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Working Paper No. 81

ASPECTS OF URBAN LABOUR FOR  
IN INDIA II

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## ASPECTS OF URBAN LABOUR FORCE IN INDIA - II

This paper is a sequel to an earlier one (MIDS Working Paper No.80).<sup>1/</sup> In the earlier paper the dynamics of urban labour markets, with specific reference to the phenomena of wageisation (changes in the wage labour in the workforce) and casualization (changes in the casual labour in the wage labour force) was examined using the data relating to current day rates of the two rounds of the National Sample Survey 1977-78 (32nd round) and 1983 (38th round). The earlier analysis revealed that the urban labour market during the five year period 1977-78 and 1983 was not static. Increases in the incidence of wage labour in the non-agrarian urban workforce was observed in 12 states among males and 8 states among females. The entire peninsular India recorded such an increase. A reduction in the relative size of the wage sector in urban India was noticed in the gangetic belt of Bihar, Uttar Pradesh and W. Bengal. Rajasthan exhibited the same phenomenon for female workforce. It was further evident that in the case of urban male workforce, all the states where wageisation was evident (with the exception of Karnataka), the casualization process was also underway. Even states where wageisation was not evident, the casualization process prevailed in the case of male workforce. The process was not so widespread among females in the country though casual labour as a proportion of wage labour in the country as a whole was markedly higher among females than males.

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<sup>1/</sup> U.Kalpagam, Aspects of Urban Labour Force in India-I, MIDS Working paper No.80, March 1987.

Prior evidence both from analysis of occupational structure as well as the growing literature on the informal sector does suggest that some occupations are more 'casual prone' than others. For instance much of construction labour, and non-professional non-governmental services are casual in nature. Similarly within the manufacturing sector, the workforce status often depends on the employment size of the enterprise. Thus small enterprises, in the nature of workshops, do tend to employ workers on casual basis, not to mention the contract and casual labour in the large units themselves. Much of home-based production that are in the nature of piece rated work for a buyer-up or merchant contractor are also casual in nature.

In the same manner, prior evidence also suggest that in certain occupations 'self-employment' prevails. Retail trading, a section of services and a section of homebased production are essentially 'self employment sectors'.

Given this prior understanding, the interstate variations in the size of the wage sector of the non-agrarian urban workforce and the size of the casual wage sector relative to the wage sector, again in the non-agrarian urban workforce, could be explained partially by the differences in nature of the occupational structure itself.

The earlier study had also suggested the possibility of casual labour in the wage labour force being highly correlated with unemployment rate. While the direction

of casualty is not generally stated, the possibility that greater surplus labour could be a factor in the casualising tendency need to be kept in mind. However a high correlation (and significant) between these two variables existed only in the case of male workforce.

The data that is used for the analysis is the aggregate state level data. The aggregation is over a number of urban units, where the characteristics and dynamics of each urban unit could be different. In particular the literature on urbanisation suggests that the nature of occupational structure is likely to vary with the size class of towns. Thus small towns are likely to have both a smaller wage sector and a smaller regular wage sector in the wage sector as a whole, than the larger size class of towns. In that case both self employment and casual employment in the workforce may be relatively higher. The distribution of urban workforce in the state over different size classes of towns would be an important factor in the analysis.

The present paper attempts to explain the inter-state differences in the incidence of wage labour in the urban workforce (non-agrarian) and the incidence of casual labour in the urban wage-labour force (non-agrarian) and the changes in them over time through the differences and shifts in the occupational structure, and through the size and changes (in the size) of relative surplus labour (unemployment). The differences in the occupational structure in different size classes of towns, though recognised to be important, is not included as an explanatory variable. This is because the data base for

the paper is only the three rounds of the National sample survey on employment and unemployment - 1972-73 (27th round), 1977-78 (32nd round) and 1983 (38th round). By restricting only to the internal evidence contained in the NSS, it attempts to examine the relationship that exists between the two phenomena under consideration, and the sectoral distribution of the urban workforce. To this end the paper is divided into the following sections-

- i) the data base
- ii) the phenomenon of wageisation<sup>\*</sup>
  - a) urban workforce (general)
  - b) non-agrarian urban workforce
- iii) The phenomena of casualization and wageisation<sup>\*</sup>
  - a) urban workforce (general)
  - b) non-agrarian urban workforce
- iv) An overview of urban labour market dynamics
- v) The two phenomena and Unemployment
- vi) Wageisation, casualization and the sectoral distribution of urban workforce
- vii) Conclusions

The Data Base: The objective of the three quinquennial surveys on employment and unemployment carried out during the 27th (1972-73), 32nd (1977-78) and 38th (1983) rounds was to measure the nature and extent of employment and unemployment in quantitative terms. To achieve this objective, the population of age 5 years and above was classified as belonging to different activity categories adopting three different approaches, namely

- i) Usual status approach with a reference period of 365 days preceeding the date of survey
- ii) Current week status approach with a reference period of 7 days preceeding the date of survey and
- iii) Current day status approach - the reference period being each day of the 7 days preceeding the date of survey.

Annexure I contains the various activity categories used in the 27th, 32nd and 38th rounds. Persons reported to be engaged in any one or more of the activities listed under the category codes 01-51 during the specified period were considered 'working', those assigned codes 81 and 82 were considered as 'seeking' and or 'available for work'. The two together constituted the labour force. Those assigned codes 91-99 were classified as 'not in the labour force'.

As this paper uses only data relating to usual status, we shall examine further the classification according to usual status approach. In the 32nd and 38th round surveys, the status of activity (or inactivity) on which a person spent relatively longer time of the preceding 365 days prior to the date of survey was considered the principal usual activity status of the person. Accordingly a person's principal usual status was considered 'working' (or employed) if s/he was engaged relatively for a longer time during the reference period of 365 days in any one or more work activities viz activities coded 01-51, 'seeking or available for work' or unemployed s/he was not working but was either seeking or was available for work (activity code 81) for a relatively longer time of the



specified reference period and "not in the labour force" if s/he was engaged for a relatively longer period in any one or more of the non-gainful activities (activities coded 91-98). Within the two broad activity categories 'working' and 'not in the labour force' the detailed activity category was determined on the basis of time spent criterion. A person categorised as a worker on the basis of his/her principal status is referred to as 'main worker'. Those of the 'non-workers' who pursued in a subsidiary capacity some gainful activity as well, along with their principal usual activity (non-gainful) are referred to as 'marginal workers'. These two groups viz main workers and marginal workers together constitute 'all workers'.

In the 27th round survey (1972-73) however, for a person, his or her activity (or inactivity) which dominated for a long period of time in the past (say one year or so) and which also was likely to continue in the future was considered as his/her usual activity. Accordingly a person was considered working if s/he was pursuing any gainful activity for a long period in the past, say one year which was likely to continue in the future also. Even persons (excepting full time regular students) who were pursuing gainful activities marginally only were considered as workers. Thus the estimates of usual 'workers' based on the 27th round data included both the categories of workers, those pursuing gainful activities in the principal capacity and those pursuing gainful activities in the subsidiary capacity or in other words both 'main' and 'marginal workers'. The estimates of workers - main and marginal taken together as obtained from the 32nd and 38th rounds are thus comparable with

the estimates 'workers' as obtained from the 27th round. In this paper, the workers, in 32nd and 38th rounds refer to 'all workers', i.e., main and marginal workers.

In our analysis the data for the 27th and 32nd rounds refer to the average of 4 subrounds for the entire survey period 1972-73 and 1977-78. The data for the 38th round refers to the average of 2 subrounds of only Jan-June 1983, the period for which the data is as yet available. While there is unlikely to be major changes affecting the results (in urban areas), the results may still be considered preliminary.

#### Wageisation : Urban Workforce in General

Table 1 presents comparable usual status data on the incidence of wage-labour in the urban workforce in all states for the years 1972-73, 1977-78 and 1983. The All-India trends in the incidence of wage labour show a steady though marginal decline in the case of males. The female rates first show a decline in the first 5 year period 1972-73 and 1977-78, and a rise of nearly 3 per cent in the next 5 year period 1977-78 to 1983. Within the country there are different patterns among the states. Tables 2(A) and (B) present the summary of state level analysis. Prima facie evidence of an increase in the wage labour incidence in the ten year period is available for ten states among males and females. Of the 10 States that showed increase in the case of males, 4 states (Andhra Pradesh, Gujarat, Karnataka and Tamilnadu) showed increase in both five year periods 1972-73 to 1977-8, and 1977-8 to 1983. Assam, Haryana, Kerala, Madhya Pradesh, Orissa

Table 1

Incidence of Wage Labour in the Urban  
Workforce (Usual status comparable)

States	Males			Females		
	27 1972-73	32 1977-78	38 1983	27 1972-73	32 1977-78	38 1983
Andhra Pradesh	55.99	58.04	59.20	50.16	51.83	51.14
Assam	56.21	55.22	59.25	72.12	67.63	60.01
Bihar	60.25	56.31	51.87	53.19	51.87	49.66
Gujarat	61.08	62.28	63.70	51.73	51.98	52.71
Haryana	47.24	44.13	50.46	47.31	44.35	27.97
Himachal Pradesh	75.52	55.29	65.76	51.28	47.54	43.74
Jammu & Kashmir	56.17	52.58	46.57	26.32	27.98	37.70
Karnataka	60.04	60.74	64.79	52.90	59.35	65.49
Kerala	64.55	61.95	65.57	61.53	42.87	44.64
Madhya Pradesh	58.84	58.31	59.15	41.72	55.09	57.71
Maharashtra	70.53	67.47	67.35	66.20	64.08	66.04
Manipur	47.14	43.16	35.73	14.50	12.35	8.75
Meghalaya	78.61	74.28	64.50	70.88	78.57	40.01
Nagaland	76.92	68.27	62.42	42.87	59.26	60.05
Orissa	64.83	59.38	67.03	59.23	60.58	70.17
Punjab	51.22	47.60	53.08	42.18	37.54	49.53
Rajasthan	47.40	47.34	45.80	18.90	19.32	15.42
Tamilnadu	59.90	62.23	65.89	48.50	46.29	56.09
Tripura	58.67	59.22	56.24	100	87.06	96.44
Uttar Pradesh	51.31	48.22	44.73	36.71	33.21	46.08
W. Bengal	70.82	66.32	62.39	75.62	65.61	59.08
India	60.75	59.18	58.45	51.58	50.49	53.32



Table-2A

States where wageisation phenomenon  
is evident between 1972-73 and 1983 - Males  
(usual status comparable)

Wageisation 1972-73 & 1977-78	Wageisation 1977-78 & 1983	Wageisation 1972-73 & 1983
Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Gujarat	Assam	Assam
Karnataka	Gujarat	Gujarat
Tamilnadu	Haryana	Haryana
Tripura	Himachal Pradesh	Karnataka
	Karnataka	Kerala
	Kerala	Madhya Pradesh
	Madhya Pradesh	Orissa
	Orissa	Punjab
	Punjab	Tamilnadu
	Tamilnadu	

Females

Andhra Pradesh	Gujarat	Andhra Pradesh
Gujarat	Jammu & Kashmir	Gujarat
Jammu & Kashmir	Karnataka	Jammu & Kashmir
Karnataka	Kerala	Karnataka
Madhya Pradesh	Madhya Pradesh	Madhya Pradesh
Meghalaya	Nagaland	Nagaland
Nagaland	Orissa	Orissa
Orissa	Punjab	Punjab
Rajasthan	Tamilnadu	Tamilnadu
	Uttar Pradesh	Uttar Pradesh

Table-2B

Wageisation is not evident between 1972-73 and 1983

- Males

(usual states comparable)

Prima-facie Decrease in the incidence of wage labour in the workforce 1972-73 & 1977-78	Prima-facie Decrease in the incidence of wage labour in the workforce 1977-78 & 1983	Prima-facie Decrease in the incidence of wage labour in the workforce 1972-73 & 1983
Assam	Bihar	Bihar
Bihar	Jammu & Kashmir	Himachal Pradesh
Haryana	Maharashtra	Jammu & Kashmir
Himachal Pradesh	Manipur	Maharashtra
Kerala	Meghalaya	Manipur
Madhya Pradesh	Nagaland	Meghalaya
Maharashtra	Rajasthan	Nagaland
Manipur	Tripura	Rajasthan
Meghalaya	Uttar Pradesh	Tripura
Nagaland	West Bengal	Uttar Pradesh
Orissa		West Bengal
Punjab		
Rajasthan		
Uttar Pradesh		
W. Bengal		

FEMALES

Assam	Andhra Pradesh	Assam
Bihar	Assam	Bihar
Haryana	Bihar	Haryana
Himachal Pradesh	Haryana	Himachal Pradesh
Kerala	Himachal Pradesh	Kerala
Maharashtra	Manipur	Maharashtra
Manipur	Meghalaya	Manipur
Punjab	Rajasthan	Meghalaya
Tamilnadu	W. Bengal	Rajasthan
Tripura		Tripura
Uttar Pradesh		W. Bengal
West Bengal		

and Punjab recorded increases only between 1977-8 to 1983, the increase during this period overtook the decrease such that for the overall ten year period, these states show an increase.

Of the 10 states, showing similar increases among females, 6 states showed increases in both (5 year) periods. These are Gujarat, Jammu and Kashmir, Karnataka, Madhya Pradesh, Nagaland and Orissa. The states of Andhra Pradesh, Meghalaya and Rajasthan recorded increases only in the first phase. Of these, only the increase in Andhra Pradesh was sufficiently high to compensate for the decrease in the second phase, such that for the 10 year period Andhra Pradesh records an increase, while Meghalaya and Rajasthan register decreases in the incidence of wage labour. Kerala, Punjab, Tamilnadu and Uttar Pradesh recorded increase only during 1977-8 to 1983. The increase in Kerala was not sufficient to offset the decrease recorded in the earlier phase, such that for the 10 year period, Kerala does not register an increase. The situation is therefore unlike Punjab, Tamilnadu and Uttar Pradesh.

In the same manner, of the 11 states that recorded decreases among male workforce in the ten year period, only Himachal Pradesh and Tripura did not show decreases in both periods. All other 9 states - Bihar, Jammu & Kashmir, Maharashtra, Manipur, Meghalaya, Nagaland, Rajasthan, Uttar Pradesh and West Bengal recorded decreases in both (5 year) periods. There were in addition states that recorded decreases in the first (5 year) period, but the subsequent increase in the second period compensated

for the decline, such that for the ten year period these states do not show a decrease. The states are Assam, Haryana, Kerala, Madhya Pradesh, Orissa and Punjab.

The female workforce situation is discussed below. Of the 11 states recording decreases between 1972-73 to 1983, six states show decreases in both periods. These are Assam, Bihar, Haryana, Himachal Pradesh, Manipur and W. Bengal. The states of Kerala, Maharashtra, Tripura, Punjab, Tamilnadu and Uttar Pradesh recorded decreases in the first period only. In Punjab, Tamilnadu & Uttar Pradesh, the decrease was offset by the increase in the second period such that for the ten year period, these states do not record an overall decrease in the incidence of wage labour. Andhra Pradesh is the only state that recorded a decrease in the second period; but did not do so for the entire ten year period, while the decrease in Rajasthan in the second period was not compensated by the increase in the first period.

The prima facie evidence presented above can be accepted as valid only if the Work Participation Rates (WPRs) are to some extent stable. If WPRs are unstable, it has to be ensured that the prima facie increases/decreases are in fact real, and not the consequence of WPR instability arising out of some statistical practices. For instance, a decline in WPR can arise on two counts - a real decline, and an illusory decline when for instance those who are working as selfemployed are not captured in the workforce statistics. In such a situation we would expect wageisation to occur as a result of the netting process that excludes large sections of selfemployed from the worker status.

Two aspects of the stability of WPR need to be probed for our analysis. First over time and secondly the variation across states. Considering first the stability over time, it appears as a reasonable analysis to consider the wageisation phenomenon as real if the elasticity of the incidence of wage labour with respect to WPR is greater than one in absolute terms, that is if the percentage change in the incidence of wage labour over time is greater (absolutely) than the percentage change in the WPR over the same time period. Similarly the variations in WPR across states could be both a real one, and a statistical one arising as mentioned earlier, out of an exclusive way of netting workers which might have varied across regions. In particular there exist activities that are gainful and important for subsistence but not necessarily "economically productive". Such activities are recorded in code 93 (engaged in domestic work and free collection) in both the 32nd and 38th rounds. In some states sections of selfemployment get included in code 93 activity and vice versa. The interstate variations in WPR after accounting for "93 activity" are considerably lower than before such adjustment. We seek to minimise this variation by including those recorded in activity code 93 (engaged in domestic work and free collection of items).<sup>1/</sup> The WPR obtained through the addition of activity code 93 can be called the "Extended Work Participation Rate". We then apply the same analysis of the elasticity of the incidence of wage labour with respect to the EWPR to examine whether the wageisation process is real or not. Annexures 2.1 - 2.6 contain the tables dealing with the two aspects of stability analysis.

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1/ See K C Seal, in Women in the Indian Labour Force, ILO ARTEP 1981.

Table-3A

Increases: 1972-73 and 1977-78

MALES

States showing prima facie increase in the incidence of wage labour	States continuing to show increase in incidence of wage labour after checking elasticity of wage labour with WPR	States continuing to show increase in incidence of wage labour after checking with elasticity with respect to EWPR
Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Gujarat	Gujarat	Gujarat
Karnataka	Karnataka	Karnataka
Tamilnadu	Tamilnadu	Tamilnadu
Tripura		

FEMALES

Andhra Pradesh	Karnataka
Gujarat	Madhya Pradesh
Jammu & Kashmir	Nagaland
Karnataka	
Madhya Pradesh	
Meghalaya	
Nagaland	
Orissa	
Rajasthan	



Table-3B

Decreases: 1972-73 and 1977-78

MALES

States showing prima facie decrease in the incidence of wage labour	States continuing to show decrease in the incidence of wage labour after checking elasticity with WPR	States continuing to show decrease in the incidence of wage labour after checking elasticity with EWPR
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Assam	Bihar	Bihar
Bihar	Haryana	Haryana
Haryana	Himachal Pradesh	Himachal Pradesh
Himachal Pradesh	Maharashtra	Maharashtra
Jammu & Kashmir	Nagaland	Nagaland
Kerala	Orissa	Orissa
Madhya Pradesh	Punjab	Punjab
Maharashtra	Uttar Pradesh	Rajasthan
Manipur	West Bengal	Uttar Pradesh
Meghalaya		West Bengal
Nagaland		
Orissa		
Punjab		
Rajasthan		
Uttar Pradesh		
West Bengal		

FEMALES

Assam	
Bihar	
Haryana	
Himachal Pradesh	
Kerala	
Maharashtra	Manipur
Manipur	
Punjab	
Tamilnadu	
Tripura	
Uttar Pradesh	
West Bengal	

Table-4A

Increases 1972-73 and 1983

MALES

States showing increase in incidence of wage labour in the workforce prima facie	States continuing to show increase after checking with elasticity with respect of WPR	States continuing to show increase after checking with elasticity with respect to EWPR
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Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Assam	Karnataka	Karnataka
Gujarat	Punjab	Punjab
Haryana	Tamilnadu	Tamilnadu
Karnataka		
Kerala		
Madhya Pradesh		
Orissa		
Punjab		
Tamilnadu		

FEMALES

Andhra Pradesh		
Gujarat	Jammu & Kashmir	
Jammu & Kashmir	Karnataka	Madhya Pradesh
Karnataka	Madhya Pradesh	Nagaland
Madhya Pradesh	Nagaland	Orissa
Nagaland	Uttar Pradesh	
Orissa		
Punjab		
Tamilnadu		
Uttar Pradesh		



Table-4B

Decreases 1972-73 and 1983

MALES

States showing prima facie decrease in the incidence of wage labour in the workforce	States continuing to show decrease after checking with elasticity with respect to WPR	States continuing to show decrease after checking with elasticity with respect to EWPR
Bihar	Bihar	Bihar
Himachal Pradesh	Himachal Pradesh	Himachal Pradesh
Jammu & Kashmir	Jammu & Kashmir	Jammu & Kashmir
Maharashtra	Maharashtra	Maharashtra
Manipur	Manipur	Manipur
Meghalaya	Meghalaya	Meghalaya
Nagaland	Nagaland	Nagaland
Rajasthan	Rajasthan	Rajasthan
Tripura	Uttar Pradesh	Uttar Pradesh
Uttar Pradesh	West Bengal	West Bengal
West Bengal		

FEMALES

Assam		
Bihar		
Haryana	Haryana	
Himachal Pradesh	Kerala	Manipur
Kerala	Manipur	Meghalaya
Maharashtra	Meghalaya	
Manipur	Rajasthan	
Meghalaya		
Rajasthan		
Tripura		
West Bengal		

Table-5A

Increases 1977-78 and 1983

MALES

States showing prima facie increase in incidence of wage labour in the work-force	States continuing to show increase after checking with elasticity with respect to WPR	States continuing to show increase after checking with elasticity with respect to EWPR
Andhra Pradesh	Andhra Pradesh	Andhra Pradesh
Assam	Assam	Assam
Gujarat	Haryana	Haryana
Haryana	Himachal Pradesh	Himachal Pradesh
Himachal Pradesh	Karnataka	Karnataka
Karnataka	Kerala	Kerala
Kerala	Orissa	Orissa
Madhya Pradesh	Punjab	Punjab
Orissa	Tamilnadu	Tamilnadu
Punjab		
Tamilnadu		

FEMALES

Gujarat	Jammu & Kashmir	Karnataka
Jammu & Kashmir	Karnataka	Punjab
Karnataka	Punjab	Tamilnadu
Kerala	Tamilnadu	Uttar Pradesh
Madhya Pradesh	Uttar Pradesh	
Nagaland		
Orissa		
Punjab		
Tamilnadu		
Uttar Pradesh		

Table-5B

Decreases 1977-78 and 1983

MALES

States showing prima facie decrease in the incidence of wage labour in the workforce	States continuing to show decrease after checking for elasticity with respect to WPR	States continuing to show decrease after checking for elasticity with respect to EWPR
Bihar	Bihar	Bihar
Jammu & Kashmir	Jammu & Kashmir	Jammu & Kashmir
Maharashtra	Manipur	Manipur
Manipur	Meghalaya	Meghalaya
Meghalaya	Nagaland	Nagaland
Nagaland	Rajasthan	Rajasthan
Rajasthan	Tripura	Tripura
Tripura	Uttar Pradesh	Uttar Pradesh
Uttar Pradesh	West Bengal	West Bengal
West Bengal		

FEMALES

Andhra Pradesh		
Assam	Haryana	Haryana
Bihar	Manipur	Himachal Pradesh
Haryana	Meghalaya	Manipur
Himachal Pradesh	Rajasthan	Meghalaya
Manipur		Rajasthan
Meghalaya		West Bengal
Rajasthan		
West Bengal		

Tables 3 (A&B), 4 (A&B) and 5 (A&B) present the summarised results of the wageisation phenomenon among urban workforce for the three periods 1972-73 to 1977-78, 1977-78 to 1983, and 1972-73 to 1983. The following are important points to be noted.

1. In general the male analysis is less affected by instability of WPR
2. In the first (5 year) period there is not a single state for female workforce analysis where it can be confidently asserted that the prima facie increase/decrease in wage labour incidence is in fact real. In the case of male workforce, it can be confidently asserted that increases in the wage labour incidence are evident in the three southern states of Andhra Pradesh, Karnataka, Tamilnadu and the northern state of Gujarat. Equally it can be asserted that wage labour as a proportion of workforce decreased in Bihar, Haryana, Himachal Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Uttar Pradesh and West Bengal.
3. In the second (5 year) period 1977-78 to 1983 there are more states both among males and females in which the results can be confidently asserted. Among males, the states that record increases in the wage labour incidence are Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Karnataka, Kerala, Orissa, Punjab and Tamilnadu. Thus we note that again the southern states as in the first period, indicate the wageisation process, though now Kerala and Orissa can be added to the

southern list. In addition Punjab, Haryana and Himachal Pradesh is another urban region indicating wageisation. Among females however, Karnataka and Tamilnadu are the only two southern states that continue to record the wageisation process in this period. Punjab and rather surprisingly the state of Uttar Pradesh are the two northern states that record an increase in the incidence of wage labour among females in the second period.

4. The states recording unambiguous decreases in the incidence of wage labour in the urban workforce among males are the states of Bihar, Uttar Pradesh, Rajasthan and W. Bengal forming one continuous belt, the North Eastern states of Manipur, and Meghalaya, and the states of Rajasthan and Haryana.
5. For the entire 10 year period there are very few states where it can be unambiguously stated that the incidence of wage labour in the urban workforce in general had increased. For males unambiguous increases are recorded in the three southern states of Andhra Pradesh, Karnataka, and Tamilnadu, and the northern state of Punjab. The three southern states as noted earlier also recorded unambiguous increases in both the first and second periods. Thus the increase in urban wage labour in the three southern states has had a longer duration than the other new entrants on the scene like Punjab, Haryana, Himachal Pradesh, Kerala, Orissa and Assam. Gujarat recorded an unambiguous increase only

in the first period, and is likely to have been so in the second period, with only prima facie incidence that does not remain validated after the stability analysis.

6. There are however more states among males that record unambiguous decreases in the wage labour incidence in the urban workforce in general. The contiguous region comprising the states of Rajasthan, Bihar, Uttar Pradesh and W. Bengal, the North Eastern region comprising Manipur, Meghalaya and Nagaland, and the states of Maharashtra, Himachal Pradesh and Jammu & Kashmir. In the case of females, only the two states of Manipur and Meghalaya record unambiguous decreases for the entire ten year period. Just as the southern states indicate a longer period of increases in wage labour among males, so too the region of Rajasthan, Bihar, Uttar Pradesh and W. Bengal appear to have a longer period of decrease in wage labour incidence. Of the North Eastern states that revealed decreases in the latter period 1977-78 to 1983, only Nagaland has had a longer period of decrease.

7. In general few states indicate unambiguous decreases among females than males, and those that do are only for the period 1977-78 to 1983. It is difficult to ascertain the reason, though it needs to be kept in mind that the stability analysis would have a severe effect among females than among males. We had earlier



noted however, that large number of states provide prima facie evidence of decrease among females too, as in the case of males. The same is true too for increases in the wage labour incidence.

8. Excepting a few states, the results obtained so far using the usual status data for the period 1977-78 to 1983 are similar to the results using current daily rates for the same period.<sup>1/</sup>

#### Wageisation and the Non-Agrarian Urban Workforce

In 1983, nearly a tenth of male workers and fifth of female workers in urban India were agricultural workers (see table 6). As we are primarily interested in examining the urban labour market dynamics with regard to non-agrarian workforce, we shall now examine the phenomenon of wageisation with respect to non-agrarian workforce only. However as the data relating to agricultural workers are only available for the 32nd (1977-78) and 38th (1983) rounds, this section's analysis would be confined only to the five year period 1977-78 to 1983.

Table 7 provides the comparable estimates of wage labour incidence in the non-agrarian urban workforce from the two rounds. The country as a whole shows a marginal decline in the wage labour incidence. However there are

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<sup>1/</sup> See tables 7a and 7b in Kalpagam (1987)

Table 6 - Incidence of Agricultural workers in the urban workforce (usual status comparable)

	Males		Females	
	32	38	32	38
Andhra Pradesh	14.54	9.25	35.02	22.02
Assam	6.00	10.80	12.45	-
Bihar	11.80	11.27	31.84	15.04
Gujarat	9.09	9.05	31.61	21.71
Haryana	14.21	14.87	48.68	31.37
Himachal Pradesh	7.02	7.00	39.89	26.78
Jammu & Kashmir	11.73	8.22	51.66	7.14
Karnataka	14.92	12.87	31.28	25.24
Kerala	21.87	21.19	49.59	11.68
Madhya Pradesh	11.64	10.92	29.72	26.01
Maharashtra	8.73	6.06	30.52	18.32
Manipur	25.64	43.85	26.69	57.81
Meghalaya	0.96	2.77	-	1.21
Nagaland	11.38	2.34	29.63	16.47
Orissa	16.27	10.19	29.51	19.22
Punjab	11.63	9.47	37.42	6.40
Rajasthan	10.91	13.84	59.66	30.39
Tamilnadu	12.74	10.95	29.77	20.22
Tripura	11.75	7.10	0.86	-
Uttar Pradesh	9.77	9.29	21.39	11.03
West Bengal	5.89	2.78	13.45	2.03
India	10.57	9.23	31.90	18.09



**Table 7 - Incidence of wage labour in the non-agrarian workforce.**  
**Urban (Usual status comparable)**

	Males			Females		
	32	38	% change between 32-38	32	38	% change between 32-38
Andhra	59.51	60.74	+2.06	44.49	47.10	+5.87
Assam	57.40	64.62	+12.57	72.01	60.01	-16.67
Bihar	59.30	54.00	-8.93	54.86	44.86	-18.23
Gujarat	65.08	67.00	+2.95	58.52	53.38	-8.78
Haryana	48.55	56.07	+15.48	64.13	37.81	-41.04
Himachal Pradesh	59.07	70.14	+18.74	79.10	59.74	-24.48
Jammu & Kashmir	57.67	48.50	-15.91	56.47	39.34	-30.34
Karnataka	63.91	68.19	+6.70	61.46	67.78	+10.27
Kerala	66.00	67.79	+2.72	64.70	45.64	-29.46
Madhya Pradesh	60.96	62.50	+2.53	59.59	59.84	+0.42
Maharashtra	69.38	68.65	-1.06	65.62	65.28	-0.52
Manipur	56.89	63.65	+11.88	16.85	20.74	+23.11
Meghalaya	75.00	65.44	-12.75	78.57	40.50	-48.46
Nagaland	76.37	63.92	-16.30	84.25	71.89	-14.67
Orissa	62.27	70.12	+12.61	60.61	70.82	+16.84
Punjab	50.59	56.73	+12.14	52.74	51.37	-2.61
Rajasthan	52.44	51.47	-1.85	40.72	20.43	-49.84
Tamilnadu	62.97	67.79	+7.65	42.25	55.35	+31.01
Tripura	62.41	60.00	-3.86	87.81	96.44	+9.83
Uttar Pradesh	50.83	46.44	-8.63	37.53	47.24	+25.88
W. Bengal	67.86	63.20	-6.87	72.39	59.34	-18.03
India	61.48	60.76	-1.17	54.74	53.87	-1.58

significant differences across states. Prima facie evidence of increase in wage labour incidence in 12 states for males and 8 states for females are available. The remaining 9 states (males) and 13 states (females) show prima facie decrease in the incidence of wage labour.

In this case too, the same stability analysis is conducted. Annexures 3.1 to 3.4 present the data for the stability analysis. Table 8(A&B) is the summarised statement of the stability analysis indicating the unambiguous occurrence of the wageisation phenomenon in the different states. The following points are important to be noted.

- (1) Increases in the wage labour incidence are noticed in the case of males in the southern states of Karnataka, Kerala and Tamilnadu. Orissa could also be added to the list of southern states indicating an increase. The region of Punjab, Haryana and Himachal Pradesh also shows increase. It might be recalled that in the earlier part of the paper we had indicated that these two regions also show an increase in the wage labour incidence in the urban workforce in general. Assam is the only other state recording an unambiguous increase.
- (2) The southern states of Karnataka, Tamilnadu and Orissa also record increases in the wage labour incidence in the female workforce. Uttar Pradesh is the only other state recording such an increase.

Table-8A

Wageisation and Non-Agrarian Urban Workforce

Increases 1977-78 and 1983

States showing prima facie increase in incidence of wage labour in the workforce	States continuing to show increase after checking with elasticity with respect to WPR	States continuing to show increase after checking with elasticity with respect to EWPR
--	---	--

MALES

Andhra Pradesh	Assam	Assam
Assam	Haryana	Haryana
Gujarat	Himachal Pradesh	Himachal Pradesh
Haryana	Karnataka	Karnataka
Himachal Pradesh	Kerala	Kerala
Karnataka	Orissa	Orissa
Kerala	Punjab	Punjab
Madhya Pradesh	Tamilnadu	Tamilnadu
Manipur		
Orissa		
Punjab		
Tamilnadu		

FEMALES

Andhra Pradesh	Karnataka	Karnataka
Karnataka	Tamilnadu	Orissa
Madhya Pradesh	Tripura	Tamilnadu
Orissa	Uttar Pradesh	Uttar Pradesh
Tamilnadu		
Tripura		
Uttar Pradesh		

Table-8B

Wageisation and Non-Agrarian Urban Workforce

Decreases 1977-78 and 1983

States showing prima facie decrease in incidence of wage labour in the workforce	States continuing to show decrease after checking with elasticity with respect to WPR	States continuing to show decrease after checking with elasticity with respect to EWPR
---	--	--

MALES

Bihar	Bihar	Bihar
Jammu & Kashmir	Jammu & Kashmir	Jammu & Kashmir
Maharashtra	Meghalaya	Meghalaya
Meghalaya	Nagaland	Nagaland
Nagaland	Tripura	Tripura
Rajasthan	Uttar Pradesh	Uttar Pradesh
Tripura	W. Bengal	W. Bengal
Uttar Pradesh		
W. Bengal		

FEMALES

Assam	Haryana	Bihar
Bihar	Meghalaya	Haryana
Haryana	Nagaland	Himachal Pradesh
Himachal Pradesh		Meghalaya
Jammu & Kashmir		Rajasthan
Kerala		W. Bengal
Maharashtra		
Meghalaya		
Nagaland		
Punjab		
Rajasthan		
W. Bengal		

- (3) Bihar, Uttar Pradesh and West Bengal forming one region, the North Eastern region comprising Meghalaya, Nagaland and Tripura, and the state of Jammu & Kashmir record for males, decreases in the wage labour incidence. These two regions also recorded decreases in the wage labour in the urban workforce in general.
- (4) In the case of female workforce decreases in the wage labour incidence are evident in Bihar, Rajasthan and West Bengal, Haryana and Himachal Pradesh and Meghalaya.

IIIO a) Wageisation and Casualization : Urban Workforce in general

Table 9A & B present comparable estimates of casual labour proportion in the wage labour force for the three rounds. There has been in the ten year period a steady increase in casual labour in the wage labour force. The increase is more rapid for males, though the incidence itself is significantly higher for females.

The phenomenon of casualization could occur along with wageisation or need not be accompanied by wageisation. That means the Wage Sector itself might increase or decrease, while the size of Casual Wage Sector increases relatively. Tables 10 (A&B), 11 (A&B) and 12 (A&B) present the summarised results of the casualization 1977-78 phenomenon for the three periods - 1972-3 to 1977-8, to 1983, and 1972-73 to 1983. The following aspects are to be noted.

(1) Males 1972-73 to 1977-78

(i) Excepting the two states of Manipur and Rajasthan, all the other states recorded increase in / casual labour in the wage labour force. These comprised of states that had indicated both unambiguous increases and decreases in the incidence of wage labour in the urban workforce.

(ii) States that indicated both increases in wage labour and in casual labour proportions are the three southern states of Andhra Pradesh, Karnataka and Tamilnadu and the state of Gujarat.

(iii) States that indicated unambiguous decrease in wage labour, but increase in the casual labour proportion are the regions of Bihar, Orissa, Uttar Pradesh and W. Bengal, Punjab, Haryana and Himachal Pradesh, and the states of Maharashtra and Nagaland.

(iv) Nothing can be said about the wageisation process in the two states Manipur and Rajasthan, where casual labour as a proportion of wage labour decreased.

(2) Females 1972-73 to 1977-78

(i) Excepting four states (Meghalaya, Nagaland, Tripura, Rajasthan) all the others recorded increases in the casual labour proportion in the wage labour force.



Table-9

Casual labour as a proportion of wage labour

	<u>Male</u>			<u>Female</u>		
	Casual/wage labour			Casual/wage labour		
	27	32*	38*	27	32*	38*
Andhra Pradesh	21.99	26.98	25.29	65.45	70.81	63.63
Assam	7.54	9.60	19.00	3.63	16.99	16.00
Bihar	18.17	24.76	30.23	49.24	58.13	56.80
Gujarat	17.04	20.18	25.18	45.51	58.29	55.23
Haryana	13.80	18.85	21.76	29.55	41.15	16.77
Himachal Pradesh	8.09	9.35	12.14	00.00	6.90	16.30
Jammu & Kashmir	7.69	11.28	12.69	9.80	14.19	10.80
Karnataka	25.52	34.28	31.05	64.86	65.81	61.02
Kerala	40.59	53.67	53.39	39.77	60.11	42.56
Madhya Pradesh	19.87	21.93	26.56	49.40	54.02	63.96
Maharashtra	13.07	16.76	18.37	45.91	45.97	54.19
Manipur	10.33	2.02	1.40	10.48	19.35	9.37
Meghalaya	14.44	14.89	17.60	29.51	20.91	26.94
Nagaland	00.00	2.64	5.74	11.10	00.00	00.00
Orissa	19.22	21.84	22.56	53.94	61.95	58.99
Punjab	15.38	15.42	18.27	27.93	28.21	21.12
Rajasthan	17.68	17.55	22.93	47.88	36.28	58.30
Tamilnadu	19.77	29.70	33.86	54.37	56.32	60.60
Tripura	8.35	14.40	6.58	15.46	11.88	2.80
Uttar Pradesh	15.03	22.90	22.96	25.88	35.83	34.57
West Bengal	10.48	17.14	19.97	17.28	28.18	30.96
India	16.54	21.64	25.24	46.06	50.68	51.14

\* refers to adjusted figures. Adjustment here means inclusion of marginal workers.

Table-9B

Non-Agrarian Casual Labour as a proportion of  
non-agrarian wage labour - (Usual status comparable)

States	Males		Females	
	32	38	32	38
Andhra Pradesh	19.68	21.66	48.01	49.74
Assam	8.78	18.32	15.05	16.00
Bihar	19.69	24.94	42.30	43.66
Gujarat	16.53	22.06	46.09	43.50
Haryana	17.33	18.46	20.67	10.29
Himachal Pradesh	9.20	11.42	6.90	16.30
Jammu & Kashmir	11.12	12.11	12.12	7.64
Karnataka	29.45	25.50	53.17	50.66
Kerala	45.19	46.02	47.56	36.39
Madhya Pradesh	17.23	23.42	40.22	53.15
Maharashtra	13.11	16.47	25.53	43.72
Manipur	1.65	1.41	19.35	9.37
Meghalaya	14.89	17.16	20.91	26.94
Nagaland	2.66	5.73	-	-
Orissa	14.58	18.59	46.84	49.69
Punjab	13.19	16.82	19.51	19.74
Rajasthan	16.99	20.68	25.56	55.77
Tamilnadu	23.79	29.22	41.59	52.13
Tripura	9.21	5.74	11.88	2.80
Uttar Pradesh	20.37	20.41	28.03	29.29
West Bengal	14.58	19.14	25.16	30.07
India	17.41	21.99	35.25	41.63



Table-10A

Casualisation and wageisation 1972-73 and 1977-78

A(1)

MALES

States where casualisation is evident in CL/WL	States where wageisation is also evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	<u>Andhra Pradesh</u>	Assam
Assam	<u>Gujarat</u>	<u>Bihar</u>
Gujarat	<u>Karnataka</u>	<u>Haryana</u>
Haryana	<u>Tamilnadu</u>	<u>Himachal Pradesh</u>
Himachal Pradesh	Tripura	Jammu & Kashmir
Jammu & Kashmir		Kerala
Karnataka		Madhya Pradesh
Kerala		<u>Maharashtra</u>
Madhya Pradesh		Meghalaya
Maharashtra		<u>Nagaland</u>
Meghalaya		<u>Orissa</u>
Nagaland		<u>Punjab</u>
Orissa		<u>Uttar Pradesh</u>
Tamilnadu		<u>West Bengal</u>
Tripura		
Uttar Pradesh		
W. Bengal		

B(1)

States where casualisation is not evident in CL/WL	States where wageisation is also evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Manipur		Rajasthan
Rajasthan		Manipur

\* When a State is underlined it means that prima facie evidence on wageisation is validated in both the stability tests.

Table-10B

Casualization and wageisation 1972-73 and 1977-78

FEMALES

A(ii)

States where casualization is evident in	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	Andhra Pradesh	Assam
Assam	Gujarat	Bihar
Bihar	Jammu & Kashmir	Haryana
Gujarat	Karnataka	Himachal Pradesh
Haryana	Madhya Pradesh	Kerala
Himachal Pradesh	Meghalaya	Maharashtra
Jammu & Kashmir	Nagaland	Manipur
Karnataka	Orissa	Punjab
Kerala	Rajasthan	Tamilnadu
Madhya Pradesh		Tripura
Maharashtra		Uttar Pradesh
Orissa		West Bengal
Punjab		
Tamilnadu		
Uttar Pradesh		
West Bengal		

B(ii)

States where casualization is not evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is not evident in WL/TW
Meghalaya	Meghalaya	Tripura
Nagaland	Nagaland	
Rajasthan	Rajasthan	
Tripura		

- (ii) It is important to note that only in a few of the states could the wageisation phenomenon be established unambiguously.

For both males and females, it is important to note that this five year period (1972-3 to 1977-8) saw widespread increase in the proportion of casual labour in the urban wage labour force.

3) Males - 1977-78 to 1983

- (i) Excepting the three southern states of Andhra Pradesh, Karnataka and Kerala, and the North-Eastern states of Manipur and Tripura which showed a decline in the proportion of casual labour in the wage labour force, all the other states recorded increases in the incidence of casual labour in the wage labour force.
- (ii) Punjab, Haryana and Himachal Pradesh comprising a contiguous region, the states of Orissa, Tamilnadu and Assam record unambiguous increases in both casual labour and wage labour incidence.
- (iii) The region comprising Rajasthan, Bihar, Uttar Pradesh and West Bengal, the North-Eastern states of Meghalaya and Nagaland, and the state of Jammu and Kashmir record increases in the incidence of casual labour in the wage labour force despite unambiguous decreases in the wage labour incidence.
- (iv) Of the 5 states that recorded decreases in the incidence of casual labour, the southern states Andhra Pradesh, Karnataka and Kerala record increases in the wage labour incidence, while Manipur and Tripura record decreases.

Table-11A

Casualization and Wageisation 1972-73 and 1983

MALES

States where casualization is evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	<u>Andhra Pradesh</u>	<u>Bihar</u>
Assam	Assam	<u>Himachal Pradesh</u>
Bihar	Gujarat	<u>Jammu &amp; Kashmir</u>
Gujarat	Haryana	<u>Maharashtra</u>
Haryana	<u>Karnataka</u>	<u>Meghalaya</u>
Himachal Pradesh	Kerala	<u>Nagaland</u>
Jammu & Kashmir	Madhya Pradesh	<u>Rajasthan</u>
Karnataka	Orissa	<u>Uttar Pradesh</u>
Kerala	<u>Punjab</u>	<u>West Bengal</u>
Maharashtra	<u>Tamilnadu</u>	
Meghalaya		
Nagaland		
Orissa		
Punjab		
Rajasthan		
Tamil Nadu		
Uttar Pradesh		
West Bengal		
B(i)		

States where casualization is <u>not</u> evident in	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Manipur		<u>Manipur</u>
Tripura		Tripura

\* When a State is underlined it means that prima facie evidence on wageisation is validated in both the stability tests.

Table-11B

Casualization and Wageisation 1972-73 and 1983

FEMALES

States where casualization is evident	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Assam		Assam
Bihar	Gujarat	Bihar
Gujarat	Jammu & Kashmir	Himachal Pradesh
Himachal Pradesh	<u>Madhya Pradesh</u>	Kerala
Jammu & Kashmir	Orissa	Maharashtra
Kerala	Tamilnadu	Rajasthan
Madhya Pradesh	Uttar Pradesh	W. Bengal
Maharashtra		
Orissa		
Rajasthan		
Tamilnadu		
Uttar Pradesh		
West Bengal		

B(ii)

States where casualization is <u>not</u> evident	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	Andhra Pradesh	Haryana
Haryana	Karnataka	<u>Manipur</u>
Karnataka	<u>Nagaland</u>	<u>Meghalaya</u>
Manipur	Punjab	Tripura
Meghalaya		
Nagaland		
Punjab		
Tripura		

\* When a State is underlined, it means that the prima facie evidence on wageisation is validated in both the stability tests.

4. Females 1977-78 to 1983

(i) Only 7 states record increase in the incidence of casual labour in the wage labour force. Of these Tamilnadu is only one recording unambiguous increase in the wage labour incidence, and Rajasthan and Meghalaya record unambiguous decrease in wage labour incidence.

(ii) In the remaining 14 states, casual labour as a proportion of wage labour decreased. Of these, only in Karnataka, Punjab and Uttar Pradesh is there evidence of increase in wage labour incidence, while in Haryana and Manipur the wage labour decreases unambiguously.

(iii) Thus in this period, the casualization process among females is not as widespread as that of males. For the earlier period 1972-73 to 1977-78 we had noticed widespread casualization among both males and females. While the phenomenon appears to have continued in the subsequent period for males, in the case of females there is a reversion.

5. The ten year period 1972-3 to 1983

Males

Except Manipur and Tripura, all the other states record increases in the incidence of casual labour during the ten year period. Of these states where increases have occurred, the three southern states Andhra Pradesh, Karnataka and Tamilnadu, and the northern state of Punjab record unambiguous increase in the wage labour incidence too.



Table-12A

Casualization and Wageisation 1977-78 and 1983

MALES

A(i)

States where casualization is evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Assam	<u>Assam</u>	<u>Bihar</u>
Bihar	Gujarat	<u>Jammu &amp; Kashmir</u>
Gujarat	<u>Haryana</u>	Maharashtra
Haryana	<u>Himachal Pradesh</u>	<u>Meghalaya</u>
Himachal Pradesh	Madhya Pradesh	<u>Nagaland</u>
Jammu & Kashmir	<u>Orissa</u>	<u>Rajasthan</u>
Madhya Pradesh	<u>Punjab</u>	<u>Uttar Pradesh</u>
Maharashtra	<u>Tamilnadu</u>	<u>W. Bengal</u>
Meghalaya		
Nagaland		
Orissa		
Punjab		
Rajasthan		
Tamilnadu		
Uttar Pradesh		
W. Bengal		

B(i)

States where casualization is <u>not</u> evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	<u>Andhra Pradesh</u>	<u>Manipur</u>
Karnataka	<u>Karnataka</u>	<u>Tripura</u>
Kerala	<u>Kerala</u>	
Manipur		
Tripura		

\* When a State is underlined, it means that the prima facie evidence on wageisation is validated in both the stability tests.

Table-12B

Casualization and Wageisation 1977-78 and 1983

FEMALES

States where casualization is evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Himachal Pradesh	Madhya Pradesh	Himachal Pradesh
Madhya Pradesh	<u>Tamilnadu</u>	<u>Meghalaya</u>
Maharashtra		<u>Rajasthan</u>
Meghalaya		W. Bengal
Rajasthan		
Tamilnadu		
W. Bengal		

B(ii)

States where casualization is <u>not</u> evident in CL/WL	States where wageisation is evident in WL/TW	States where wageisation is <u>not</u> evident in WL/TW
Andhra Pradesh	Gujarat	Andhra Pradesh
Assam	Jammu & Kashmir	Assam
Bihar	<u>Karnataka</u>	Bihar
Gujarat	Kerala	<u>Haryana</u>
Haryana	Orissa	<u>Manipur</u>
Jammu & Kashmir	<u>Punjab</u>	
Karnataka	<u>Uttar Pradesh</u>	
Kerala		
Manipur		
Orissa		
Punjab		
Tripura		
Uttar Pradesh		

\* When a State is underlined, it means that the prima facie evidence on wageisation is validated in both the stability tests.

Of the states where wage labour incidence has decreased, and where casualization has occurred simultaneously the region comprising the states of Rajasthan, Bihar, Uttar Pradesh and W. Bengal form one contiguous region. The other states displaying the same tendency are Meghalaya and Nagaland, Himachal Pradesh, Jammu and Kashmir and Maharashtra.

### Females

Despite the reversal of the casualization process in the latter period (1977-78 to 1983), 13 states indicate the casualization process for the ten year period, while 8 states indicate decreases in the casual labour incidence. However (excepting for four states) nothing can be stated regarding the wageisation process, as the instability in WPR over the ten year period among females appears to be relatively large. The results of the wageisation phenomenon among females for the ten year period can at best be speculative.

### III) (b) Wageisation and Casualization: Non-Agrarian Urban Workforce 1977-78 to 1983

Table 13 (A&B) provide the summarised statement on the phenomena of casualization and wageisation among the non-agrarian urban workforce for the period 1977-78 to 1983. The following aspects should be noted.

Table-13A

Casualization and Wageisation 1977-78 and 1983  
- Non Agrarian Urban Workforce

MALES

States where casualization is evident in CL/WL (NA)	Of these states where casualization is evident, those that indicate wageisation in WL/TW	Of the states where casualization is evident, those where wageisation is not evident in WL/TW
Andhra Pradesh	Andhra Pradesh	<u>Bihar</u>
Assam	<u>Assam</u>	<u>Jammu &amp; Kashmir</u>
Bihar	Gujarat	Maharashtra
Haryana	<u>Haryana</u>	<u>Meghalaya</u>
Himachal Pradesh	<u>Himachal Pradesh</u>	<u>Nagaland</u>
Jammu & Kashmir	<u>Kerala</u>	Rajasthan
Kerala	Madhya Pradesh	<u>Uttar Pradesh</u>
Madhya Pradesh	<u>Orissa</u>	<u>W. Bengal</u>
Maharashtra		
Meghalaya		
Nagaland		
Orissa		
Punjab		
Rajasthan		
Tamilnadu		
Uttar Pradesh		
W. Bengal		
States where casualization is <u>not</u> evident (in CL/WL)	States where wageisation is evident in WL/TW	States where wageisation is not evident in WL/TW
Karnataka	<u>Karnataka</u>	<u>Tripura</u>
Manipur	Manipur	
Tripura		

\* When a State is underlined, it means that the prima facie evidence on wageisation is validated in both the stability tests.

Table-13B

Casualization and Wageisation 1977-78 and 1983

- Non Agrarian Urban Workforce

FEMALES

States where casualization is evident (in CL/WL)	Of these states where casualization is evident, those that indicate wageisation also	Of the states where casualization is evident, those where wageisation is not evident
Andhra Pradesh	Andhra Pradesh	Assam
Assam	Madhya Pradesh	Bihar
Bihar	Orissa	Himachal Pradesh
Himachal Pradesh	<u>Tamilnadu</u>	Maharashtra
Madhya Pradesh	<u>Uttar Pradesh</u>	<u>Meghalaya</u>
Meghalaya		Rajasthan
Orissa		W. Bengal
Rajasthan		
Tamilnadu		
Uttar Pradesh		
W. Bengal		
States where casualization is not evident (in CL/WL)	Of these states where casualization is not evident, those where wageisation is evident	Of the states where casualization is not evident, those where wageisation is also not evident
Gujarat	<u>Karnataka</u>	Gujarat
Haryana	Manipur	<u>Haryana</u>
Jammu & Kashmir	Tripura	Jammu & Kashmir
Karnataka		Kerala
Kerala		Punjab
Manipur		
Punjab		
Tripura		

\* When a State is underlined, it means that the prima facie evidence on wageisation is validated in both the stability tests.

### Males

1) Excepting 3 states, all the others indicate increases in the proportion of casual labour in the wage labour force (non-agrarian) in the five year period. Of these, the states comprising the region of Punjab, Haryana and Himachal Pradesh, the states of Kerala, Tamilnadu and Orissa in the south, and the North Eastern state of Assam indicate unambiguous increases in the incidence of wage labour too.

2) Bihar, Uttar Pradesh and W. Bengal; Meghalaya and Nagaland; and Jammu and Kashmir record increases in casual labour incidence along with decreases in the wage labour incidence.

3) Karnataka exhibits the favourable trend of decrease in casual labour incidence with an increase in the wage labour incidence.

4) The results obtained for the non-agrarian urban workforce is broadly similar to the urban workforce in general (excepting minor differences).

### Females

1) 12 states record increases in proportion of casual labour in the wage labour. There are however very few states where the wageisation phenomenon can be unambiguously specified. Of these we note that Tamilnadu and Uttar Pradesh are the two states where the incidence of both casual labour and wage labour increased. In Meghalaya, wage labour incidence decreased, while casual labour incidence increased.



2) Eight states record decreases in casual labour incidence. Karnataka is the only state recording unambiguous increase in wage labour incidence, and a decrease in casual labour incidence. Haryana records decreases in both.

3) The results in this instance show a sharp difference from that observed for the urban workforce in general. In the case of non-agrarian workforce analysis, there are more states (addition of 5 more states) recording increases in casual labour incidence.

#### IV      Urban Labour Market Dynamics : A Round-up

If the entire urban work sector is divided into the Wage Sector (WS) and the Self Employed Sector (SES), with the Wage Sector further differentiated into the Regular Wage Sector (RWS) and the Casual Wage Sector (CWS), the labour market dynamics between two time points can be categorised into the following situations.<sup>1/</sup>

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<sup>1/</sup> TW (Total Workers), WL (Wage labour), RW (Regular Wage or salaried workers), and CL (Casual Wage labour).

- (i)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \uparrow$
- (ii)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \downarrow$
- (iii)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \downarrow$
- (iv)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \uparrow$
- (v)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \downarrow$
- (vi)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \uparrow$

These configurations would be clear if it is recognised that while the phenomenon of casualization implies a (relative) decline in the Regular Wage Sector relative to the Wage Sector, this relative decline may be associated with both a positive or negative absorption in the Regular Wage Sector (ie,  $\frac{RW}{TW} \downarrow$  may be associated with both  $\frac{RW}{TW} \uparrow$  or  $\frac{RW}{TW} \downarrow$ ). Wagesation and casualization can coexist with positive or negative absorption in RWS. Given the structure of the economy, there might exist a positive relationship between employment in RWS and CWS. For every employment in RWS, there might be some employment created in CWS, though the phenomenon of casualization implies that for a unit employment in RWS, the employment in CWS relative to RWS increases overtime. A decrease in  $\frac{RW}{TW}$  would imply that the absorptive capacity in RWS has been attained, if at the same time  $\frac{WL}{TW}$  increases.

Of these ~~se~~ <sup>six</sup> different configurations we can postulate the favourable and not so favourable configurations. Given the widely accepted fact that modern sector employment is associated with wage employment in contrast to traditional sector where selfemployment is predominant,<sup>1/</sup> a state of increasing wage employment is an indicator of modern sector employment. The status of employment within the wage sector throws light on the stability or instability of livelihood-configuration iv) appears to be the most favourable and configuration iii) the least favourable on this basis.

Tables 14 (A,B&C) and 15 present the summarised statement of urban labour market dynamics. The categorisation of states only takes into account those states where the wageisation phenomenon is unambiguous. For the general urban workforce, it is evident that in the period 1972-73 to 1977-78 only configuration (iii) the least favourable situation and configuration (ii) (also unfavourable) were predominant for males. In the next period 1977-78 to 1983 almost the same states reporting configuration (iii) in the earlier period, also continued to display the same pattern. Thus for the ten year period Bihar, Uttar Pradesh and Bengal have displayed an unfavourable dynamic for males. Punjab, Haryana and Himachal Pradesh drastically altered their position from configuration (iii) to configuration (i) for males. The 3 southern states Andhra Pradesh, Karnataka & Kerala show the most favourable pattern (configuration iv) for males in the period 1977-78 to 1983. In the case of females, the states of Karnataka, Punjab and Uttar Pradesh record the most favourable configuration (iv), while Meghalaya and

1/ See A. S. Oberai, "Changes in the structure of employment with economic development", ILO ARTEP 1978.

Rajasthan the least favourable one (iii) for the period 1977-78 to 1983. For the 10 year period no state has displayed the least favourable situation (iii) for females.

Table-14A - Labour Market Dynamics 1972-73 to  
1977-78  
General Urban Workforce

- i)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \uparrow$   
Males : -  
Females : -
- ii)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \downarrow$   
Males : Andhra Pradesh, Gujarat, Karnataka, Tamilnadu.  
Females : -
- iii)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \uparrow - \frac{CL}{RW} \uparrow - \frac{RW}{TW} \downarrow$   
Males : Bihar, Haryana, Himachal Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Uttar Pradesh, West Bengal.  
Females : -
- iv)  $\frac{WL}{TW} \uparrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \uparrow$   
Males : -  
Females : -
- v)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \downarrow$   
Males : -  
Females : -
- vi)  $\frac{WL}{TW} \downarrow - \frac{CL}{WL} \downarrow - \frac{CL}{RW} \downarrow - \frac{RW}{TW} \uparrow$   
Males : Rajasthan, Manipur, (marginal increase only)  
Females : -

(only States where wageisation phenomenon is unambiguous are taken into account).



Table-14B - Labour Market Dynamics 1977-78 to 1983  
General Urban Workforce

i)	$\frac{WL}{TW} \uparrow -$	$\frac{CL}{WL} \uparrow -$	$\frac{CL}{RW} \uparrow -$	$\frac{RW}{TW} \uparrow$
	<u>Males</u> : Himachal Pradesh, Haryana, Orissa, Punjab			
	<u>Females</u> : Tamilnadu			
ii)	$\frac{WL}{TW} \uparrow -$	$\frac{CL}{WL} \uparrow -$	$\frac{CL}{RW} \uparrow -$	$\frac{RW}{TW} \downarrow$
	<u>Males</u> : Assam, Tamilnadu			
	<u>Females</u> : -			
iii)	$\frac{WL}{TW} \downarrow -$	$\frac{CL}{WL} \uparrow -$	$\frac{CL}{RW} \uparrow -$	$\frac{RW}{TW} \downarrow$
	<u>Males</u> : Bihar, Jammu & Kashmir, Meghalaya, Nagaland, Rajasthan, Uttar Pradesh, West Bengal.			
	<u>Females</u> : Meghalaya, Rajasthan.			
iv)	$\frac{WL}{TW} \uparrow -$	$\frac{CL}{WL} \downarrow -$	$\frac{CL}{RW} \downarrow -$	$\frac{RW}{TW} \uparrow$
	<u>Males</u> : Andhra Pradesh, Karnataka, Kerala			
	<u>Females</u> : Karnataka, Punjab, Uttar Pradesh			
v)	$\frac{WL}{TW} \downarrow -$	$\frac{CL}{WL} \downarrow -$	$\frac{CL}{RW} \downarrow -$	$\frac{RW}{TW} \downarrow$
	<u>Males</u> : Manipur			
	<u>Females</u> : Haryana, Manipur			
vi)	$\frac{WL}{TW} \downarrow -$	$\frac{CL}{WL} \downarrow -$	$\frac{CL}{RW} \downarrow -$	$\frac{RW}{TW} \uparrow$
	<u>Males</u> : Tripura			
	<u>Females</u> : -			

(Only States in which wageisation phenomenon is unambiguous are taken into account)

14-C Labour Market Dynamics 1972-73 to 1983

General Urban Workforce

- i)  $\frac{WL}{TW} \uparrow -$   $\frac{CL}{WL} \uparrow -$   $\frac{CL}{RW} \uparrow -$   $\frac{RW}{TW} \uparrow$   
Males : Andhra Pradesh, Punjab.  
Females : -
- ii)  $\frac{WL}{TW} \uparrow -$   $\frac{CL}{WL} \uparrow -$   $\frac{CL}{RW} \uparrow -$   $\frac{RW}{TW} \downarrow$   
Males : Karnataka, Tamilnadu  
Females : Madhyapradesh
- iii)  $\frac{WL}{TW} \downarrow -$   $\frac{CL}{WL} \uparrow -$   $\frac{CL}{RW} \uparrow -$   $\frac{RW}{TW} \downarrow$   
Males : Bihar, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Meghalaya, Nagaland, Rajasthan, Uttar Pradesh, West Bengal.  
Females : -
- iv)  $\frac{WL}{TW} \uparrow -$   $\frac{CL}{WL} \downarrow -$   $\frac{CL}{RW} \downarrow -$   $\frac{RW}{TW} \uparrow$   
Males : -  
Females : Nagaland
- v)  $\frac{WL}{TW} \downarrow -$   $\frac{CL}{WL} \downarrow -$   $\frac{CL}{RW} \downarrow -$   $\frac{RW}{TW} \downarrow$   
Males : Manipur  
Females : Manipur, Meghalaya.
- vi)  $\frac{WL}{TW} \downarrow -$   $\frac{CL}{WL} \downarrow -$   $\frac{CL}{RW} \downarrow -$   $\frac{RW}{TW} \uparrow$   
Males : -  
Females : -

(Only States where wageisation phenomenon is unambiguous are taken into account).



Table-15

Labour Market Dynamics 1977-78 to 1983  
Non-Agrarian Urban workforce

i)  $\frac{WL}{TW} \uparrow$  —  $\frac{CL}{WL} \uparrow$  —  $\frac{CL}{RW} \uparrow$  —  $\frac{RW}{TW} \uparrow$

Males : Assam, Haryana, Himachal Pradesh,  
Kerala & Orissa.

Females : Tamil Nadu, Uttar Pradesh

ii)  $\frac{WL}{TW} \uparrow$  —  $\frac{CL}{WL} \uparrow$  —  $\frac{CL}{RW} \uparrow$  —  $\frac{RW}{TW} \downarrow$

Males : —

Females : —

iii)  $\frac{WL}{TW} \downarrow$  —  $\frac{CL}{WL} \uparrow$  —  $\frac{CL}{RW} \uparrow$  —  $\frac{RW}{TW} \downarrow$

Males : Bihar, Meghalaya, Nagaland,  
West Bengal, Jammu & Kashmir,  
Uttar Pradesh.

Females : Meghalaya

iv)  $\frac{WL}{TW} \uparrow$  —  $\frac{CL}{WL} \downarrow$  —  $\frac{CL}{RW} \downarrow$  —  $\frac{RW}{TW} \uparrow$

Males : Karnataka

Females : Karnataka

v)  $\frac{WL}{TW} \downarrow$  —  $\frac{CL}{WL} \downarrow$  —  $\frac{CL}{RW} \downarrow$  —  $\frac{RW}{TW} \downarrow$

Males : Tripura

Females : Haryana

vi)  $\frac{WL}{TW} \downarrow$  —  $\frac{CL}{WL} \downarrow$  —  $\frac{CL}{RW} \downarrow$  —  $\frac{RW}{TW} \uparrow$

Males : —

Females : —

\* Only States where the wageisation phenomenon is unambiguous are taken into account for the above grouping.

## V The phenomena and Unemployment

Table 16 gives the urban unemployment rate (comparable chronic unemployment) in the India at the three NSS rounds. To examine the relationship between wageisation, casualization and unemployment, correlation coefficients were calculated. It is generally expected that an increase in wage employment relative to self employment is likely to transform disguised unemployment into open unemployment. Thus states with a higher incidence of wage labour in the total workforce are also likely to be states with a higher unemployment rate. By the same logic of reasoning it can be expected that states which over time indicate wageisation, are also states likely to indicate an increase in unemployment rate.

It is also expected that greater casualization would be associated with greater unemployment. The casuality could be in both directions. It is indeed obvious that greater casualness would lead to greater unemployment too. But it is equally true that the existence of unemployment could itself have the tendency to casualize the labour force. Micro evidence does suggest the plausibility of this phenomenon.

Table 17 provides the associated correlation coefficients and the respective t values.

It can be noted from the results contained in table 17, that there are two distinct patterns in the correlation.

Table-16 Unemployment Rate (Usual Status)

States	Males			Females		
	27	32	38	27	32	38
Andhra Pradesh	6.70	5.58	4.27	6.64	11.26	2.49
Assam	3.16	4.37	6.77	6.04	14.87	17.16
Bihar	5.69	5.55	5.11	3.52	13.57	1.88
Gujarat	2.93	3.34	5.46	4.06	5.59	1.99
Haryana	5.31	4.84	5.04	10.00	15.20	1.98
Himachal Pradesh	2.56	3.57	6.38	8.57	17.42	20.02
Jammu & Kashmir	2.60	3.24	4.06	5.36	14.06	11.11
Karnataka	5.11	5.36	5.13	5.15	13.79	5.52
Kerala	10.40	8.53	9.96	14.43	16.50	15.68
Madhya Pradesh	3.68	3.98	3.52	2.56	6.23	2.27
Maharashtra	5.03	5.16	4.19	6.14	12.02	5.85
Manipur	2.38	1.19	0.50	-	2.72	-
Meghalaya	1.51	1.43	5.10	4.43	8.49	17.32
Nagaland	4.10	-	-	-	0.00	-
Orissa	4.29	5.89	5.64	3.62	8.29	9.37
Punjab	2.47	2.83	3.21	4.29	8.25	8.46
Rajasthan	2.65	2.85	3.52	1.91	2.70	0.67
Tamilnadu	6.20	6.31	6.90	5.75	11.98	7.12
Tripura	5.07	12.50	7.28	38.09	35.19	23.48
Uttar Pradesh	2.22	3.60	3.38	1.58	9.31	2.52
W. Bengal	6.93	8.88	8.68	13.31	23.14	12.56
India	4.79	5.40	5.11	6.05	12.40	5.72

Table-17

Correlation Coefficients

Variables	Males			Females		
	27	32	38	27	32	38
1) $\frac{WL}{TW}$ & UNEMP	0.05	0.17	0.51 (2.58)	0.72	0.51	0.48
2) $\frac{WL}{TW}$ (NA) & UNEMP	-	0.03	0.31	-	0.49	0.45
3) $\frac{CL}{WL}$ & UNEMP	0.60 (3.27)	0.49 (2.45)	0.57 (3.02)	-0.20	-0.12	-0.35
4) $\frac{CL}{WL}$ (NA) & UNEMP	-	0.40 (1.89)	0.59	-	-0.10	-0.31
	27-32	32-38	27-38	27-32	32-38	27-38
5) $\frac{WL}{TW}$ ( $t_1-t_2$ ) & UNEMP ( $t_1-t_2$ )	0.06	0.15	-0.01	-0.02	-0.28	-0.10
6) $\frac{WL}{TW}$ NA ( $t_1-t_2$ ) & UNEMP ( $t_1-t_2$ )	-	0.10	-	-	-0.27	-
7) $\frac{CL}{WL}$ ( $t_1-t_2$ ) & UNEMP ( $t_1-t_2$ )	0.10	0.67 (3.95)	0.13	0.39	0.26	0.34
8) $\frac{CL}{WL}$ (NA) ( $t_1-t_2$ ) & UNEMP ( $t_1-t_2$ )	-	0.45	-	-	0.15	-

The incidence of wage labour in the workforce is significantly correlated with unemployment only in the case of females. This is true for wage labour in the general urban workforce and with respect to the non-agrarian urban workforce for all NSS rounds. This result of a significant correlation between wage labour incidence and unemployment however does not hold in the case of males (excepting 38th round general urban workforce). It means that for the female workforce, states recording higher incidence of wage labour also records higher unemployment rate. This suggests the likelihood of greater disguised employment for females, when the wage labour incidence is low. That is, greater the proportion of female workers engaged as selfemployed, the greater the likelihood that even though they are unemployed or underemployed for part of the time, they report themselves as 'self-employed'.<sup>1/</sup>

The correlation between changes in wage labour incidence and changes in unemployment are not significant under any category.

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<sup>1/</sup> As a greater proportion of females in the self employment category are 'helpers' in enterprises often unpaid family helpers' the possibility that the extent of disguised employment (and consequent distortions in unemployment data owing to biases in perception) in this category may be more, than when they are self-employed but not as helpers (which is what men who are self employed are) is an aspect that needs greater probing.



The incidence of casual labour in the wage labour force and unemployment are significantly correlated for all NSS rounds (both general and non-agrarian) in the case of male workforce. The correlations are insignificant for the female workforce. There is also a significant correlation between changes in casual labour incidence and changes in unemployment rate in the case of males (both general and non-agrarian workforce), but not for females. The differences in the behaviour of the two sets of correlations for males and females certainly needs explanation, but such explanations would need to posit some kind of causal relationships too.

#### Wageisation, Casualization and Occupational structure

We had stated in the beginning that one of the objectives of this paper was to explain the inter-state differences in the incidence of wage labour and casual labour through the differences and shifts in the occupational structure, and through the existence of labour surplus (unemployment). To this end, we had attempted to explain the cross-section variation in  $\frac{WL}{TW}$  (wage labour incidence) and  $\frac{CL}{WL}$  (casual labour incidence in the wage labour) through a set of variables that capture the differences in the occupational structure. Our analysis is however restricted only to the non-agrarian urban workforce.

To explain  $\frac{WL}{TW}$  and  $CL/WL$  the following variables were used.



- (1) Ratio of workers in secondary sector to the Tertiary sector ( $SEC/TER$ ). The Secondary sector comprised Mining and Quarrying; Manufacturing; Electricity, gas and water supply and construction. Tertiary sector includes Trade, Transport and Services.
- (2) Proportion of Manufacturing Sector Workers in the secondary sector ( $M/SEC$ )
- (3) Proportion engaged in 'Trade' in the Tertiary sector ( $TR/TER$ )
- (4) Proportion engaged in 'services' in the tertiary sector ( $S/TER$ )
- (5) Unemployment rate ( $UNEMP$ )

While prior theoretical reasoning for the inclusion of each of these variables is difficult to specify, we have prior evidence both from macro data sources and micro studies of the likely influence of each of these variables. Tertiary sector has a greater potential for self-employment than secondary sector in which only the household manufacturing sector could have a greater potential for self employment. We would then expect  $\frac{WL}{TW}$  and  $\frac{SEC}{TER}$  to be positively correlated (if household manufacturing remains a small proportion). Similarly we expect  $M/SEC$  to be positively correlated, if selfemployment under household manufacturing remains small. In the same manner it can be explained that  $TR/TER$  being more prone to self employment is likely to have a negative influence on  $\frac{WL}{TW}$ ,  $S/TER$  is (like  $M/SEC$ ) an amalgam of regular wage

employment, casual employment and self employment. Depending on the strength of each of these elements within 'services', we would expect it to influence WL/TW.

The earlier section of the paper has already highlighted the importance of unemployment rate (UNEMP).

In the same manner the incidence of casual labour could be influenced by the same set of variables relating to occupational structure and unemployment rate. The tertiary sector as a whole is generally expected to be more casual prone than the secondary sector. Within the secondary sector itself, 'construction' labour is largely casual. We expect casual labour in the secondary sector to be lower, if the proportion of manufacturing workers in the secondary sector is large. Using these initial insights of the likely influence of occupational structure, a regression analysis using these variables was attempted. The results of the regression analysis are given below.

### Regression Results

We present the results for the two rounds of the NSS 32nd (1977-78) and 38th (1983). For each of these equations we give the variables included in the equations and the  $\bar{R}^2$  of the equation. We specify the  $\beta$  coefficients and 't' values only for those variables that are significant.

SET - 1

MALES

1.  $\frac{WL}{TW}$  (NA) = f (SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP)  
(1977-78)

	B coeff	t value	$\bar{R}^2 = 0.28$
Constant =	65.47	7.73	
$\frac{TR}{TER}$ =	-0.59	-2.33	

2.  $\frac{WL}{TW}$  (NA) = f (SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP)  
(1983)

	B coeff	't' value	$\bar{R}^2 = 0.19$
Constant =	51.57	5.99	
UNEMP =	156.66	2.26	

FEMALES

1.  $\frac{WL}{TW}$  (NA) = f (SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP)  
(1977-78)

	B coeff	t value	$\bar{R}^2 = 0.30$
Constant =	48.58	2.78	
UNEMP =	1.07	2.38	

2.  $\frac{WL}{TW}$  (NA) = f (SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP)  
(1983)

Range of  $\bar{R}^2 = 0.24$  to  $0.145$   
(in stepwise )  
regression

No variable except the constant term was significant in any of the stepwise regressions for this case.

SET- 2

MALES

$$1. \frac{CL}{WL} (NA) = f \left\{ \frac{WL}{TW} (NA), SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP \right\} \\ (1977-78)$$

$$\overline{R}^2 \text{ range} = 0.00 \text{ to } 0.149$$

None of the variables were significant except the constant term in this equation.

$$2. \frac{CL}{WL} (NA) = f \left\{ \frac{WL}{TW} (NA), SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP \right\} \\ = f \left\{ \frac{WL}{TW} (NA), SEC/TER, M/SEC, TR/TER, UNEMP \right\}$$

$$\overline{R}^2 = 0.54$$

	coeff	t value
UNEMP	= 1.539	2.13
M/SEC	= -0.003	-2.60
TR/TER	= 0.006	2.37

FEMALES

$$1. \frac{CL}{WL} (NA) = f \left\{ \frac{WL}{TW} (NA), SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP \right\} \\ (1977-78)$$

$$\overline{R}^2 \text{ range} = 0.048 \text{ to } 0.003$$

None of the variables were significant except the constant term in this equation.

$$2. \frac{CL}{WL} (NA) = f \left\{ \frac{WL}{TW} (NA), SEC/TER, M/SEC, TR/TER, SER/TER, UNEMP \right\}$$

(1983)

$$\overline{R}^2 = 0.45$$

Constant	= 40.20	2.09
M/SEC	= -0.86	-3.68
SER/TER	= 0.64	2.35

It is evident from the results presented above, that the regression results are strong only for the casual labour incidence at the 38th round (1983). The inter-state variations in the incidence of casual labour in the urban non-agrarian labour force could be explained to the extent of nearly 54 per cent in the case of males by the three variables - proportion of manufacturing workers in the secondary sector, the proportion of 'trade' in the tertiary sector and by unemployment rate. Unemployment rate and  $TR/TER$  (trade in the tertiary sector) are, as expected, positively correlated with  $CL/WL$ , while  $M/SEC$  (Manufacturing in the secondary sector) is negatively correlated with casual labour incidence. In the case of female workforce the variations can be explained to the extent of 41 per cent. Here again the ratio  $M/SEC$  (manufacturing workers in secondary sector) shows negative and significant correlation. Thus in general, increases in manufacturing workers in the secondary sector are conducive to lower casual labour incidence.  $SER/TER$  (Services in the tertiary sector) is yet another significant variable that shows the expected sign. While in the case of males, the variable  $TR/TER$  is significant, among females it is variable ( $SER/TER$ ) that is significant. This suggests that the intrasectoral concentration (within the tertiary sector) of casual labour differs between males and females. It is also important to note that unemployment rate is significant in the casual labour equation for males (38th round), but not for females. This provides additional corroboration to the hypothesis postulated in Kalpagam (1987). It was suggested therein that if casual labour in the workforce

does not have an autonomous existence of its own, but is related to employment in the Regular Wage Sector, then the pressure of casualizing part of regular wage employment is likely to be high under situations of surplus labour. This appears to be the case with male rather than female non-agrarian urban workforce.

The extent to which changes in the wage labour and casual labour incidence can be explained by the changes in the above mentioned variables was examined for the changes recorded in the five year period 1977-78 to 1983.

For males, the changes in wage labour incidence could be explained to the extent of 34 per cent with these variables. However only proportion of (Trade/Tertiary) sector was significant and as was expected, shows negative relationship with WL/TW. None of the variables are significant in the case of females.



Males:

SET 3

$$\left[ \frac{WL}{TW} (NA) \right]_{t=1977-78} - \left[ \frac{WL}{TW} (NA) \right]_{t=1983} = f (UNEMP_{t_1-t_2},$$

$$SEC/TER (t_1-t_2), M/SEC (t_1-t_2),$$

$$t_1 = 1977-78$$

$$TR/TER (t_1-t_2)$$

$$t_2 = 1983$$

$$\bar{R}^2 = 0.34$$

$$\left[ \frac{TR}{TER} \right]_{t_1-t_2} = \begin{array}{cc} \text{coeff.} & \text{t value} \\ -0.61, & -3.16 \end{array}$$

Females

$$\left[ \frac{WL}{TW} (NA) \right]_{t=1977-78} - \left[ \frac{WL}{TW} (NA) \right]_{t=1983} = f \left[ UNEMP_{t_1-t_2}, \right.$$

$$SEC/TER (t_1-t_2), M/SEC (t_1-t_2),$$

$$TR/TER (t_1-t_2)$$

$$SER/TER (t_1-t_2)$$

None of the variables were significant in any of the stepwise regressions that were tried for this equation.

SET 4

Males

$$\left[ \begin{array}{c} \text{CL} \\ \text{WL} \end{array} \right]_{\text{(NA)}} \Big|_{t=1977-78} - \left[ \begin{array}{c} \text{CL} \\ \text{WL} \end{array} \right]_{\text{(NA)}} \Big|_{t=1983} = f \left[ \begin{array}{c} \text{Unemp} \\ \text{TR} \\ \text{TER} \end{array} \right] (t_1 - t_2),$$

$$\frac{\text{WL}}{\text{TW}} \text{(NA)}_{t_1 - t_2}, \text{ SEC/TER } (t_1 - t_2), \text{ M/SEC } (t_1 - t_2), \frac{\text{TR}}{\text{TER}} (t_1 - t_2),$$

$$\left[ \begin{array}{c} \text{SER} \\ \text{TER} \end{array} \right] (t_1 - t_2)$$

$$\underline{\underline{\bar{R}^2 = 0.44}}$$

where  $t_1 = 1977-78$  and  $t_2 = 1983$

<u>Var</u>	<u>Coeff.</u>	<u>t value</u>
Constant	-0.028	-4.23
Unemp $(t_1 - t_2)$	1.03	3.18
SER/TER $(t_1 - t_2)$	-0.003	-2.45

It appears that there is multicollinearity between TR/TER and SER/TER. Without including SER/TER in the regression equation, TR/TER is significant ( $t=2.43$ ) and positively correlated with the regressand. When SER/TER is introduced, the t value of TR/TER drops. The  $\bar{R}^2$  with SER/TER is however markedly higher.

Female

$$\left[ \begin{array}{c} \text{CL} \\ \text{WL} \end{array} \right]_{\text{(NA)}} \Big|_{t=1977-78} - \left[ \begin{array}{c} \text{CL} \\ \text{NL} \end{array} \right]_{\text{(NA)}} \Big|_{t=1983} = f \left[ \begin{array}{c} \text{UNEMP} \\ \text{TR} \\ \text{TER} \end{array} \right] (t_1 - t_2),$$

$$\frac{\text{WL}}{\text{TW}} \text{(NA)}_{t_1 - t_2}, \frac{\text{SEC}}{\text{TER}} (t_1 - t_2) \left[ \begin{array}{c} \text{TR} \\ \text{TER} \end{array} \right] \underline{\underline{\bar{R}^2 = 0.34}}$$

$$\frac{\text{SEC}}{\text{TER}} (t_1 - t_2) = \text{Coeff (18.08), } t \text{ value (3.56)}$$

labour incidence

The equation for changes in casual/indicates for males the significance of unemployment rate and the ratio of workers in Services in the tertiary sector (SER/TER). Upto 44 percent of the variations could be explained by these variables. Strong multicollinearity between TR/TER and SER/TER was noted. If SER/TER was dropped from the equation retaining TR/TER, it was found that it was positively related to CL/WL (NA). In the equation on wage labour incidence among Males, the same variable was negatively related to  $\frac{WL}{TW}$  (NA). This reverse relationship of TR/TER to  $\frac{WL}{TW}$  and  $\frac{CL}{WL}$  suggests that the possibility of casualizing part of the regular wage employment under conditions of surplus labour need not be a uniform tendency across all sectors of employment. As an initial evidence, it appears that the pressure of casualizing part of regular wage employment is likely to be high in "Trade". Unemployment rate is at the same time (in the same casual labour equation) positively related to CL/WL.

The corresponding equation for females explains 34 per cent of the variation. The ratio of employment in secondary sector to tertiary sector (SEC/TER) becomes significant with a positive coefficient. It appears that an increase in secondary sector employment relative to the tertiary sector, leads to an increase in the incidence of casual labour in the female wage labour force. Both construction and manufacturing in the secondary sector in which women in the secondary sector are by and large employed, are predominantly casual in nature. We had earlier noted that the

wage labour among females is predominantly casual. This in conjunction with the fact that the secondary sector offers fewer possibilities of selfemployment for women than the tertiary sector, it is not surprising that  $\frac{SEC}{TER}$  variable is positively related to CL/WL.

This paper focussed on aspects of urban labour market dynamics. In particular the phenomenon of wageisation and casualization was examined, and their variations were explained in terms of differences in occupational structure and unemployment. Restricting to the internal evidence of the NSS narrowed the scope of analysis but certainly facilitated a more thorough analysis of the data itself than would otherwise have been possible. Our examination of the patterns of change, in particular the grouping of states for wageisation and casualization, suggest to us that it is necessary to relate the processes in rural areas with the process occurring in urban areas. This ought to be the logical follow-up.

### Conclusions

The paper so far has been empirical, merely relating to certain patterns, trends and relations. The motivation for engaging in such an exercise needs greater spelling-out than has been done so far. It might be useful to start with two warnings. First the use of the term "wage labour" in the paper is not in a strictly political-economy sense. It merely refers to 'hired labour' under some wage system. It is an

empirical category derived from the format and constraints within which the data has been collected and generated. Secondly it is not the intention to suggest in any way whatsoever that there is a linear progression from self-employment status to wage employment.

Wage labour in the political economy sense implies the following conditions - (1) 'On one side' must be live labour separated "both from the conditions of live labour and from the means of livelihood, the means of self-preservation of live labour power"; (2) 'the other side' must be represented by value which is sufficient 'not only for the production of commodities or values necessary for the reproduction of live labour power or its preservation, but also for the absorption of surplus labour ...'; (3) 'a free relation of exchange' must exist 'between the two sides'. This relation, 'based on exchange values rather than relations of domination', presupposes such production 'which brings the producer the means of livelihood, not directly, but through the medium of exchange and moreover cannot possess outside labour directly but is compelled to buy it from the labourer himself, exchanging it'; and finally, (4) that side 'which represents the objective conditions of labour in the form of independent ..... values' must 'consider its ultimate goal to be, not direct consumption or creation of use value, but presupposition of value, self-growth of value, the making of money'.<sup>1/</sup> Thus wage labour strictly refers to a worker who is deprived of the means of production and is

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1/ Taken from Rastyannikov, Agrarian Evolution in a Multiform structure society, Routledge and Kegan Paul, London 1981.

engaged in production which creates use values as well as exchange values, values in general as well as surplus value. Moreover, he is involved in that production on the basis of free commodity exchange, ie, exchange free from any other relations (bondage) except those of mere market purchase and sale.

According to Marx, 'exchange of materialised labour for live labour constitutes neither capital, on the one side, nor wage labour on the other'. Such exchange can apply not only to the sphere of consumption of material goods produced but also to the sphere of production. Thus it is the nature of production and its aim - personal consumption or production of value for the sake of increasing value that constitutes the important criterion of characterising hired labour as wage labour. Marx noted, "In the epoch of the disintegration of pre-bourgeois relations, free labourers whose services are bought for production rather than consumption appear sporadically; but .... even when taken on a large scale, this happens only in the case of the production of direct use values and not values as such". Only "when these free labourers grow in numbers and this relation becomes more widespread, does the old mode of production disintegrate .... and the elements of actual wage labour are being prepared". Exchange that takes place when there is "neither capital, on the one side nor wage labour, on the other" can only represent the 'relation of simple circulation'. Wage workers engaged in production functioning according to the laws of simple reproduction cannot be considered 'wage labour' in the political economy sense. These workers represent at



best a 'protoproletariat' and proliferate <sup>inverse</sup> in/proportion to the development level of the capitalist structure and in direct proportion to the level of relative over population.

Even under situations where hired labour produces surplus value, that labour need not be a representative of wage labour for it depends on the use of that surplus value. Consumption of surplus value renders the use of hired labour as disguised purchase of labour as use value.

In a multistructural society where different forms of production coexist, the empirical wage labour category used as in this paper's analysis is a catchall category of all forms of hired labour. The distinction between Casual wage labour and Regular wage labour is yet another empirical characterisation, and so is the concept 'selfemployed' encompassing diverse relations (dependent/independent) with the market. The logic of evolution and change in a multistructural context is likely to reveal a secular/epochal movement to wage labour, (in the strict Marxian sense), ie. the expected linear progression, only during such an epochal time period under consideration. In periods of examination that are shorter than that time period there is every reason to expect that such linear progression need not be valid. The expansion and contraction of different forms of production, the transformation of these forms, and their articulation with different forms renders evolution and change in multistructural context a complex process. Such a process would also entail back and forth movements in the labour force status

and the expansion and contractions of different forms of hired labour too.

The literature on the urban informal sector, as well as studies on migration in the Indian Context do suggest that consequent of relative over population both due to demographic pressure, and as a consequence of rural transformation and rural-urban migration, the urban subsistence sector has expanded greatly. Consumption oriented services and production of use values appear to constitute a significant proportion of this urban subsistence sector along with a sizeable and growing sector engaged in production of exchange value. The wage labour in this context represent relation of simple circulation and simple reproduction. Often such wage workers are unable to secure the necessary minimum for subsistence through their own labour (due to both erratic employment and low wages) and they prefer to move into more secure livelihood options such as some form of selfemployment activities, which while minimising the risks of erratic wage employment also provide those engaged a certain degree of autonomy than before. Equally not all selfemployment situations at all times and in all contexts provide both an assured income and autonomy mentioned above. The extent of non-labour resources available and the market potential are important determinants of stability or instability of those in selfemployment. Forced commercialization (as in agriculture) could render petty commodity producers increasingly vulnerable to exploitation through exchange, or could lead to shrinkage and loss of markets itself, thus forcing them to move out from selfemployment to some form of wage employment.

The expansion of tertiary sector and the slow growth of the secondary sector causes the situation of slow expansion of wage-labour for surplus value production. Along with the pressures resulting from relative over population in urban areas, there arises a distinct sphere of activities called 'modes of subsistence'. Transactions in this mode of subsistence is not geared to surplus value production, but is geared to generation of subsistence. Thus two distinct (though not independent) circuits can be identified - the circuit of accumulation and the circuit of subsistence, the logic of each being distinct and separate. A linear progression to wage employment status can be expected only under a situation where the circuit of accumulation expands to absorb the circuit of subsistence. The logic of reproduction of a multi-structural system is to reproduce these two circuits. We then expect that the process of reproduction would entail a non-linear movement too. The scale of expanded reproduction in the circuit of accumulation would be the determining break in the reproduction of a multi-structural system.

The purpose of this excursion into more theoretical and abstract issues is to bring to attention both the inadequacy and the incompleteness of the empirical analysis of this paper. For an understanding of the dynamics of urban labour markets it is necessary to include in the analysis the relationship between selfemployment and wage employment (movements within the labour force), the links with the rural sector and the rural processes, in particular the impact of rural-urban migration on the urban labour market, and levels of earnings of different sections of the urban labour force. Theoretically, the conceptualization of the labour market should take into account the multistructural nature of the economy, and the existence of distinct circuits of production and exchange each with its own logic of reproduction.

Annexure 1

Usual Status Activity Codes - 27th round - 1972-1973

<u>Code</u>	<u>Description</u>
11	Working in own farm
12	Working in household non-farm enterprise/ profession
13	Working as regular salaried employee/wage labourer in farm
14	Working as regular salaried employee/wage labourer in non-farm enterprise/business/ profession/service/public/domestic enterprise
15	Working as casual wage labourer
16	Working in household farm as helper
17	Working in non-household enterprise as helper
21	Not working but seeking available for employment
31	Attending educational institution
32	Engaged in domestic work
33	too young to work/to attend school/to seek employment
34	Old and disabled
35	Others (included are pensioners, remittance recipients, beggars, prostitutes, etc).

Usual Status Activity Codes - 32nd and 38th rounds  
- (1977-78) and (1983)

<u>Code</u>	<u>Description</u>
01-04	Working with an employer under obligation but work not specifically compensated by any wage/salary
11	Worked (self-employed) in household enterprises.
21	Worked as helper in household enterprises
31	Worked as regular salaried/wage employee
41	Worked as casual wage labour in public works
51	Worked as casual wage labour in other types of work
81	Sought work
91	Attended educational institutions
92	Attended domestic duties only
93	Attended domestic duties and was engaged in free collection of goods (vegetables, roots, fire-wood, cattle feed etc.) sewing, tailoring, weaving, etc for household use.
94	Too young to work/to attend school/to seek employment
95	Old and disabled
96	Rentiers, pensioners, remittance recipients etc.
97	Beggars, prostitutes etc.
98	Others.

Annexure 2.1

Urban Work Force Participation Rates  
(Usual States comparable)

States	<u>Males</u>			<u>Females</u>		
	27 1972-73	32 1977-78	38 1983	27 1972-73	32 1977-78	38 1983
Andhra Pradesh	57.33	59.28	58.80	21.23	24.42	21.94
Assam	55.40	54.02	50.28	5.13	6.24	8.45
Bihar	54.51	54.49	55.74	10.96	10.64	15.54
Gujarat	54.73	55.53	57.99	14.19	15.02	14.74
Haryana	53.26	54.87	61.20	10.80	14.56	10.87
Himachal Pradesh	65.12	63.24	60.16	12.48	17.87	19.64
Jammu & Kashmir	63.52	56.12	59.61	8.13	14.49	10.08
Karnataka	56.21	56.14	57.94	19.15	20.75	20.72
Kerala	50.81	55.73	54.61	21.29	32.54	25.16
Madhya Pradesh	53.98	54.54	56.47	17.52	16.11	17.26
Maharashtra	58.16	57.31	57.80	17.11	17.79	16.43
Manipur	45.97	54.64	45.61	25.73	25.74	28.11
Meghalaya	57.82	53.13	51.70	15.73	20.26	21.62
Nagaland	60.62	60.07	60.67	14.09	14.36	11.29
Orissa	60.42	56.87	58.02	18.37	17.04	11.50
Punjab	60.00	62.56	59.47	12.73	16.01	17.97
Rajasthan	54.66	53.93	53.23	23.65	23.10	20.70
Tamilnadu	59.03	60.85	60.33	19.34	27.40	23.89
Tripura	47.98	51.12	50.30	2.91	14.09	12.61
Uttar Pradesh	57.59	57.10	56.97	9.37	10.80	11.61
W. Bengal	60.21	59.70	58.90	9.64	11.26	14.76
India	57.09	57.71	57.71	15.53	17.81	17.31



Elasticity of the incidence of wage labour in the urban  
workforce with the urban work participation rates-Males  
(usual status comparable)

27-32

27-38

STATES	% change in WL/TW	% change in WPR	% WL/TW % WPR	% change in WL/TW	% change in WPR	% change WL/TW % change in WPR
Andhra Pradesh	+3.66	+3.4	+1.08	+5.73	+2.56	+2.24
Assam	-1.76	-2.5	+0.70	+5.41	-9.24	-0.59
Bihar	-6.54	-0.4	+16.35	-13.91	+2.26	-6.15
Gujarat	+1.96	+1.46	+1.34	+4.29	+5.96	+0.72
Haryana	-6.58	+3.06	-2.15	+6.82	+14.91	+0.46
Himachal Pradesh	-26.79	-2.89	+9.27	-12.92	-7.62	+1.70
Jammu & Kashmir	-6.39	-11.65	+0.55	-17.09	-6.16	+2.77
Karnataka	+1.17	-0.12	-9.75	+7.91	+3.08	+2.57
Kerala	-4.03	+9.68	-0.42	+1.58	+7.48	+0.21
Madhya Pradesh	-0.90	+1.04	-0.87	+0.53	+4.61	+0.11
Maharashtra	-4.34	-1.46	+2.97	-4.51	-0.62	+7.27
Manipur	-8.44	+18.86	-0.45	-24.20	-0.78	+31.03
Meghalaya	-5.51	-8.11	+0.68	-17.95	-10.58	+1.70
Nagaland	-11.25	-0.91	+12.36	-18.86	+0.08	+235.6
Orissa	8.41	-5.88	+1.43	+3.39	-3.97	-0.85
Punjab	-7.07	-4.27	-1.66	+3.63	-0.88	-4.13
Rajasthan	-1.27	-1.34	+0.95	-3.38	-2.62	+1.29
Tamilnadu	+3.89	+3.08	+1.26	+10.0	+2.20	+4.55
Tripura	+0.94	+6.54	+0.14	-4.14	+4.84	-0.86
Uttar Pradesh	-6.02	-0.85	+7.08	-12.8	-1.08	+11.85
West Bengal	-6.35	-0.85	+7.45	-11.90	-2.18	+5.46
India	-2.58	+0.68	-3.79	+1.09	-3.09	-3.48

## STATES

	% change in WL/TW	% change in WPR	% change WL/TW % change in WPR
Andhra Pradesh	+2.00	-0.81	-2.47
Assam	+7.30	-6.29	-1.16
Bihar	-7.88	+2.29	-3.44
Gujarat	+2.28	+4.43	+0.51
Haryana	+14.34	+11.54	+1.24
Himachal Pradesh	+18.94	-4.87	-3.89
Jammu & Kashmir	-11.43	+6.23	-1.83
Karnataka	+6.67	+3.21	+2.08
Kerala	+5.84	-2.01	-2.91
Madhya Pradesh	+1.44	+3.54	+0.41
Maharashtra	-0.18	+0.85	-0.21
Manipur	-17.22	-16.53	+1.04
Meghalaya	-13.17	-2.69	+4.90
Nagaland	-8.57	+1.00	-8.57
Orissa	+12.88	+2.02	+6.38
Punjab	+11.51	-4.94	-2.33
Rajasthan	-3.25	-1.30	+2.5
Tamilnadu	+5.88	-0.85	-6.92
Tripura	-5.03	-1.60	+3.14
Uttar Pradesh	-7.24	-0.23	+31.48
West Bengal	-5.93	-1.34	+4.43
India	-1.24	+0.40	-3.10

workforce with UWPRS - Females (usual status comparable)

STATES	27-32		27-38	
	% change in WL/TW	% change in WPR	% change in WL/TW	% change in WPR
Andhra Pradesh	+3.33	+15.03	+1.95	+3.34
Assam	-6.23	+21.64	-16.79	+64.72
Bihar	-2.48	-2.92	-6.82	+23.54
Gujarat	-0.48	+5.85	+1.89	+3.88
Haryana	-6.26	+34.81	-40.88	+0.65
Himachal Pradesh	-7.29	+43.19	-14.70	+57.37
Jammu & Kashmir	+6.31	+78.23	+43.24	+23.99
Karnataka	+12.19	+8.36	+23.80	+8.20
Kerala	-30.33	+52.84	-27.45	+18.18
Madhya Pradesh	+32.05	-8.05	+38.33	-1.48
Maharashtra	-3.20	+3.97	-0.24	-3.97
Manipur	-14.83	+0.04	-39.66	+9.25
Meghalaya	+10.85	+28.80	+43.55	+37.44
Nagaland	+38.23	+1.92	+40.07	-19.87
Orissa	+2.28	-7.24	+18.47	-37.40
Punjab	-11.00	+25.77	+17.43	+41.16
Rajasthan	+2.22	-2.33	-18.41	-12.47
Tamilnadu	-4.56	+41.68	+15.65	+23.53
Tripura	-12.94	+384.19	+3.56	+333.33
Uttar Pradesh	-9.53	+15.26	+25.52	+23.91
W. Bengal	-13.24	+16.80	-21.87	+53.11
India	-2.11	+14.68	+3.37	+11.46

Elasticity of the incidence of wage labour in the urban workforce with UMPRS - Females: (usual status comparable)

STATES	32-38		% change in WL/TW	% change in WPR	% change in WL/TW % change in WPR
	% change in WL/TW	% change in WPR			
Andhra Pradesh	-1.33	-10.16		+ 0.13	
Assam	-11.27	+35.42		- 0.32	
Bihar	-4.45	+27.26		- 0.16	
Gujarat	+1.40	-1.86		- 0.75	
Haryana	-36.93	-25.34		+1.46	
Himachal Pradesh	-7.99	+9.90		-0.81	
Jammu & Kashmir	+34.74	-30.43		-1.14	
Karnataka	+10.35	-0.14		-73.93	
Kerala	+4.13	-22.68		-0.18	
Madhya Pradesh	+4.76	+7.14		+0.67	
Maharashtra	+3.06	-7.64		-0.40	
Manipur	-29.15	+9.21		-3.17	
Meghalaya	-49.08	+6.71		-7.31	
Nagaland	+1.33	-21.38		-0.06	
Orissa	+15.83	-32.51		-0.49	
Punjab	+31.94	+12.24		+2.61	
Rajasthan	-20.19	-10.39		+1.94	
Tamilnadu	+21.17	-12.81		-1.65	
Tripura	+10.77	-10.50		-1.03	
Uttar Pradesh	+38.75	+7.50		+5.17	
W. Bengal	-9.95	+31.08		-0.32	
India	+5.61	-2.81		-2.00	



Annexure 2.4Urban Extended Work Force Participation Rates

(usual status comparable)

States	Males			Females		
	27 1972-73	32 1977-78	38 1983	27 1972-73	32 1977-78	38 1983
Andhra Pradesh	57.33	59.37	58.84	21.23	23.59	24.17
Assam	55.40	54.17	50.39	5.13	21.69	14.35
Bihar	54.51	54.69	56.17	10.96	28.43	22.86
Gujarat	54.73	55.57	58.12	14.19	18.97	20.67
Haryana	53.26	54.92	61.62	10.80	30.81	35.92
Himachal Pradesh	65.12	63.32	60.16	12.48	44.04	40.79
Jammu & Kashmir	63.52	56.12	59.82	8.13	18.16	29.52
Karnataka	56.21	56.32	58.04	19.15	25.62	24.17
Kerala	50.81	55.78	54.68	21.29	35.53	28.41
Madhya Pradesh	53.98	54.63	56.58	17.52	24.83	21.60
Maharashtra	58.16	57.37	57.84	17.11	22.17	16.47
Manipur	45.97	54.64	45.80	25.73	40.00	33.28
Meghalaya	57.82	53.13	52.03	15.73	28.65	21.62
Nagaland	60.62	60.07	60.67	14.09	33.51	12.32
Orissa	60.42	57.01	58.13	18.37	23.57	18.60
Punjab	60.00	62.61	60.55	12.73	37.28	48.26
Rajasthan	54.66	54.01	53.64	23.65	34.03	28.68
Tamilnadu	59.03	60.91	60.38	19.34	30.40	28.38
Tripura	47.98	51.12	50.30	2.91	19.56	12.61
Uttar Pradesh	57.59	57.18	57.10	9.37	24.80	28.43
W. Bengal	60.21	59.80	58.90	9.64	21.02	22.85
India	57.09	57.56	57.88	15.53	26.08	25.57

Elasticity of the incidence of wage labour in the urban  
workforce with respect to EWP - Males  
(Usual status comparable)

States	27 - 32			27 - 38			32 - 38		
	% change in WL/TW	% change in EWP	% WL/TW in EWP	% in WL/TW	% in EWP	% in WL/TW	% in EWP	% in WL/TW	% in EWP
Andhra Pradesh	+ 3.66	+ 3.56	+ 1.03	+ 5.73	+ 2.63	+ 2.18	+ 2.00	- 0.89	- 2.25
Assam	- 1.76	- 2.22	+ 0.79	+ 5.41	- 9.04	- 0.60	+ 7.30	- 6.98	- 1.05
Bihar	- 6.54	+ 0.33	- 19.82	- 13.91	+ 3.05	- 4.56	- 7.88	+ 2.71	- 2.91
Gujarat	+ 1.96	+ 1.53	+ 1.28	+ 4.29	+ 6.19	+ 0.69	+ 2.28	+ 4.59	+ 0.50
Haryana	- 6.58	+ 3.12	- 2.11	+ 6.82	+ 15.70	+ 0.43	+ 14.34	+ 12.20	+ 1.18
Himachal Pradesh	- 26.79	- 2.76	+ 9.71	- 12.92	- 7.62	+ 1.70	+ 18.94	- 4.99	- 3.80
Jammu & Kashmir	- 6.39	- 11.65	+ 0.55	- 17.09	- 5.82	+ 2.94	- 11.43	+ 6.59	- 1.73
Karnataka	+ 1.17	+ 0.20	+ 5.85	+ 7.91	+ 3.26	+ 2.43	+ 6.67	+ 3.05	+ 2.19
Kerala	- 4.03	+ 9.78	- 0.41	+ 1.58	+ 7.62	+ 0.21	+ 5.84	- 1.97	- 2.96
Madhya Pradesh	- 0.90	+ 1.20	- 0.75	+ 0.53	+ 4.82	+ 0.11	+ 1.44	+ 3.57	+ 0.40
Maharashtra	- 4.34	- 1.39	+ 3.12	- 4.51	- 0.55	+ 8.20	- 0.18	+ 0.85	- 0.21
Manipur	- 8.44	+ 18.86	- 0.45	- 24.20	- 0.34	+ 71.18	- 17.22	- 16.18	+ 1.06
Meghalaya	- 5.51	- 8.11	+ 0.68	- 17.95	- 10.01	+ 1.79	- 13.17	- 2.70	+ 4.88
Nagaland	- 11.25	- 0.91	+ 12.36	- 18.85	+ 0.08	+ 235.63	- 8.57	+ 1.00	- 8.57
Orissa	- 8.41	- 5.64	+ 1.49	+ 3.39	- 3.79	- 0.89	+ 12.88	+ 1.96	+ 6.57
Punjab	- 7.07	+ 4.35	- 1.63	+ 3.63	+ 0.92	+ 3.95	+ 11.51	- 3.29	- 3.50
Rajasthan	- 1.27	- 1.19	+ 1.07	- 3.38	- 1.87	+ 1.81	- 3.25	- 0.69	+ 4.71
Tamilnadu	+ 3.89	+ 3.18	+ 1.22	+ 10.0	+ 2.29	+ 4.37	+ 5.88	- 0.87	- 6.76
Tripura	+ 0.94	+ 6.54	+ 0.14	- 4.14	+ 4.84	- 0.86	- 5.03	- 1.60	+ 3.14
Uttar Pradesh	- 6.02	- 0.71	+ 8.48	- 12.8	- 0.85	+ 15.06	- 7.24	- 0.14	+ 51.71
W. Bengal	- 6.35	- 0.68	+ 9.34	- 11.90	- 2.18	+ 5.46	- 5.93	- 1.51	+ 3.93
India	- 2.58	+ 0.82	- 3.15	- 3.79	+ 0.82	- 4.62	- 1.24	+ 0.56	- 2.21



Elasticity of the incidence of wage labour in the urban  
workforce with respect to EWPR - Females  
(Usual status comparable)

States	27 - 32			27 - 38			32 - 38		
	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR	% change in WL/TW in EWPR
Andhra Pradesh	+ 3.33	+ 39.38	+ 0.08	+ 1.95	+ 13.85	+ 0.14	- 1.33	-18.32	+ 0.07
Assam	- 6.23	+322.81	- 0.02	-16.79	+179.73	- 0.09	-11.27	-33.84	+ 0.33
Bihar	- 2.48	+159.39	- 0.02	- 6.82	+108.58	- 0.06	- 4.45	-19.59	+ 0.23
Gujarat	+ 0.48	+ 33.69	+ 0.01	+ 1.89	+ 45.67	+ 0.04	+ 1.40	+ 8.96	+ 0.16
Haryana	- 6.26	+185.28	- 0.03	-40.88	+232.59	- 0.18	-36.93	+16.59	- 2.22
Himachal Pradesh	- 7.29	+252.88	-0.03	-14.70	+226.84	- 0.06	- 7.99	- 7.38	+ 1.08
Jammu & Kashmir	+ 6.31	+123.37	+ 0.05	+43.24	+263.10	+ 0.16	+34.74	+62.56	+ 0.56
Karnataka	+12.19	+ 33.79	+ 0.36	+26.80	+ 26.21	+ 0.91	+10.35	- 5.66	- 1.83
Kerala	-30.33	+ 66.89	- 0.45	-27.45	+ 33.44	- 0.82	+ 4.13	-20.04	- 0.21
Madhya Pradesh	+32.05	+ 41.72	+ 0.77	+38.33	+ 23.29	+ 1.65	+ 4.76	-13.01	-00.37
Maharashtra	- 3.20	+ 29.57	- 0.11	- 0.24	- 3.74	+ 0.06	+ 3.06	-25.71	- 0.12
Manipur	-14.83	+ 55.46	- 0.27	-39.66	+ 29.34	- 1.35	-29.15	-16.80	+ 1.74
Meghalaya	+10.85	+ 82.14	+ 0.13	-43.55	+ 37.44	- 1.16	-49.08	-24.54	+ 2.00
Nagaland	+38.23	+137.83	+ 0.28	+40.07	- 12.56	- 3.19	+ 1.33	-63.23	- 0.02
Orissa	+ 2.28	+ 28.31	+ 0.08	+18.47	+ 1.25	+14.78	+15.83	-21.09	- 0.75
Punjab	-11.00	+192.85	- 0.06	+17.43	+279.10	+ 0.06	+31.94	+29.45	+ 1.08
Rajasthan	+ 2.22	+ 43.89	+ 0.05	-18.41	+ 21.27	- 0.87	-20.19	-15.72	+ 1.28
Tamil Nadu	- 4.56	+ 57.19	- 0.08	+15.65	+ 46.74	+ 0.33	+21.17	- 6.64	- 3.19
Tripura	-12.94	+572.16	- 0.02	- 3.56	+333.33	- 0.01	+10.77	-35.53	- 0.30
Uttar Pradesh	- 9.53	+164.67	- 0.06	+25.52	+203.42	+ 0.13	+38.75	+14.64	+ 2.65
West Bengal	-13.24	+118.05	- 0.11	-21.87	+137.03	- 0.16	- 9.95	+ 8.71	- 1.14
India	- 2.11	+ 67.93	- 0.03	+ 3.37	+ 64.65	+ 0.05	+ 5.61	- 1.96	- 2.86

Annexure 3.1

Non-Agrarian Work Participation Rates - Urban  
Non-Agrarian Workforce (Usual Status comparable)

States	Males		Females	
	32	38	32	38
Andhra Pradesh	50.66	53.36	15.87	17.11
Assam	50.78	44.85	5.46	8.45
Bihar	48.06	49.46	7.25	11.47
Gujarat	50.48	52.74	10.27	11.54
Haryana	47.07	52.10	7.47	7.46
Himachal Pradesh	58.80	55.95	10.74	14.38
Jammu & Kashmir	49.54	54.71	7.01	9.33
Karnataka	47.78	50.48	14.26	15.49
Kerala	43.54	43.04	16.40	22.22
Madhya Pradesh	48.19	50.30	11.32	12.77
Maharashtra	52.31	54.30	12.36	13.42
Manipur	40.63	25.61	18.87	11.86
Meghalaya	52.62	50.27	20.26	21.36
Nagaland	53.23	59.25	10.10	9.43
Orissa	47.62	52.11	12.01	9.29
Punjab	55.30	53.84	10.02	16.82
Rajasthan	48.05	45.86	9.32	14.41
Tamilnadu	53.10	53.72	19.21	19.06
Tripura	45.11	46.73	13.97	12.61
Uttar Pradesh	51.52	51.68	8.49	10.33
West Bengal	56.18	57.26	9.75	14.46
India	51.40	52.38	12.13	14.18

Annexure 3.2

Elasticity of the incidence of non-agrarian wage labour  
in the non-agrarian workforce with respect to  
non-agrarian work participation rates

States	Males			Females		
	%change in WL/TW 32-38	%change in WPR	Elasti- city	%change in WL/TW 32-38	%change in WPR	Elasti- city
Andhra Pradesh	+ 2.06	+ 5.33	+ 0.39	+ 5.87	+ 7.81	+ 0.75
Assam	+12.57	-11.68	- 1.08	-16.67	+54.76	- 0.30
Bihar	- 8.93	+ 2.91	- 3.07	-18.23	+58.21	- 0.31
Gujarat	+ 2.95	+ 4.48	+ 0.66	- 8.78	+12.37	- 0.71
Haryana	+15.48	+10.69	+ 1.45	-41.04	- 0.13	+315.69
Himachal Pradesh	+18.74	- 4.85	- 3.86	-24.48	-33.89	- 0.72
Jammu & Kashmir	-15.91	+10.44	- 1.52	-30.34	+38.10	- 0.92
Karnataka	+ 6.70	+ 5.65	+ 1.19	+10.27	+ 8.63	+ 1.19
Kerala	+ 2.72	- 1.15	- 2.37	-29.46	+35.49	- 0.83
Madhya Pradesh	+ 2.53	+ 4.38	+ 0.58	+ 0.42	+12.81	+ 0.03
Maharashtra	- 1.06	+ 3.80	- 0.28	- 0.52	+ 8.58	- 0.06
Manipur	+11.88	-36.97	- 0.32	+23.11	-37.15	- 0.62
Meghalaya	-12.75	- 4.47	+ 2.85	-48.46	+ 5.43	- 8.92
Nagaland	-16.30	+11.31	- 1.44	-14.67	- 6.63	+ 2.21
Orissa	+12.61	+ 9.43	+ 1.34	+16.84	-22.65	- 0.74
Punjab	+12.14	- 2.64	- 4.60	- 2.61	+67.85	- 0.04
Rajasthan	- 1.85	- 4.56	+ 0.41	-49.84	+54.61	+ 0.91
Tamil Nadu	+ 7.65	+ 1.17	+ 6.54	+31.01	- 0.78	-39.76
Tripura	- 3.86	+ 3.59	- 1.08	+ 9.83	- 9.74	- 1.01
Uttar Pradesh	- 8.63	+ 0.31	-27.84	+25.88	+21.67	+ 1.19
W. Bengal	- 6.87	+ 1.92	- 3.58	-18.03	+48.31	+ 0.37
India	- 1.17	+ 1.91	- 0.61	- 1.58	+16.90	- 0.09

Annexure 3.3

Extended Workforce Participation Rates - Urban

Non-Agrarian Workforce

States	Males			Females		
	32	38	%change between 32-38	32	38	%change between 32-38
Andhra Pradesh	50.75	53.40	+ 5.22	21.04	19.34	- 8.08
Assam	50.93	44.96	-11.72	20.91	14.35	-31.37
Bihar	48.26	49.89	+ 3.38	25.04	20.79	-16.97
Gujarat	50.52	52.87	+ 4.65	14.22	17.47	+22.86
Haryana	47.12	52.52	+11.46	23.72	32.51	+37.06
Himachal Pradesh	58.88	55.95	- 4.98	36.91	35.53	- 3.74
Jammu & Kashmir	49.54	54.92	+10.86	10.68	28.77	+169.38
Karnataka	47.96	50.58	+ 5.46	19.13	18.94	- 0.99
Kerala	43.59	43.11	- 1.10	19.39	25.47	+31.36
Madhya Pradesh	48.28	50.41	+ 4.41	20.04	17.11	-14.62
Maharashtra	52.35	54.34	+ 3.80	16.74	13.46	-19.59
Manipur	40.63	25.80	-36.50	33.13	17.03	-48.60
Meghalaya	52.62	50.60	- 3.84	28.65	21.36	-25.45
Nagaland	53.23	59.25	+11.31	29.25	10.46	-64.24
Orissa	47.76	52.22	+ 9.34	18.54	16.39	-11.60
Punjab	55.35	54.92	- 0.78	31.29	47.11	+50.56
Rajasthan	48.13	46.27	- 3.86	20.25	22.39	+10.57
Tamilnadu	53.16	53.77	+ 1.15	22.21	23.55	+ 6.03
Tripura	45.11	46.73	+ 3.59	19.44	12.61	-35.13
Uttar Pradesh	51.60	51.81	+ 0.41	22.49	27.15	+20.72
W. Bengal	56.28	57.26	+ 1.74	19.51	22.55	+15.58
India	51.48	52.55	+ 2.08	20.40	22.44	+10.00

Annexure 3.4

Elasticity of the incidence of non-agrarian wage labour  
in the non-agrarian extended WPR - Urban -  
(usual status comparable)

States	Males			Females		
	% change in WL/TW (NA)	% change in EWPR (NA)	Elasti- city	% change in WL/TW (NA)	% change in EWPR (NA)	Elasti- city
	32-38	32-38		32-38	32-38	
Andhra Pradesh	+ 2.06	+ 5.22	+ 0.39	+ 5.87	- 8.08	- 0.7
Assam	+12.57	-11.72	- 1.07	-16.67	-31.37	+ 0.5
Bihar	- 8.93	+ 3.38	- 2.64	-18.23	-16.97	+ 1.0
Gujarat	+ 2.95	+ 4.65	+ 0.63	- 8.78	+22.86	- 0.38
Haryana	+15.48	+11.46	+ 1.35	-41.04	+37.06	- 1.1
Himachal Pradesh	+18.74	- 4.98	- 3.76	-24.48	- 3.74	+ 5.55
Jammu & Kashmir	-15.91	+10.86	- 1.47	-30.34	+169.38	- 0.18
Karnataka	+ 6.70	+ 5.46	+ 1.23	+10.27	- 0.99	-10.37
Kerala	+ 2.72	- 1.10	- 2.47	-29.46	+31.36	- 0.94
Madhya Pradesh	+ 2.53	+ 4.41	+ 0.57	+ 0.42	-14.62	- 0.03
Maharashtra	- 1.06	+ 3.80	- .279	- 0.52	-19.59	+ 0.0
Manipur	+11.88	-36.50	- 0.33	+23.11	-48.60	- 0.48
Meghalaya	-12.75	- 3.84	+ 3.32	-48.46	-25.45	+ 1.90
Nagaland	-16.30	+11.31	- 1.14	-44.67	-64.24	+ 0.2
Orissa	+12.61	+ 9.34	+ 1.35	+16.84	-11.60	- 1.45
Punjab	+12.14	- 0.78	-15.56	- 2.61	+50.56	- 0.05
Rajasthan	- 1.85	- 3.86	+ 0.48	-49.84	+10.57	- 4.72
Tamilnadu	+ 7.86	+ 1.15	+ 6.65	+31.01	+ 6.03	+ 5.14
Tripura	- 3.86	+ 3.59	- 1.08	+ 9.83	-35.13	- 0.23
Uttar Pradesh	- 8.63	+ 0.41	-21.05	+25.88	+20.72	+ 1.25
W. Bengal	- 6.87	+ 1.74	- 3.95	-18.03	+15.58	- 1.16
India	- 1.17	+ 2.08	- 0.56	- 1.58	+10.00	- 0.16

Data Source:

The data for this paper has been drawn from the following issues of Sarvekshana.

Sarvekshana

- i) Vol IX, No 4, April 1986
- ii) Vol VII, No 3, January, 1984
- iii) Vol VII, No 4, April, 1984
- iv) Vol VI, Nos 3 & 4, January-April, 1983
- v) Vol VI, Nos 1 & 2, July-October, 1982
- vi) Vol V, Nos 1 & 2, July-October, 1981.

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