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Contribution of Women to the National Economy

G. Raveendran

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Subregional Office for South Asia, New Delhi

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Executive Summary

The focus of this paper is primarily on the estimates of contribution of women to the Gross Domestic Product (GDP) of India and its likely underestimation due to existing data collection mechanisms. It includes estimates of women workers in the country classified by informal and formal sectors and by industry groups along with their contribution to GDP. The methodology used was that of apportioning GDP estimates of different compilation categories between informal and formal sectors by using the estimates of labour inputs and productivity differentials of the respective categories and then between male and female workers by using their proportions in each category and sector. Women constituted 32.2 per cent of the total workforce in 2004-05 and among them 72.8 per cent were employed in agriculture as against 48.8 per cent men. Women workers were predominantly in the informal sector with a share of about 91.2 per cent. Women contributed 23.4 per cent of the GDP in the informal sector and 16.2 per cent in the formal sector during 2004-05. The overall contribution of women to the GDP was about 19.8 per cent. Women are doubly disadvantaged by virtue of being engaged in traditional industries where productivity is low and informality high. The contribution of women to GDP is also underestimated due to exclusion from the definition of economic activity of processing of primary products for own consumption and of self-reporting of worker status by the informants during surveys.

Foreword

This paper is part of a series of studies that have been launched by the ILO Subregional Office in collaboration with the Institute of Social Studies Trust (ISST). The work was inspired and shaped by Devaki Jain who suggested conducting a nuanced and policy oriented factual mapping of women's engagement in employment which could be used to influence the knowledge base of policy makers, and to think of new ways to increase productivity of women's work, to shift women out of low productive work to new kinds of work and to give them independent incomes. By doing so, the aim was to highlight women's economic values and recast the ideas and institutions to deal with their contribution as well as neglect. Nirmala Banerjee lead a team of scholars through technical discussions, sifting out key gender dimensions in the current economic scenario and guided the studies and the arguments. Ratna Sudarshan, Director, ISST and Reiko Tsushima, ILO Specialist on Gender Equality and Women Workers' Issues coordinated the entire process.

This paper brings to light some important aspects of women's location in the labour market and their contribution to the national economy. It also vividly illustrates, through data, that the majority of women are concentrated in sectors with low productivity.

The objective of the paper is to estimate the contribution of officially recorded women's work to the GDP of India based on the available data sets. It also makes an attempt to measure the contribution of women's unrecorded work. The paper shows that women's average productivity in recorded activities is significantly below that of men. Women are concentrated in sectors marked by low productivity for example, over seventy-eight percent of the female workforce is engaged in "traditional" industries (agriculture, tobacco products, private households, wood and wood products) which also registered the lowest average gross value added per worker. The percentages of women in industries with high productivity, such as banking and financial intermediation, air transport, computer and related activities, and real estate activities were very low.

The finding of the study provides further impetus for strengthening policies to enhance the productivity of women's work, in their current location and by facilitating their entry into new sectors. The concentration of women in low productive sectors results in significant waste of their productive potential. Innovation of gender sensitive technologies that are production enhancing must be built into policy frameworks. Furthermore, making visible and supporting the unpaid work of women in both recognized domains of economic activities as well as care economy is required through improvement in infrastructure and other support mechanisms.

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1. Introduction

In the context of growing gender inequalities and the consequential adverse impacts on the well-being of society, gender issues have emerged at the centre stage of development planning in several 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 the economic contribution of women. Several social scientists even consider the very definition and instruments used for collecting data on economic activities in India 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 primarily 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 in the 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 exists no productivity differentials between men and women in the respective sectors. The estimates were worked out for 1999-2000 and 2004-05.

3. Workforce Estimates by Industry Groups

The total workforce in the country during 2004-05 is estimated to be 455.7 million based on the NSS 61st Round Survey on Employment-Unemployment and census population projections for different states. Women workers were 146.89 million or just 32.2 per cent of the total workers. About 106.89 million or 72.8 per cent of these women workers were employed in agriculture even though the share of the industry among men workers was only 48.8 per cent. The overall share of the industry in the total workforce was about 56.6 per cent. The distribution of workers by industry, sector and sex

in 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.

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

(in millions)

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
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 & defence	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 & 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 2: Percentage Distribution of Workers in Informal and Formal Sectors by Industry Groups, 2004-05

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
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 & defence	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 & 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 Sex, 2004-05

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
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 & defence	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 & water	6.43	0.13	6.56	89.04	4.39	93.44	95.47	4.53	100.00
16	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 per cent of the total women workers as against 38.53 million 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 per cent workers. In the education sector, men workers were just 6.61 million with a share of 2.1 per cent. 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 and restaurants (1.12 million); and public administration and defence (1.08 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 (74.3 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 over all 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 per cent in the case of fabricated metal products to 76.7 per cent 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.

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

Number of women workers	Percentage share of women workers	
	More than 32.0%	Less than 32.0%
More than 0.7 million	Spinning, weaving & finishing of textiles Tobacco products Wearing apparel Chemicals & chemical products	Wood & wood products Non-metallic mineral products Medical, precision & optical instruments
Less than 0.7 million but 0.1 million or more		Other food products Grain mill products & starches Dressing & dyeing of fur Paper and paper products Fabricated metal products Coke & refined petroleum Processing of meat, fish, etc.

There were only four industries in which the number of women workers exceeded 0.7 million and their share in the industry exceeded 32.0 per cent. In the case of three other industries, though the number of women workers exceeded 0.7 million, their share in the workforce of the industry was less than 32.0 per cent.

4. Distribution of Women Workers by Sector

The informal sector is generally characterized 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.

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

Sl. No.	Industry group	Men			Women			Persons		
		Informal sector	Formal sector	Total	Informal sector	Formal sector	Total	Informal sector	Formal sector	Total
1	Agriculture	97.42	2.58	100.00	98.05	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	100.00	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
7	Other community, social & personal 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 & defence	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
12	Real estate, renting & business services	72.63	27.37	100.00	49.97	50.03	100.00	70.36	29.64	100.00
13	Banking & financial intermediation	26.39	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
15	Electricity, gas & 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

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-29.1 per cent among women workers as against 26.3 per cent of total workers. Since employment in extra-territorial organizations is negligible, all the women workers in private households and extra-territorial organizations 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 summarized 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 to 30 per cent and 16 compilation categories where the share of women workers was 20 per cent and below.

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

Sl. No.	Compilation category	Number of women workers (million)	Percentage share		
			In the total workforce 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 & defence	1.06	11.8	0.72	0.7
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	Social work & membership organizations	0.39	23.5	0.27	29.0
23	Funeral & other service activities	0.33	28.4	0.22	96.7
24	Wholesale 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 & 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 & related activities	0.17	18.5	0.11	20.1
32	Telecommunications	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 and toys, stationery, articles of personal use, brooms and brushes, etc.*
2. *Social work and membership organizations include boarding homes and hostels, residential nurseries, homes for the aged.*
3. *Funeral related activities and other service activities include sauna and steam baths, massage saloons, rest rooms, astrological and spiritual activities, marriage bureaus, shoe shiners, etc.*
4. *Research and development includes market research; consultancy activities; architectural, engineering and other technical activities; public relations; etc.*

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

Informal sector share	Percentage share of women workers			
	Above 40%	Between 30% and 40%	Between 20% and 30%	20% and below
Above 90%	Private households Agriculture Washing & dry cleaning Coaching centres	Spinning, weaving & finishing of textiles Wearing apparel	Wood & wood products Funeral & other service activities	Retail trade Hotels & restaurants Hair dressing & beauty treatment
70% to 90%	Tobacco products Sewage & refuse disposal		Medical, precision & optical instruments Grain mill products	Wholesale trade Paper & paper products Fabricated metal products Recreational & cultural activities
50% to 70%		Chemical & products	Non-metallic mineral products Other food products Dressing & dyeing of fur	Construction Research & development Telecommunication Coke & refined petroleum
Below 50%	Education	Health services	Social work & membership organizations	Public administration & defence Mining Banking & financial services Computer & related activities Processing of meat, fish, etc

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 per cent 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) telecommunications (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 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 Category and Sector between 1999-2000 and 2004-05

Sl. No.	Sector	Informal sector			Formal sector			Total		
		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 organizations	4.69	16.40	5.83	12.29	3.32	8.57	7.32	6.24	7.06
23	Funeral & other services	-13.84	-24.88	-18.07	-32.58	-39.20	-34.08	-16.20	-25.78	-19.69
24	Wholesale 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 & 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 & related activities	20.40	9.30	18.84	19.99	32.80	22.26	20.14	25.40	21.02
32	Telecommunications	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 activities	6.03	18.10	7.15	4.96	-15.12	3.41	5.68	8.41	5.93
	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 and 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 GDP during 2004-05 was Rs 2,855,934 crore¹ (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 are 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, 2004-05

(in Rs crore)

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	Agriculture	295 886	211 103	506 990	19 310	10 329	29 639	315 196	221 433	536 629
2	Manufacturing	91 948	31 912	123 859	286 449	51 223	337 672	378 396	83 135	461 531
3	Trade	283 011	35 741	318 753	93 570	12 229	105 799	376 582	47 970	424 552
4	Education	7 143	6 002	13 145	55 556	37 878	93 434	62 699	43 880	106 580
5	Private households & ETOs	2 006	3 888	5 894	219	72	291	2 225	3 960	6 185
6	Construction	78 634	7 390	86 024	84 007	15 637	99 645	162 641	23 028	185 669
7	Other community, social & personal services	28 753	10 106	38 860	13 163	3 938	17 101	41 916	14 044	55 961
8	Hotels & restaurants	16 065	4 146	20 211	17 658	1 913	19 570	33 723	6 058	39 781
9	Health services	9 345	2 979	12 323	23 531	17 283	40 814	32 876	20 261	53 137
10	Public administration & defence	645	65	710	155 843	20 944	176 786	156 487	21 009	177 496
11	Transport, storage & communication	108 034	3 186	111 220	130 985	8 010	138 994	239 019	11 195	250 214
12	Real estate, renting & business services	143 449	12 172	155 620	71 892	17 786	89 678	215 341	29 958	245 298
13	Banking & financial intermediation	136 69	1 920	15 588	129 782	22 461	152 243	143 451	24 380	167 831
14	Mining	12 017	3 187	15 204	60 641	8 620	69 260	72 657	11 807	84 464
15	Electricity, gas & water	1 782	37	1 818	56 024	2 765	58 789	57 806	2 801	60 607
16	Grand total	1 092 385	333 834	1 426 218	1 198 630	231 086	1 429 716	2 291 015	564 920	2 855 934

¹ Crore is a unit in the Indian numbering system equal to ten million. The Indian unit has been kept here with its equivalent in trillion in parentheses to enable easy recognition since most Indian literature use the unit "crore".

Table 10: Percentage Distribution of GDP in Each Sector and Sex by Industry Groups, 2004-05

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		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
5	Private households & 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
7	Other community, social & personal services	2.63	3.03	2.72	1.10	1.70	1.20	1.83	2.49	1.96
8	Hotels & 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
10	Public administration & defence	0.06	0.02	0.05	13.00	9.06	12.37	6.83	3.72	6.21
11	Transport, storage & communication	9.89	0.95	7.80	10.93	3.47	9.72	10.43	1.98	8.76
12	Real estate, renting & business services	13.13	3.65	10.91	6.00	7.70	6.27	9.40	5.30	8.59
13	Banking & financial 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 & 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

Though 72.8 per cent of 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. Manufacturing industries had the second largest share at 14.7 per cent though the share of the sector in the employment of women was only 11.5 per cent. The other industry groups which shared a sizeable percentage of GDP contribution of women were (i) trade (7.8 per cent); (ii) education (5.3 per cent); (iii) real estate, renting and business services (4.3 per cent); (iv) banking and financial intermediation (16.8 per cent); (v) construction (4.1 per cent); (vi) public administration and defence (3.7 per cent); and (vii) health services (3.6 per cent). 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 gross value added 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 per cent in the formal sector. While a little over 50 per cent of the GDP was generated in the formal sector, the contribution of women was as low as 8.1 per cent. This is 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 per cent) and education (41.2 per cent). 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'.

Table 11: Percentage Distribution of GDP in Each Industry Group by Sector and Sex, 2004-05

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		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
5	Private households & 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
7	Other community, social & personal services	51.38	18.06	69.44	23.52	7.04	30.56	74.90	25.10	100.00
8	Hotels & 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
10	Public administration & defence	0.36	0.04	0.40	87.80	11.80	99.60	88.16	11.84	100.00
11	Transport, storage & communication	43.18	1.27	44.45	52.35	3.20	55.55	95.53	4.47	100.00
12	Real estate, renting & business services	58.48	4.96	63.44	29.31	7.25	36.56	87.79	12.21	100.00
13	Banking & financial 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 & 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

The major compilation categories in 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 Major Compilation Categories

Sl. No.	Compilation category	GDP contribution of women (Rs crore)	Percentage share		
			In the GDP of the industry	To GDP contribution of women	GDP share of informal sector
1	Agriculture	221 433	41.26	39.20	95.34
2	Education	41 390	40.92	7.33	8.79
3	Retail trade	33 490	13.76	5.93	97.56
4	Banking & financial intermediation	24 380	14.53	4.32	7.87
5	Construction	23 028	12.40	4.08	32.09
6	Public administration & defence	21 009	11.84	3.72	0.31
7	Chemicals & chemical products	20 768	28.05	3.68	5.73
8	Health services	20 261	38.13	3.59	14.70
9	Computer & related activities	16 326	21.71	2.89	3.48
10	Wholesale trade	13 608	9.46	2.41	18.22
11	Mining	11 807	13.98	2.09	26.99
12	Real estate activities	10 944	7.68	1.94	94.64
13	Spinning, weaving & finishing of textiles	10 618	27.98	1.88	71.59
14	Wearing apparel	8 351	36.82	1.48	82.84
15	Hotels & restaurants	6 058	15.23	1.07	68.43
16	Telecommunications	6 027	11.25	1.07	32.30
17	Non-metallic mineral products	5 262	24.26	0.93	44.72
18	Processing of meat, fish, etc.	4 768	26.95	0.84	9.17
19	Medical & precision equipments	4 579	18.16	0.81	62.55
20	Funeral & related activities	4 236	27.93	0.75	93.85
21	Tobacco products	4 095	71.23	0.72	42.44
22	Coke & refined petroleum	4 086	9.96	0.72	19.36
23	Other food products	3 866	32.41	0.68	24.46
24	Social work & membership organizations	3 656	26.34	0.65	19.69

25	Private households	3 581	71.75	0.63	100.00
26	Grain mill products, starches	2 854	23.55	0.51	76.58
27	Electricity, gas & water	2 801	4.62	0.50	1.30
28	Electrical machinery	2 540	9.53	0.45	17.91
29	Washing & dry cleaning	2 520	42.07	0.45	94.14
30	Coaching centres	2 491	45.83	0.44	94.85
31	Sewage & refuse disposal	2 267	39.39	0.40	83.29
32	Fabricated metal products	2 143	4.48	0.38	43.23
33	Research & development	2 118	12.24	0.37	36.55
34	Manufacture of beverages	1 895	20.39	0.34	15.76
35	Iron & steel	1 823	3.46	0.32	11.61
36	Paper & paper products	1 494	11.00	0.26	48.16
37	Wood & wood products	1 455	28.50	0.26	97.15
38	Air transport	1 388	25.46	0.25	6.28
39	Dressing & dyeing of fur	1 160	19.39	0.21	60.21
40	Railways	1 134	3.53	0.20	0.00
41	Motor vehicles	1 011	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
	Total	562 162	20.52	99.51	59.09

Agriculture with a 41.3 per cent share of contribution to GDP by women accounted for 39.2 per cent of total GDP contribution of women, and of that 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 per cent), banking and financial intermediation (4.3 per cent), construction (4.1 per cent), public administration and defence (3.7 per cent), chemical and chemical products (3.7 per cent), health services (3.6 per cent), computer and related activities (2.9 per cent), and wholesale trade (2.4 per cent).

8. Growth in GDP Contribution of Women

The overall annual growth rate in 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 per cent as against 6.1

per cent 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 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 and business services (19.3 per cent); (ii) health services (11.4 per cent); (iii) hotels and restaurants (8.6 per cent); (iv) trade (8.4 per cent); (v) manufacturing (7.9 per cent); (vi) education (7.9 per cent); (vii) banking and financial services (7.9 per cent); and (viii) electricity, gas and water supply (7.8 per cent). 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 the informal sector in this category.

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

Sl. No.	Industry group	Informal sector			Formal sector			Total		
		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
7	Other community, social & personal services	8.01	5.48	7.31	1.81	-6.10	-0.38	5.82	1.35	4.58
8	Hotels & 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
10	Public administration & defence	-32.95	-36.69	-33.36	4.06	6.00	4.28	3.39	5.21	3.59
11	Transport, storage & communication	15.25	-4.76	14.23	12.07	3.36	11.44	13.44	0.62	12.63
12	Real estate, renting & business services	2.67	13.45	3.31	16.83	24.55	18.14	6.28	19.27	7.46
13	Banking & financial 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 & 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

9. Productivity Differentials

The average gross value added per worker was the lowest in the case of wood and wood products, 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 per cent 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 employed in these industries was just 0.41 per cent. The total employment 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 gross value added per worker in each of the major compilation categories are given in Table 14.

Table 14: Estimates of Gross Value Added Per Worker in Ascending Order of Value, 2004-05

Sl. No.	Compilation category	GVA per Worker (Rs)		
		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
9	Spinning, weaving & finishing of 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 & restaurants	38 192	242 124	65 214
15	Construction	43 933	157 016	71 613
16	Retail trade	75 007	102 850	75 775
17	Medical, precision & optical instruments	45 639	161 763	76 752
18	Recreational, cultural activities	43 293	161 943	79 314

19	Paper & paper products	43 389	127 552	82 539
20	Social work & membership organizations	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	Wholesale 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	Telecommunications	188 587	730 363	460 490
41	Electricity, gas & 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 & 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 per cent and their contribution to GDP was just about 19.8 per cent in the year 2004-05. It is, however, argued that the participation of women in the workforce 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 de-husking of paddy, grinding of food grains, preparation of gur and preservation of meat, fish, etc., for household consumption are treated as economic activities as per the UNSNA. Similarly, making of baskets and mats, preparation of cow dung cake, 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 maintenance of kitchen gardens, orchards, etc.; work in household poultry, dairy, etc.; free collection of fish, small games, wild fruits, vegetables, etc., for household consumption; and free collection of firewood, cow dung, cattle feed, etc., for household consumption which form part of economic activity as per definition but often do 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. This non-recording 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 member in the household hierarchy. These activities are generally conceived as part of household chores and not as economic activities. In addition, there are activities like tutoring one's own or others' children free of charge and bringing water from outside household premises which form part of the extended UNSNA but are 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. Of these 60.12 million, 59.25 million were women and 0.87 million were men. The estimates of men and women engaged in maintenance of kitchen gardens, orchards, etc.; work in household poultry, dairy, etc.; free collection of fish, small games, wild fruits, vegetables, etc., for household consumption; and free collection of firewood, cow dung, cattle feed, etc., 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 Subsidiary Status Workers Category

Sl. No.	Activity	Sex	Persons (million)			Percentage		
			Rural	Urban	Total	Rural	Urban	Total
1	Maintenance of kitchen gardens, orchards, etc.	Men	0.18	0.03	0.21	12.5	5.56	10.61
		Women	15.29	1.97	17.26	14.67	3.17	10.38
2	Work in household poultry, dairy, etc.	Men	0.3	0.01	0.31	20.83	1.85	15.66
		Women	26.47	1.79	28.26	25.39	2.88	16.99
3	Free collection of fish, small games, wild fruits, vegetables, etc. for household consumption	Men	0.32	0.01	0.33	22.22	1.85	16.67
		Women	15.09	0.69	15.78	14.48	1.11	9.49
4	Free collection of firewood, cow dung, cattle feed, etc. for household consumption	Men	0.64	0.04	0.68	44.44	7.41	34.34
		Women	35.99	3.29	39.28	34.53	5.30	23.62
5	Total of all activities	Men	1.44	0.09	1.53	100.00	16.67	77.27
		Women	92.84	7.74	100.58	89.06	12.47	60.48
6	Any of the above activities	Men	0.8	0.07	0.87	0.77	0.11	0.52
		Women	53.28	5.97	59.25	51.11	9.62	35.63
7	Total persons in 92 and 93	Men	1.44	0.54	1.98	100	100	100
		Women	104.24	62.05	166.29	100	100	100

The women were engaged in one or more of these four economic activities, though they were reported to be out of the labour force. On average each woman was engaged in 1.7 activities (the total person activities were 100.58 million). The most common activity was free collection of firewood, cow dung, cattle feed, 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 workforce 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 per cent instead of 32.2 per cent.

There were 85.19 million persons, including 84.45 million women, engaged in activities classified as economic activities as per UNSNA 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 this 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 (preparation of gur for household consumption, preservation of meat and fish for household consumption, and making of baskets and mats) taken together engaged 23.04 million women. On an average, each woman was engaged in 1.75 activities.

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

Sl. No.	Activity	Sex	Persons (million)			Percentage		
			Rural	Urban	Total	Rural	Urban	Total
1	De-husking of paddy for household consumption	Men	0.2	0.04	0.24	13.89	7.41	12.12
		Women	14.57	1.9	16.47	13.98	3.06	9.90
2	Grinding of food grains for household consumption	Men	0.16	0.04	0.2	11.11	7.41	10.10
		Women	15.34	4.77	20.11	35.25	28.76	33.12
3	Preparation of gur for household consumption	Men	0.08	0.02	0.1	5.56	3.70	5.05
		Women	4.46	1.05	5.51	4.28	1.69	3.31
4	Preservation of meat and fish for household consumption	Men	0.1	0.04	0.14	6.94	7.41	7.07
		Women	6.19	1.9	8.09	5.94	3.06	4.86
5	Making baskets and mats for household use	Men	0.11	0.03	0.14	7.64	5.56	7.07
		Women	7.82	1.62	9.44	7.50	2.61	5.68
6	Preparation of cow dung cake for use as fuel in the household	Men	0.34	0.04	0.38	23.61	7.41	19.19
		Women	42.08	2.91	44.99	40.37	4.69	27.06
7	Sewing, tailoring, weaving, etc. for household use	Men	0.18	0.08	0.26	12.5	14.81	13.13
		Women	28.21	15.32	43.53	27.06	24.69	26.18
5	Total of all activities	Men	1.17	0.29	1.46	81.25	53.70	73.74
		Women	118.67	29.47	148.14	113.84	47.49	89.09
6	Any of the above activities	Men	0.59	0.15	0.74	0.566	0.24	0.45
		Women	63.18	21.27	84.45	60.61	34.28	50.78
7	Total persons in 92 and 93	Men	1.44	0.54	1.98	100	100.00	100.00
		Women	104.24	62.05	166.29	100	100.00	100.00

Nearly 25 per cent 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 per cent of them were in 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 the Subsidiary Status Workers Category

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

Considering all UNSNA activities, 99.29 million out of 168.27 million persons with usual primary status activity status codes 92 or 93 and not included in subsidiary status workers were engaged in one or more of the 11 activities listed in Tables 18 and 19. While 23.77 per cent of them were engaged only in one activity, 12.73 per cent were 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 or more activities. The average number of activities per woman was 2.53.

The distribution of persons with usual principal status activity status codes 92 and 93 and engaged in various UNSNA activities but not included in the category of subsidiary status workers is given in Table 18 and their 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 per cent.

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

(’000)

No. of activities	Rural			Urban			Rural + Urban		
	Men	Women	Persons	Men	Women	Persons	Men	Women	Persons
1	279.21	22 790.10	23 069.31	103.43	16 824.96	16 928.40	382.65	39 615.06	39 997.71
2	287.88	17 675.82	17 963.70	40.36	3 421.71	3 462.07	328.24	21 097.53	21 425.77
3	163.55	13 138.09	13 301.64	11.18	1 425.38	1 436.56	174.73	14 563.47	14 738.20
4	71.36	8 030.27	8 101.63	1.14	534.20	535.34	72.50	8 564.47	8 636.97
5	57.28	5 189.58	5 246.86	13.78	754.76	768.54	71.06	5 944.34	6 015.40
6	46.20	3 227.46	3 273.65	10.12	373.20	383.32	56.32	3 600.66	3 656.97
7	28.91	2 242.40	2 271.30	2.64	86.66	89.30	31.54	2 329.06	2 360.60
8	17.92	1 271.72	1 289.65	0.00	37.24	37.24	17.92	1 308.96	1 326.89
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	74 663.89	75 624.99	184.01	23 479.24	23 663.25	1 145.11	98 143.13	99 288.24
No activity	476.39	29577.18	30053.57	359.95	38 572.42	38 932.37	836.34	68 149.60	68 985.94
All	1437.48	104241.07	105678.56	543.97	62 051.65	62 595.62	1 981.45	166 292.73	168 274.18

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

No. of activities	Rural			Urban			Rural + Urban		
	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 activity	66.86	71.63	71.56	33.83	37.84	37.80	57.79	59.02	59.00
No 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 UNSNA Activities Not Covered in the GDP Estimation

The economic value of the activities listed in Tables 16 and 17 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 would also 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 this 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 (Rs. 2.136 trillion) crore by women. The total GDP would thus become Rs 3,072,041 crore (Rs. 30.720 trillion) and the share of women would become Rs 778,567 crore (Rs. 7.785 trillion) or 25.3 per cent.

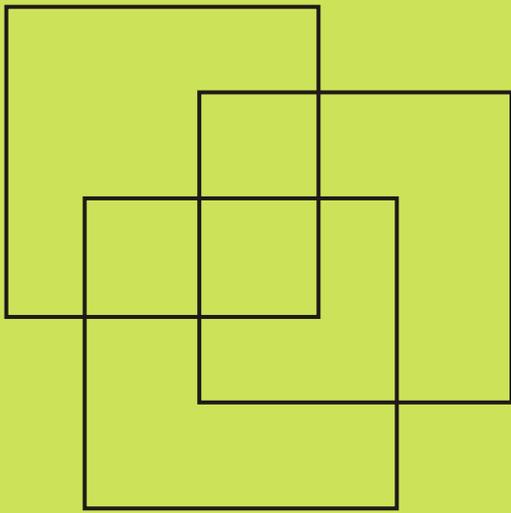
12. Conclusions

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 workforce was only 32.2 per cent in the year 2004-05. A large percentage of these women were employed in the informal sector which is 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 GDP. 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 of the share of women in modern high value industries and activities.

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

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