS. The comparisons were made by estimating the workers by applying the WPRs from NSS on the population figures from RGI,

the implicit assumption being that the level of underestimation of workers as well as population in the NSS was uniform.

Now, the estimate of workers (based on WPRs of 55<sup>th</sup> round and the annual growth) as on April 1, 2001 at 395.64 million was quite close to the Census 2001 figures of 402.51 million. However, the variations in the two data sets in different sectors are seen to be varying significantly (Table 3). In 1993-94, the estimates of main workers from RGI data were lower by 9.84 percent (5.08 percent among male and 23.19 percent among female) than NSS, the difference has increased to 14.74 percent (11.11 percent among male and 24.91 percent among female) in 2001, even though the overall difference had narrowed down to a mere 1.74 percent in Census 2001 as against -11.49 percent in 1993-94. The inference that though the difference of total workers in the census is increasing in positive direction the difference in main workers has increased in opposite direction, is seen to hold true even if the published NSS estimates are used (without any adjustment for population). This indicates that the gap between these two data sets has substantially narrowed down as far as absolute number of workers in the Census and NSS (adjusted for population) are concerned; but may have further widened if we see from the point of view of man lays worked.

**Table 3: Percent Difference in Workers in NSS vis-à-vis RG**

	Adjusted for Population			Crude (i.e, NSS Published Results)		
	Total	Main/ Principal	Marginal/ Subsidiary	Total	Main/ Principal	Marginal/ Subsidiary
<b>In 1993-94</b>						
Persons	-11.49	-9.84	-25.42	1.52	3.57	-15.56
Males	-6.17	-5.08	-51.86	8.24	9.52	-44.94
Females	-22.52	-23.19	-20.78	-12.19	-12.86	-10.46
<b>In 2001</b>						
Persons	1.74	-14.74	215.54	7.61	-9.71	223.51
Males	0.48	-11.11	880.57	7.53	-4.90	934.03
Females	4.56	-24.91	119.79	7.76	-22.66	124.32

# Workers in Census 2001

As all the subsidiary workers within the labour force are unemployed as per the usual status concept of NSS, therefore to examine the implications of the increased share of marginal workers in Census, we have analysed the relationship of the subsidiary

workers with the unemployment based on various NSS quinquennial rounds. These results (Table 4) indicate that quite a significant share of marginal workers, particularly males, is in the labour force.

**Table 4: Percentage of subsidiary Workers in NSS 43<sup>rd</sup>, 50<sup>th</sup> and 55<sup>th</sup> Rounds**

Sector	Item	55 <sup>th</sup> (1999-2000)		50 <sup>th</sup> (1993-94)		43 <sup>rd</sup> (1987-88)	
		Male	Female	Male	Female	Male	Female
Rural	Share of marginal workers included in labour force to total marginal workers	21.60	0.57	18.66	0.75	23.66	1.86
	Share of marginal workers included in labour force to total unemployed	16.85	10.98	25.39	21.42	34.68	16.16
Urban	Share of marginal workers included in labour force to total marginal workers	31.25	2.19	2.62	1.64	41.47	5.12
	Share of marginal workers included in labour force to total unemployed	5.83	5.39	10.09	5.06	14.06	15.46

To have an idea of the unemployment scenario on the basis of the Census 2001 marginal workers, we have estimated the unemployment rates by using the ratio of 55<sup>th</sup> round. The unemployment rate is seen to be 22.13 percent, 4.35 percent, 36.42 and 10.07 percent in rural-male, rural-female, urban-male, urban-female respectively. All these figures are much much higher than the NSS results and totally in contrast to the generally accepted overall unemployment rate of around 2-3 percent. It may be reiterated that this is not an attempt to provide estimates of unemployment. However, it does give a broad idea of the extent of unemployment.

In spite of the fact that the absolute number of workers as per Census 2001 and estimated by NSS are quite close, the structure of workforce and growth rate of workers is quite different. Further, as estimates based on WPRs of NSS itself may not be considered

as reliable (Kumar and Sharma 2001), users should be very cautious before drawing any inference about the impact of economic policies on the unemployment levels as well as on growth of workers.

This enigma may be explained if at the time of detailed results it is found that the growth in number of marginal workers came about due to phenomenal increase in the marginal workers outside the labour force. However, the probability of such a result is quite remote in a developing country like ours. Till RGI comes out with some plausible explanations about the increased share of marginal workers, the problem in the interpretation of these result will persist.

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## EMPLOYMENT AND UNEMPLOYMENT SITUATION IN 1990S

Indira Hirway

### How Good Are NSS Data

The concepts and methods used by NSSO to net work and workers are not able to capture the work of the poor, particularly of women, satisfactorily. Since that part of the workforce which is not captured by the NSS survey is not likely to remain stagnant and is subject to increases and declines, depending on the specific situation, it is possible that an increase in this part of the workforce may explain the decline in the worker-population ratio (WPR) in the nineties. The Work force in these 'difficult to measure sectors', such as subsistence work, home-based work or informal work, can be better captured through time use surveys. Using data from the pilot time use survey (1998-99), this paper shows that (a) this survey technique is capable of getting more realistic estimates of workforce and (b) some of the work not captured in the NSS surveys but captured in the time use surveys is likely to explain the changes in the employment situation in the nineties to a considerable extent.

### 1

### Background

The results of the employment and unemployment survey, 1999-2000 have generated considerable debate among scholars and policy-makers with regard to the trends in employment and unemployment in the nineties. The survey results show that (a) there has been considerable decline in the crude worker population ratios (WPRs) in all the four segments of the population, namely, males and females in rural and urban areas, during 1993-94 and 1999-2000 and (b) this decline has been much steeper in the case of women than in the case of men. Since the decline has been experienced by all the age groups, it is clear that the decline is not due to the shifts in the age structure of the population. This decline in the growth of employment also has been accompanied by any significant increase in unemployment rates, which implies that there has been a decline in the labour force population ratio during the nineties. That is, the percentage of the population offering for work, successfully or otherwise, or is willing to take up work or extra work has also declined in the nineties.

What could be reasons for this decline in both WPRs and LPRs? Sundaram (2001 a and 2001 b) has the following explanations;

- (1) To a significant extent, the reduction in WPRs reflects a beneficial rise in the student population ratios - not only in the 5-9 and 10-14 age groups covering the primary and the middle school system, but also in the 15-19 and 20-24 age groups indicating a rising participation in secondary and higher level education.
- (2) In respect of the decline in WPRs in the age groups 25 years and above, where there are not offsetting increase in participation in education, at least for rural women the decline in the WPRs on the usual principal plus subsidiary status categorization in the 25 and above age groups (except 50-54) is due entirely to declines in WPRs on the subsidiary status.
- (3) The decline in the WPRs in the 1990s is getting exaggerated by the fact that in a number of cases, the 1993-94 levels are outliers when seen against WPRs from the earlier quinquennial surveys (Sundaram 2001b). That is, the long-term decline in the employment levels is not that significant.

Though the above arguments do seem to explain, to an extent, the decline in the WPRs during the nineties, they do not explain the entire decline. To start with, the arguments that the rising student population ratios up to the age group 20-24 explain, to a significant extent, the decline in the WPRs does not seem to be fully valid.

The table shows that the highest decline has been experienced by rural women in the age groups 15-19 (by 60 points) and 20-24 (by 47 points). If this decline is due to an increase in the student population ratio, it means that (a) rural women have experienced the highest growth rates in the post-higher secondary education (in the age group 20-24) than rural males, urban males and urban females: (b) rural women have shown a higher growth rate in higher secondary education (in the age group 15-19) than urban males and urban females: and (c) rural females have experienced higher growth rates in higher secondary and post-higher secondary education than in primary and secondary education

# Employment & Unemployment Situation

**Table 1 Age Specific Usual Status (PS+SS) Worker Population Ratios  
(up to 24 Years ) by Residence, 1991 and 2001**

Age Group change	Rural males			Rural Females			Urban males			Urban Females		
	50th	55th	Points change	50th	55th	Points change	50th	55th	Points change	50th	55th	Points change
5-9	11	6	-5	14	7	-7	5	3	-2	5	2	-3
10-14	138	91	-47	141	96	-45	66	49	-17	45	36	-9
15-19	577	503	-74	364	304	-60	356	314	-40	123	105	-18
20-24	859	844	-15	456	409	-47	674	658	-16	180	155	-25

Source : Provisional Population Total, National Survey Organization .

These implications are do not seem to be acceptable if we consider the fact that the female literacy rate in India is 45.84 (Census of population 2001) and about 90 percent of literate women in the late nineties are educated up to less than secondary level (28 percent are literate without any formal education, 60 percent up to primary education) [Hirway and Mahendra Dev 2001]

The WPR of urban women has shown higher decline in the group 20-24 than in the younger age groups, 5-9 10-14 and 15-19. Once again this does not seem to be entirely due to increased student population ratio of urban women as the rates of increase are likely to be higher in lower age groups, and lower in higher age groups at this level of female literacy. Empirical evidence shows that the student population ratio increases faster in the younger age groups particularly up to age 14 at a low level of literacy

In other words, the decline in the WPRs in the age groups 15-19 and 20-24, particularly for women, can be only partly explained by the rising student population ratios. One has to look for other explanations to understand the entire decline in the RPRs.

The other explanation given by Sundaram for the decline in the WPR above the age groups 25 and above, at least for rural women is the decline in WPRs on the subsidiary status. However, the fact remains that this explanation is not applicable to urban females or to rural and urban males. That is even though there is an explanation for the decline in the WPR of rural women , we do not have any

suitable explanation for urban women and for rural and urban men. One has to look for some other explanation.

The third explanation by Sundaram is that the 1993-94 levels are outliers when seen against WPRs of the earlier surveys, and therefore the long-term decline in employment level is not that significant. Table 2 which presents the age specific WPRs for the past four quinquennial surveys as well as the Charts 1-4 that depict the movements of the male and female WPRs in rural and urban areas in these past four surveys shows that :

- (1) In the case of rural and urban males 1993-94 is an outlier. In the case of rural males , the decline in the WPR is much less (by 8 points) if measured from 1983 than if measured from 1993-94.(21 points). Similarly, the case of urban males, the long term WPR shows an increasing trend which is not seen well if viewed only from 1993-94
- (2) In the case of rural women , however the year 1993-94 WPR is not really an outlier. If one views the long-term trend from 1983 (we ignore the WPR of 1987-88 as it was an abnormal year), the decline is much more (41 points) than viewed from 1993-94.
- (3) In case of urban female also the 1993-94 WPR is not much of an outlier. The long -term decline (from 1983) in the WPR is only marginally lower (by 12 points) than the same from 1993-94 (by 15 points). In fact, in the case of the urban female WPR, the declining trend is observed from 1977-78 wherefrom the rate declined by 17 points up to 1999-2001.

In short, the argument of the "the outlier 1993-94" is not applicable to all the segments of the workforce, particularly in the case of women and specially rural women.

To sum up, though the explanations given by Sundaram are valid, they are not adequate to explain the decline in the WPRs in the nineties. There is a need for further investigation in this area.

In this context, we would like to argue that part of the explanation lies in the limited ability of the NSS surveys to capture the work and workers in the economy. It seems to us that the concepts and methods used by NSSO to net work and workers are not able to capture the work of the poor, and particularly of women, satisfactorily. Since the part of the workforce, which is not netted by the NSS surveys is not likely to remain stagnant and is likely to increase and decline depending on the specific situation, it is possible that an increase in this part of the workforce may result a decline in NSS-based WPRs. It is therefore possible that the decline in the WPRs in the nineties is due to the expansion of non-reported (by the NSSO) part of the workforce which is employed in what is known as "difficult to measure sectors" (such as subsistence work, home-based work or informal work) of the economy.

It is possible to capture the workforce in these "difficult to measure sectors" through time use surveys. In Section II we argue that the time use survey technique, as has been developed in the recent years, can capture paid and unpaid work of men and women fairly accurately. Using the recent data of the pilot time use surveys of India (1998-99), the paper shows that (a) this survey technique is capable of getting more realistic estimates of workforce, and (b) some of the work not captured in the NSS surveys, but captured in the time use surveys is likely to explain the changes in the employment situation in the nineties to a considerable extent.

Section II discusses the advantages of the time use survey technique over the conventional surveys and presents the relevant results of the time use survey, while Section III explain the implications of the time use data for understanding changes in the

size of the workforce. It also infers implications of the discussion for improving workforce data in India

## Time Use Studies and Workforce Estimates

Conceptually speaking, the total workforce in any economy covers all those who contribute to the gross domestic product (GDP) of the economy. That is, there is always a correspondence between the GDP generated in the economy and the total workforce that contributes to its generation. One major function of the workforce statistics therefore is to net comprehensively all the workers who participate in the production of goods and services covered under the national product statistics. Somehow, this simple looking task is not performed satisfactorily, particularly in developing countries, due to various conceptual and methodological problems.

One important aspects of the history of labour statistics in India is the continuous efforts made for netting comprehensively the workforce and labour force in the country. As is well known, there are two major sources of workforce/ labourforce statistics in India, the decennial Census of population and the quinquennial Surveys of the NSSO. In the case of Census of Population, the term 'work' has been defined as "any productive work for which remuneration is paid and is market oriented", and 'worker' is a person engaged in 'work'. If a person has worked for a major part of the reference year, he /she is a 'main worker', and if a person has worked for less than half a year he/she is a marginal worker. In the case of the NSSO surveys a person is a worker if he/she is engaged in any 'economically meaningful activity'. This also includes general activities of women done within the sphere of household activities, such as, looking after live-stock, fodder collection, foodgrains processing etc. A census investigator is expected to ask a respondent whether he is worker or not, while the NSS investigator asks about the activity that the person is engaged in. The NSSO is therefore known to be capturing 'workers' in a much better way than the census, and the size of the workforce as well as the workforce participation rates under the NSSO are higher than the same under the Census of population.

# Employment & Unemployment Situation

The census authorities made special attempts to capture work and workers in the 1991 Census as also in the 2001 Census. The 2001 Census data on workforce are not yet out, but the 1991 Census data were examined carefully by scholars to see whether they provided better/more realistic estimates of the workforce [ Premi and Raju 1993; Hirway 1993] These studies revealed that in spite of the changes introduced in the census enumeration as well as the training and extension work undertaken by the central and state governments and NGOs, the census failed to provide better or more comprehensive estimates of the workforce in the country. Through some pockets/regions showed a jump in the female WPR, the macro-data could not show any significant increase. This was because:

- (1) It was difficult to raise awareness among 400 m and odd women about their work status- the efforts made were not adequate.
- (2) It was also difficult to change the biases of investigators/enumerators (about 1m in number) regarding women's work.

The NSSO also has tried persistently to collect accurate data on workforce/labour force in the country. A major landmark in this context was 1972-73 when the NSSO introduced the three concepts of usual status, current weekly status and daily status of employment along with four rounds of employment surveys to capture seasonal changes. IN the 32<sup>nd</sup> Round (1977-78), the NSSO introduced probing question for the first time for all those respondents who reported activity status code 92 (domestic work) and 93 (domestic work with free collection) as their main activity. These questions tried to find out women's productive activities as well as their accurate labour market status. In the later rounds also the NSSO continued these efforts and even included collection of time use data. However, these time use data were not somehow analysed by the NSSO.

In order to capture the data on the strength of the informal sector and the workers engaged in it, Economic Census was conducted for the first time in 1977. This census attempted to capture details of small non-agricultural enterprises in the non-agricultural sector. This first Economic Census was

followed by (a) Survey on Unorganised Manufacturing Enterprises 1978-79 (NSS 33<sup>rd</sup> Round) and (b) Survey of Enterprises covering Trade, Hotels and Restaurants, Transport and Services Sector (1979-80). The Second Economic Census was carried out in 1980, and the third in 1990. Both these census were followed by Enterprise Surveys in manufacturing, trade hotels, mining etc.

This Economic Census has been conducted during 1998-99 independently by the CSO in collaboration with Directorate of Economics and Statistics of States and Union Territories. It has been delinked from the Population Census mainly with a view to building up a time series with shorter intervals, which is suitable for unorganised activities. The fourth Economic Census is expected to generate frames separately for different types of membership, viz. private non-profit institutions, private, others and cooperatives giving activity wise information on number of enterprises as well as employment for each primary unit i.e., village and UFS block.

The 55<sup>th</sup> Round of the NSSO is another important survey on employment, unemployment. This Round collected data on informal sector using (1) employment, unemployment survey and (2) enterprise surveys. All unincorporated enterprises, which operate on either proprietary or partnership basis, are considered to contribute to 'informal sector'. This survey is expected to provide more realistic estimates of workforce/labour force than before. The results of the survey show that somehow this has not happened, and as Sundaram states, there seems to be an unresolved puzzle behind it

Why is there an underestimation of workforce/labour force in India? There seems to be three major factors responsible for this: Firstly, work in India is frequently seasonal, intermittent and uncertain. Also, household work and economic work frequently get mixed with the result that it is difficult to demarcate between the two at the conceptual level as well as at the operational level (for example, cooking for family and cooking for hired workers). The available methods fail to net this type of work and workers. Secondly, under the prevailing socio-cultural values, many times women are not expected to get engaged in paid

# Employment & Unemployment Situation

employment outside the home and working women are held in low esteem in the society. The highest prestige is assigned to conventional domestic work for the family and the lowest to women's manual work outside home. As a result, women tend to under report their work. Thirdly, women themselves believe many times that their work is not important enough to be recorded as 'work'. For example, a weaver may report himself as a worker, but the female members of the household, who starch the yarn, prepare the loom, etc, may not report as a workers. And fourthly investigators also tend to be biased while reporting women's work. They tend to view women's work as household work and thereby underestimate women's work [Hirway 1999].

In short the conventional surveys like the Census of Population or NSSO surveys tend to fail to net work of the poor, and particularly of (poor) women. It has been observed that the major problem

sectors are subsistence sector, informal work and home-based work. Though the 1993 UN Systems of National Accounts includes production of goods for self-consumption (i.e. subsistence sector) under the purview of national income, the workers (and some time output) of this sector are excluded from the official workforce data. In the same way workers in the informal sector and home based workers are also sometimes excluded from the conventional estimates of the workforce. In addition the activities like collection of fuel wood, fetching water, etc. which are recognised as a part of national accounts system and are now included in the NSS definition of work are also frequently excluded from the official data on work force.

Table 2: Age Specific Usual Status (PS+SS) Worker Population Ratios by Rural-Urban Residence and Gender, 1983 to 1999-2000

Table 2. Age specific usual status (ps+ss) worker population Ratios by Rural - Urban Residence and Gender, 1983 to 1999 - 2000

Age Group	Rural Males				Rural Females			
	1983	1987-88	1993-94	1999-00	1983	1987-88	1993-94	1999-00
5-9	25	23	11	6	23	24	14	7
10-14	238	140	138	91	224	182	141	96
15-19	644	600	577	503	433	399	364	304
20-24	884	872	859	844	483	465	456	409
25-29	963	959	957	950	540	523	525	491
30-34	985	982	983	979	577	57	585	555
35-39	987	986	989	984	606	595	608	579
40-45	982	979	987	983	611	610	606	586
45-49	980	978	983	980	589	580	594	566
50-54	957	959	970	953	526	523	542	515
55-59	921	928	942	929	476	459	467	450
60+	662	668	699	639	227	218	241	218
All	543	539	553		330	323	328	
(564)	(546)			(346)	(333)			

# Employment & Unemployment Situation

**Table 2. Age specific usual status (ps+ss) worker population Ratios by Rural - Urban Residence and Gender, 1983 to 1999 - 2000 (Contd..)**

Age Group	Urban Males				Urban Females			
	1983	1987-88	1993-94	1999-00	1983	1987-88	1993-94	1999-00
5-9	7	5	5	3	7	3	5	2
10-14	106	85	66	49	64	65	45	36
15-19	398	355	356	314	144	146	123	105
20-24	710	674	674	658	182	185	180	155
25-29	913	914	904	883	222	223	224	194
30-34	964	696	964	960	290	309	301	235
35-39	981	981	983	975	290	309	301	285
40-45	978	983	981	974	305	308	320	283
45-49	972	973	973	969	283	306	317	267
50-54	939	938	942	935	269	268	286	262
55-59	837	845	856	809	230	234	226	207
60+	508	480	442	402	124	123	113	94
All	510	506	521		146	152	155	
(564)	(538)	(526)			(155)	(159)		

Note: Figures in parentheses shows the crude WPRS' that would have been observed if the age distribution of the surveyed population in 1983 and 1987-88 had been the same as was reported by the 1993-94 survey.

For 1983, 1987-88 and 1993 -94 Surveys: P Visaria, 'Employment and Workforce in India: Implications for National Income Estimates,' mimeo, July 1998.

For 1999-2000: NSSO, Employment and Unemployment in India 1999-2000 Key Results, NSS 55<sup>th</sup> Round July 1999-June 2000, December 2000

## Time Use Survey for Better Estimates of Workforce

Time use surveys is a relatively new survey tool being used by several developed and a few developing countries to get better measures of well-being as well as workforce. Historically speaking, the time use survey technique was first used in the early years of the 20<sup>th</sup> century as a means of understanding lifestyle of people, including their social life. These surveys were thus designed to understand that part of life of people for which no information was available from conventional data

sources, such as national income statistics, labour and employment statistics, population statistics, etc. In the second part of the 20<sup>th</sup> century, and particularly during the last few decades of the century, however, a need was felt to measure the invisible unpaid work of men and women to estimate the contribution of unpaid work to human welfare. Since the need was first expressed by some feminist groups in industrialized countries in the north, several of these countries like Finland, Canada, Norway, Australia, the US, Japan etc, started conducting these surveys to make invisible domestic work of women in these countries visible [Ironmonger 1999; Harvey 1996; Goldschmidt 1995].

With the emergence of developing countries on the scene in the last decade of the 20<sup>th</sup> century, however, time use surveys have acquired a new focus as these countries have seen several additional uses of time use surveys- in netting economic work of women and thereby improving workforce statistics and national income statistics. It is now gradually getting accepted that time use survey is a survey technique (in fact, the only survey technique that is available to us at present) that provides a comprehensive information on how

individuals spend their time on a daily and weekly basis, and reveals the details of an individual's daily life with a combination of specificity and comprehensiveness not achieved in any other social survey. Data collection under a time use survey does not have any socio-cultural bias as the information collected refers only to how individuals spend their time. Since the information is collected about all the 24 hours, no activity is likely to be missed out. As a result, a proper coding and a suitable system of classification of activities can generate fairly accurate data on workforce. In other words, the time use method can remove the methodological hurdles in data collection and with a proper classification of time use activities; it can also remove conceptual hurdles and as a result can generate reliable estimates of workforce [Hirway 1999].

Time use studies provide data on the following.

- (1) Allocation of time by men and women between SNA2 extended SNA3 and non SNA activities;<sup>4</sup>
- (2) Detailed classification of these activities (up to 3 digits) that provide details about participation of men and women in these activities and time spent on them [Indira Hirway 1999 op cit for details];
- (3) Context variables in time use surveys provide additional details regarding the time spent on different activities : These variable could be (a) paid and unpaid activities, (b)location (inside or outside home of activities, (c) for whom is the activities conducted, and (d) with whom the activities are conducted: and
- (4) Background schedules provide useful details about about individual and household characteristics of the persons whose time use is reported. Individual characteristics like age, sex,

education, occupation, etc, amd household characteristics like income and consumption expenditure, cast/race, ;mair, occupation', etc can be related to time use patterns.

The first pilot Indian time use survey was conducted in 1998-99 in six major states selected from the six major regions of the country<sup>5</sup>. The objective behind selecting the six states was to test the concepts and methods in these six different socio-economic situations. Though the results of the combined state are not strictly representative of the entire country, the broadly represent the all-India situation, We have therefore used the combined states data as well as state data for the purpose of presenting WPRs.

It needs to be added that the activity classification classifies the time use activities in the SNA framework. That is the activities are classified into in SNA activities-activities covered under the national accounts system, and falling within the SNA Production Boundary; extended SNA activities- activities that fall outside the SNA production Boundary, but fall within the General production Boundary, consisting mainly of unpaid services , and Non SNA activities or personal services which cannot be delegated to others, like sleeping , eating etc. there are further classified into broad sectors (1<sup>st</sup> digit), sub sectors (2<sup>nd</sup> digit ) and actual activities (3<sup>rd</sup> digit).<sup>6</sup> The data collected in the survey provide information about howmany people spent time on each of the activities during the reference day and how much time did they spend on these activities.

### Computation of WPRS Using Time Use Data and Their Comparability with NSS WPRs

The time use survey collected data on how people spent the last 24 hours of a normal (working) day and of the weekly variant day during the last week.<sup>7</sup> This information was collected using one day recall method

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according to which the investigator asked the respondent the details by minutes, in an hourly timeslot, on how he/she spend the day before. The details of the time use activities were then classified as per the activity classification to arrive at the data on the time spent by respondents on different SNA, extended SNA and non-SNA activities.

The selection of the normal day for the survey was done randomly, implying each week day of the reference week had an equal chance of getting selected. The total selected days, thus do represent the reference week. Also the inclusion of weekly variant day gave information on how the respondents spent the weekly variant day. However, it was observed that the concept of weekly holiday does not exist in most places (people work throughout the week), with the result of the weekly estimates of the time use pattern were made by using 6.5 normal days and 0.5 weekly variant day in the reference week.

In the case of the NSSO, on the other hand, there are three reference periods, namely, one year, one week and each day of the week, and workforce estimates are made for each of the reference period. For classification of persons according to current weekly status approach, they are assigned a unique activity status with reference to a period of seven days proceeding the date of the survey. This is easily done in the case of persons having only one status during

the reference week. But for the persons pursuing more than one activity, a priority-cum -major time rule is applied to obtain a unique activity status. Under the priority rule, the status of working gets a priority over the status of not working but seeking/available for work. Within the broad category of working and non-working, the detailed activity category assigned by major time spent criterion Using this procedure in the current weekly status, a person is considered working or employed if the person was engaged for at least one hour a day on any one day of the previous week in any economic activity. A person who has not worked for even one hour on any day of the week, but had been seeking or had been available for work any time for at least one hour during the week was considered seeking/available for work. Others were considered 'not available for work' or 'out of labour force' (see NSSO 2000).

One can thus say that both the NSSO and the TUS had a common reference period of one week. In order to make the TUS work force data comparable to the NSSO weekly status data, those who spent at least one hour on work during the reference week under the TUS were estimated, and using these estimates comparable WPRs (with the NSS-based WPRs) were computed.

Table 3 presents data on WPRS as per the TUS (1998-99) and the NSSO current weekly status (1993-94 and 1999-2000). The table shows that:

States	NSSO, 1993-94			NSSO 1999-2000					
	Male	Female	Person	Rural			Urban		
				Male	Female	Person	Male	Female	Person
Haryana	45.6	18.8	33.1	46.2	17.7	32.8	50.2	10	31.3
MP	52.5	27.17	40.42	51.2	30.7	41.3	47.3	12.1	30.5
Gujarat	54.6	26.39	41.1	57.1	35.5	46.4	52.9	12.5	33.6
Orissa	52.9	20.48	36.86	52.7	23.3	37.9	45.7	11.6	29.3
TamilNadu	56.6	34.2	45.38	56.6	38.1	47.4	55.2	20.1	38.1
Meghalaya	59.1	42.88	51.17	55.6	42	48.7	39.3	19.7	29.7
Combinated states/all India states/all -india	52.6	23.41	38.53	51	25.3	38.4	50.9	12.8	32.7



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State	TUS 1998-99			Difference between TUS-WPR and NSS-WPR (1993-94)			Difference between TUS-WPR and NSS-WPR (1999-2000 Rural)		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Haryana	57.3	56.16	59.79	11.7	37.36	26.69	11.1	38.46	26.99
MP	60.5	49.43	55.28	7.96	22.26	14.86	9.27	18.73	13.98
Gujarat	60	44.17	52.5	5.42	17.78	11.4	2.92	8.67	6.1
Orissa	59.9	55.47	57.67	7	34.99	20.81	7.18	32.17	19.77
TamilNadu	66.1	50.25	58.18	9.47	16.05	12.8	9.5	12.15	10.78
Meghalaya	56.2	52.45	54.34	-2.83	9.57	3.17	0.62	10.45	5.64
Combinated states/all India states/all -india	61.3	50.32	56.01	8.73	26.91	17.48	10.32	25.02	17.61

Note \* The data refer to current weekly status of workers.

\*\*The data refer to the WPRs computed using the time use data the reference period is one week.

Source : NSSO Rounds, RN Pandey, Estimating Workforce Participation Rates Using Time Use Survey Data and its comparison with the Usual Labour Force

Survey - Indian Experience: NSSO Rounds, National Sample Survey Organisation, New Delhi.

The table shows that

(1) The WPRs based on the TUS are higher than the same of the NSS, for males and females both, which implies that the TUS has been able to get better estimates of workforce for men as well as women.

(2) The differences between the two sets of WPRs are higher in the case of women than in the case of men. While differences between the male WPRs go up to 11.7 per cent points (in the case of Haryana), the differences between the female WPRs go up to 38.4 percent points (again in the case of Haryana). This indicates that women's economic work is more underestimated in the NSSO than that of men. This seems to be due to the fact that women predominate as unpaid workers or subsistence workers in 'difficult to measure' sectors.

(3) The difference in the NSSO base WPRs and TUS-based WPRs are the largest in the case of Haryana (26.99 points for persons, 11.1 points for men and 38.46 for women) and the lowest in Meghalaya (5.64 points for persons, 0.82 points for men and 10.45 points for women), followed by Gujarat (6.1 points for persons, 2.92 points for men and 8.67 points for women). This

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indicates that the extent of underestimation of the workforce under NSS rounds is not the same across all the states. The underestimation does not seem to be related to the level of economic growth either, as Haryana and Gujarat both fall in the top five richest states in India, but the extent of underestimation in Haryana seems to be much more than the same in Gujarat. The underestimation of workforce under the NSSO therefore needs a careful investigation.

The higher WPRS under the time use survey raises a basic question regarding the validity and accuracy of the WPRs of the conventional surveys. The conventional estimates of workforce seem to

leave out a significant portion due to the inadequacies of the concepts and methods used. The time use surveys results show that the part of the workforce underestimated under the NSSO is not the same in all the states, implying that the extent of underestimation is likely to change from situation to situation.

It is therefore possible that the decline in the NSSO-based WPRs between 1993

-94 and 1999-2000 is due to the expansion of the 'difficult to measure' sectors like subsistence sector, home-based work or other informal sector activities.

**Table 4: State wise Distribution of Time Spend (in Hours) in SNA Activities by Mode of Payment and Sex (Participants)**

States	Male			Female			Total		
	Paid	Unpaid	PerCent Time on Unpaid Activities	Paid	Unpaid	PerCent Time on Unpaid Activities	Paid	Unpaid	PerCent Time on Unpaid Activities
Haryana	33.09 (1152)	18.12 (1347)	35.38	4.13 (215)	25.34 (1494)	85.99	20.06 (1367)	21.37 (2841)	51.58
Madhya Pradesh	29.41 (5247)	23.34 (6311)	44.25	14.31 (3072)	15.75 (4391)	52.40	22.99 (8319)	20.12 (10702)	46.67
Gujarat	44.37 (3959)	14.17 (3897)	24.21	17.18 (1747)	13.87 (2541)	44.67	33.26 (5706)	14.05 (6438)	29.70
Orissa	31.25 (2103)	22.42 (2589)	41.77	8.00 (583)	18.18 (32.35)	69.44	20.55 (26.86)	20.47 (5824)	49.90
Tamil Nadu	41.42 (5633)	13.36 (4863)	24.39	21.8 (3034)	10.32 (4280)	32.45	32.74 (8667)	12.04 (9143)	26.89
Mehalaya	17.34 (374)	35.39 (740)	67.12	7.83 (196)	25.34 (692)	76.39	12.65 (570)	30.44 (1432)	70.64
Combined states	36.54 (18468)	18.12 (19747)	33.15	14.87 (8847)	15.18 (16633)	50.52	27.16 (27315)	16.85 (36380)	38.29

Source : Report of the Time use survey, Central Statistical Organisation, Government of India (2000)

(will be continued on next issue)

## Consumer Price Index for Industrial Workers

(Base 1982 = 100)

States	Centre	Consumer Price Index Number for the month of											
		Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02
<b>Southern States</b>													
Kerala	1. Aluva	464	469	471	468	461	463	471	479	489	492	483	486
	2. Mundakayam	455	460	456	454	454	454	457	464	476	476	486	482
	3. Kollam	460	469	464	463	466	495	459	496	504	502	498	501
	4. Thiruvananthapuram	507	516	523	529	528	532	530	546	557	552	544	545
	Average	472	479	479	479	477	486	479	496	507	506	503	504
Tamilnadu	1. Chennai	502	502	500	503	502	501	508	512	515	520	523	526
	2. Coimbatore	452	453	449	451	455	465	471	480	477	482	481	479
	3. Coonoor	458	464	458	458	460	466	469	474	477	473	478	488
	4. Madurai	461	458	454	451	443	445	454	458	457	464	464	470
	5. Salem	457	461	454	454	453	453	461	470	470	467	464	472
	6. Tiruchirappalli	515	515	515	512	512	515	507	522	530	548	548	550
	Average	474	476	472	472	471	474	478	486	488	492	493	498
Andhra Pradesh	1. Gudur	455	447	447	438	431	430	440	453	457	458	458	463
	2. Gundur	459	460	466	465	451	453	463	468	480	480	481	484
	3. Hyderabad	447	455	460	459	462	462	466	469	468	470	471	476
	4. Visakhapatnam	458	456	460	456	460	462	466	468	470	475	473	475
	5. Warangal	486	483	496	489	486	487	496	496	503	509	506	514
	Average	461	460	466	461	458	459	466	471	476	478	478	482
Karnataka	1. Bangalore	448	448	448	445	445	445	445	450	455	456	458	457
	2. Belgaum	502	502	502	503	505	507	509	511	519	521	524	523
	3. Hubli Dhanwar	469	462	462	459	460	460	462	469	477	477	480	481
	4. Meccara	456	453	453	452	453	452	456	461	462	463	463	459
	Average	469	466	466	465	466	466	468	473	478	479	481	480
Pondicherry	1. Pondicherry	496	493	494	493	494	507	502	505	516	512	516	521

Contd.

# Indices

## Consumer Price Index for Industrial Workers (Contd.)

(Base 1982 = 100)

States	Centre	Consumer Price Index Number for the month of											
		Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02
<b>Northern States</b>													
Delhi	1. Delhi	541	533	530	529	537	539	545	555	561	563	562	563
Maharashtra	1. Mumbai	539	536	543	550	553	554	555	558	560	562	563	563
	2. Nagpur	495	487	486	589	491	491	495	499	493	496	499	500
	3. Nasik	505	504	511	507	511	508	508	511	514	519	518	518
	4. Pune	526	522	514	517	520	521	530	531	532	534	532	534
	5. Solapur	484	482	481	479	476	477	485	484	486	490	499	497
	Average	510	506	507	528	510	510	515	517	517	520	522	522
Haryana	1. Faridabad	478	471	469	464	468	472	475	480	487	491	492	491
	2. Yamuna Nagar	438	430	431	427	428	434	434	441	452	458	459	456
	Average	458	451	450	446	448	453	455	461	470	475	476	474
West Bengal	1. Asansol	460	456	449	443	449	452	451	452	459	463	463	465
	2. Darjeeling	410	402	394	387	388	387	388	390	393	412	420	411
	3. Durgapur	536	532	540	536	540	544	549	552	558	564	567	571
	4. Haldia	586	580	573	571	579	578	577	579	584	589	590	592
	5. Howrah	547	538	526	528	535	536	541	542	545	548	550	554
	6. Jalpaiguri	418	416	413	406	410	408	409	416	421	425	427	429
	7. Kolkata	540	526	517	514	522	523	528	528	537	536	538	543
	8. Raniganj	417	415	402	404	411	414	416	410	419	423	425	424
	Average	489	483	477	474	479	480	482	484	490	495	498	499
Chandigarh	1. Chandigarh	498	497	513	513	505	505	505	509	514	521	525	522
Uttar Pradesh	1. Agra	432	424	422	423	426	429	428	434	442	447	447	444
	2. Ghaziabad	472	465	463	459	464	466	473	478	483	486	489	483
	3. Kanpur	461	449	444	452	455	448	450	461	465	470	471	467
	4. Saharapur	430	426	428	432	434	434	433	434	436	438	439	446
	5. Varanasi	493	482	474	474	478	474	481	482	491	495	499	498
	Average	458	449	446	448	451	450	453	458	463	467	469	468
Madhya Pradesh	1. Balaghat	422	421	412	408	409	410	413	417	428	431	432	445
	2. Bhopal	510	507	507	501	503	503	504	512	512	515	516	517
	3. Indore	482	480	477	475	482	484	486	492	496	493	491	491
	4. Jabalpur	471	467	461	459	462	459	460	462	468	470	472	488
	Average	471	469	464	461	464	464	466	471	476	477	478	485
	<b>All India</b>	472	472	472	472	468	469	472	476	481	484	485	487

## Consumer Price Index and % Variations of Index for Industrial Workers

State	Centre	CPI for the month of		variatio	CPI for the month of		variatio
		Sept-01	Sept-02		Oct-01	Oct-02	
<b>Southern States</b>							
1. Kerala	1. Aluva	458	483	5.46	465	486	4.52
	2. Mundakayam	447	486	8.72	449	482	7.35
	3. Kollam	457	498	8.97	456	501	9.87
	4. Thiruvananthapuram	505	544	7.72	509	545	7.07
	Average	467	503	7.71	470	504	7.18
2. Tamilnadu	1. Chennai	491	523	6.52	497	526	5.84
	2. Coimbatore	442	481	8.82	446	479	7.40
	3. Coonoor	448	478	6.70	453	488	7.73
	4. Madurai	436	464	6.42	446	470	5.38
	5. Salem	444	464	4.50	450	472	4.89
	6. Tiruchirappalli	500	548	9.60	511	550	7.63
Average	460	493	7.14	467	498	6.49	
3. Andra Pradesh	1. Gudur	446	458	2.69	446	463	3.81
	2. Gundur	451	481	6.65	456	484	6.14
	3. Hyderabad	443	471	6.32	446	476	6.73
	4. Visakhapatanam	446	473	6.05	454	475	4.63
	5. Warangal	468	506	8.12	479	514	7.31
Average	451	478	5.99	456	482	5.74	
4. Karnataka	1. Bangalore	440	458	4.09	443	457	3.16
	2. Belgaum	495	524	5.86	499	523	4.81
	3. Hubli Dhanwar	455	480	5.49	457	481	5.25
	4. Meccara	458	463	1.09	459	459	0.00
Average	462	481	4.17	465	480	3.34	
5. Pndicherry	1. Pndicherry	482	516	7.05	496	521	5.04

Contd..

## Consumer Price Index and % Variations of Index for Industrial Workers (Contd.)

State	Centre	CPI for the month of		% variatio	CPI for the month of		% variatio
		Sept-01	Sept-02		Oct-01	Oct-02	
<b>Northern States</b>							
1. Delhi	1. Delhi	534	562	5.24	540	563	4.26
2. Maharashtra	1. Mumbai	534	563	5.43	536	563	5.04
	2. Nagpur	488	499	2.25	490	500	2.04
	3. Nasik	503	518	2.98	505	518	2.57
	4. Pune	518	532	2.70	520	534	2.69
	5. Solapur	480	499	3.96	479	497	3.76
	Average	505	522	3.49	506	522	3.24
3. Haryana	1. Faridabad	480	492	2.50	478	491	2.72
	2. Yamuna Nagar	433	459	6.00	433	456	5.31
	Average	457	476	4.16	456	474	3.95
4. West Bengal	1. Asansol	453	463	2.21	458	465	1.53
	2. Darjeeling	396	420	6.06	404	411	1.73
	3. Durgapur	531	567	6.78	540	571	5.74
	4. Haldia	575	590	2.61	577	592	2.60
	5. Howrah	528	550	4.17	536	554	3.36
	6. Jalpaiguri	415	427	2.89	421	429	1.90
	7. Kolkata	518	538	3.86	531	543	2.26
	8. Raniganj	404	425	5.20	413	424	2.66
	Average	478	498	4.19	485	499	2.81
5. Chandigarh	1. Chandigarh	501	525	4.79	496	522	5.24
6. Uttar Pradesh	1. Agra	421	447	6.18	427	444	3.98
	2. Ghaziabad	473	489	3.38	470	483	2.77
	3. Kanpur	454	471	3.74	457	467	2.19
	4. Saharapur	431	439	1.86	431	446	3.48
	5. Varanasi	486	499	2.67	493	498	1.01
	Average	453	469	3.53	456	468	2.63
7. Madhya Pradesh	1. Balaghat	420	432	2.86	422	445	5.45
	2. Bhopal	503	516	2.58	506	517	2.17
	3. Indore	475	491	3.37	477	491	2.94
	4. Jabalpur	466	472	1.29	471	488	3.61
	Average	466	478	2.52	469	485	3.46
	All India	465	485	4.30	468	487	4.06

## Consumer Price Index for Agricultural Labourers

Sl. No.	Centre	Base 1986-87 = 100]											
		Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sept 02	Oct 02
<b>Southern States</b>													
1	Kerala	318	322	319	322	321	321	321	325	328	328	325	NA
2	Tamilnadu	311	316	314	313	311	313	316	319	320	321	324	NA
3	Anthrapradesh	331	327	324	325	326	329	331	334	335	337	338	NA
4	Karnataka	311	312	308	308	309	309	314	314	315	316	320	NA
<b>Northern States</b>													
5	Maharashtra	305	304	303	303	303	303	308	314	315	319	321	NA
6	Haryana	325	323	320	321	320	320	322	323	328	331	333	NA
7	West Bengal	311	307	301	299	301	299	297	299	300	305	309	NA
8	Uttar Pradesh	315	311	309	312	312	308	309	315	320	323	326	NA
9	Madhya Pradesh	312	310	304	304	305	307	311	314	317	320	320	NA
NA	NA	323	324	319	317	319	319	320	322	323	328	331	NA
NA	NA	296	296	291	290	291	292	288	290	293	296	298	NA
NA	NA	320	315	312	313	316	219	321	325	229	332	334	NA
NA	NA	299	296	297	299	296	295	300	301	298	303	303	NA
14	Jammu & Kashmir	329	326	329	330	330	231	338	333	334	335	337	NA
15	Manipur	304	307	300	299	302	299	297	298	295	295	299	NA
16	Meghalaya	359	356	351	350	354	354	348	344	341	345	343	NA
17	Orissa	307	303	294	286	287	290	293	295	297	300	301	NA
18	Punjab	328	324	322	322	320	325	325	328	332	335	335	NA
19	Rajasthan	306	305	306	308	310	311	313	318	320	323	327	NA
20	Tripura	334	315	313	315	319	327	321	323	327	326	328	NA
	<b>All India</b>	<b>313</b>	<b>312</b>	<b>308</b>	<b>308</b>	<b>309</b>	<b>309</b>	<b>311</b>	<b>314</b>	<b>316</b>	<b>319</b>	<b>321</b>	<b>322</b>

## Consumer Price Index and % Variations for Agricultural Labourers

Base 1986-87 = 100]

Sl. No.	Centre	Index for		% Variation	Index for		% Variation
		Aug-01	Aug-02		Sept-01	Sept-02	
	<b>Southern States</b>						
1	Kerala	323	328	1.55	316	325	2.85
2	Tamilnadu	304	321	5.59	304	324	6.58
3	Anthrapradesh	326	337	3.37	327	338	3.36
4	Karnataka	307	316	2.93	307	320	4.23
	<b>Northern States</b>						
5	Maharashtra	309	319	3.24	305	321	5.25
6	Haryana	322	331	2.80	324	333	2.78
7	West Bengal	305	305	0.00	306	309	0.98
8	Uttar Pradesh	313	323	3.19	314	326	3.82
9	Madhya Pradesh	316	320	1.27	315	320	1.59
10	Assam	318	328	3.14	319	331	3.76
11	Bihar	285	296	3.86	287	298	3.83
12	Gujarat	329	332	0.91	324	334	3.09
13	Himachalpradesh	303	303	0.00	299	303	1.34
14	Jammu & Kashmir	332	335	0.90	329	337	2.43
15	Manipur	312	295	-5.45	308	299	-2.92
16	Meghalaya	348	345	-0.86	350	343	-2.00
17	Orissa	313	300	-4.15	312	301	-3.53
18	Punjab	331	335	1.21	329	335	1.82
19	Rajasthan	311	323	3.86	308	327	6.17
20	Tripura	323	326	0.93	324	328	1.23
	<b>All India</b>	<b>312</b>	<b>319</b>	<b>2.24</b>	<b>311</b>	<b>321</b>	<b>3.22</b>



## Consumer Price Index for Rural Labourers

Sl. No.	Centre	Base 1986-87 = 100]											
		Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sept 02	Oct 02
<b>Southern States</b>													
1	Kerala	321	326	322	325	324	323	324	328	331	331	327	NA
2	Tamilnadu	312	316	314	313	312	313	316	319	320	322	324	NA
3	Anthrapradesh	332	327	325	325	327	330	332	335	335	337	338	NA
4	Karnataka	312	316	309	309	311	311	315	315	316	317	321	NA
<b>Northern States</b>													
5	Maharashtra	306	306	305	304	304	304	309	314	316	319	321	NA
6	Haryana	325	323	321	322	321	321	323	325	330	333	334	NA
7	West Bengal	313	310	303	301	303	302	300	302	303	308	312	NA
8	Uttar Pradesh	319	315	313	315	316	312	312	319	324	327	330	NA
9	Madhya Pradesh	317	314	309	308	310	312	315	318	322	325	325	NA
10	Assam	324	324	319	317	319	320	320	322	323	328	331	NA
11	Bihar	298	298	292	292	292	294	290	293	295	298	300	NA
12	Gujarat	321	317	313	315	317	320	323	326	331	334	335	NA
13	Himachalpradesh	305	302	301	304	302	302	306	308	305	310	310	NA
14	Jammu & Kashmir	323	320	321	323	324	325	331	326	326	328	329	NA
15	Manipur	305	308	300	300	303	299	297	298	296	296	300	NA
16	Meghalaya	356	354	348	347	350	350	345	341	338	342	340	NA
17	Orissa	307	303	294	286	287	290	293	295	297	300	301	NA
18	Punjab	332	329	327	327	215	330	330	332	336	339	340	NA
19	Rajastan	309	307	308	310	312	313	315	319	320	324	328	NA
20	Tripura	328	308	307	309	313	321	315	317	321	319	321	NA
	<b>All India</b>	<b>316</b>	<b>314</b>	<b>311</b>	<b>311</b>	<b>311</b>	<b>312</b>	<b>313</b>	<b>317</b>	<b>319</b>	<b>321</b>	<b>323</b>	<b>324</b>

## Consumer Price Index and % Variations for Rural Labourers

Base 1986-87 = 100]

Sl. No.	Centre	Index for		% Variation	Index for		% Variation
		Aug-01	Aug-02		Sept-01	Sept-02	
	<b>Southern States</b>						
1	Kerala	326	331	1.53	320	327	2.19
2	Tamilnadu	305	322	5.57	304	324	6.58
3	Andhrapradesh	327	337	3.06	327	338	3.36
4	Karnataka	309	317	2.59	309	321	3.88
	<b>Northern States</b>						
5	Maharashtra	310	319	2.90	306	321	4.90
6	Haryana	323	333	3.10	325	334	2.77
7	West Bengal	307	308	0.33	308	312	1.30
8	Uttar Pradesh	316	327	3.48	318	330	3.77
9	Madhya Pradesh	319	325	1.88	318	325	2.20
10	Assam	318	328	3.14	319	331	3.76
11	Bihar	287	298	3.83	289	300	3.81
12	Gujarat	330	334	1.21	326	335	2.76
13	Himachalpradesh	309	310	0.32	305	310	1.64
14	Jammu & Kashmir	326	328	0.61	323	329	1.86
15	Manipur	312	296	-5.13	309	300	-2.91
16	Meghalaya	346	342	-1.16	347	340	-2.02
17	Orissa	313	300	-4.15	312	301	-3.53
18	Punjab	334	339	1.50	333	340	2.10
19	Rajasthan	311	324	4.18	309	328	6.15
20	Tripura	319	319	0.00	319	321	0.63
	<b>All India</b>	<b>314</b>	<b>321</b>	<b>2.23</b>	<b>313</b>	<b>323</b>	<b>3.19</b>

## Consumer Price Index for Industrial &amp; Agricultural Workers

(Kerala State)

Centre	1970= 100	Base 1998-99=100										
	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02
Thiruvananthapuram	114	114	115	114	114	114	114	115	116	117	117	117
Kollam	115	115	115	114	115	115	116	117	117	118	118	118
Pathanamthitta	113	113	113	112	112	112	113	113	114	115	113	113
Punalur	114	114	114	113	112	112	113	113	113	113	115	115
Alappuzha	114	114	114	113	113	112	113	113	113	113	113	113
Kottayam	115	115	115	114	114	113	114	114	115	115	115	115
Mundakkayam	113	113	113	112	111	111	111	112	113	114	114	114
Munnar	115	115	115	114	114	114	114	115	116	116	115	115
Ernakulam	115	115	115	114	114	113	114	114	115	115	115	115
Chalakkudy	114	114	114	113	113	112	113	113	113	113	113	113
Thrissur	115	115	115	114	114	113	114	114	114	114	114	114
Palakkad	112	112	112	111	111	111	111	112	113	114	114	114
Malappuram	113	113	114	113	112	112	112	113	114	115	114	114
Kozhikkode	115	115	115	114	113	112	113	113	113	113	113	113
Meppady	115	115	115	114	114	114	114	115	115	116	115	115
Kannur	115	115	115	114	114	113	114	114	114	115	114	114
Kasargod	114	114	114	113	112	112	113	113	113	113	113	114
State	114	114	114	113	113	113	113	114	114	115	114	114

## Consumer Price Index Numbers of certain centres for urban non-manual employees

[Base 1984-85=100]

Sl.No	Centre	State	Index for the month of											
			Nov 01	Dec 02	Jan 02	Feb 02	Apr-02	May-02	Jun-02	Jul-02	Aug 02	Sep 02	Oct 02	
<b>Southern Centres</b>														
1	Trivandrum	Kerala	386	386	391	392	395	400	402	406	408	405	NA	
2	Calicut	Kerala	374	374	375	376	375	376	378	380	383	383	NA	
3	Chennai	Tamilnadu	462	466	471	472	475	478	482	487	486	485	NA	
4	Coimbatore	Tamilnadu	455	462	460	460	462	463	466	471	473	474	NA	
5	Madurai	Tamilnadu	448	448	447	448	449	452	455	453	453	454	NA	
6	Salem	Tamilnadu	434	434	434	433	438	440	444	445	449	448	NA	
7	Tiruchirapalli	Tamilnadu	418	421	426	429	431	432	434	439	441	441	NA	
8	Hydrabad	Andrapradesh	413	411	412	411	417	420	425	427	426	429	NA	
9	Kurnool	Andrapradesh	411	408	413	411	408	409	410	412	413	414	NA	
10	Vijayawada	Andrapradesh	434	431	434	433	438	442	447	454	457	456	NA	
11	Vishakapattanam	Andrapradesh	406	406	404	402	406	408	412	416	416	416	NA	
12	Warangal	Andrapradesh	426	427	424	420	417	420	428	426	426	426	NA	
13	Bangalore	Karnataka	416	415	415	416	416	419	421	421	422	424	NA	
14	Gulbarga	Karnataka	385	386	386	389	387	389	392	392	392	395	NA	
15	Hubli	Karnataka	402	403	400	400	402	404	407	410	413	415	NA	
16	Mangalore	Karnataka	387	387	389	389	391	395	397	400	407	410	NA	
<b>Northern Centres</b>														
1	Dclhi	Delhi	405	402	399	399	399	401	405	411	413	419	NA	
2	Mumbai	Maharashtra	397	396	397	396	402	405	406	408	407	407	NA	
3	Aurangabad	Maharashtra	423	425	430	428	428	431	433	442	440	442	NA	
4	Nagpur	Maharashtra	379	376	375	372	378	381	386	386	388	389	NA	
5	Pune	Maharashtra	406	404	405	404	409	413	419	421	421	421	NA	
6	Solapur	Maharashtra	374	373	371	370	373	377	379	384	386	389	NA	
7	Chandigarh	Punjab	465	463	466	469	335	337	341	478	481	482	NA	
8	Kolkatta	West Bengal	359	356	352	352	356	358	363	366	367	367	NA	
9	Asansol	West Bengal	403	401	396	398	406	412	414	408	410	415	NA	
10	Kharagpur	West Bengal	382	382	374	374	381	384	391	396	400	400	NA	
11	Siliguri	West Bengal	424	420	421	418	422	424	425	430	430	432	NA	
12	Lucknow	Uttarpradesh	373	366	365	362	370	373	374	386	388	390	NA	
13	Agra	Uttarpradesh	389	384	385	382	387	393	395	403	405	406	NA	
14	Allahabad	Uttarpradesh	415	410	411	414	416	414	418	429	433	435	NA	
15	Kanpur	Uttarpradesh	365	360	357	358	360	364	372	374	381	378	NA	
16	Meerut	Uttarpradesh	347	345	354	355	360	360	366	370	373	371	NA	
	<b>All India</b>		<b>395</b>	<b>394</b>	<b>393</b>	<b>392</b>	<b>396</b>	<b>398</b>	<b>402</b>	<b>406</b>	<b>407</b>	<b>408</b>	<b>408</b>	

**Consumer Price Index Numbers and % Variations of certain centres  
for Urban non-manual employees**

[Base 1984-85=100]

Sl. No	Centre	State State	Index for		% Increase	Index for		% Increase
			Jul-02	Aug-02		Aug-02	Sept-02	
	<b>Southern State</b>							
1	Trivandrum	Kerala	406	408	0.49	408	405	-0.74
2	Calicut	Kerala	380	383	0.79	383	383	0.00
3	Chennai	Tamilnadu	487	486	-0.21	486	485	-0.21
4	Coimbatore	Tamilnadu	471	473	0.42	473	474	0.21
5	Madurai	Tamilnadu	453	453	0.00	453	454	0.22
6	Salem	Tamilnadu	445	449	0.90	449	448	-0.22
7	Tiruchirapalli	Tamilnadu	439	441	0.46	441	441	0.00
8	Hydrabad	Andrapradesh	427	426	-0.23	426	429	0.70
9	Kurnool	Andrapradesh	412	413	0.24	413	414	0.24
10	Vijayawada	Andrapradesh	454	457	0.66	457	456	-0.22
11	Vishakapattanam	Andrapradesh	416	416	0.00	416	416	0.00
12	Warangal	Andrapradesh	426	426	0.00	426	426	0.00
13	Bangalore	Karnataka	421	422	0.24	422	424	0.47
14	Gulbarga	Karnataka	392	392	0.00	392	395	0.77
15	Hubli	Karnataka	410	413	0.73	413	415	0.48
16	Mangalore	Karnataka	400	407	1.75	407	410	0.74
	<b>Northern State</b>							
1	Delhi	Delhi	411	413	0.49	413	419	1.45
2	Mumbai	Maharashtra	408	407	-0.25	407	407	0.00
3	Aurangabad	Maharashtra	442	440	-0.45	440	442	0.45
4	Nagpur	Maharashtra	386	388	0.52	388	389	0.26
5	Pune	Maharashtra	421	421	0.00	421	421	0.00
6	Solapur	Maharashtra	384	386	0.52	386	389	0.78
7	Chandigarh	Punjab	478	481	0.63	481	482	0.21
8	Kolkatta	West Bengal	366	367	0.27	367	367	0.00
9	Asansol	West Bengal	408	410	0.49	410	415	1.22
10	Kharagpur	West Bengal	396	400	1.01	400	400	0.00
11	Siliguri	West Bengal	430	430	0.00	430	432	0.47
12	Lucknow	Uttarpradesh	386	388	0.52	388	390	0.52
13	Agra	Uttarpradesh	403	405	0.50	405	406	0.25
14	Allahabad	Uttarpradesh	429	433	0.93	433	435	0.46
15	Kanpur	Uttarpradesh	374	381	1.87	381	378	-0.79
16	Meerut	Uttarpradesh	370	373	0.81	373	371	-0.54
	<b>All India</b>		<b>406</b>	<b>407</b>	<b>0.25</b>	<b>407</b>	<b>408</b>	<b>0.25</b>

# Prices

## MONTHLY RETAIL PRICES OF CERTAIN ESSENTIAL COMMODITIES FOR THE LAST ONE YEAR

Sl. No	Name of Commodity	Unit	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr 02	May 02	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02
<b>A. RICE - Open Market</b>														
1	Red - Matta	Kg	12.16	12.20	12.20	12.23	11.96	11.91	11.89	11.91	12.32	12.80	12.95	12.93
2	Red - Chamba	Kg	12.13	12.30	12.25	12.15	12.29	12.36	12.36	11.81	12.20	12.88	13.39	12.96
3	White Andra Vella	Kg	12.05	12.15	12.29	12.34	11.70	11.91	11.82	11.93	12.16	12.15	12.03	11.95
<b>B. PULSES</b>														
4	Green gram	Kg	30.93	30.43	30.57	30.18	30.07	30.93	31.29	31.32	31.14	30.54	30.96	30.21
5	Black gram split w/o husk	Kg	36.46	35.00	34.71	34.04	32.75	32.68	34.25	34.96	34.04	33.32	33.13	32.32
6	Dhall(Tur)	Kg	30.15	29.69	29.12	28.81	28.88	28.92	29.69	30.00	30.31	30.73	31.13	31.15
<b>C. OTHER FOOD ITEMS</b>														
7	Sugar(O.M)	Kg.	15.25	15.18	15.26	15.25	15.30	15.24	15.07	14.74	14.59	14.52	14.69	14.49
8	Milk (Cow's)	Ltr.	12.96	12.96	13.04	13.04	13.04	13.07	13.18	13.00	13.00	12.50	13.00	13.04
9	Egg Hen's (White lagon)	Dozen	16.20	16.00	16.95	16.46	16.00	15.04	14.92	17.14	17.04	14.89	15.23	14.38
10	Mutton with bones	Kg	115.00	115.00	116.43	116.43	116.43	116.43	120.71	120.71	120.00	121.79	121.43	122.14
11	Tea (Kannan Devan)	1/2 kg	69.96	71.21	70.68	70.68	70.68	70.68	71.21	71.14	71.14	71.07	71.00	71.07
12	Coffee Powder (Brook Bond Gr.Label)	1/2 kg	69.30	69.20	69.25	69.25	69.25	69.25	69.13	69.13	69.20	69.20	69.20	69.20
<b>D. OIL AND OIL SEEDS</b>														
13	Coconut oil	Kg	36.54	48.61	43.61	41.79	40.04	44.64	43.86	45.79	52.14	52.64	51.04	49.57
14	Groundnut oil	Kg	49.87	50.31	50.87	50.42	49.87	51.50	52.50	51.48	53.48	53.38	56.20	56.38
15	Refined oil(Postman)	Kg.	60.18	60.33	60.33	59.55	59.40	61.50	62.10	62.74	64.93	65.83	65.65	63.87
16	Gingelly oil	Kg.	50.29	50.14	51.00	50.36	51.18	53.29	53.57	54.79	54.79	54.46	56.85	58.05
17	Coconut without husk	100 nos	386.07	474.64	461.07	442.86	429.64	443.93	440.71	452.50	480.36	482.14	480.77	469.64

Monthly retail prices of certain essential commodities for the last one year (Contd.)

Sl. No	Name of Commodity	Unit	Nov 01	Dec 01	Jan 02	Feb 02	Mar 02	Apr-02	May 02	Jun 02	Jul 02	Aug 02	Sep 02	Oct 02
<b>E. SPICES AND CONDIMENTS</b>														
18	Corriandar	Kg.	40.86	39.57	37.79	35.71	33.57	33.64	33.14	33.21	33.29	32.93	35.00	34.29
19	Chillies dry	Kg.	48.00	45.00	43.07	41.64	39.36	38.86	39.71	42.07	43.00	43.07	45.00	51.93
20	Onion small	Kg.	17.31	16.89	12.26	10.61	10.74	10.61	11.60	13.85	18.15	15.38	16.02	19.27
21	Tamarind without seeds loose	Kg.	24.50	24.71	24.57	24.07	23.21	22.07	22.71	22.36	22.64	22.79	23.69	24.29
<b>F. TUBERS</b>														
22	Chennai	Kg.	7.29	7.86	7.21	7.43	8.07	9.86	10.00	12.14	12.00	10.36	9.15	8.29
23	Tapioca Raw	Kg.	4.84	4.71	4.68	4.93	4.89	5.21	5.07	4.96	5.32	5.54	5.62	5.82
24	Potato	Kg.	12.29	13.27	11.77	9.21	8.63	9.64	10.44	11.57	11.59	11.98	11.09	11.99
25	Colocassia	Kg.	13.57	13.07	11.71	12.36	13.00	13.82	15.18	14.30	14.00	14.08	14.69	13.29
<b>G. VEGETABLES</b>														
26	Onion big	Kg.	11.49	9.94	7.39	6.69	5.90	5.51	5.36	6.19	6.85	7.96	8.40	8.54
27	Brinjal	Kg.	10.71	11.00	10.46	11.00	10.29	10.93	10.21	10.43	10.29	10.00	9.85	9.64
28	Cucumber	Kg.	7.21	8.36	8.36	7.86	6.14	6.21	5.93	7.93	8.14	6.79	8.23	7.93
29	Ladies Finger	Kg.	11.71	10.71	9.64	11.36	12.14	11.43	10.36	10.43	11.14	11.21	11.15	10.93
30	Cabbage	Kg.	8.71	9.07	8.43	9.21	8.71	8.36	9.14	8.71	9.00	9.50	7.69	8.64
31	Bittergourd	Kg.	12.29	12.79	11.29	11.21	11.86	13.50	12.79	14.46	14.00	12.14	12.85	14.43
32	Tomatto	Kg.	10.64	19.21	8.71	8.14	7.71	8.07	8.64	11.36	9.57	10.71	8.54	9.14
33	Chillies green	Kg.	13.14	16.57	13.00	12.21	14.00	14.29	12.86	17.43	14.57	16.21	14.69	15.00
34	Banana green	Kg.	13.04	11.14	10.18	10.32	10.11	11.61	12.00	11.18	11.61	12.32	11.85	10.96
35	Plantain green	Kg.	8.68	8.86	8.54	8.89	8.54	8.61	8.43	8.46	8.71	8.71	9.46	8.89
<b>H. MISCELLANEOUS ITEMS</b>														
36	Washing Soap (501 Half Bar)	1/2 Bar	7.73	7.73	7.70	7.70	7.71	7.73	7.73	7.71	7.80	7.86	7.88	7.91
37	Toilet Soap Lux	100 gm	11.00	11.00	10.96	10.96	11.07	11.32	11.32	11.29	11.46	11.57	11.71	11.86
38	Toothpaste Colgate	100 gm	27.50	28.93	28.75	29.11	29.07	29.79	29.79	29.64	29.64	29.64	29.64	29.64
39	Cement - Sankar (Ord. Paper Bag)	each	183.68	182.95	187.46	189.21	173.69	168.96	164.32	154.77	149.95	151.68	138.67	130.21

