

WOMEN'S WORK IN THE POST REFORM PERIOD: AN EXPLORATION OF MACRO DATA

1. Introduction

Development within the framework of economic reforms is often equated to growth rates which are highlighted as the only solution to all problems – be it poverty, unemployment or inequalities based on gender, class and caste. Higher economic growth, apart from having its trickle down effect, is expected to bring in synergies that would finally shake the earlier structures and relationships. Accordingly, it is assumed that a simple correlation exist between women's work and women's status. Thus, an important aspect that is often highlighted in the context of economic reforms is the translation of labour market changes into defining or redefining gender relations and empowerment of women. The supporters of this theory see current development as one which has opened up new and increased opportunities for women with women entering into new forms and sectors of work that are highly market oriented and remunerative.

In India too, in the aura that has been created around liberalisation, a sense of a benign and socially progressive influence of free markets has been projected, reflected in a widespread understanding that new opportunities of employment for women are opening up. While some focus on the high-end sectors of IT services, others stress on export manufacturing, both considered favouring the hiring of women and both linked to processes associated with globalisation. Thus, the characteristic features of the structure of the female workforce in the 1990s is often highlighted as an increasing feminisation of the urban workforce on account of an increased work participation for urban women, a feminisation of agriculture on account of an increased share of women workers in the primary sector, rigidities and a declining share for women in rural non-farm employment, decrease in secondary sector employment, and an increase in tertiary sector employment.

The data collected by National Sample Survey Organisation (NSSO) under its employment and unemployment surveys give a large wealth of data on employment, which are disaggregated by gender. Although employment data sets are generally quite inadequate for the purposes of comprehending the nature of social and economic forces at work in the sphere of labour and employment relations, and even more so as they operate in relation to women, nevertheless, they are important for identifying major shifts and changes taking place. For such purposes, some distinctive features that emerge from a disaggregate data are quite revealing. Disaggregate level information is available on the magnitude, pattern and structure of employment of women which could be analysed at a disaggregate level to understand the dynamics of women's employment. The changes in work participation rates, patterns of work and sectoral/industrial divisions are some of the indicators that provide an understanding of how economic transformation has impacted female employment. The paper analyses women's employment through a disaggregate analysis of the last three rounds of quinquennial NSSO Employment and Unemployment surveys, 1993-94, 1999-00 and 2004-05 and explores the emerging patterns in women's employment which outline some of the new developments or changes that are taking place.

The remaining part of the paper is structured under five broad sections. Section II discusses the broad changes in women's employment through an examination of absolute changes in employment, work participation rates and nature of employment. Sectoral and sub-sectoral trends and patterns across rural and urban areas are outlined in Section III. Section IV provides a disaggregate analysis of female employment in the IT and ITES sector in the backdrop of the euphoria that prevails in the context of the growth of the sector. The issue of women as unpaid care workers is discussed in Section V with a view to situate women in a broader context of their role as both productive and reproductive workers. Finally Section VI sums up the paper.

II. Female Employment in the Post Reform Period

Participation of women in economic activity world over has normally been positively related to opening up of the economy, whether the link is seen through the expansion of women-oriented sectors or through the cost-differential dimension. The initial propounder of this line of argument was Standing (1989) who argued that the deregulation of labor markets (informalisation) necessitated by global production

systems would favour women in terms of cost effectiveness resulting in feminisation of jobs. Many empirical works undertaken in different country contexts also suggest the occurrence of such a phenomenon for at least for short periods, though the rates of change vary widely across countries and sectors (Standing, 1999; Cerruti, 2000; Ozler, 2000; Valodia, 2001).

In India, though the initial response to deregulation largely took the established understanding of expanding opportunities for women, doubts are raised on its actual impact with growing evidences of employment stagnation and increasing informalisation of the workforce. Further it has also been argued that the changes associated with reforms – technological changes, industrial relocation and the shift from subsistence production to market orientation has unleashed forces that have pushed women to a marginalised and discriminated position in the labour market. In this context, the effect on female employment- be it feminisation, marginalisation, exclusion or segregation has acquired central importance in all major discourses around economic reforms all over the world.

Despite the growing literature on the subject the above issues continues to be the most debated aspect as well, with contradicting experiences and trends coming not only from different regions or sectors but also across various time periods within a given segment of the economy. This puzzle around female employment could be seen from the diverse findings and discussions on women's work during the last two decades which have raised larger questions on globalisation and the gendering of labour markets. Despite these diverse views on the actual impact of opening up of the economy on female labour, it is now acknowledged that the labour market changes in India have followed a different track unlike other Asian Countries (Ghosh, 2002).

Women's participation in employment has always been much low, partly due to the definitional issues as well as their absence in conventionally recognised categories of work. Level of participation in economic activity in a population crucially depends on how work and worker are defined. In the definition followed by the major statistical data systems a person is a worker if he/she is engaged in any "economically meaningful activity". This definition excludes many women from the boundary of production with women largely concentrated in the subsistence sector for household use/consumption. Thus a large section of women are rendered invisible and hence do not even figure in the calculations of worker participation rates.

Census of India gives population projections for various years for both the sexes separately for rural and urban areas. The projected data as on January 1 2005 is used to estimate workforce estimates applying it to the segment wise workforce participation rates as given by NSSO. The estimates for 2004-05 are compared with that of previous rounds of data¹ both for principal status as well as usual status workers. From the Table (Table 1) it is clear that the first important change in employment relates to aggregate workforce itself. Quite contrast to the 1990s which saw a quite dramatic deceleration of aggregate employment generation, which fell to the lowest rate recorded, the period between 1999-2000 and 2004-05 show a revival of aggregate employment growth, with male-female workforce increasing sharply.

Table 1: Trends in work force across various years - (00)

Categories	Usual Principal Status (UPS)			Usual Status (UPSS)		
	1993-94	1999-00	2004-05	1993-94	1999-00	2004-05
Rural Males	1826513	1916993	2148785	1877438	1950044	2192965
Rural Females	747223	796118	919227	1047390	1030474	1242096
Total Rural	2573736	2713111	3068012	2924827	2980518	3435062
Urban Males	635879	756367	894457	645795	763739	907684
Urban Females	134342	157962	201015	172091	187664	247174
Urban Total	770221	914329	1095472	817886	951403	1154858
Total Males	2462392	2673360	3043242	2523233	2713784	3100649
Total Females	881565	954080	1120242	1219480	1218138	1489270
Total	3343957	3627440	4163484	3742714	3931921	4589919

Source: NSSO Data 1993-94 & 2004-05: Calculated using Census segment wise population Projections and NSS segment wise Worker Population Ratios

1999-00: Calculated using population figures taken from Sundaram 2001 and NSS segment wise Worker Population Ratios

This recovery in employment is all the more important for women as the earlier period showed a near stagnation in the number of female workers and an absolute reduction in the number of rural female workers by usual status. The 2004-05 figures show a substantial increase in absolute number of women workers not only in rural areas but also in urban areas, with a larger increase in rural areas. However, the

¹ For 1999-00, the population figures are taken from Sundaram (2001) and for 1993-94 the population figures are calculated using the Census population projections as on January 1994. The segment-wise population figures are applied to NSSO segment-wise worker-population ratios to arrive at workforce estimates.

recovery is not only confined to female workers and in fact male workers show a much better recovery in terms of absolute number increases.

II. I. Volatile Female Workforce Participation Rates

The declining work participation rate of women has been the issue which has received much attention in the discussion on globalisation and its gendered implications in the country. On line with an increased workforce figures, the participation rates show significant improvements both for urban and rural areas for both the sexes. The data show some recovery after a substantial decline in women's participation rate during 1993-94 and 1999-00, to reach the level of 1993-94, though as per principal status the rates have gone much higher than the 1993-94 rates (Table 2). For females, participation rates show about 3 percentage point improvement over the previous period both for rural and urban areas. The increase in participation rates is also true with males though the rate of increase is less than that of females. The rural-urban disaggregation shows that the rates have improved both in rural and urban areas almost at the same rate for women while for men; the increase is largely in urban areas.

Table 2: Work force participation rate in NSSO Rounds

Rounds	UPS			UPSS		
	Male	Female	Total	Male	Female	Total
Rural						
1993-94	53.8	23.4	39.0	55.3	32.8	44.4
1999-2000	52.2	23.1	38.0	53.1	29.9	41.7
2004-05	53.5	24.2	39.1	54.6	32.7	43.9
Urban						
1993-94	51.3	12.1	32.7	52.1	15.5	34.7
1999-2000	51.3	11.7	32.4	51.8	13.9	33.7
2004-05	54.1	13.5	34.6	54.9	16.6	36.5
Total						
1993-94	53.2	20.6	37.5	54.5	28.6	42.0
1999-2000	52.0	20.3	36.5	52.7	25.9	39.7
2004-05	53.6	21.5	38.0	54.7	28.7	42.0

Source: Various Rounds of NSSO Data

The work force participation rates raise two issues of concern with regard to female employment. Firstly, the increased participation rate of women in rural areas during a period of crisis largely led by agricultural recession by no imagination could be seen as a positive outcome². Secondly, a comparison of the participation rates across principal and usual status shows that the increased participation of women both in rural and urban areas is largely accounted by the increase in women workers in the subsidiary category. The increased number of women in subsidiary status especially in rural areas in the context of the alarming agrarian crisis means that women do not have opportunities for long term regular employment. However, to understand this change and its implications one has to analyse the issue at further disaggregate levels which could reveal important insights into the dynamics of the processes at work which push more and more rural women to employment.

II.II. Female Employment Expansion through Increased Self Employment

Self employment in the context of development is considered important for a number of reasons that have to do with poverty reduction and employment generation. The thrust on self employment is often based on the supposition that it signifies micro entrepreneurship, which is superior to wage employment and could eventually grow into small or medium enterprise and thus entrepreneurship. Self employment has been a buzz word for almost two decades from now, especially in the context of female employment. One of the major discourses during the period of liberalisation has been directed at women as self employed workers originating from the perception that beneficial effects of liberalisation lay in expanding the relationship between women 'entrepreneurs' in informal sector and wider markets. Accordingly,

² The agrarian distress is reflected in the spate of suicides in many parts of the country. A large number of farm suicides have been reported from various parts of the country especially from states like Maharashtra, Andhra Pradesh and Kerala. The crisis is perceived as an outcome of the integration of the economy to the world in a context of worldwide recession. With the removal of quantitative restrictions and freer global trade, not only are those developing country farmers engaged in growing exported cash crops suffering, but the livelihoods of millions of food grain producers are also being undermined as a result of imports of exceptionally low-priced foreign grain. It is argued that the agrarian crisis is likely to persist as long as the present policies of openness to the world market continue, as global conditions of trade in primary commodities are likely to remain unfavourable (Patnaik, 2005).

the importance and future possibilities of the sector has been among the highlights of many of the major policy documents on women during this period. Organisation of micro-credit arrangements, formation of NGO-aided Self Help Groups and so on constituted the agenda of the 'catch all do all policy approach' for lifting women out of poverty and to strive for their economic 'empowerment'. Accordingly, the post-liberalisation period saw a boom in programmes initiated under various ministries and governmental departments towards promoting self employment for women.

Table 3: Percentage Distribution of Employment by Status (UPSS)

Employment Status and year	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
(i) Self-Employed						
1987-88	58.6	60.8	41.7	47.1	54.3	58.9
1993-94	57.7	58.6	41.7	45.8	52.9	56.7
1999-2000	55.0	57.3	41.5	45.3	52.8	55.6
2004 -05	58.1	63.7	44.8	47.7	54.21	61.0
(ii) Regular Employees						
1987-88	10.0	3.7	43.7	27.5	18.6	6.9
1993-94	8.5	2.7	42.0	28.4	17.0	6.3
1999-2000	8.8	3.1	41.7	33.3	14.0	7.3
2004 -05	9.0	3.7	40.6	35.6	18.25	9.0
(iii) Casual Labour						
1987-88	31.4	35.5	14.6	25.4	27.1	34.2
1993-94	33.8	38.7	16.3	25.8	30.1	37.0
1999-2000	36.2	39.6	16.8	21.4	33.2	37.1
2004 -05	32.9	32.6	14.6	16.7	27.54	30.0

Source: Various Rounds of NSSO Data

Such a facile understanding however does not fully reflect the dynamics of growing prominence of self employment in the country. Self employed workers could belong to a range of heterogeneous occupations and thus, not all perspectives see them as positive risk-taking entrepreneurs³. Whether individuals take to self-employment as

³ The NSSO survey defines 'self-employed as those individuals who operate their own farm or non-farm enterprises or are engaged independently in a profession or trade on own-account or with one or a few partners'. Neo-Marxists conceptualise self employment in the non-farm sector as "petty commodity production".

a result of a “push” out of the formal economy, or a due to a “pull” towards more lucrative and advantageous employment opportunities is an intensely debated topic in the literature on labour economics.

Self employment has, of course, always predominated over wage employment in rural areas because of the dominance of peasant agriculture. Regular wage employment in rural areas is relatively insignificant, and more so for women. Nevertheless, till 1999-2000, there was a consistent decline in the proportions of female self employed in rural areas accompanied by an increasing share of casual labour⁴. This generally reflected the process of small peasant families either supplementing cultivation with casual work or losing their land and becoming casual landless labour. However, a reversal of the trend, i.e. decline in share of self employment occurred between 1999-2000 and 2004-05 (Table 3). For rural women, the share of self employed rose dramatically from 57.3 per cent to 63.7 per cent. This was matched by a corresponding fall in share of casual labour from 39.6 per cent to 32.6 per cent⁵.

In urban areas, although self employment remained significant, the tendency till the end of the 1990s was of an increasing share of regular wage employment. However, the period between 1999-2000 and 2004-05 saw an increase in the share of self employed from 45.3 per cent to 47.7 per cent and a substantial drop in the share of casual wage work. It is important to note here the volatility of work participation rates during the period. Female work participation rates show a decline in the period 1993-94 and 1999-00, while the later period shows an upward movement. Thus, in 2004-05, female work force participation rate showed about 3 percentage point improvement over the previous period (both for rural and urban areas). In the first half of the decade, when the overall proportions of self employed declined, women’s work participation rates fell quite sharply. In contrast, in the second half of the decade, accompanying a sharp increase in the share of self employed women’s work participation rates recovered from their earlier levels.

It appears that the 1990s created certain conditions for pauperisation of sections of the self employed accounting for the shift to casual work and falling work participation rates among women. Factors that would have contributed to this process are the dismantling of the public distribution system, rising prices of food

⁴ The trend has been the same for male employment as well.

⁵ A similar trend can also be seen among rural male workers, although the percentage change in share is of a lesser order.

items, withdrawal of state protection to domestic industry and reduction of support systems and subsidies for small industry. On the other hand, from 2000 onwards, it seems that even casual work has become increasingly unavailable leaving large masses of workers with little option but to eke out some sort of livelihood from the self employment that they had earlier abandoned as a viable option.

II.III. The Growing Predominance of Female Unpaid Workers

According to the definition followed in the employment and unemployment survey⁶ of the National Sample Survey Organisation (NSSO), self employed denotes "*persons who operate their own farm or non farm enterprises or are engaged independently in a profession or trade on account or with one or few partners*". In the survey, self employed persons are further categorised into three groups: own account workers, employers and helpers in household enterprise. Own account workers are the self employed who operate their enterprises on their own account or with one or few partners and run their enterprises without hiring any labour. However, they may have unpaid helpers to assist them in the activity of the enterprise. Employers work on their own account or with one or a few partners and by and large run their enterprise by hiring labour but may also use unpaid help from family members. The third category is the unpaid workers or helpers in household enterprise are mostly family members who keep themselves engaged in their household enterprises as assistants working full or part time, and do not receive any regular salary or wages in return for the work performed. These workers could be engaged in either agricultural holding or family enterprises on an unpaid basis to produce products that are marketed or in the production of goods for household own consumption; including production of crops and livestock, basic food processing, gathering firewood and fetching water, making tools, utensil and clothes, constructing housing.

Self employment is thus not a homogenous category and unless one examines the various subcategories, it is impossible to analyse the implications of changes in

⁶ As regards the nature of employment generally workers are classified into three categories: self-employed; regular salaried/wage employee and employees and casual labour. Regular salaried/wage employee include persons working in others farm or non farm enterprises (both household and non-household) and getting in return salary or wages on a regular basis. The category not only includes persons getting time wage but also piece wages or salary and paid apprentices, both full time and part time. Casual workers include persons usually engaged in other farm or no-farm enterprises (both household and non-household) and getting in return wage according to the terms of the daily or periodic work contract.

self employment. The data shows that one of the most striking features of self employment is the extremely high share of unpaid work by women that may be found in both rural and urban areas (Table 4). In fact, if one removes unpaid women workers from the category of self employment, it appears that wage employment is the overwhelmingly predominant form of paid work among women in India. Shockingly, the recent major increase in the quantum of self employment among women in rural areas has been accompanied by an actual drop in the proportions of own account workers and employers and a marked increase in the share of women's unpaid labour.

Table 4: Paid and unpaid work in self employment rural areas - 1993-94 – 2004-05 – UPSS

Category of self employed	1993-94		1999-2000		2004-05	
	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed
Own account worker	156573	25.51	150213	25.44	183483	23.19
Employer	7488	1.22	4310	0.73	6330	0.8
Worked as helper in household enterprise (unpaid family worker)	449771	73.28	435938	73.83	601403	76.01
Total	613771	100	590462	100	791215	100

Source: Unit data, Employment and Unemployment Rounds, National Sample Survey Organisation

While the share of own account workers and employers among self employed rural women declined from 25.5 per cent in 1993-94 to 23.2 per cent in 2004-05, the share of unpaid workers increased from 73.3 per cent to 76 per cent. This in effect means that the rising share of self employment among rural women workers is essentially an expression of concentration of women in unpaid work. Clearly the sharp slow down of the rate of growth of agriculture in GDP and declining returns to agriculture, is reflected in the inability of agricultural incomes to pay for casual hired labour even when required. The thinner spread of agricultural incomes is being expressed in the substitution of casual labour by the unpaid labour of women. In

other words, indicates deterioration in the quality of employment – i.e., rural women working more for lesser income.

Table 5: Paid and unpaid work in self employment urban areas - 1993-94 – 2004-05 – UPSS

Category of self employed	1993-94		1999-2000		2004-05	
	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed	No of workers	Proportion to total self employed
Own account worker	40678	51.61	44793	52.69	58633	49.73
Employer	1551	1.97	1139	1.34	1839	1.56
Worked as helper in h.h. enterprise (unpaid family worker)	36588	46.42	39080	45.97	57430	48.71
Total	78818	100	85012	100	117902	100

Source: Unit data, Employment and Unemployment Rounds, National Sample Survey Organisation

The picture in relation to unpaid work is not different in urban areas (Table 5). Here again, the absolute number of unpaid women workers and their proportions increased over the period though the proportion showed a decline in 1999-00. The share of unpaid women in total self employed increased from 46.4 per cent in 1993-94 to 48.8 per cent in 2004-05. The decline in own account workers is quite striking. This trend is a reflection of the stagnation in the urban economy and declining opportunities for women.

III. Female Employment Patterns: Sectoral and Sub-sectoral Analysis

The prospects of the manufacturing sector in India to absorb women workers (unlike East Asian countries) has been debated extensively in the literature on women's employment, given the socio-cultural context of the country. Along side, emphasis

has been given to the prospects of service sector jobs in terms of growth in GDP and employment⁷.

Table 4: Broad sectoral distribution and shares across male and female workers-UPS (per cent)

Rural									
	1993-94			1999-00			2004-05		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary	74.55 (68.10)	85.11 (31.90)	77.62 (100.00)	71.80 (67.17)	84.42 (32.83)	75.50 (100.00)	66.80 (65.60)	81.98 (34.40)	71.35 (100.00)
Secondary	10.62 (75.08)	8.59 (24.92)	10.03 (100.00)	12.00 (76.45)	8.89 (23.55)	11.09 (100.00)	15.10 (77.24)	10.41 (22.76)	13.70 (100.00)
Tertiary	14.83 (85.17)	6.29 (14.83)	12.35 (100.00)	16.20 (85.34)	6.69 (14.66)	13.41 (100.00)	18.10 (84.77)	7.61 (15.23)	14.96 (100.00)
Total	100.00 (70.91)	100.00 (29.09)	(100.00)	100.00 (70.64)	100.00 (29.36)	100.00	100.00 (70.06)	100.00 (29.94)	100.00
Urban									
Primary	9.98 (70.30)	20.04 (29.70)	11.73	7.30 (69.97)	15.00 (30.03)	8.63	6.89 (67.33)	14.91 (32.67)	8.36
Secondary	33.43 (83.47)	31.46 (16.53)	33.09	32.10 (84.17)	28.90 (15.83)	31.55	33.67 (83.28)	30.13 (16.72)	33.02
Tertiary	56.59 (84.72)	48.50 (15.28)	55.18	60.60 (83.80)	56.10 (16.20)	59.82	59.44 (82.83)	54.95 (17.17)	58.62
Total	100.00 (82.62)	100.00 (17.38)	100.00	100.00 (82.72)	100.00 (17.28)	100.00	100.00 (81.68)	100.00 (18.32)	100.00

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

The trend in female employment becomes all the more puzzling if one analyses the sectoral shares. The sectoral changes in employment show a large increase in the number of women in the primary sector– from 6,96,414,00 to 7,82,798,00 workers, though in terms of share in female employment the sector shows a decline from 84 per cent to 82 per cent (Table 4). However, male/female share of the sector shows an increase in the share of female workers in total primary employment by almost 2

7 In the Approach Paper to Xth Five-Year Plan (2002-2007) of the Planning Commission, service sector has been projected as the most potential sector in terms of employment. The approach paper calls for the promotion of specific service sectors jobs which are women friendly and gender neutral such as IT & ITES.

percentage points. The rural- urban division shows increased number of women in primary sector in both the areas leading to increased female share in total primary employment. Further, in urban areas, the share of primary sector remained almost stagnant unlike the earlier period contrary to the expected shift away from agriculture alongside economic development.

The data shows some degree of stagnation in rural areas in the share of the secondary sector and the tertiary sector almost stagnated with small increases (19.77 per cent to 19.96 percent and 15.58 per cent to 16.36 per cent respectively). As far as urban areas are concerned the share of the service sector shows a decline with manufacturing showing the increase. The declining share of tertiary sector, in the context of its projected potential for absorbing female labour force, raises serious concerns on the actual impact of the sector in overall employment.

Table 5: Broad sectoral distribution and shares across male and female workers - UPSS (per cent)

Rural									
	1993-94			1999-00			2004-05		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary	74.80 (60.76)	86.51 (39.24)	79.00 (100.00)	71.86 (61.42)	85.60 (38.58)	76.60 (100.00)	67.10 (58.63)	83.52 (41.37)	73.04 (100.00)
Secondary	10.50 (70.44)	7.89 (29.56)	9.57 (100.00)	11.98 (72.30)	8.70 (27.70)	10.84 (100.00)	14.90 (72.66)	9.89 (27.34)	13.09 (100.00)
Tertiary	14.70 (82.47)	5.59 (17.53)	11.44 (100.00)	16.17 (84.32)	5.70 (15.68)	12.55 (100.00)	18.00 (82.80)	6.59 (17.20)	13.87 (100.00)
Total	100.00 (64.17)	100.00 (35.83)	100.00	100.00 (65.47)	100.00 (34.53)	100.00	100.00 (63.82)	100.00 (36.18)	100.00
Urban									
Primary	10.28 (60.44)	25.27 (39.56)	13.43 (100.00)	7.39 (62.59)	18.02 (37.41)	9.49 (100.00)	7.00 (58.28)	18.38 (41.72)	9.44 (100.00)
Secondary	33.23 (79.56)	32.07 (20.44)	32.99 (100.00)	31.87 (81.74)	29.03 (18.26)	31.31 (100.00)	33.50 (79.26)	32.17 (20.74)	33.21 (100.00)
Tertiary	56.49 (83.26)	42.66 (16.74)	53.58 (100.00)	60.74 (82.39)	52.95 (17.61)	59.21 (100.00)	59.50 (81.53)	49.45 (18.47)	57.35 (100.00)
Total	100.00 (78.98)	100.00 (21.02)	100.00	100.00 (80.31)	100.00 (19.69)	100.00	100.00 (78.58)	100.00 (21.42)	100.00

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

When subsidiary workers are all included (Table 5), the trend becomes much clearer. The female shares show an increase in all the three sectors in rural areas with the primary sector showing maximum increase of more than 4 percentage points, which needs to be seen in the light of its declining share in the previous period. In urban areas also the share of women workers in the primary sector shows a drastic increase from 38.58 per cent to 41.37 per cent. The female share of employment in the secondary sector has stagnated over time, while that of service sector increased though at a much lower level compared to that of primary sector. Thus, the trend in sectoral distribution seems to dispel some of the existing understanding of female employment changes with the opening up of the economy – a sharp shift away from primary to service sector employment. This becomes all the more critical in the context of an increasing trend of projecting service sector, especially the ICT driven ones, as an engine of growth and as a source of employment, especially for women⁸.

III.I. Continuing Dependence on the Primary Sector

In the context of the above broad trends it is pertinent to look at the changes at the disaggregate level, across various industrial sectors/sub sectors as it could reveal important insights into the processes that are underway. Increased share of women in sectors where the conditions of work is better would mean entirely different process when compared to a situation where women are pushed to sectors which are known for drudgery and poor conditions of work. The process becomes all the more different when one takes into account the conditions under which women take up work. For many women, labour market participation is an outcome of poverty and livelihood, which have strong implications on their sectoral concentration, nature of work, and bargaining position.

With agriculture accounting for close to three-fourths of all women workers in India, developments in farm sector become the most important factor influencing women's employment. A longstanding feature of women's employment in the country has been the persistent and substantially high concentration of women in agriculture. This is reflective of the fact that for most women, urbanisation and the pattern of industrial development did not mean expanding opportunities for

⁸ Broad female employment trends and patterns in IT and ITES sector are examined in Section V. However, for a detailed discussion see Neetha (2006).

employment. It is for this reason that even within urban India, agriculture, which is elsewhere peripheral to the urban context and urban employment, continue to account for a far larger share of the female workforce than one would expect.

Table 6: Distribution of female workers across various industrial categories- UPSS Total

Industrial Category	1993-94			1999-00			2004-05		
	1	2	3	1	2	3	1	2	3
Agriculture, forestry and fishing	945357	77.44	39.48	912023	74.88	38.74	1079652	72.42	41.63
Mining and quarrying	5222	0.43	19.51	3842	0.32	17.14	4221	0.28	16.52
Mfrg & repair services	120987	9.91	29.14	123355	10.13	28.24	174039	11.67	31.05
Electricity, gas and water	516	0.04	3.71	375	0.03	3.61	494	0.03	4.07
Construction	16482	1.35	13.61	20343	1.67	11.66	28024	1.88	10.75
Trade, hotels and restaurants	39376	3.23	12.84	52325	4.30	12.78	61208	4.11	12.31
Transport, storage and communication	3285	0.27	3.06	4408	0.36	3.01	5945	0.40	3.19
Finance, insurance, real estate and business services	4489	0.37	12.07	4692	0.39	9.61	9152	0.61	11.72
Community, social and personal services	84987	6.96	26.35	96587	7.93	28.94	128026	8.59	33.93
Estimated Workers ⁹ (`00)	1220700	100.00	32.59	1217950	100.00	30.94	1490759	100.00	32.47

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: 1- Absolute number of workers (`00); 2- Sectoral share in total female employment; 3 – Female share in total employment

As indicated by the fall in the share of primary sector, the share of agriculture has more or less stagnated with a small decline over the period (Table 6). The share of the mining and quarrying also show a decline, leading to an overall decline in the share of primary sector as has been discussed earlier. But what is striking is the huge increase in the absolute number of women engaged in agriculture during the period 1999-00 and 2004-05 by around 1.7 million women workers. This when taken in contrast to the decline in the number of women in the earlier period points to the direction of changes that are happening in the economy. This is not to say that only

⁹ Total workforce estimates may vary slightly across tables as they are derived from adding up sectoral estimates, calculated from the proportions across industrial categories as given in the published data.

agriculture has registered increase in absolute number of women. All the sectors do show increase in absolute number of women. However the intensity of the biased nature of employment shifts is evident from the fact that of the 2.7 million increases in women workers across all the sectors, 1.7 million are in agriculture. On account of this increased number of women in agriculture, the female share of the sector shows substantial change during the last two periods with the share increasing by about 3 points.

This strikingly sharp increase in the number of female workers and their increasing share in total agriculture employment need to be analysed against the context of the ongoing agricultural crisis. In the context of declining wages and shrinking agricultural incomes, there seems to have been no alternative left to rural households than trying out all possible ways of survival¹⁰. The entry of a large number of women into the labour market could thus be mainly an outcome of desperation. The increased share of women in agriculture thus seems to be the resultant of the known trend of shifting of burden of subsistence agriculture onto women in the context of its declining economic condition. In the absence of any other alternative source of employment, such desperation would add only to the number of underemployed in agriculture, further lowering productivity.

The industrial sector, including repair services, show increase in both absolute numbers as well as its share. Female share in total industrial employment also show an increase from 28.24 per cent in 1993-94 to 31.05 per cent in 2004-05, as against the earlier period which showed a decline. This definitely shows a break from the previous periods of stagnation and declining share of female employment and thus marks some degree of positive change. However, to arrive at any firm conclusions there is a need to look at rural-urban division and specific sectors that have contributed to this increase in female employment in manufacturing.

Construction industry, which accounts for a considerable proportion of women workers has almost stagnated over the period while in absolute terms there has been some increase. The female share in construction employment shows a decline, an indication of replacement of female workers with mechanisation of construction work. The most important change that needs to be highlighted, which is quite reverse of the trend observed during the previous periods is the decline in the share

¹⁰ Between 2000 and 2004, with the deepening of agrarian crisis wage employment in agriculture seems to have become scarce with the number of agricultural labourers falling steeply by almost 10 million. (see Neetha & Mazumdar, 2006).

of women engaged in the trade, hotels and restaurants, though in terms of absolute number there is an increase. In the category community, social and personal services, the substantial increase in the number of women seems to indicate a process of feminisation of the sector with the female share in total employment increasing at around 5 percentage points. Here again, there is a need to explore sub-sectoral patterns to understand its actual implications on female work as wide variation exist among these sub sectors in terms of wages and other conditions of employment. These trends as well as the nature and processes that affect paid and unpaid employment would become much clearer if one disaggregate it across further categories.

III.II. Expansion of Urban Female Employment through Low Paid Work

In the 1990s, there has been a precipitous fall in women's employment in urban agriculture reflected both in the reduced number of women in agriculture and also in its share in female employment and total agricultural employment. However, during the period 1999-00 and 2004-05 the number of women engaged in agriculture shows a sizeable jump, surpassing the number of women registered even in 1993-94 (Table 7). This increase is reflected in the rising share of the sector in women's total employment as well as in the sharp increase in the female share in total agricultural employment. The female share has increased by about 5 percentage points exceeding even the 1993-94 shares by more than 2 percentage points. The increased dependence on agriculture in urban areas though goes beyond the conventional understanding of urban development and employment, the direction of change in other sectors do help one in broadly positioning these changes.

Among other sectors, interestingly, the big shift for urban women workers has been in manufacturing, the share of which has increased by about 4 percentage points. Here again the share exceeded that of 1993-94 though the share remained much less than the share in 1987-88, which is much before the growth of export oriented manufacturing (Chandrasekhar & Ghosh 2006). The female share in total manufacturing employment also show an increase on account of a substantial increase in women urban workers by around 1.4 lakh workers. Construction industry shows decline both in terms of its share in female employment and also in the share of female workers in total construction employment reflecting a process of defeminisation which could be largely attributed to the mechanisation boom in the sector.

Table 7: Distribution of Female workers across various industrial categories- UPSS Urban

Industrial Category	1993-94			1999-00			2004-05		
	1	2	3	1	2	3	1	2	3
Agriculture, forestry and fishing	42506	24.68	42.24	33029	17.62	39.95	44986	18.18	44.83
Mining and quarrying	1033	0.60	10.95	751	0.40	9.85	494	0.20	5.71
Mfrg & repair services	47669	27.67	22.66	45039	24.02	20.84	69703	28.17	24.63
Electricity, gas and water	516	0.30	6.25	375	0.20	5.79	494	0.20	6.37
Construction	7056	4.10	13.67	9008	4.80	11.94	9393	3.80	10.11
Trade, hotels and restaurants	17381	10.09	9.58	31715	16.92	12.38	30155	12.19	10.61
Transport, storage and communication	2237	1.30	3.45	3378	1.80	4.08	3460	1.40	3.44
Finance, insurance, real estate and business services	3442	2.00	12.02	4692	2.50	12.01	7910	3.20	12.87
Community, social and personal services	50423	29.27	30.73	59489	31.73	32.07	80826	32.67	37.41
Estimated Workers (`00)	172263	100.00	21.02	187476	100.00	19.69	247421	100.00	21.42

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: 1- Absolute number of workers (`00); 2- Sectoral share in total female employment; 3 – Female share in total employment

Within service sector, the share of trade in female employment which rose sharply during the period 1993-94 and 1999-00 absorbing part of displaced workers from agriculture and manufacturing during the period seems to have lost its importance in the later period. This has resulted even in an absolute decline in the number of female workers. The share of trade in total employment of women fell sharply from 16.92 per cent to 12.19 per cent during the period with female share in employment in trade declining from 12.38 per cent to 10.61 per cent. The category of community, social and personal services though show only a small increase in share, the female share in total employment shows a dramatic increase from 32.07 per cent to 37.41 per cent, which is brought out by the substantial increase in the number of women workers by around 2.1 lakhs. Since the category comprises of various sub categories, the dynamics of the sector and its implications for women's overall employment would be clear only from a sub-sectoral analysis. Thus, while between 1993-94 and 1999-2000, the share of both agriculture and manufacturing in urban women's employment showed a decline, it was partly cushioned by the increase in

trade, absorbing part of the displaced workers. However, between 1999-00 and 2004-05, as has been seen earlier, women are found leaving the sector to take up employment elsewhere. This decline in retail and petty trading and the fluctuations in the home based work under the putting out system are among the possible reasons for such a drastic decline in own account workers which has been discussed in section .

At the overall level, the trends in women's employment during the period are somewhat puzzling. On the one hand; more and more women are found moving to agriculture alongside an increase in the number of women in manufacturing and personal and community services. This broadly denotes a positive development with some signs of women getting entry to some forms of employment. However, sectoral shifts- with women moving out of agriculture and taking up trade related activities in the initial period followed by a further crowding into agriculture and other service industries- point to a desperate situation where women are trying out various possibilities. This suggests that female employment is largely driven by survival options and thus is far from being a positive labour market outcome. These trends are thus indicative of growing labour market uncertainty and volatility rather than steady improvement in female employment.

Table 8: Distribution of women workers across various sub sectors of agriculture

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Growing of crops; market gardening; horticulture	19745	23921	24209	31885	85.62 (33.74)	80.95 (35.80)	73.30 (37.98)	70.88 (41.83)
Farming of animals	2211	5025	7507	12112	9.59 (30.23)	17.01 (41.70)	22.73 (56.36)	26.92 (61.69)
Estimated workers	23062	29549	33029	44986	100.00 (31.93)	100.00 (35.03)	100.00 (39.45)	100.00 (44.27)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

In order to understand the processes that are underway, a further sub sectoral analysis is done. The sub-sectoral analysis is done for both principal and usual status workers which could help in understanding the nature of employment created. The data is restricted to only those sectors which account for more than 2 per cent of women. Agriculture which showed an alarming increase in the number of women comprises largely of crop cultivation, farming of animals, forestry and so on (Table 8). The disaggregated data shows that the increase is largely in crop cultivation though the category farming of animals have increased both in terms of absolute numbers as well as share.

In manufacturing the trend of falling share of food products and tobacco continued with its share reducing further to 6 per cent and 13 percent in 2004-05 (Table 9). In the case of tobacco there is even an absolute reduction in the number of women.

The whole upward movement of manufacturing is largely limited to just two sectors viz, garment making and textiles. Textiles account for the largest share of manufacturing (27.46 per cent), registering an increase of about 4 percentage points. Garment making show the highest increase an increase of about 12 lakh women workers, raising its share from 10 per cent to 22.89 per cent of total manufacturing. Tanning and leather products also show an upward trend with the sectoral share increasing by about 1 per cent. The two sectors – chemicals and non metallic manufacturing – which showed upward movement in share during the previous period show a decline in its share though in terms of absolute numbers there has been an increase.

Overall, the sub- sectoral analyses of manufacturing do not suggest any major shift in female employment. The substantial difference in the number of workers across principal and usual status, especially in sectors which show a boom in female employment, suggests the possibility of the revival of the subcontracting/putting out system where women are employed largely as piece rate workers. Such systems of employment are known for its ad hoc character and low pay and hence to see this as a very positive outcome is questionable.

Table 9: Distribution of women workers across various sub sectors of Manufacturing

Categories	No. of Female Workers ('00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Manufacture of food products and beverages	3475	3417	4129	4202	9.4 (14.62)	6.72 (16.42)	9.17 (16.69)	5.99 (19.15)
Manufacture of tobacco products	7898	7237	9196	9145	21.37 (71.98)	14.23 (73.40)	20.42 (74.35)	13.03 (71.99)
Manufacture of textiles	8372	11860	10697	19280	22.65 (24.10)	23.32 (24.61)	23.75 (28.83)	27.46 (34.07)
Manufacture of wearing apparel; dressing and dyeing of fur	3633	11257	4504	16066	9.83 (23.37)	22.13 (29.36)	10 (27.85)	22.89 (36.61)
Tanning and dressing of leather; manufacture of luggage, handbags saddlery, harness and footwear	790	1809	751	1977	2.14 (10.80)	3.56 (16.51)	1.67 (9.87)	2.82 (19.02)
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plating materials	1422	1206	1877	1483	3.85 (12.96)	2.37 (10.01)	4.17 (16.44)	2.11 (11.67)
Manufacture of chemicals and chemical products	3159	4422	3566	4696	8.55 (26.58)	8.7 (33.64)	7.92 (28.83)	6.69 (33.89)
Manufacture of other non-metallic mineral products	1422	1809	1689	2225	3.85 (19.44)	3.56 (18.35)	3.75 (22.19)	3.17 (21.41)
Manufacture of furniture; manufacturing n.e.c.	2527	3015	3378	4696	6.84 (13.16)	5.93 (11.01)	7.5 (16.91)	6.69 (15.64)
Estimated workers	36963	50857	45039	70197	100 (17.89)	100 (19.42)	100 (21.04)	100 (24.51)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

Table 10: Distribution of women workers across various sub sectors of trade

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Wholesale trade and commission trade, except of motor vehicles and motorcycles	1580	2010	1689	2472	6.10 (6.17)	7.63 (5.40)	5.36 (6.58)	8.13 (6.49)
Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	20377	18694	25710	21257	78.66 (11.31)	70.99 (10.04)	81.55 (13.65)	69.92 (11.09)
Hotels and restaurants	3791	5226	4129	6179	14.63 (13.82)	19.85 (14.91)	13.10 (14.97)	20.33 (16.72)
Estimated workers	25906	26333	31528	30402	100.00 (10.46)	100.00 (9.54)	100.00 (12.32)	100.00 (10.66)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

The disaggregate analysis shows that the decline in trade is largely accounted by the drastic reduction in the share of retail trade, which fell down from 81.55 per cent to 70 per cent by usual status (Table 10). The decline in absolute number of women is quite sharp with more than 4 lakh women moving away from the sector, with female share of employment showing a decline. The sudden decline in the number of women engaged in trade, after a sudden boom points to the instability and volatility of such employment in general and for women in particular.

This means that incomes from petty retailing were neither stable nor financially viable for many forcing them to shift to other sectors in search of employment. What seems to have happened is that people who are out of the workforce through shifts in the traditional occupations have tried alternative sources of livelihood and because of different reasons petty retail trade is often seen as an important source of employment for poor women, who are uneducated and lack specific skills. The perceived relative skill required for entering into retail trade, especially small vending is not much as compared to other categories of work. The self-employed nature of the occupation makes the entry of poor and vulnerable groups into the occupation easier, which is furthered by the requirement of a very low capital investment. Hotels

and restaurants show increase in both absolute number of women as well as share, as has been during the earlier period.

Community and personal services do seem to have some of these displaced workers – suggesting a movement of women from trade to community and personal services (Table 11). Further, the category community and personal services disaggregated across major categories clearly shows signs of segregation. The inability of public administration to absorb more and more workers is visible in the declining share of women in the sector and an almost stagnant figure in terms of absolute numbers. Education as always has been the case, account for majority of female workers in this category. The data shows substantial increase in the number of female workers though the share has not registered much increase. The decline in the share of female teachers as principal status workers is noteworthy reflecting a tendency of increased presence of part time workers which could largely be seen as a resultant of privatization of the sector.

Table 11: Distribution of women workers across various sub sectors of community and personal services

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Public administration and Defence	7266	7639	7319	7662	13.18 (10.74)	9.87 (12.68)	12.30 (10.83)	9.48 (12.76)
Education	19271	24926	21206	28672	34.96 (46.84)	32.21 (45.51)	35.65 (48.45)	35.47 (47.74)
Health and social work	6792	8644	6944	8898	12.32 (37.14)	11.17 (39.45)	11.67 (38.41)	11.01 (40.55)
Other service activities	11373	5628	12573	7415	20.63 (41.46)	7.27 (25.69)	21.14 (44.05)	9.17 (30.57)
Private households with employed persons	9004	24926	9759	26200	16.33 (61.55)	32.21 (75.85)	16.40 (64.11)	32.42 (75.62)
Estimated workers	55129	77391	59489	80826	100.00 (30.45)	100.00 (37.58)	100.00 (32.07)	100.00 (37.63)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

Health and social work also seems to have declined in terms of its importance in its share of women. What seems to be interesting is the sharp increase in the share as well as number of women engaged in private household in employed persons. The more than double share of the sector have positioned the sector next to and almost close to education. In terms of absolute numbers too the increase has been quite substantial from 9,75,900 to 26,20,000 during the period. The category private households with employed persons have been sub-categorized and data was collected across sub-activity classifications within that. The data shows that women are largely employed as housemaids/servants accounting for about 70 per cent of women in this category, with female share as high as 87 per cent in this category (Table 12). The gender based segregation is clear across the categories, with women accounting for all who report as governess/baby sitters and their complete absence from categories such as gardeners/watchman and so on.

Table 12: Distribution of women workers across various sub sectors of private households with employed persons

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Housemaid/servant	4596	4968	17689	18291	62.5 (100.00)	66.67 (100.00)	70.97 (86.83)	69.81 (87.04)
Cook	0	0	804	742	0 (0.00)	0.00 (0.00)	3.23 (100.00)	2.83 (100.00)
Gardener	0	0	0	0	0 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Gate keeper/chowkidar/ watchman	0	0	0	0	0 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Governess/baby sitter	0	0	603	742	0 (0.00)	0.00 (0.00)	2.42 (100.00)	2.83 (100.00)
Others	2758	2484	5829	6427	37.5 (39.09)	33.33 (36.16)	23.39 (61.97)	24.53 (63.90)
Total estimated workers in the category 'private households with employed persons'	7354	7453	24926	26200	100 (53.29)	100 (53.11)	100 (75.59)	100 (76.23)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

From the data it seems that employment in domestic service appears to be the only available option for many of the disadvantaged groups or sections that are faced with limited opportunities. The wages and other conditions of work in the sector are one of the lowest, with the sector being even out of the minimum wages purview in many states. The growth of the sector is indicative of as to how women are affected by the development process.

To sum up, at the overall level, the analysis reveals that the increased participation rates of women in urban areas cannot be seen as a positive phenomenon as it has not made much structural changes in women's employment. The trend seems to suggest a highly regressive tendency with women getting concentrated in the lower rungs of the labour market. Further, with reduced family incomes and rapid impoverishment, it is quite likely that more and more women, who are entering into the workforce seeking employment, take up different tasks at different points in time which could fluctuate in quantum, depending on the opportunities available such as petty trade- adding to fluctuations in such categories of work.

III. III. Increased Female Presence in Agriculture with Volatile Rural Non-farm Employment

Agriculture occupies a central position as far as rural employment is concerned. The excessive dependence on agriculture shows a continuation during the period though there has been some degree of diversification of employment. The data shows that though there has been a small decline in the proportion of women in agriculture, non farm activities account for only about 17 per cent of the workers. The increase in the number of women engaged in agriculture is alarming with about 1.5 million additional women joining the sector thus pushing women's share of total agriculture employment by about 3 percentage points (Table 13). This crowding of women in agriculture in this context of a deceleration in agricultural growth and productivity would only mean that the already low income from agricultural production is shared by many hands, further aggravating the rural crisis, which has been highlighted earlier. Sectoral shifts are relatively lower in other sectors with manufacturing, trade, and community social and personal services showing marginal increases in its share when the two time periods are compared.

Table 13: Distribution of Female workers across various industrial categories- UPSS- Rural

Industrial Category	1993-94			1999-00			2004-05		
	1	2	3	1	2	3	1	2	3
Agriculture, forestry and fishing	902850	86.11	39.36	878994	85.30	38.70	1034666	83.22	41.50
Mining and quarrying	4190	0.40	24.17	3091	0.30	20.90	3726	0.30	22.07
Mfrg & repair services	73317	6.99	35.81	78316	7.60	35.49	104336	8.39	37.59
Electricity, gas and water	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00
Construction	9427	0.90	13.56	11335	1.10	11.44	18631	1.50	11.11
Trade, hotels and restaurants	21995	2.10	17.56	20609	2.00	13.45	31052	2.50	14.57
Transport, storage and communication	1047	0.10	2.47	1030	0.10	1.62	2484	0.20	2.89
Finance, insurance, real estate and business services	1047	0.10	12.24	0	0.00	0.00	1242	0.10	7.49
Community, social and personal services	34564	3.30	21.81	37097	3.60	25.02	47200	3.80	29.27
Estimated Workers (`00)	1048437	100.00	35.83	1030474	100.00	34.53	1243338	100.00	36.18

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: 1- Absolute number of workers (`00); 2- Sectoral share in total female employment; 3 – Female share in total employment

Part of the overall crisis of rural employment is because non-farm employment has not been expanding to absorb additional job seekers. The stagnation in other sectors is partly due to the crisis in agriculture since the declining returns from agriculture spills over to other sectors in the form of shrinking demand. Manufacturing seems to have absorbed some proportion of the increase in the number of women workers, with the share showing a marginal increase. Unlike the trend observed in urban areas where there has been a substantial decline in the share of women in trade, rural areas show a stagnant picture with a small increase. Community, social and personal services also show a marginal increase. Overall this reveals that there have not been substantial changes across major industrial categories of women workers in the rural areas.

In the context of the above trends, to get a better understanding of the dynamics of rural female employment the critical segments of non farm employment such as manufacturing, and personal and community services are analysed at further disaggregate level for the last two rounds. Here again, the data is restricted to only those sectors which account for more than 2 per cent of women.

Table 14: Distribution of women workers across various sub sectors of manufacturing

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Manufacture of food products and beverages	7961	8273	10305	9937	13.16 (24.45)	10.59 (26.97)	13.16 (31.43)	9.88 (28.93)
Manufacture of tobacco products	19107	21142	25762	26084	31.58 (78.25)	27.06 (68.91)	32.89 (78.58)	25.93 (75.93)
Division: 17: Manufacture of textiles	12738	16546	16488	21116	21.05 (36.12)	21.18 (41.49)	21.05 (39.51)	20.99 (47.29)
Manufacture of wearing apparel; dressing and dyeing of fur	2388	8273	3091	13663	3.95 (29.34)	10.59 (29.96)	3.95 (34.57)	13.58 (39.78)
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plating materials	7165	11031	9274	13663	11.84 (24.01)	14.12 (29.96)	11.84 (28.29)	13.58 (33.15)
Manufacture of chemicals and chemical products	2388	2758	3091	3726	3.95 (44.01)	3.53 (44.95)	3.95 (51.85)	3.70 (54.23)
Manufacture of other non-metallic mineral products	6369	8273	7213	9937	10.53 (26.03)	10.59 (24.51)	9.21 (26.89)	9.88 (28.93)
Manufacture of furniture; manufacturing n.e.c.	1592	1838	2061	2484	2.63 (14.67)	2.35 (11.98)	2.63 (17.29)	2.47 (14.46)
Estimated workers	60505	78134	78316	100610	100.00 (30.97)	100.00 (35.37)	100.00 (35.51)	100.00 (40.68)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

The traditional sectors of rural women's employment such as food products and tobacco show a decline in its share as has been the trend in the past. The most important feature of the changing employment in manufacturing is the huge increase in the number and share of women engaged in wearing apparel as in the case of urban areas (Table 14). The number of women engaged in textiles has also increased however the share shows an overall stagnation. The increase in the share of wearing apparel is particularly sharp when subsidiary workers are also taken into

account- which indicates the possibility of large scale subcontracted- putting out home based work in the sector.

Table 15: Distribution of women workers across various sub sectors of personal and community services

Categories	No. of Female Workers (`00)				Share to total female employment in manufacturing			
	UPS		UPSS		UPS		UPSS	
	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05	1999-00	2004-05
Public administration and defence	3981	2758	4122	2484	11.90 (11.29)	6.67 (9.99)	11.43 (11.52)	5.26 (9.04)
Education	10350	18385	11335	21116	30.95 (27.25)	44.44 (35.25)	31.43 (29.25)	44.74 (38.42)
Health and social work	3184	4596	3091	4968	9.52 (29.34)	11.11 (29.96)	8.57 (34.57)	10.53 (36.16)
Sewage and refuse disposal, sanitation and similar activities	1092	919	1030	1242	4.76 (40.25)	2.22 (29.95)	2.86 (34.56)	2.63 (36.16)
Activities of membership organisations n.e.c.	0	919	0	1242	0.00 (0.00)	2.22 (14.98)	0.00 (0.00)	2.63 (18.08)
Other service activities	12738	6435	14427	7453	38.10 (29.34)	15.56 (20.97)	40.00 (30.25)	15.79 (24.11)
Private households with employed persons	1592	7354	2061	8695	4.76 (58.68)	17.78 (59.92)	5.71 (69.15)	18.42 (63.28)
Estimated workers	33437	41365	36067	47200	100.00 (22.41)	100.00 (27.52)	100.00 (25.21)	100.00 (30.53)

Source: NSSO Employment and Unemployment Data, Various Rounds

Note: Figures in parentheses refer to female share in total employment in the given sector

Yet another sector which has shown dramatic an increase as far as women's employment is concerned is that of community and personal services. The sub-sectoral data shows a declining share of public administration in women's employment in this category, reflecting the shrinking of government jobs (Table 15). Education is found to occupy the most important position in terms of its share in total employment followed by private households with employed persons. Education shows further signs of sex based segregation with female share increasing sharply over the period from 29 per cent to 38 per cent. The growing share of women in education could be linked to the individual and family aspirations resulting from the

social acceptability of sector. The maximum increase in share has been for private household with employed persons, which registered a three fold increase in its share during the period – indicative of a desperate entry of women into paid work. Working conditions of domestic workers in terms of wage earnings and other benefits are one of poorest and an overwhelming majority of domestic women workers, nearly 84 per cent in urban areas and 92 per cent in rural areas were found to get wages below the minimum wages of Rs. 66 per day (NCEUS, 2007).

On the whole, the broad pattern indicates that the changes in the non farm sector do not show any signs of long term employment changes but are reflective of the continuing volatility and uncertainty in non-farm employment. Thus in an overall term, rural female work force seems to be highly disadvantaged with further signs of segregation into the lower rungs of the economy.

IV. Women in Information Technology (IT) and IT Enabled (ITES) Industries

The growth of the IT industry is said to have increased women's employment in the service sector. Thus, of late, the 'feminising profile' and the 'women friendly' aspects of the sector have been a subject of much discussion and debate. The contribution of the sector to employment as per the NAASCOM estimates have risen from around 285,000 in 1999-00 to more than 1 million in 2004-05, at a compound annual rate of 28.5 per cent per annum. In this context, a major question that arises apart from women's entry and share in the sector is the issue of gender segregation. The recent scholarship in the area suggests that the sector shows clear signs of labour market segmentation by gender, where women are engaged in low paid and less skilled occupations, there by reinforcing or aggravating the existing gender inequities in the labour market. In the context of non availability of any gender disaggregated employment data on the sector at the macro level many studies have relied on micro level evidences. The NSS employment and unemployment unit level data could be used to provide some broad estimates of the sector, though some overestimation is bound to happen as some of the disaggregate classification could also capture employment which fall beyond the IT categories. In spite of these limitations, these estimates could help in understanding the broader sectoral patterns and trends. Accordingly in this section, the composition of women in the IT Sector and changes over time are analysed using the NSSO estimates.

Women's share in the IT industrial sectors has increased over the period from 14.5 in 1999-00 to 17.7 in 2004-05 (Table 16). The patterns across disaggregate categories reveal the growing segmentation in the sector. Share of women workers in the hard ware consultancy sector has shown a drastic decline from 29.4 per cent to 18.6, indicating the growing male domination in this segment. The substantial increase in the share of women in data base activities from 7.4 per cent to 23.3 per cent, along with the increased share in software consultancy segment are indicative of the structural changes happening in the sector. Most of the work carried out under software development and data base activities in India comprises simple programming through specified directives and provision of data in a certain order or sequence. These activities do not require much skill or knowledge and are largely repetitive and monotonous.

Table 16: Share of Workers across IT Industrial Categories, 1999-00 & 2004-05

Industrial Categories	1999-00			2004-05		
	Male	Female	Total	Male	Female	Total
Hard ware Consultancy	5.1 (70.6)	12.7 (29.4)	6.2 (100.0)	2.3 (81.4)	0.7 (18.6)	2.0 (100.0)
Soft ware Consultancy	43.6 (88.3)	34.2 (11.7)	42.2 (100.0)	45.9 (81.8)	47.4 (18.2)	46.2 (100)
Data Processing	19.2 (82.8)	23.6 (17.2)	19.8 (100.0)	5.6 (79.0)	6.9 (21.0)	5.8 (100.0)
Data Base Activities	10.8 (92.6)	5.1 (7.4)	10.0 (100)	7.5 (86.7)	20.3 (23.3)	9.8 (100.0)
Maintenance and repair of computers and computer based systems	6.3 (88.2)	5.0 (11.8)	6.1 (100.0)	4.6 (100.0)	0.0 (0.0)	3.8 (100.0)
Other computer related activities	4.5 (68.7)	9.7 (31.3)	5.3 (100.0)	12.6 (86.4)	9.2 (13.6)	12.0 (100.0)
Provision of value added telecom services: paging, email, cellular phone, video conferencing, internet etc.	5.3 (86.5)	4.8 (13.5)	5.2 (100.0)	11.3 (87.2)	7.7 (12.8)	10.7 (100.0)
Total	100.0 (85.5)	100.0 (14.5)	5.2 (100.0)	11.3 (82.3)	7.7 (17.7)	100.0 (100.0)

Source: NSSO 55th & 61st Rounds, Raw data from CD

Note: Figures in parentheses are male –female shares to total

Apart from the share of women in each category, it is important to understand their distribution across various categories as it reveals much insights into the extent of participation in different sectors. The data shows that software consultancy accounted for the maximum share of women workers during both the time periods, registering a substantial growth over the period. This is followed by data base activities. The increasing shares of data base activities and soft ware consultancies highlight the changes in the structure of women workforce in the sector – which, on the one side, shows a shift towards more skilled work and, on the other, points to the growing concentration of women in less skilled data base activities.

To get a better picture of the overall changes in the IT sector and its impact on women, it is important to analyze the trends in IT related occupations. With the available NCO data, it is impossible to arrive at a definite estimate on the number of workers in the sector as it is difficult to segregate IT related jobs from any of the given occupational categories. In this context, to roughly capture the various IT related occupations, occupational categories which are, *prima-facie*, associated to IT industry are analysed (Table 17).

Table 17: Share of Workers across T Occupational Categories, 1999-00 & 2004

Occupational Categories	1999-00			2004-05		
	Mal e	Female	Total	Mal e	Female	Total
System analysts and programmers	10.2 (93.2)	2.8 (6.8)	8.7 (100.0)	28.6 (88.4)	11.9 (11.6)	24.6 (100.0)
Stenographers and Steno typists, Card and Tape Punching Operators (excluding stenographers)	56.7 (77.8)	61.0 (22.2)	57.6 (100.0)	18.0 (71.1)	23.2 (28.9)	19.2 (100.0)
Computing Machine Operators	33.1 (77.5)	36.2 (22.5)	33.8 (100.0)	53.5 (72.4)	64.8 (27.6)	56.2 (100.0)
Total	100.0 (86.50)	100.0 (13.50)	100.0 (100.0)	100.0 (76.1)	100.0 (23.9)	100.0 (100.0)

Source: NSSO 55th & 61st Rounds, Raw data from CD
 Note: Figures in parentheses are male –female shares to total

The data shows that during the period the share of female workers has almost doubled. The largest shares of women workers are in occupational categories stenographers and steno typists, card and tape punching operators (excluding

stenographers) and computing machine operators, for the both the years. However, the shares have increased substantially across the period and the highest increases are found in occupations such as system analysts and programmers¹¹. The substantial share of women in the categories of computing machine operators and system analysts & programmers - which are completely IT linked - points to the trend of increased entry of women into these occupations. The distribution of workers across various occupational categories shows that the largest chunk of women is in the category computing machine operators, the share of which has increased from 36.2 in 1999-00 to 64.8 per cent in 2004-05. The data pertaining to 2004-05 indicate trends of concentration of women in the category of computing machine operators, which represents IT enabled service occupations.

Apart from gender wise patterns, the skewed nature of benefits across rural-urban areas is also a matter of concern in the context of employment in this sector, due to its potential to further aggravate the structural inequalities and hence gender divisions. Table 18 provides the rural/urban and social group wise composition of workers in IT industrial categories.

Table 18. Rural/Urban Composition of Workers in IT Industrial Categories (per cent)

Categories	1999-00			2004-05		
	Male	Female	Total	Male	Female	Total
Rural/Urban Composition						
Rural	7.9	0.2	6.8	8.1	3.4	7.3
Urban	92.1	99.8	93.2	91.9	96.6	92.7

Source: NSSO 55th & 61st Rounds, Raw data from CD

A sharp rural-urban divide is visible in the distribution of IT employment, with urban area accounting for over 90 per cent of total employment in the sector. This is particularly so in the case of women workers, with rural areas having a negligible share, though some improvements are visible over the period. On the whole, the analysis of the macro data reveals that there are clear signs of sex based segregation and segmentation though women are getting increased entry into the sector. The analysis also suggests that social exclusion along rural-urban locations are important

¹¹Though the category of stenographers are excluded from the calculation, there are chances of over-estimation as there could be workers in other categories as well, who may not have anything to do with IT or related work.

issues in this sector. Such exclusions, along with gender divisions could lead to a skewed distribution of gains, eluding employment benefits to marginalised and disadvantaged segments of the society.

V. Women as Unpaid Care Workers

Apart from women's role in the conventionally defined productive work, the reproductive or household work assumes particular significance in any discussion on women's work. The only data available to look at this aspect of work is the time use data collected by CSO. The data distinguishes three broad categories of activity based on the standard international system of accounting - SNA, Extended SNA and Non SNA. The SNA activities include primary production activities like agriculture, animal husbandry, fishing, forestry, processing and storage, mining and quarrying; secondary activities like construction and manufacturing; and tertiary activities such as trade, business and other services. Extended SNA activities include household maintenance, care for children, the sick and the elderly, and community and voluntary work. Learning, personal care and self maintenance, and social and cultural activities are categorized as Non-SNA activities. Activities covered under SNA are much broader than the definition followed in the labour force definition and hence there will be a difference in workforce estimates. Despite these limitations, analysis across these broad categories of SNA and extended SNA would give insight into the division between 'economic' work and unpaid care work. This becomes extremely important in the context of a large proportion of women the about 54 per cent reporting to have worked from their homes during 2004-05 (NCEUS, 2007)

An overview of the distribution of participants (those from whom time disposition data was collected) in terms of their participation in a day in only SNA, only Extended SNA (care work) or in both are given below. The pattern is important from a gender perspective as women generally participate in both SNA and care work in larger numbers than men.

The gender difference is striking. While a large proportion of men did only SNA, very few women belonged to this category. For rural females, while 'both SNA and extended SNA' accounted for the largest proportion, in urban areas women engaged in 'only extended SNA' constituted the largest share.

Table 19: Percentage distribution of participants in only SNA, in extended SNA and in both SNA and extended SNA

Rural		Only SNA	Only ESNA	SNA & ESNA	No SNA or ESNA
Combined states	Male	43.8	5.1	40.6	10.5
	Female	2.6	19.1	73.5	4.7
Urban					
Combined States	Male	32.3	9.0	41.7	17.0
	Female	1.7	49.7	41.5	7.1

Source: Time Use Statistics, Unit level data, 1999

What is to be noted specifically is that a large proportion of women were active in both SNA and extended SNA, unlike men, and that the female-male difference in SNA was much smaller than that in extended SNA. Apart from whether an individual participated in SNA / ESNA or both what is more important for the issue under study is the time spent on these activities.

Table 20: Average daily spent on SNA and unpaid care work – age 10 and above

Categories	Rural				Urban			
	Male		Female		Male		Female	
	Hour/minute	Parti. rate	Hour/minute	Parti. rate	Hour/minute	Parti. rate	Hour/minute	Parti. rate
SNA	7.6	84.4	4.4	76.1	8.1	74.0	3.2	43.2
ESNA	1.2	47.7	5.5	92.6	1.1	50.7	6.1	91.2

Source: Time Use Statistics, Unit level data, 1999

Women spent a significantly larger proportion of the day in unpaid care work and the male-female difference was very sharp, irrespective of rural/urban difference. In rural areas, women spent about 5.5 hours of the day on unpaid care work while men spent only 1.2 hours of their day on such work. The male –female difference in care work was slightly more in urban areas with women spending about 6.1 hours of their day on unpaid care work and men spending almost the same time as their rural counterparts.

These women do a number of activities that help households to save income. But these are not included into the realm of economic activity and thus do not get reflected in work force participation rate. What is important to note in this context

more than monetisation of such work is the non-recognition and lack of appreciation of such work which is reflected in the lack of public and social policies. There is increasing understanding of how housework is an aspect of family life most resistant to change. Occupational demands and expectations continue to be based on the assumption that the worker is an individual who is relatively free of domestic and family responsibilities. Withdrawal of the state from education, health, food provision and other social sectors are bound to increase the pressure on women as women may have to put in more time as care givers.

As per the 61st round of employment and unemployment data among women in the prime age group 15-59 years, 53 percent in rural and 65 percent in rural areas reported that they were engaged in domestic duties by principal status. Many women who report themselves as principally engaged in work report some economic activity, which would fetch the household some additional income. Such participation, if nominal, or are a borderline case of economic activity, would not be reflected in the usual indicators of employment. Therefore, a set of probing questions are put to all the members of the household classified as *engaged in domestic duties* according to the *usual principal status* regarding their participation economic activities.

Between the period 1993-94 and 2004-05 the proportion of women with domestic work as principal status reporting subsidiary economic activity has increased which though one could argue shows increased opportunities for women, also mean increased pressure on women. Further the kind of activities that women take up as additional work do not in any case suggest the possibility of opportunities rather one of survival, forced by the economic hardships. The activities that these women are engaged mostly with are free collection of goods and fuel, household poultry & dairy, sewing, tailoring, weaving, grinding of food grains etc.

Even in the event of economic pressure, the social pressure on women to remain within the boundaries of households and the pressure of house work is evident from the proportion of women who showed willingness to take up economic work provided such work is done at home. Of the 56.8 percent reporting domestic duties, 35.7 percent of the women in rural areas and 29.4 per cent of women in urban areas showed willingness to do work if the work could be done at home.

VI. Summing up

The analysis provided in the paper suggests that the growing social and economic crisis is sending vast sections of women workers into a downward spiral resulting in a deepening of gender based inequality in employment. The downward spiral has expressed itself in several ways. The drastic increase in the number of female subsidiary workers in certain sectors alongside betterment in the participation rates by all status suggests the possibility of many women being unable to find employment throughout the year. This thus points to the lack of adequate employment opportunities for female labour force. The growth of self employment among women, especially during a period of rural crisis points to the lack of opportunities for other sources of paid employment. The sectoral distribution shows a stagnant and highly segregated picture with women concentrated mainly in the primary sector as against the trends in other liberalised economies. Manufacturing though apparently at the outset improved as far as women are concerned, the concentration of women in few sectors that too with a growing number of subsidiary workers cannot be seen as a positive process. Though the service sector contributes towards a substantial proportion of women workers, the degree of concentration that is visible in the sector, especially in personal services in the urban areas and in education points to broad contours of change. It also needs to be emphasized that, unlike in other countries, the growth of the service sector in India has not been substantial enough to absorb a large proportion of the female population. The phenomenal increase in the number of workers in the category of private households with employed persons further reveals distress driven employment growth. The findings also question assumptions concerning self employment and its prospects for generating large scale employment. The current pattern of increase in self-employment on account of the increase in unpaid work is a matter of serious concern. There are tendencies of a higher concentration of women workers in low productivity and declining industries, belying the impression that with economic reforms, employment opportunities in more modern sectors would grow.

Further, the question of employment choices for women needs to be seen in the context of alternatives or in the absence of such alternatives. The burden of supporting the family is increasingly falling on women as men become involuntarily or voluntarily unemployed. The survival needs of the family often has its toll on women with household work and reproductive responsibilities still entirely seen as women's work outside the sphere of production. This, given the asymmetrical power

relations and division of labour in the private sphere, women are doubly disadvantaged. Moreover, women's employment needs to be seen in terms of its potential for challenging and destabilising social inequalities. Thus though one could argue that there have been changes in the economic roles of women leading to their increased visibility as workers, in the context of gender segregation and unfair production relations the ultimate impact of these changes are complex. At the macro level, the directions of these changes as revealed by sectoral and sub-sectoral trends and patterns shows that the increase in the participation rate of women is more an outcome of the search for livelihood options than an actual labour market expansion.

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