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# 1. Introduction

In the context of growing gender inequalities and the consequential adverse impacts on the well-being of the society, gender issues have emerged at the centre stage of development planning in most countries including India. The formulation of specific policies and programmes to address such issues effectively has to be, however, based on reliable and timely statistics on various aspects of gender inequalities. A major data gap in this regard is non-availability of reliable measurement of economic contribution of women. Several social scientists even consider that the very definition and instruments used for collecting data on economic activities in India are inadequate to identify and measure the real contribution of women. Though these issues are of considerable significance to the statistical system of the country, the focus of this paper is on estimating the contribution of women to the Gross Domestic Product (GDP) of the country based on available data sets, except for highlighting the likely magnitude of underestimation at the end.

# 2. Methodology

The methodology is basically that of apportioning the estimates of GDP compiled by the Central Statistical Organization (CSO) for each of the compilation categories by using the shares of labour inputs of men and women. At the first instance, the GDP estimates were apportioned between informal and formal sectors by using estimated labour inputs obtained from employment – unemployment surveys after adjusting for census population totals and productivity differentials as available from unorganized sector enterprise surveys. The exercise was undertaken by using the definition of informal sector adopted by the National Commission for Enterprises in the Unorganized Sector (NCEUS). As per the definition, the informal sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers. By using this definition, the labour inputs of informal and formal sectors were computed for each of the compilation categories. The value added per worker of informal and formal sectors were then computed by using the data sets of unorganized sector enterprise surveys of both manufacturing and service industries in different years. Notional estimates of GDP were worked out by multiplying the labour inputs with the corresponding value added per worker obtained from the surveys separately for informal and formal sectors. The ratios between these notional estimates were used for apportioning the CSO estimates of GDP between formal and informal sectors for each of the compilation categories. The estimates thus obtained for informal and formal sectors were further apportioned by using the corresponding labour inputs of males and females. It is assumed that there exist no productivity differentials between men and women in the respective sectors. The estimates have been worked out for 1999-000 and 2004-05.

# **3.** Work Force Estimates by Industry Sector

The total work force in the country during 2004-05 is estimated to be 455.7 million based on NSS 61<sup>st</sup> Round Survey on Employment–Unemployment and census population

projections for different states. Women workers among them were 146.89 million or just 32.2 percent of the total workers. About 106.89 million or 72.8 percent of these women workers were employed in agriculture even though the share of the industry among men workers was only 48.8 percent. The distribution of workers by industry, sector and sex in the descending order of women workers is given in Table 1, and the percentage shares of each industry group in each category of worker is given in Table 2. The percentage distribution of workers in each industry group by sector and sex is given in Table 3.

									( in 1	million)
		In	formal sec	tor	Fo	rmal sector	r		Total	
Sl.No:	Industry Group	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Agriculture	146.90	104.81	251.71	3.90	2.08	5.98	150.80	106.89	257.69
2	Manufacturing	25.40	13.99	39.39	13.13	2.95	16.08	38.53	16.94	55.48
3	Trade	36.68	4.66	41.35	1.74	0.18	1.92	38.42	4.85	43.27
4	Education	1.65	1.39	3.05	4.96	3.38	8.35	6.61	4.78	11.39
5	Private households & ETOs	1.36	3 39	4.75	0.00	0.00	0.00	1.36	3 39	4.75
6	Construction	17.90	1.68	19.58	5.35	1.00	6.35	23.25	2.68	25.93
7	Other Community, Social & Personal Services	5.62	1.81	7.43	0.96	0.33	1.29	6.58	2.14	8.72
8	Hotels & Restaurants	4.21	1.09	5.29	0.73	0.08	0.81	4.94	1.16	6.10
9	Health Services	1.19	0.38	1.57	1.01	0.74	1.76	2.20	1.12	3.32
10	Public Administration & Defense	0.08	0.01	0.08	7.84	1.05	8.89	7.92	1.06	8.98
11	Transport, Storage & Communication	13.68	0.27	13.96	4.19	0.24	4.43	17.88	0.51	18.39
12	Real Estate, Renting & Business Services	3.03	0.23	3.26	1.14	0.23	1.37	4.17	0.46	4.64
13	Banking & Financial Intermediation	0.70	0.10	0.80	1.95	0.34	2.29	2.65	0.44	3.08
14	Mining	0.70	0.19	0.89	1.54	0.22	1.76	2.25	0.41	2.65
15	Electricity, Gas and Water	0.08	0.00	0.09	1.17	0.06	1.23	1.25	0.06	1.31
16	Grand Total	259.19	134.00	393.19	49.62	12.90	62.52	308.81	146.89	455.70

Table 1: Estimates of Employment by Industry, Sector and Sex, 2004-05

 

 Table 2: Percentage Distribution of Workers in Informal and Formal Sectors by Industry Groups, 2004-05

		Informal sector			F	ormal sect	or	Total		
Sl.No:	Industry Group	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Agriculture	56.68	78.22	64.02	7.85	16.16	9.57	48.83	72.77	56.55
2	Manufacturing	9.80	10.44	10.02	26.46	22.90	25.72	12.48	11.53	12.17
3	Trade	14.15	3.48	10.52	3.50	1.43	3.08	12.44	3.30	9.50
4	Education	0.64	1.04	0.77	10.00	26.24	13.35	2.14	3.25	2.50
5	Private households & ETOs	0.53	2.53	1.21	0.00	0.00	0.00	0.44	2.31	1.04
6	Construction	6.91	1.26	4.98	10.78	7.72	10.15	7.53	1.82	5.69
7	Other Community, Social & Personal Services	2.17	1.35	1.89	1.94	2.56	2.07	2.13	1.46	1.91

8	Hotels & Restaurants	1.62	0.81	1.35	1.47	0.61	1.29	1.60	0.79	1.34
9	Health Services	0.46	0.28	0.40	2.04	5.77	2.81	0.71	0.76	0.73
10	Public Administration & Defense	0.03	0.01	0.02	15.80	8.17	14.22	2.56	0.72	1.97
11	Transport, Storage & Communication	5.28	0.20	3.55	8.45	1.87	7.09	5.79	0.35	4.04
12	Real Estate, Renting & Business Services	1.17	0.17	0.83	2.30	1.80	2.20	1.35	0.32	1.02
13	Banking & Financial Intermediation	0.27	0.07	0.20	3.93	2.62	3.66	0.86	0.30	0.68
14	Mining	0.27	0.14	0.23	3.11	1.70	2.82	0.73	0.28	0.58
15	Electricity, Gas and Water	0.03	0.00	0.02	2.35	0.45	1.96	0.41	0.04	0.29
16	Grand Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 3: Percentage Distribution of Workers in Each Industry by Sector and Se, 2004-05

		In	formal sec	tor	F	ormal secto	or	Total		
Sl.No:	Industry Group	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Agriculture	57.01	40.67	97.68	1.51	0.81	2.32	58.52	41.48	100.00
2	Manufacturing	45.79	25.22	71.01	23.66	5.33	28.99	69.46	30.54	100.00
3	Trade	84.77	10.78	95.55	4.02	0.43	4.45	88.79	11.21	100.00
4	Education	14.51	12.22	26.73	43.55	29.71	73.27	58.06	41.94	100.00
5	Private households & ETOs	28.67	71.32	99.99	0.01	0.00	0.01	28.68	71.32	100.00
6	Construction	69.03	6.49	75.52	20.64	3.84	24.48	89.67	10.33	100.00
7	Other Community, Social & Personal Services	64.44	20.74	85.18	11.03	3.79	14.82	75.47	24.53	100.00
8	Hotels & Restaurants	68.95	17.80	86.75	11.96	1.29	13.25	80.91	19.09	100.00
9	Health Services	35.74	11.39	47.13	30.48	22.39	52.87	66.22	33.78	100.00
10	Public Administration & Defense	0.86	0.09	0.94	87.32	11.74	99.06	88.18	11.82	100.00
11	Transport, Storage & Communication	74.40	1.49	75.89	22.80	1.31	24.11	97.20	2.80	100.00
12	Real Estate, Renting & Business Services	65.37	4.99	70.36	24.64	5.00	29.64	90.01	9.99	100.00
13	Banking & Financial Intermediation	22.66	3.18	25.84	63.22	10.94	74.16	85.88	14.12	100.00
14	Mining	26.49	7.03	33.52	58.21	8.27	66.48	84.70	15.30	100.00
15	Electricity, Gas and Water	6.43	0.13	6.56	89.04	4.39	93.44	95.47	4.53	100.00
16	Grand Total	56.88	29.40	86.28	10.89	2.83	13.72	67.77	32.23	100.00

Women workers in the non-agricultural sector constituted just 40 million or 27.2 per cent of total women workers. In the case of men, 158.01 million or 51.2 per cent of the workers were employed in non-agriculture. Within the non-agricultural sector, manufacturing industries employed 16.94 million or 11.5 percent of the total women workers as against 38.53 or 12.5 per cent of men workers.

Trade and education sectors employed 4.85 million (3.3 per cent) and 4.78 million (3.2 per cent) of women workers respectively in 2004-05. Men, however, dominated trade

accounting for 38.42 million or 12.4 percent workers. In the education sector, men workers were just 6.61 million with a share of 2.1 percent. The four industry groups – agriculture, manufacturing, trade and education - accounted for 90.8 per cent of women workers.

The other industry groups which employed at least one million women were private households (3.39 million), construction (2.68 million); other community; social and personal services (2.14 million); hotels & restaurants (1.12 million), and public administration and defense (1.06 million).

The order of magnitude of women workers among different industry groups was not the same as the order of shares of women workers in each industry group as shown in Table 3. Private households and extra-territorial organizations had the highest share (71.3 per cent) of women workers. This was followed by education with a share of 41.9 per cent and agriculture with a share of 41.5 per cent. The only other industry with a percentage share of women higher than the overall share of 32.2 per cent was health services. The transport, storage and communication sector had the lowest share (2.8 per cent) of women workers, followed by electricity, gas and water with a share of just 4.5 per cent.

Within the manufacturing sector, there were 14 compilation categories which employed at least 0.1 million females. The percentage shares of females in these industries varied from 4.8 percent in the case of fabricated metal products to 76.7 percent in tobacco products. The classification of these industries by the number of female workers and their share in the total workers is summarised in Table 4.

	remate workers by the	i Share in those muusules
	Percentage Share of Women Work	ters
Number of	More than 32.0 percent	Less than 32.0 percent
Women		
Workers		
More than	Spinning, weaving & finishing	Wood & wood products
0.7 million	of textiles	Non-metallic mineral products
	Tobacco products	Medical, precision & optical
	Wearing apparel	instruments
	Chemicals & chemical products	
Less than		Other food products
0.7 million		Grain mill products & starches
		Dressing & dyeing of fur
		Paper and paper products
		Fabricated metal products
		Coke & refined petroleum
		Processing of meat, fish, etc.

Table 4: Classification of Manufacturing Industries with at least 0.1 millionFemale Workers by their Share in those Industries

There were only four industries in which the number of women workers exceeded 0.7 million and their percentage share in the industry exceeded 32.0 percent. In the case of three industries, though the number of workers exceeded 0.7 million their share in the work force of the industry was less than 32.0 percent.

### 4. Distribution of Women Workers by sector

The informal sector is generally characterised by low capital investment, low productivity and low earnings. The quality of work, comprising job security, income security, social security and conditions of work, is also considered to be low in the informal sector. However, 86.21 per cent of workers in the country in the year 2004-05 worked in the informal sector. Among women workers, 91.2 per cent were in the informal sector as compared to 83.9 per cent men. Thus, a significantly high percentage of women were engaged in low quality informal sector work. The percentage shares of informal sector workers among men and women in different industry groups are given in Table 5.

			Men			Women		Persons			
					Informal	Formal	Total		Formal	Total	
		Informal	Formal		Sector	Sector		Informal	Sector		
Sl.No:	Industry Group	Sector	Sector	Total				Sector			
1	Agriculture	97.42	2.58	100.00	9805	1.95	100.00	97.68	2.32	100.00	
2	Manufacturing	65.93	34.07	100.00	82.56	17.44	100.00	71.01	28.99	100.00	
3	Trade	95.47	4.53	100.00	96.19	3.81	100.00	95.55	4.45	100.00	
4	Education	24.99	75.01	100.00	29.14	70.86	100.00	26.73	73.27	100.00	
5	Private households & ETOs	99.97	0.03	100.00	100.0	0.00	100.00	99.99	0.01	100.00	
6	Construction	76.99	23.01	100.00	62.81	37.19	100.00	75.52	24.48	100.00	
	Other Community, Social & Personal										
7	Services	85.38	14.62	100.00	84.54	15.46	100.00	85.18	14.82	100.00	
8	Hotels & Restaurants	85.22	14.78	100.00	93.22	6.78	100.00	86.75	13.25	100.00	
9	Health Services	53.97	46.03	100.00	33.73	66.27	100.00	47.13	52.87	100.00	
10	Public Administration & Defense	0.97	99.03	100.00	0.73	99.27	100.00	0.94	99.06	100.00	
11	Transport, Storage & Communication	76.54	23.46	100.00	53,20	46.80	100.00	75,89	24.11	100.00	
10	Real Estate, Renting &	70.00	07.07	100.00	40.07	50.00	100.00	70.00	00.04	100.00	
12	Business Services	72.63	27.37	100.00	49.97	50.03	100.00	70.36	29.64	100.00	
13	Intermediation	25.39	73.61	100.00	22.53	77.47	100.00	25.84	74.16	100.00	
14	Mining	31.28	68.72	100.00	45.92	54.08	100.00	33.52	66.48	100.00	
	Electricity, Gas and										
15	Water	6.74	93.26	100.00	2.91	97.09	100.00	6.56	93.44	100.00	
16	Grand Total	83.93	16.07	100.00	91.22	8.78	100.00	86.28	13.72	100.00	

 Table 5: Percentage Shares of Informal and Formal Sector Workers among Men and Women, 2004-05

In agriculture, 97.7 per cent of the workers belong to the informal sector while among women agricultural workers 98.0 per cent is in the informal sector. In manufacturing industries, though the share of informal sector in the aggregate employment is only 71 per cent, among women workers it is 82.6 per cent. In trade also, 95.6 per cent of total workers and 96.2 per cent of women workers are in the informal sector. The share of informal sector workers is one of the lowest in education and the same is 29.1 per cent among women workers as against 26.7 per cent of total workers. Since employment in extra-territorial

organisations is negligible, all the women workers in private households and extra-territorial organisations belong to the informal sector. In the hotels and restaurants industry as well the share of informal sector women workers is much higher than that of men workers. The industries in which the share of informal sector among women workers is lower than that of men are (i) construction (62.8 per cent and 77.0 per cent); (ii) health services (33.7 per cent and 54.0 per cent); (iii) other community, social and personal services (84.5 per cent and 85.4 per cent); and (iv) public administration and defence (0.7 per cent and 1.0 per cent). In the case of other industry groups, except mining, the share of women workers in the total workforce as well as their share in the informal sector is very low.

# 5. Composition of Workers by Sector and Compilation Categories

Since the estimation of GDP in the country is by compilation categories, the distribution of women workers by compilation categories as well as formal and informal sectors is an important input in the estimation of their economic contribution. These estimates and shares are given in Table 6 and summarised in Table 7. Though there are seven compilation categories in which the share of women in the total workforce is greater than 40 per cent, there is only one compilation category, viz., education, in which their share in the informal sector is less than 50 per cent. Even among the compilation categories in which the share of women workers ranged between 30 to 40 per cent, it was only in the case of health services that the share of the informal sector was less than 50 per cent. There were eight compilation categories where share of women workers was between 20 and 30 per cent and 16 compilation categories where the share of women workers was 20 percent and below.

			Percentage Share					
Sl.No:	Compilation Category	Number (million)	in the total work force of the industry	to total women workers in the country	of informal sector in the total women workers			
1	Agriculture	106.89	41.5	72.77	98.0			
2	Retail trade	4.44	13.8	3.02	98.2			
3	Education	4.03	41.3	2.74	16.7			
4	Spinning, Weaving & finishing of textiles	3.98	39.2	2.71	90.8			
5	Tobacco products	3.50	76.7	2.38	83.0			
6	Private households	3.39	71.4	2.31	100.0			
7	Wearing apparel	2.84	38.6	1.93	90.2			
8	Construction	2.68	10.3	1.82	62.8			
9	Wood & wood products	1.51	29.2	1.03	98.6			
10	Hotels & restaurants	1.16	19.1	0.79	93.2			
11	Non- metallic mineral products	1.14	25.8	0.77	63.9			
12	Health services	1.12	33.8	0.76	33.7			
13	Public administration & defense	1.06	11.8	0.72	0.7			

Table 6: Women Workers by Major Compilation Categories and Their Shares

14	Washing & dry cleaning	0.88	41.7	0.60	98.9
15	Chemicals & products	0.80	38.1	0.54	53.9
16	Coaching centres	0.75	45.8	0.51	96.1
17	Medical, precision & optical instruments	0.73	22.3	0.50	85.5
18	Other food products	0.65	29.4	0.44	59.8
19	Grain mill products, starches	0.54	25.3	0.37	89.1
20	Banking & Financial intermediation	0.44	14.1	0.30	22.5
21	Mining	0.41	15.3	0.28	45.9
22	Membership Organisations	0.39	23.5	0.27	29.0
23	Funeral & other service activities	0.33	28.4	0.22	96.7
24	Whole sale trade	0.30	5.6	0.21	71.9
25	Dressing & dyeing of fur	0.30	19.4	0.20	59.3
26	Hair dressing& beauty treatment	0.26	11.3	0.18	99.6
27	Paper and paper products	0.23	13.8	0.15	73.2
28	Fabricated metal products	0.20	4.8	0.14	71.3
29	Research & development	0.19	10.9	0.13	54.5
30	Sewage & Refuse disposal	0.17	42.1	0.12	89.4
31	Computer and related activities	0.17	18.5	0.11	20.1
32	Telecommunication	0.16	13.7	0.11	64.9
33	Coke & refined petroleum	0.11	11.8	0.07	57.5
34	Processing of meat, fish etc	0.11	16.4	0.07	33.9
35	Recreational, cultural activities	0.10	9.8	0.07	87.3
	Total	145.94	34.40	99.35	91.4

#### Notes

- 1. Medical, precision and optical instruments category also includes manufacturing not elsewhere classified like jewellery, musical instruments, sports goods, games & toys, stationery, articles of personal use, brooms & brushes, etc.
- 2. Social work and membership organisations include boarding homes and hostels, residential nurseries, homes for aged.
- 3. Funeral related activities & other service activities include sauna and steam baths, massage saloons, rest rooms, astrological & spiritual activities, marriage bureaus, shoe shiners, etc.
- 4. *Research & development includes market research; consultancy activities; architectural, engineering and other technical activities, public relations, etc.*

Percen	Percentage Share of Women Work Force											
tage in		~										
miorm		Between 30 to	Between 20 to									
ai sector	Above 40%	40%	30%	20% and below								
500001		Spinning,	wood & wood									
	Private households	weaving &	products	Retail trade								
		finishing of	<b>.</b>	Hotels &								
	Agriculture	textiles		restaurants								
	Washing & dry		Funeral & other									
Above	cleaning	Wearing apparel	service activities	Hair dressing &								
90%	Coaching centres			beauty treatment								
			Med. Precision &									
	Tobacco products		optical instruments	Whole sale trade								
	Sewage & refuse			Paper & paper								
	disposal		Grain mill products	products								
				Fabricated metal								
				products								
70 to				Recreational &								
90%				cultural activities								
		Chemical &	Non-metal mineral									
		products	products	Construction								
			Other food	Research &								
			Drossing & duoing	Talacommunicatio								
			of fur	relecommunicatio								
50 to				II Coke & refined								
<b>70%</b>				petroleum								
			Social work	Public admn &								
	Education	Health services	& membership org	defense								
				Mining								
				Banking &								
				financial services								
				Computer &								
				related activities								
Below				Processing of meat.								
50%				fish, etc								

#### Table 7: Classification of Compilation Categories by Percentage of Women Workers and Informal Sector Share

# 6. Growth of Women Workers

The overall rate of growth of women workers between 1999-2000 and 2004-05 was higher than that of males. While the aggregate growth rate of workforce was 2.76 per cent per year, it was 3.74 per cent in the case of women workers as against 2.26 percent in the case of men. The growth rates of employment in each compilation category and sector are given in Table 8. The categories which recorded substantial growth rates in female workers were (i) wearing apparel (33.0 per cent), (ii) computer and related activities (25.4 per cent), (iii) private households (24.3 per cent), (iv) dressing and dyeing of fur (16.8 per cent), (v) hair

dressing and beauty treatment (16.0 per cent), (vi) coaching centres (14.6 per cent), (vii) telecommunication (12.1 per cent) and (viii) research and development (12.1 per cent). In the case of agriculture, which employed 72.8 per cent of the women workers, the growth rate was about 3.0 per cent as against 0.7 per cent in the case of men.

Table 8: Annual Rate of Growth of Employment in each Compilation	<b>Category and Sector</b>
between 1999-2000 and 2004-05	

SI.		In	formal sec	tor	ŀ	Formal sec	tor		Total	
No	Sector	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	0.69	3.07	1.64	2.99	-0.99	1.49	0.74	2.99	1.64
2	Retail trade	3.77	1.98	3.51	-9.24	-14.33	-9.78	3.20	1.48	2.96
3	Education	2.20	0.36	1.33	4.10	8.48	5.75	3.82	6.83	5.00
4	Spinning, Weaving &									
	finishing of textiles	3.14	8.69	5.62	3.49	5.10	3.70	3.27	8.33	5.09
5	Tobacco products	1.52	2.88	2.59	13.49	2.49	5.50	4.18	2.81	3.12
6	Private households	17.28	24.34	22.05				17.28	24.34	22.05
7	Wearing apparel	19.49	36.85	25.07	17.65	13.26	16.50	19.12	32.96	23.44
8	Construction	8.54	5.83	8.29	6.94	7.50	7.02	8.16	6.43	7.97
9	Wood & wood products	2.52	5.88	3.46	3.38	10.18	3.99	2.56	5.94	3.48
10	Hotels & restaurants	4.67	7.31	5.18	8.29	9.45	8.40	5.16	7.45	5.58
11	Non- metallic mineral									
	products	2.56	1.50	2.24	7.59	9.47	7.98	4.70	3.98	4.51
12	Health services	5.51	8.37	6.16	2.95	5.01	3.79	4.29	6.07	4.87
13	Public Administration &									
	defence	-34.05	-37.72	-34.44	-2.23	-0.41	-2.03	-3.36	-1.74	-3.18
14	Washing & dry cleaning	0.60	-5.05	-1.99	4.64	14.06	8.75	0.63	-4.92	-1.92
15	Chemicals & chemical									
	products	2.96	2.08	2.45	1.38	12.46	3.77	1.74	6.14	3.29
16	Coaching centres	12.87	15.07	13.85	4.34	5.68	4.92	12.42	14.60	13.39
17	Medical, precision & optical									
	instruments	3.27	7.02	4.17	8.57	15.57	9.28	4.72	8.04	5.40
18	Other food products	0.75	0.23	0.61	-4.66	3.98	-2.13	-1.13	1.64	-0.37
19	Grain mill products, starches	-1.65	-3.57	-2.19	7.83	1.91	6.70	-0.25	-3.06	-1.01
20	Banking & financial									
	intermediation	10.00	17.56	10.78	4.78	6.99	5.09	6.02	8.90	6.40
21	Mining	-0.43	-1.51	-0.66	5.95	6.83	6.06	3.69	2.49	3.50
22	Social work & membership									
	organisations	4.69	16.40	5.83	12.29	3.32	8.57	7.32	6.24	7.06
23	Funeral and other services	-13.84	-24.88	-18.07	-32.58	-39.20	-34.08	-16.20	-25.78	-19.69
24	Whole sale trade	8.80	5.88	8.65	8.19	19.12	9.24	8.72	8.75	8.72
25	Dressing & dyeing of fur	0.02	9.24	1.51	13.07	38.66	15.96	4.51	16.77	6.32
26	Hair dressing& beauty									
	treatment	4.77	16.35	5.77	9.95	-16.73	6.87	4.81	15.96	5.77
27	Paper and paper products	1.12	5.38	1.85	9.94	2.32	9.20	4.95	4.51	4.89
28	Fabricated metal products	5.01	1.01	4.77	-1.11	-0.87	-1.10	2.63	0.45	2.52
29	Research & development	11.25	3.61	10.46	9.67	31.02	11.91	10.78	11.73	10.88
30	Sewage & Refuse disposal	7.88	0.82	4.14	-14.50	-23.31	-16.88	-2.25	-4.47	-3.22
31	Computer and related									
	activities	20.40	9.30	18.84	19.99	32.80	22.26	20.14	25.40	21.02
32	Telecommunication	13.30	12.74	13.20	8.54	11.04	8.77	10.65	12.12	10.84
33	Coke & refined petroleum	-0.64	5.59	0.15	-8.56	-4.65	-8.24	-5.53	0.46	-4.93
34	Processing of meat, fish etc	0.48	-10.06	-0.67	-7.96	30.20	-1.42	-1.96	5.84	-0.91
35	Recreational, cultural	6.03	18.10	7.15	4.96	-15.12	3.41	5.68	8.41	5.93

activities									
Total	2.18	3.67	2.70	2.73	4.57	3.13	2.26	3.74	2.76

There were also compilation categories which recorded negative growth rates in women workers. These included (i) funeral and other service activities (-25.8 per cent), (ii) washing and dry cleaning (-4.9 per cent), (iii) sewage and refuse disposal (-4.5 per cent), (iv) grain mill products & starches (-3.1 per cent) and (v) public administration and defence (-1.7 per cent). It is apparent that women workers have started expanding both in traditional and modern industries.

### 7. Estimates of GDP by Industry Group

The estimated value of Gross Domestic Product (GDP) during 2004-05 was Rs.2,855,934 crore (Rs.28.559 trillion). It consisted of Rs.1,426,218 crore (Rs. 14.262 trillion) in the informal sector and Rs.1,429,716 crore (Rs.14.297 trillion) in the formal sector. The contribution of women to GDP during the year was Rs.564,920 crore (Rs.5.649 trillion) consisting of Rs.333,834 crore (Rs.3.338 trillion) in the informal sector and Rs.231,086 crore (Rs.2.310 trillion)in the formal sector. Though in the aggregate, the share of the informal sector in the GDP was a little less than 50 per cent, its share in the GDP contribution of women was considerably higher at 59.1 per cent. The estimates of GDP in each industry group by sector and sex is given in Table 9. The percentage distribution of GDP contribution of men and women by industry group is given in Table 10.

# Table 9: Estimates of GDP by Industry, Sector and Sex in 2004-05

(Rs. Crore)

SI.		In	formal Sec	ctor	F	ormal Sec	tor		Total	
No:	Industry Group	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	295886	211103	506990	19310	10329	29639	315196	221433	536629
2	Manufacturing	91948	31912	123859	286449	51223	337672	378396	83135	461531
3	Trade	283011	35741	318753	93570	12229	105799	376582	47970	424552
4	Education	7143	6002	13145	55556	37878	93434	62699	43880	106580
5	Private households & ETOs	2006	3888	5894	219	72	291	2225	3960	6185
6	Construction	78634	7390	86024	84007	15637	99645	162641	23028	185669
	Other community, Social &									
7	personal Services	28753	10106	38860	13163	3938	17101	41916	14044	55961
8	Hotels and Restaurants	16065	4146	20211	17658	1913	19570	33723	6058	39781
9	Health Services	9345	2979	12323	23531	17283	40814	32876	20261	53137
	Public administration &									
10	Defence	645	65	710	155843	20944	176786	156487	21009	177496
	Transport, Storage &									
11	Communication	108034	3186	111220	130985	8010	138994	239019	11195	250214
	Real Estate, Renting &									
12	Business Services	143449	12172	155620	71892	17786	89678	215341	29958	245298
	Banking & Financial									
13	intermediation	13669	1920	15588	129782	22461	152243	143451	24380	167831
14	Mining	12017	3187	15204	60641	8620	69260	72657	11807	84464
15	Electricity, Gas and Water	1782	37	1818	56024	2765	58789	57806	2801	60607
16	Grand Total	1092385	333834	1426218	1198630	231086	1429716	2291015	564920	2855934

SI.		In	formal Sec	ctor	F	ormal Sec	tor		Total	
No:	Industry Group	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	27.09	63.24	35.55	1.61	4.47	2.07	13.76	39.20	18.79
2	Manufacturing	8.42	9.56	8.68	23.90	22.17	23.62	16.52	14.72	16.16
3	Trade	25.91	10.71	22.35	7.81	5.29	7.40	16.44	8.49	14.87
4	Education	0.65	1.80	0.92	4.63	16.39	6.54	2.74	7.77	3.73
	Private households &									
5	ETOs	0.18	1.16	0.41	0.02	0.03	0.02	0.10	0.70	0.22
6	Construction	7.20	2.21	6.03	7.01	6.77	6.97	7.10	4.08	6.50
	Other community, Social									
7	& personal Services	2.63	3.03	2.72	1.10	1.70	1.20	1.83	2.49	1.96
8	Hotels and Restaurants	1.47	1.24	1.42	1.47	0.83	1.37	1.47	1.07	1.39
9	Health Services	0.86	0.89	0.86	1.96	7.48	2.85	1.43	3.59	1.86
	Public administration &									
10	Defense	0.06	0.02	0.05	13.00	9.06	12.37	6.83	3.72	6.21
	Transport, Storage &									
11	Communication	9.89	0.95	7.80	10.93	3.47	9.72	10.43	1.98	8.76
	Real Estate, Renting &									
12	Business Services	13.13	3.65	10.91	6.00	7.70	6.27	9.40	5.30	8.59
	Banking & Financial									
13	intermediation	1.25	0.58	1.09	10.83	9.72	10.65	6.26	4.32	5.88
14	Mining	1.10	0.95	1.07	5.06	3.73	4.84	3.17	2.09	2.96
15	Electricity, Gas and Water	0.16	0.01	0.13	4.67	1.20	4.11	2.52	0.50	2.12
16	Grand Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 10: Percentage Distribution of GDP in each Sector & Sex by Industry Groups in 2004-05

Though 72.8 per cent of the women workers were employed in agriculture, the share of the sector in the GDP contribution of women was just 39.2 per cent in 2004-05. The manufacturing industries had the second largest share of 14.7 percent though the share of the sector in the employment of women was only 11.5 percent. The other industry groups which shared a sizeable percentage of GDP contribution of women were (i) trade (7.8 percent), (ii) education (5.3 percent), (iii) real estate, renting & business services (4.3 percent), (iv) banking & financial intermediation (16.8 percent), (v) construction (4.1 percent) and (vi) public administration and defence (3.7 percent), and (vii) health services (3.6 percent). Private households which employed the fifth largest percentage of women had the second lowest share of GDP contribution of women. In other words, the average GVA per worker in the case of private households was one of the lowest.

In the aggregate, 19.8 per cent of the GDP was contributed by 32.2 per cent women workers in the year 2004-05. It consisted of 11.7 per cent in the informal sector and 8.1 percent in the formal sector. While a little over 50 percent of the GDP was generated in the formal sector, the contribution of women was as low as 8.1 percent. It was primarily because of male dominance in the formal sector and employment of a large percentage of women in comparatively low productive industries. The only industry group in which the share of women exceeded that of men in GDP was private households. The percentage distribution of GDP in each industry group by sector and sex is given in Table 11. The other sectors in which the contribution of women to GDP was above 40 per cent were agriculture (41.3 percent) and education (41.2 percent). The share of women was 38.1 per cent in the case of health services and 25.1 per cent in the case of other 'community, social and personal services'.

SI.		Ir	nformal Sec	tor	ŀ	Formal Sect	or		Total	
No:	Industry Group	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	55.14	39.34	94.48	3.60	1.92	5.52	58.74	41.26	100.00
2	Manufacturing	19.92	6.91	26.84	62.06	11.10	73.16	81.99	18.01	100.00
3	Trade	66.66	8.42	75.08	22.04	2.88	24.92	88.70	11.30	100.00
4	Education	6.70	5.63	12.33	52.13	35.54	87.67	58.83	41.17	100.00
	Private households &									
5	ETOs	32.43	62.86	95.29	3.54	1.17	4.71	35.97	64.03	100.00
6	Construction	42.35	3.98	46.33	45.25	8.42	53.67	87.60	12.40	100.00
	Other community, Social									
7	& personal Services	51.38	18.06	69.44	23.52	7.04	30.56	74.90	25.10	100.00
8	Hotels and Restaurants	40.38	10.42	50.80	44.39	4.81	49.20	84.77	15.23	100.00
9	Health Services	17.59	5.61	23.19	44.28	32.52	76.81	61.87	38.13	100.00
	Public administration &									
10	Defense	0.36	0.04	0.40	87.80	11.80	99.60	88.16	11.84	100.00
	Transport, Storage &									
11	Communication	43.18	1.27	44.45	52.35	3.20	55.55	95.53	4.47	100.00
	Real Estate, Renting &									
12	Business Services	58.48	4.96	63.44	29.31	7.25	36.56	87.79	12.21	100.00
	Banking & Financial									
13	intermediation	8.14	1.14	9.29	77.33	13.38	90.71	85.47	14.53	100.00
14	Mining	14.23	3.77	18.00	71.79	10.21	82.00	86.02	13.98	100.00
15	Electricity, Gas and Water	2.94	0.06	3.00	92.44	4.56	97.00	95.38	4.62	100.00
16	Grand Total	38.25	11.69	49.94	41.97	8.09	50.06	80.22	19.78	100.00

Table 11: Percentage Distribution of GDP in each In	ndustry Group by Sector & Sex in 2004-05
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The major compilation categories in the descending order of contribution of women to GDP along with the percentage shares of their contribution are given in Table 12.

# Table 12: Estimated GDP Contribution of Women and Percentage Shares of<br/>Major Compilation Categories

Sl.No:	Compilation Category	GDP	Percentage Share					
		contribution	in the	to GDP	GDP			
		of women (Rs.	GDP of	contribution	share of			
		Crores)	the	of women	informal			
			industry		sector			
1	Agriculture	221433	41.26	39.20	95.34			
2	Education	41390	40.92	7.33	8.79			
3	Retail trade	33490	13.76	5.93	97.56			
4	Banking & financial intermediation	24380	14.53	4.32	7.87			
5	Construction	23028	12.40	4.08	32.09			
6	Public administration & defence	21009	11.84	3.72	0.31			
7	Chemicals & chemical products	20768	28.05	3.68	5.73			
8	Health services	20261	38.13	3.59	14.70			
9	Computer and related activities	16326	21.71	2.89	3.48			
10	Whole sale trade	13608	9.46	2.41	18.22			
11	Mining	11807	13.98	2.09	26.99			
12	Real estate activities	10944	7.68	1.94	94.64			
13	Spinning, Weaving & finishing of textiles	10618	27.98	1.88	71.59			
14	Wearing apparel	8351	36.82	1.48	82.84			
15	Hotels & restaurants	6058	15.23	1.07	68.43			
16	Telecommunication	6027	11.25	1.07	32.30			
17	Non- metallic mineral products	5262	24.26	0.93	44.72			
18	Processing of meat, fish etc	4768	26.95	0.84	9.17			

19	Medical & precision equipments	4579	18.16	0.81	62.55
20	Funeral and related activities	4236	27.93	0.75	93.85
21	Tobacco products	4095	71.23	0.72	42.44
22	Coke & refined petroleum	4086	9.96	0.72	19.36
23	Other food products	3866	32.41	0.68	24.46
24	Social work & membership organisations	3656	26.34	0.65	19.69
25	Private households	3581	71.75	0.63	100.00
26	Grain mill products, starches	2854	23.55	0.51	76.58
27	Electricity, gas and water	2801	4.62	0.50	1.30
28	Electrical machinery	2540	9.53	0.45	17.91
29	Washing & dry cleaning	2520	42.07	0.45	94.14
30	Coaching centres	2491	45.83	0.44	94.85
31	Sewage & Refuse disposal	2267	39.39	0.40	83.29
32	Fabricated metal products	2143	4.48	0.38	43.23
33	Research & development	2118	12.24	0.37	36.55
34	Manufacture of beverages	1895	20.39	0.34	15.76
35	Iron & steel	1823	3.46	0.32	11.61
36	Paper and paper products	1494	11.00	0.26	48.16
37	Wood & wood products	1455	28.50	0.26	97.15
38	Air transport	1388	25.46	0.25	6.28
39	Dressing & dyeing of fur	1160	19.39	0.21	60.21
40	Railways	1134	3.53	0.20	0.00
41	Motor vehicles	1011	3.94	0.18	1.46
42	Auxiliary transport activities	826	6.39	0.15	21.67
43	Hair dressing & beauty treatment	760	11.29	0.13	99.85
44	Freight transport by motor vehicles	638	1.14	0.11	73.02
45	Scheduled passenger land transport	613	2.20	0.11	8.33
46	Recreational, cultural activities	605	7.17	0.11	64.80
47	Total	562162	20.52	99.51	59.09

Agriculture with a share of 41.3 per cent of its contribution to GDP by women accounted for 39.2 per cent of total GDP contribution of women and over 95 per cent of the value addition was in the informal sector. The second largest contribution of women to GDP was in education with a percentage share of 7.3 per cent. The other major compilation categories which accounted for a significantly large percentage of GDP contribution of women were retail trade (5.9 percent), banking and financial intermediation (4.3 percent), construction (4.1 percent), public administration & defence (3.7 percent), chemical & chemical products (3.7 percent), health services (3.6 percent), computer and related activities (2.9 percent), and wholesale trade (2.4 percent).

#### 8. Growth in the GDP Contribution of Women

The overall annual growth rate in the GDP between 1999-2000 and 2004-05 was about 5.99 per cent. In the case of contribution of women, the growth rate was lower at 5.61 percent as against 6.1 percent in the case of males. While the growth rate of GDP in the formal sector was about 7.6 per cent, it was only 4.5 per cent in the case of informal sector. The GDP contribution of females in the formal sector, however, recorded a higher growth rate of 9.2 per cent. The industry group- wise growth rates in GDP by sector and sex is given in Table 13. The sectors which recorded comparatively high growth rates in the contribution of women to GDP were (i) real estate, renting & business services (19.3 percent), (ii) health services (11.4 percent), (iii) hotels & restaurants (8.6 percent),(iv) trade (8.4 percent),(v) manufacturing (7.9 percent), (vi) education (7.9 percent), (vii) banking & financial services (7.9 percent) and (viii) electricity, gas and water supply (7.8 percent). The growth in the industry group electricity, gas and water supply, was contributed by the formal sector as there was a decline in the contribution of informal sector.

SI.		Iı	nformal Se	ctor	F	ormal Sect	or		Total	
No:	Industry Group	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	0.20	2.57	1.15	13.29	8.91	11.64	0.77	2.82	1.59
2	Manufacturing	4.73	5.46	4.91	6.61	9.63	7.04	6.13	7.91	6.44
3	Trade	7.64	6.07	7.46	9.39	17.76	10.18	8.06	8.42	8.10
4	Education	3.67	2.97	3.35	4.43	8.80	6.07	4.34	7.88	5.71
5	Private households & ETOs	15.80	8.95	11.01	-23.73	28.18	-19.66	4.21	9.17	7.22
6	Construction	9.84	7.10	9.59	8.04	8.60	8.12	8.89	8.11	8.79
	Other Community, Social &									
7	personal Services	8.01	5.48	7.31	1.81	-6.10	-0.38	5.82	1.35	4.58
8	Hotels and Restaurants	4.88	7.52	5.39	9.94	11.13	10.06	7.35	8.58	7.54
9	Health Services	11.31	14.33	12.00	9.34	11.51	10.23	9.88	11.90	10.62
	Public administration &	-								
10	Defense	32.95	-36.69	-33.36	4.06	6.00	4.28	3.39	5.21	3.59
	Transport, Storage &									
11	Communication	15.25	-4.76	14.23	12.07	3.36	11.44	13.44	0.62	12.63
	Real Estate, Renting &									
12	Business Services	2.67	13.45	3.31	16.83	24.55	18.14	6.28	19.27	7.46
	Banking & Financial									
13	intermediation	9.83	17.38	10.61	5.04	7.26	5.35	5.45	7.88	5.78
14	Mining	-5.28	-6.31	-5.50	7.92	8.82	8.03	4.91	3.25	4.67
15	Electricity, Gas and Water	-2.10	-6.53	-2.20	4.19	8.09	4.36	3.97	7.80	4.13
16	Grand Total	4.83	3.61	4.53	7.33	9.18	7.61	6.08	5.61	5.99

Table 13: Growth Rates in GDP by Industry, Sector and Sex between 1999-2000 and 2004-05

# 9. **Productivity Differentials**

The average gross value added per worker was the lowest in the case of wood & wood products and it was followed by private households, tobacco products and agriculture. These were the industries in which a significant percentage of women were employed. In fact, these traditional industries taken together accounted for 78.5 percent of the women workers in the country. Further, a large percentage of women in all these industry groups were employed in the informal sector with significantly low productivity. The industries with high productivity are (i) banking and financial intermediation, (ii) air transport, (iii) computer and related activities and (iv) real estate activities. The percentage of women in air transport activities and real estate activities taken together was merely about 60,000 in the year 2004-05. The estimates of GVA per worker in each of the major compilation categories are given in Table 14.

Table 14: Estimates of Gross Value Added Per Worker in the<br/>Ascending Order of Value in 2004-05

		GVA	per Worker	(Rs)
Sl.No:	<b>Compilation Category</b>	Informal	Formal	Total
1	Wood & wood products	9 482	19 462	9 870
2	Private households	10 515	No worker	10 515
3	Tobacco products	5 984	39 721	12 606
4	Agriculture	20 142	49 548	20 825
5	Washing & dry cleaning	27 124	147 529	28 259
6	Hair dressing & beauty treatment	29 258	11 416	29 101

7	Wearing apparel	27 010	51 198	30 842
8	Coaching centres	32 942	44 605	33 409
	Spinning, weaving & finishing of			
9	textiles	21 029	82 773	37 440
10	Dressing & dyeing of fur	39 503	38 066	38 892
11	Non- metallic mineral products	32 368	70 806	49 073
12	Other food products	24 300	111 828	53 886
13	Grain mill products, starches	45 701	114 727	57 156
14	Hotels and restaurants	38 192	242 124	65 214
15	Construction	43 933	157 016	71 613
16	Retail trade	75 007	102 850	75 775
	Medical, precision & optical			
17	instruments	45 639	161 763	76 752
18	Recreational, cultural activities	43 293	161 943	79 314
19	Paper and paper products	43 389	127 552	82 539
	Social work & membership			
20	organisations	63 519	105 847	83 369
21	Research & development	76 114	158 442	101 139
22	Education	53 932	112 493	103 595
23	Fabricated metal products	64 468	210 354	114 636
24	Freight transport by motor vehicles	102 163	273 338	126 640
25	Funeral & other service activities	125 690	240 208	131 822
26	Sewage & Refuse disposal	121 802	207 017	139 887
27	Health services	78 650	232 242	159 848
28	Public administration & defence	83 931	198 803	197 720
29	Scheduled passenger land transport	166 270	243 747	209 834
30	Motor vehicles	83 964	272 608	229 765
31	Whole sale trade	114 082	1 309 493	267 281
32	Processing of meat, fish etc	119 955	609 919	270 684
33	Railways	113 472	281 162	275 065
34	Electrical machinery	108 878	522 434	284 639
35	Manufacture of beverages	44 208	801 502	290 889
36	Auxiliary transport activities	151 981	473 828	294 567
37	Mining	170 911	392 558	318 265
38	Chemicals & chemical products	27 711	532 807	354 427
39	Coke & refined petroleum	125 753	709 848	441 904
40	Telecommunication	188 587	730 363	460 490
41	Electricity, gas and water	211 321	479 850	462 229
42	Iron & steel	143 537	679 832	506 759
43	Banking & financial intermediation	195 528	665 483	544 032
44	Air transport	266 977	680 968	664 481
45	Computer and related activities	168 994	1 181 182	832 738
46	Real estate activities	2 869 917	4 215 335	2 933 778

# 10. Underestimation of Women Workers

It is seen that the share of women in the total workforce of the country was 32.2 percent and their contribution to GDP was just about 19.8 percent in the year 2004-05. It is, however, argued that the participation of women in the work force is not accurately measured in view of certain inherent problems in the definitions and survey methodologies followed in labour force surveys.

According to the United Nations System of National Accounts (UNSNA), production of any good for own consumption is included in the definition of economic activity and hence those engaged in such activities are considered as workers. Thus processing of primary products like (i) de-husking of paddy, (ii) grinding of food grains, (iii) preparation of gur and (iv) preservation of meat and fish, etc for household consumption are treated as economic activities as per SNA. Similarly, (i) making of baskets and mats, (ii) preparation of cow dung cake, (iii) sewing, tailoring, weaving, etc. for household use are also included in the definition of economic activity. These activities are, however, not regarded as economic activities in the definitions followed in India. There are certain other activities like (i) maintenance of kitchen gardens, orchards, etc. (ii) work in household poultry, dairy, etc. (iii) free collection of fish, small games, wild fruits, vegetables, etc. for household consumption and (iv) free collection of firewood, cow dung, cattle feed, etc. for household consumption which form part of economic activity as per definition but are often not get recorded as usual principal activities in survey interviews, particularly in the case of women, though some of them may be reported as subsidiary activities. It is primarily because the usual activity status of each person is recorded by the investigator as reported by the informants and such responses are generally conditioned by the traditional roles being played by each of the members in the household hierarchy. These activities are generally conceived as part of the household chores and not as economic activities. In addition, there are activities like (i) tutoring of own children or others' children free of charge and (ii) bringing water from outside household premises which form part of extended SNA but generally not regarded as economic activities in most countries including India.

The data sets available from the follow up questions for those classified into one of the following categories under usual principal status can be profitably used to get estimates of persons engaged in economic activities but not classified as workers:

- (i) attended domestic duties only (code-92) and
- (ii) attended domestic duties and was also engaged in free collection of goods (vegetables, roots, fire wood, cattle feed, etc.), sewing, tailoring, weaving, etc, for household use (code 93).

While there were 202.78 million persons in the above two categories, 34.51 million of them were classified as subsidiary status workers. Of the remaining 168.27 million, 60.12 million were reported to have been engaged in one or more of the activities relating to production of primary goods like maintenance of kitchen gardens, etc which are essentially economic activities. The group included 59.25 million women and 0.87 million men. The estimates of men and women engaged in the above four activities are given in Table 15.

#### Table 15: Estimates of Persons with Principal Activity Status 92 and 93 and Engaged in Specific Economic Activities but not Included in the Subsidiary Status Workers Category

	Caregoly											
S1.			Persons (million)			Percentage						
No:	Activity	Sex	Rural	Urban	Total	Rural	Urban	Total				
	Maintenance of kitchen gardens, orchards	Men	0.18	0.03	0.21	12.5	5.56	10.61				
1	etc.	Women	15.29	1.97	17.26	14.67	3.17	10.38				
	We do not set and set and set of the set of	Men	0.3	0.01	0.31	20.83	1.85	15.66				
2	work in nousehold pouldy, dairy, etc	Women	26.47	1.79	28.26	25.39	2.88	16.99				
3	Free collection of fish, small games, wild	Men	0.32	0.01	0.33	22.22	1.85	16.67				

	fruits, vegetables, etc. for household	I						
	consumption	Women	15.09	0.69	15.78	14.48	1.11	9.49
	Free collection of fire wood, cow dung,	Men	0.64	0.04	0.68	44.44	7.41	34.34
4	cattle feed, etc. for household consumption	Women	35.99	3.29	39.28	34.53	5.30	23.62
	Tetal of all activities	Men	1.44	0.09	1.53	100.00	16.67	77.27
5	Total of an activities	Women	92.84	7.74	100.58	89.06	12.47	60.48
	Any of the choice estimities	Men	0.8	0.07	0.87	0.77	0.11	0.52
6	Any of the above activities	Women	53.28	5.97	59.25	51.11	9.62	35.63
	Total Damagna in 02 and 02	Men	1.44	0.54	1.98	100	100	100
7	10tal Felsolis III 92 alle 95	Women	104.24	62.05	166.29	100	100	100

The women were engaged in one or more of the four listed economic activities, though they were reported to be out of labour force. On an average each women was engaged in 1.7 activities as the total person activities were 100.58 million. The most common activity was free collection of firewood, cow dung, cattle fee, etc for household use as 39.28 million women out of 59.25 million were engaged in this activity. Work in household poultry, dairy, etc was the next common activity and 28.26 million women were engaged in it. These activities were primarily a rural phenomenon as 53.28 million women out of 59.25 million belonged to rural areas.

The total work force in 2004-05 would have become 516.93 million including 206.14 million women, if the persons engaged in the above activities were included in the workforce. The share of women in the total workforce would have then become 39.9% instead of 32.2 percent.

There were 85.19 million persons including 84.45 million women engaged in activities classified as economic activities as per SNA but not treated as economic activities in India. The estimates of these persons by activity, place of residence and sex are given in Table 16. The most common activity of women in this group was preparation of cow dung cake for use as fuel in the household. About 44.99 million women were engaged in this activity during 2004-05. The next common activity was sewing, tailoring, weaving etc for household use and 43.53 million women were engaged in the activity. Grinding of food grains and de-husking of paddy, both for household consumption were the next two common activities and 20.11 million and 16.47 million women respectively were engaged in these activities. The other three activities taken together engaged 23.04 million women. On an average each woman was engaged in 1.75 activities.

	Included in the St	ibsiulai y	Status	VV UI KEI	is Calleg	JULY		
S1.			Pers	sons (mill	ion)	l	Percentage	e
No:	Activity	Sex	Rural	Urban	Total	Rural	Urban	Total
	De-husking of paddy for household	Men	0.2	0.04	0.24	13.89	7.41	12.12
1	consumption	Women	14.57	1.9	16.47	13.98	3.06	9.90
	Grinding of food grains for household	Men	0.16	0.04	0.2	11.11	7.41	10.10
2	consumption	Women	15.34	4.77	20.11	35.25	28.76	33.12
	Preparation of gur for household	Men	0.08	0.02	0.1	5.56	3.70	5.05
3	consumption	Women	4.46	1.05	5.51	4.28	1.69	3.31
	Preservation of meat and fish for household	Men	0.1	0.04	0.14	6.94	7.41	7.07
4	consumption	Women	6.19	1.9	8.09	5.94	3.06	4.86

Table 16: Estimates of Persons with Principal Activity Status 92 and 93 and Engaged in Specific UNSNA Activities Not Classified as Economic Activities in India and also not Included in the Subsidiary Status Workers Category

		Men	0.11	0.03	0.14	7.64	5.56	7.07
5	Making baskets and mats for household use	Women	7.82	1.62	9.44	7.50	2.61	5.68
	Preparation of cow dung cake for use as	Men	0.34	0.04	0.38	23.61	7.41	19.19
6	fuel in the household	Women	42.08	2.91	44.99	40.37	4.69	27.06
	Sewing, tailoring ,weaving, etc for	Men	0.18	0.08	0.26	12.5	14.81	13.13
7	household use	Women	28.21	15.32	43.53	27.06	24.69	26.18
		Men	1.17	0.29	1.46	81.25	53.70	73.74
5	Total of all activities	Women	118.67	29.47	148.14	113.84	47.49	89.09
		Men	0.59	0.15	0.74	0.566	0.24	0.45
6	Any of the above activities	Women	63.18	21.27	84.45	60.61	34.28	50.78
		Men	1.44	0.54	1.98	100	100.00	100.00
7	Total Persons in 92 and 93	Women	104.24	62.05	166.29	100	100.00	100.00

Nearly 25 percent of the women engaged in the above activities belonged to urban areas. The single activity in which urban women were mostly engaged was sewing, tailoring, weaving, etc. for household use and 15.32 million urban women were involved in this activity. Grinding of food grains for household use was the second major activity of urban women and 4.77 million of them were engaged in it.

About 67.51 million persons were engaged in activities like tutoring of own children and bringing water from outside the household premises,. Among them, 66.74 million were women and about 28.0 percent of them were in the urban areas. The estimates of these persons by activity, place of residence and sex are given in Table 17. Bringing water from outside the household premises was the most common activity and 55.15 million women were engaged in it.

Table 17: Estimates of Persons with Principal Activity Status 92 and 93, Engaged in Specific Activities in the Extended UNSNA and not Included in Subsidiary Status Workers Category

			Persons (million)			Percentage		
Sl.No:	Activity	Sex	Rural	Urban	Total	Rural	Urban	Total
	Tutoring of own children or	Men	0.04	0.06	0.1	2.78	11.11	5.05
1	other's children free of charge	Women	7.48	7.83	15.31	7.18	12.62	9.21
	Bringing water from outside	Men	0.59	0.1	0.69	40.97	18.52	34.85
2	the household premises	Women	43.05	12.1	55.15	41.30	19.50	33.16
		Men	0.63	0.16	0.79	43.75	29.63	39.90
5	Total of all activities	Women	50.53	19.93	70.46	48.47	32.12	42.37
		Men	0.61	0.16	0.77	0.59	0.26	0.46
6	Any of the above activities	Women	48.02	18.72	66.74	46.07	30.17	40.13
		Men	1.44	0.54	1.98	100	100.00	100.00
7	Total Persons in 92 and 93	Women	104.24	62.05	166.29	100	100.00	100.00

Considering all the SNA activities, 99.29 million out of 168.27 million persons with UPS activity status codes 92 or 93 and not included in subsidiary status workers were engaged in one or more of the 11 activities listed. While 23.77 percent of them were engaged only in one activity, 12.73 percent was engaged in two activities. There were about 0.22 million persons engaged in all the 11 activities. The average number of activities per person was 2.54. In the case of women, 98.14 million out of 166.29 million were engaged in one are more activities. The average number of activities. The distribution of

persons with UPS activity status codes 92 and 93 and engaged in various SNA activities but not included in the category of subsidiary status workers is given in Table 18 and percentage distribution is given in Table 19. If these persons were included in the workforce the total workforce in the country would have become 554.99 million and the share of women would have become 245.03 million or 44.2 percent.

								(000)		
No:of	Rural			Urban			Rural+urban			
activities	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons	
1	279.21	22790.10	23069.31	103.43	16824.96	16928.40	382.65	39615.06	39997.71	
2	287.88	17675.82	17963.70	40.36	3421.71	3462.07	328.24	21097.53	21425.77	
3	163.55	13138.09	13301.64	11.18	1425.38	1436.56	174.73	14563.47	14738.20	
4	71.36	8030.27	8101.63	1.14	534.20	535.34	72.50	8564.47	8636.97	
5	57.28	5189.58	5246.86	13.78	754.76	768.54	71.06	5944.34	6015.40	
6	46.20	3227.46	3273.65	10.12	373.20	383.32	56.32	3600.66	3656.97	
7	28.91	2242.40	2271.30	2.64	86.66	89.30	31.54	2329.06	2360.60	
8	17.92	1271.72	1289.65	0.00	37.24	37.24	17.92	1308.96	1326.89	
9	8.79	537.35	546.13	1.31	7.82	9.13	10.10	545.16	555.26	
10	0.00	349.76	349.76	0.05	9.10	9.16	0.05	358.86	358.91	
11	0.00	211.35	211.35	0.00	4.21	4.21	0.00	215.55	215.55	
Any Activity	961.09	74663.89	75624.99	184.01	23479.24	23663.25	1145.11	98143.13	99288.24	
No activity	476.39	29577.18	30053.57	359.95	38572.42	38932.37	836.34	68149.60	68985.94	
All	1437.48	104241.07	105678.56	543.97	62051.65	62595.62	1981.45	166292.73	168274.18	

# Table 18: Distribution of Persons with Usual Principal Status Activity Status Codes 92 and 93 and Engaged in Various SNA Activities

Table 19: Percentage Distribution of Persons with Usual Principal Status Activity StatusCodes 92 and 93 and Engaged in Various UNSNA Activities

No:of		Rural		Urban			Rural + Urban			
activities	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons	
1	19.42	21.86	21.83	19.01	27.11	27.04	19.31	23.82	23.77	
2	20.03	16.96	17.00	7.42	5.51	5.53	16.57	12.69	12.73	
3	11.38	12.60	12.59	2.06	2.30	2.29	8.82	8.76	8.76	
4	4.96	7.70	7.67	0.21	0.86	0.86	3.66	5.15	5.13	
5	3.98	4.98	4.96	2.53	1.22	1.23	3.59	3.57	3.57	
6	3.21	3.10	3.10	1.86	0.60	0.61	2.84	2.17	2.17	
7	2.01	2.15	2.15	0.48	0.14	0.14	1.59	1.40	1.40	
8	1.25	1.22	1.22	0.00	0.06	0.06	0.90	0.79	0.79	
9	0.61	0.52	0.52	0.24	0.01	0.01	0.51	0.33	0.33	
10	0.00	0.34	0.33	0.01	0.01	0.01	0.00	0.22	0.21	
11	0.00	0.20	0.20	0.00	0.01	0.01	0.00	0.13	0.13	
Any	(( ))	71.60	71.56	22.02	07.04	27.00	57 70	50.00	50.00	
Activity	66.86	71.63	71.56	33.83	37.84	37.80	57.79	59.02	59.00	
activity	33.14	28.37	28.44	66.17	62.16	62.20	42.21	40.98	41.00	
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

#### 11. Evaluation of Economic Value of SNA Activities Not Covered in the GDP Estimation

The economic value of the above listed activities can only be estimated by using income method. The issue, however, is the choice of an appropriate per-activity or per-capita value of income which has to be based on intensity of activity, quality of the product and appropriate wage rates. Intensities of such activities are generally available only through Time Use Surveys. Since wage rates have to be area specific and activity specific, estimates of quantity and intensity of each of the activities also would be required at such disaggregate levels. As a crude approximation, value added per worker in the informal sector in the corresponding compilation categories has been used to estimate the economic value of the activities covered in this exercise. It is justified in view of the fact that the quality of employment in the informal sector is closer to that of the activities under consideration. It is, however, necessary to convert the person activities into persons to apply the value added per worker. It is done by apportioning the total number of persons in the proportion of person activities. The estimated GDP on the basis of the exercise is Rs.216,106 crore (Rs.2.161 trillion) including Rs 2,459 crore (Rs.24.59 billion) by men and Rs.213,647 crore (Rs.2.136 trillion) crore by women. The total GDP would thus become Rs.3072041 crore and the share of women would become Rs.778567 crore (Rs.7.785 trillion)or 25.3 percent.

### 12. Conclusions

There is considerable disparity between men and women in their relative shares of employment and GDP contribution. Firstly, the share of women in the total work force was only 32.2 per cent in the year 2004-05. A large percentage of these women were employed in informal sector which was characterized by low productivity. Further, about 78.5 per cent of the women were employed in traditional industries with significantly low productivity though participation of women in some of the modern industries with high productivity did register significant growth over 1999-2000. Their number was, however, too low to improve their share in the gross domestic product. The economic empowerment of women and reduction of gender inequalities in the industrial activity of the country would, therefore, involve introduction of policies and programmes aimed at accelerating the growth in the share of women in the modern high value industries and activities.

It is also noted that women are engaged in several activities which are not taken account in the estimation of work force as well as GDP estimates. It is necessary that these activities of women are recognised and provided the necessary support mechanisms to improve their working conditions and productivity.

#### References

- 1. Central Statistical Organisation (CSO). 2006a. Brochure on new series of national accounts statistics, base year 1999-2000. (New Delhi).
- 2. \_\_\_. 2006b. Statement containing estimates of workforce and gross value added based on the revised base of 1999-2000. (New Delhi).

- 3. National Commission for Enterprises in the Unorganised Sector (NCEUS).2006 a. *Report on social security for unorganised workers*. (New Delhi).
- 4. \_\_\_\_, 2006b. "Report on definitional and statistical issues relating to informal economy (New Delhi).
- 5. Raveendran, G. 2005. "Estimating employment in the informal economy through labour force surveys", Paper presented in the eighth meeting of the Expert Group on Informal Sector Statistics, Fiji