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EDITORIAL

Manufacturing is the prime mover for industrialization and industrialization is the front engine to drive economic growth. Of course, this growth has to be pushed further by a back engine in terms of constitutional safeguards and state policies to make it more 'inclusive' and to achieve reduction in poverty and in income inequality, thereby ensuring a better quality of life for an increasing section of the entire population.

The nature and structure of manufacturing industry and its contribution to national income have changed a lot across countries and over the recent years. There have been resource transfers from and to manufacturing in developing as well as in developed economies. In many developing countries, services sector has seen significant growth accompanied by an expanding share in gross domestic product. Further, the recent emphasis on environmental concerns has altered the profile of manufacturing industries. At the same time, scientific and technological advances have thrown up new materials that need be processed through new and novel technologies by workers possessing requisite skills opening up possibilities for better performance.

Manufacturing embraces a wide spectrum, covering labour-intensive, low-technology, dwindling-market traditional industries like jute on the one end to capital-intensive, advanced-technology industries like electronics and communication devices with markets opening up with economic growth. There are manufacturing units which are pursuing the path of innovation quite ardently, while there are others which do not currently realize the urgency for innovation in order to survive and even to grow. We have industries which invest considerably on their employees to enhance their knowledge and skill, their motivation and job satisfaction, their safety and security, and their quality of life. Some industries extend the net of such activities to cover their business partners — customers, suppliers and investors. Emphasis on Corporate Social Responsibility implies increasingly greater roles of industries in the over-all development of the socio-cultural-economic environment within which they operate.

Traditional analysis of efficiency or effectiveness or productivity of manufacturing industries in terms of different measures or co-efficients which can be derived from data available from dependable sources has not generally reflected the impact of management styles and priorities on the performance of such industries. One of the reasons could be non-availability of relevant data, caused partly by difficulties in coming up with 'operational definitions' of the concepts involved and partly by an apathy of industrial units to provide adequate information required for the purpose. This apathy is sometimes a consequence of a lurking apprehension

that disclosure of specific and ‘sensitive’ information in the public domain would invite some problems of non-compliance with some regulatory norms or standards or could adversely affect competitive strength.

While steps to allay such apprehensions — not always unfounded in the course of administration of different policies and checks and balances — have to be put in place, industrial units, particularly in the micro-, small and medium industries, have to be assisted — beyond being advised — to keep proper records relating to different facets of their performance. Equally important are the efforts of data-collecting agencies including those in the government to expose people involved in data collection and scrutiny to the nuances of ‘level of technology’ or ‘level of competence of people on different tasks,’ or ‘environmental management’, or ‘investment in people’, or ‘international financial reporting system’. And we must ensure international comparability in measuring and reporting performance of an industry sector or even an industry unit, so that appropriate policies and plans could be put in place to stimulate higher performance. Incidentally, to speak of ‘performance’ we should move away from the earlier single bottom line of ‘profit’ to the emerging concept of triple bottom lines viz. profit, people and planet.

As more comprehensive data become available, we look forward to a better insight into performance of industry, in general, and manufacturing industry, in particular.

March, 2013
Kolkata

S. P. Mukherjee
Editor-in-Chief

Gender Bias in Indian Industry

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Abstract

In this paper an attempt has been made to look into the gender issues in terms of female workforce participation and wage differentials in the organized manufacturing sector in India. The major data sources for this paper are from the Annual Survey of Industries (ASI). Only female workers directly employed by the industry and engaged directly in the production process are considered for the study. From the analysis, it is found that around twenty percent of female workers are directly contributing to the production process during the year 2000-01 to 2009-10. However, there is a significant variation observed with respect to female work participation across different industry divisions. Similarly, it is observed that female participation rates have no uniformity within the States. It is also observed that significant wage differentials exist with respect to industry divisions and States.

1. Introduction

1.1 Gender discrimination in economic activities is a matter of concern for any welfare, democratic and developing State. Equal opportunity and compensation to female workforce are required to be built in the governmental policies of such States. For this reason, there are campaigns across the globe focusing on the empowerment and rights of women in all aspects including education, employment and economic participation with a view to reducing gender inequality. Keeping development as a broader goal in the mind and focusing women participation in all economic activities, many international movements have been taking place to establish the gender equality and women empowerment.

1.2 The Millennium Development Goals (MDGs) emphasize on increasing gender equality in education as well as in the labour market. To monitor the growth in the female participation in the non-agricultural sector, an indicator is defined as the share of female workers in the non-agricultural sector expressed as a percentage of total employment in the sector. This measures the degree to which labour markets are open to women in industry and service sectors. Such indicators direct the policy makers not only towards the equal employment opportunity for women but also towards the economic efficiency through flexibility of the labour market. It also focuses on raising the status of women and for ensuring their full participation and integration in the development at all levels and draws attention on the problems specific to women such as steadily declining trend of their participation in the workforce.

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1.3 There are many studies across the globe on female workforce participation to find out the trend and pattern of female workforce participation with respect to different socio-economic background and characteristics (Ghosh, 2004; Karan and Selvaraj, 2008; Khanna, 2012). Some study concludes that in India, female workforce participation is the lowest among urban females. However, in rural India, the poverty considerations lead to greater labour force participation among females.

1.4 There are studies focused on the effect of economic development on the women participation in economic activity. They have concluded that female participation rate falls with the economic development (Reilly and Dutta, 2005). Another study examined the effect of certain development variables like marital status, income, literacy on female participation rates and concludes that socio-cultural factors have a significant bearing on the levels of female participation rate (Ghosh, 2004).

1.5 However, none of these studies did find out the exact determinants of female workforce participation. The female workforce participation varies across socio-economic, demographic and cultural backgrounds with respect to geographical region. It has been observed that in spite of higher level of literacy and educational level, the share of women in the labour force is poor. Indian society is believed to be male dominated. Lower value for women in the society or family may be a cause for their invisibility in economic activities of the country.

1.6 There are studies which focused on female participation as a whole with reference to their socio economic background (Ghosh, 2004; Karan and Selvaraj, 2008; Khanna, 2012). However, studies on female participation in several sectors in the economy are very few. Though in the economy as a whole the female participation is in upward trend, the female participation in manufacturing sector has not yet been examined properly. What is the level of female participation in manufacturing sector? Are there any differentials in female participation with respect to different industry division in manufacturing sector? Is there any variation in female participation in manufacturing sector with respect to different States in India? What is the wages pattern of the female workers vis-à-vis male workers in the manufacturing sector? This paper tries to answer some of these questions.

2. Need for the Study

2.1 There is no elaborate data-based study so far on gender bias in the Indian manufacturing sector. It is a fact that the manufacturing sector is dominated by the male workers. An attempt is being made to look into the female workforce participation and wage differentials in manufacturing sector in India. It will be interesting to find out the proportions of female workers in the manufacturing sector as a whole. Not only the overall female workforce participation in manufacturing sector but also it will be useful to examine the industry where female workforce participation is high in comparison to other industry and what are the industries where significant proportions of female workers are contributing in the manufacturing sector? Not only female workforce participation but also an attempt has been made to look into the wage differentials in manufacturing sector with respect to industry division and States in India.

2.2 The gender bias in Indian industry can be studied on the basis of female workforce participation and wage differentials in manufacturing sector. Keeping this in mind the paper focused on the following objectives as follows:

3. Objectives of the Study

- (i) To examine the female workforce participation rate in organised manufacturing sector in India.
- (ii) To study the female workforce participation with respect to major industry divisions.
- (iii) To look into inter-State differentials in female workforce participation in organised manufacturing sector in India.
- (iv) To look into the gender bias in wage structure in the organized manufacturing sector in India.

4. Data Sources and Methodology

4.1 The major data source for this paper is the Annual Survey of Industries (ASI) of different years. ASI is the principal source of industrial statistics in India. It collects information on organized manufacturing sector only those industries are registered under Section 2m(i) and 2m(ii) of the Factories Act, 1948 i.e. those factories employing 10 or more workers using power and those employing 20 or more workers without using power. ASI collects various information related to fixed capital, working capital, employment and labour cost, other expenses or receipts, various input items consumed, products and by-products manufactured by the unit etc. In this paper, the major focus is to study the female workforce participation in manufacturing sectors, so the Block E: Employment and labour cost (ASI Schedule) is used. In this block, information related to male workers employed directly, female workers employed directly, man days worked (manufacturing and non-manufacturing), average number of persons worked, no of mandays paid for and wages/salaries are available for analysis. Information related to female workers employed directly is used for analysis. It will be very much useful to analyse the proportions of female workers directly employed with respect to the total workers employed directly in the industry, as gender wise data are not available for the workers employed through contractor.

4.2 Before proceeding to analysis, it is important to know the definition of worker in manufacturing sector. Here workers are defined to include all persons employed directly or through any agency whether for wages or not and engaged in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind of work incidental to or connected with the manufacturing process or the subject of the manufacturing process. Labour engaged in the repair & maintenance, or production of fixed assets for own use of the factory, or employed for generating electricity, or producing coal, gas etc. are included. In other words, the persons, directly involved in the production process, are considered as workers. Whereas, the persons, not directly engaged in the production process, are not included in the workers. Any persons though engaged in manufacturing and its ancillary activities but not receiving any payment or salaries like working proprietors (working member in case of a cooperative factory) or unpaid family members, etc., are not to be included as workers even if they may be termed

as workers under the Factories Act, 1948. It also excludes all persons holding positions of supervision or management or employed in confidential position even if classified as workers under the Factories Act, 1948.

4.3 In this paper, the female workforce participation is defined as the proportions of female workers directly employed in the total workers and contributing in the manufacturing process in the industry.

4.4 Therefore, the female workforce participation rate = $(\text{Total female workers directly employed} / \text{Total workers directly employed}) \times 100$

5. All India Average

5.1 For the development of any society, female participation in manufacturing sector is one of the indicators of measurement. Table-1 presents the female participation rate in organized manufacturing sector in India during the year 2000-01 to 2009-10. From the table, it is observed that on an average 20 percent of females are participating in the organized manufacturing sector during the year 2000-01 to 2009-10. The remaining 80 percent are male workers. From this analysis, it is clearly understood that the organized manufacturing sector in India is dominated by male workers. Even if there are lots of changes taking place with respect to female literacy, female empowerment, female employment etc. but during this ten years there is no significant change in the proportions of female participation in the organized manufacturing sector.

5.2 During this period, the female participation rate is almost constant at around 20 percent. Despite many welfare policies for the protection and safety of female workers for improving the female labour force participation in the manufacturing sector, female participation in organized manufacturing sector has not grown up.

6. Industry-wise Variation in Female work Force Participation

6.1 Though overall average is not varying, there are indications of inter-industry variation in female workers. For this reason, an attempt has been made to look into the female work force participation with respect to industry division. Table -2 presents the percentage distribution of female workers in Indian industries during the year 2008-09 and 2009-10. The data reveal that more than 50 percent of workers in the industry of tobacco products (58.78 percent) and wearing apparel (50.36 percent) are female. Similarly, in the leather product related industry (31.58 percent) and food products industry (31.35 percent), significant proportions of workers are female. Again, industry like post harvest crop & seed processing activities (28.06 percent), computer, electronic & optical products (23.26 percent), chemical & chemical products (22.92 percent), textiles (19.28 percent), significant proportions of workers are female.

6.2 Industry dealing with transport equipment, publishing activities, basic metals, machinery & equipment, waste collection, treatment & disposal activities, fabricated metal products, manufacture of furniture, repair & installation of machinery & equipment, coke & refined petroleum products, motor vehicles, trailers and semi-trailers etc., the female

workforce participation is very minimal. From the data, it may be said that industries related to tobacco products, wearing apparel, leather & related products, food products, post harvest crop & seed processing activities, where the female workforce participation is significantly high in comparison to other industry, provide a conducive nature of work for the female. Tables 3 to 6 present the industry wise analysis of female workers in manufacturing sector in India.

7. Industry on Tobacco Product: Under this division, industries like manufacturing of bidi, cigars & cheroots, stemming & re-drying of tobacco, snuff, zarda, pan masala & related products etc. are included. From the Table-3, it is evident that higher proportions (68.73 percent) of female workers are working in the manufacture of bidi industry followed by manufacture of cigars & cheroots, manufacture of other tobacco products including chewing tobacco and stemming & re-drying of tobacco industry.

8. Industry on Wearing and Apparel: Under this division, the major industries namely manufacturing of rain coats of waterproof textile fabrics or plastic sheet, manufacturing of hats, caps and other clothing accessories such as gloves, belts, ties, cravats etc., manufacturing of all types of textiles garments & clothing accessories, manufacturing of wearing apparel made of leather & substitutes of leather etc. are important. From Table 4, it is evident that higher number of female workers are working in manufacturing of all types of textile garments & clothing accessories (54.78 percent) followed by manufacturing of knitted or crocheted wearing apparel (38.77 %) and manufacturing of hats, caps & other clothing accessories industries such as gloves, belts, ties etc. (72.54 percent).

9. Leather and Related Product: All kinds of products made of leather are included in this division. From Table 5, it is evident that a higher number of female workers is working in the industry related to leather footwear such as shoes, sandals, chappals, leather-cum-rubber/plastic cloth sandals and chappals (41.20 percent) followed by manufacturing of purses, ladies handbags, artistic leather gift articles and novelties (29.12 percent).

10. Food Processing: Under this division, all kinds of food processing industry such as processing of edible nuts, grain milling other than wheat, rice & dal, manufacture of pickles, chutney etc. and other similar industries are included. From Table 6, it is evident that a very high proportion (94.53 percent) of female workers is working in the processing of edible nuts industry. Similarly, in grain milling, manufacturing of pickles, chutney etc. processing & preserving of fish etc., significantly higher proportions of female workers are contributing to the production process.

11. Interstate Variation in Female Work Participation

11.1 Female workforce participation in manufacturing sector not only varies across industry divisions but also across different States in India. Research studies (Fajimi and Omonona, 2010) found that higher proportions of females are participating in the workforce because of poverty. There may be a possibility to interpret that higher rates of female workforce participation in a State implies higher proportions poor people in that State.

11.2 The Graph-1 presents the inter-State differentials in female participation in manufacturing sector in India during the year 2009-10. From the graph, it is evident that there are variations in female workforce participation in manufacturing sector over different States. The top seven States with relatively higher proportions of females workers in the manufacturing sector are Kerala (65 percent) , Manipur (43 percent), Karnataka, (41 percent), Tamil Nadu (41 percent), Sikkim (31 percent), Andhra Pradesh (23 percent) and Puducherry (20 percent). However, in States such as West Bengal, Chattisgarh, Uttar Pradesh, Punjab, Rajasthan, Haryana, Bihar, Chandigarh etc. female workforce participation is less than 5 percent. It is observed that the States with higher female literacy rate are showing a trend of higher female participation in the manufacturing sector. The perception that female labour force comes from the poorer sections of the population may not be true in case of organized manufacturing sector. From our study, it is revealed that the poorer States like Odisha, Bihar, Uttar Pradesh, Madhya Pradesh and Rajasthan, the female participation in organized manufacturing sector is minimal at around 5 percent. It might be possible that the relationship between poverty and female workforce participation may not hold good for the organized manufacturing sector at the macro level.

12. Wage Differentials

12.1 Apart from studying the gender differentials in work participation in manufacturing sector, an attempt has been made to look into the wage differentials also. Studies from across the globe found that irrespective of sectors or geographic regions, the female workers are getting lesser wages than their male counterparts (Perinelli and Beken, 2011). A study by Karan and Selvaraj (2008) found that irrespective of different sectors such as agriculture, manufacturing and services in India, female workers are getting lower wages than their male counterparts. There are studies revealing wage differentials and the reasons thereof in India (Khanna, 2012; Reilly and Dutta, 2005). In the following section an attempt has been made to look into the wage differential in the registered manufacturing sector in India.

12.2 We define Wage Differential Ratio = Average female workers wage/ Average male workers wage. The average wage has been calculated on the basis of total annual wages to total man-days worked. So, the average female workers wage has been calculated on the basis of total female annual wage to total man-days worked for female workers. Similarly, the average male worker wage has been calculated on the basis of total annual wage to total man-days worked for male workers.

13. Wage Differentials Industry-wise

13.1 An attempt has been made to look into the wage differentials in different industry divisions in manufacturing sector. Table-7 presents the wage differentials with respect to NIC divisions based on ASI 2009-10 all India data. From the analysis, it is observed that irrespective of industry divisions female workers are getting lower wages than that of male workers. At an aggregate level, the female workers are getting on an average 48 percent lesser wage than that of male. The wage differentials also vary across industry divisions. There are industries such as chemicals and chemical products, tobacco products, waste collection, food products, non metallic minerals products, paper and paper products,

the male-female wage differentials are very high. In the chemical and chemical products industries, the female workers are getting only 24 percent of the average male workers wage. Similarly, in tobacco products industries where significantly large number of female workers (58.79%) are in the production process, wage differential ratio is also as high as 0.39. Again in food products industry, the participation of female workers is moderately high (31.35 %) but the female workers are getting lesser wage. The wage differential ratio is as high as 0.50. In the industries dealing with pharmaceuticals products, wearing apparel, post-harvest crop activities, seed processing for propagation and publishing activities, the wage differentials are comparatively better for female than other industries. In these industries, average female workers wage is around 75 percent of the male workers wage.

13.2 Now the question arises whether there is any relation with the female work participation and wage differentials with respect to industry divisions or not? It is already observed that the industries related to tobacco products, wearing apparel, leather related products and food products with high proportions of female workers show higher wage differentials. In tobacco products industries, average male workers are getting Rs. 214 per-day whereas average female workers in the same industry are getting Rs. 84 per-day. Similarly, in food products industries average male workers are getting Rs. 221 per-day, whereas average female workers are getting only Rs. 110 per-day. From this analysis, it may be concluded that those industries where female participation is high, the wage differential is also comparatively high. Those industries such as transport equipment, publishing activities, basic metals, machinery & equipment, fabricated metal products, manufacture of furniture, repair & installation of machinery & equipment, coke & refined petroleum products, motor vehicles, trailers and semi-trailers etc. where the female workforce participation is low, the wage differential is also comparatively low. This may indicate that in female worker dominated industry, the wage profile of female workers is bad.

14. Wage Differentials State-wise

14.1 It is already observed that there is a significant difference in female workforce participation across different States in India. Table-8 showing the state wise wage differentials based on ASI 2009-10 reveals that in the States namely Kerala, Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu, the wage differentials are very high. In Kerala, the average male workers are getting Rs. 375 per-day whereas the average female workers are getting Rs. 113 per-day. Similarly, in Maharashtra, the average male workers are getting Rs. 426 per-day whereas the average female workers are getting Rs. 174 per-day. Similar pattern is also observed in other States namely, Andhra Pradesh, Karnataka and Tamil Nadu. The States namely, Himachal Pradesh, Chandigarh, Delhi, Manipur, Punjab, Haryana, Bihar, Jammu & Kashmir and West Bengal, the wage differentials are comparatively low. In these States, the wage difference between male workers and female workers is much lower than that of other States. In Himachal Pradesh, the average male workers are getting Rs. 223 per-day whereas the average female workers are getting Rs. 207 per-day. In Chandigarh, the average male workers are getting Rs. 326 per-day whereas the average female workers are getting Rs. 297 per-day. From the above data, it is observed that those States where female work participation is higher, the wage differentials are also comparatively higher.

14.2 Apart of inter industry and inter state wage differentials, an attempt has also been made to look into the wage differentials within a State with respect to industry divisions. For this analysis, selected States namely Kerala and West Bengal are considered on the basis of female work participation rate. From the Table-9, it is observed that the same all India picture exists in the State of Kerala also. The industries related to food products, pharmaceuticals, textiles, paper & paper products with higher female workforce participation also exhibit higher wage differentials. In food products industries, around 90 percent of female workers are engaged in Kerala but getting 55 percent less wages than the male workers in the same industry. In food processing industries, a male worker is getting Rs. 231 per-day whereas a female worker is getting Rs. 104 per-day in Kerala. Similarly, in wearing apparel, pharmaceutical products and textiles industries, where the female workforce participation is comparatively higher, the female workers are getting lower wages than their male counterpart. In wearing apparel industry, around 76 percent of workers are female but getting only 54 percent of wages of their male counterpart. In wearing apparel industry a male workers is getting Rs. 282 per-day whereas a female worker in the same industry is getting Rs. 151 per-day. Similarly in pharmaceuticals, medicinal, chemical and botanical products where 43 percent of the female workers are engaged, female workers are getting 60 percent lower wages in comparison to the male workers in the same industry. In this industry when a male worker is getting Rs. 364 per-day whereas a female worker is getting Rs. 160 per-day.

14.3 Table-10 presents the NIC wise wage differentials in the state of West Bengal based on ASI 2009-10. From the table, the same picture is revealed. The reasons for taking these two States are based on the common perception that women are comparatively better in terms of female literacy and societal attitude towards women. However, the results do not reverse the gender bias already present in the manufacturing sector.

15. Conclusion

15.1 From the above discussion, it is found that around 20 percent of female are participating in organized manufacturing sector as worker. However, there are significant variations observed in female work participation with respect to industry divisions. It is found that the industry related to tobacco products, wearing apparel, leather and related products, food products, post-harvest crop activities and seed processing, there are significant proportions of female workers. Again, there are some other industries related to coke & refined petroleum products, repair & installation of machinery & equipment, manufacture of furniture, fabricated metal products, waste collection, machinery & equipment, basic metals, publishing activities, female participation is low.

15.2 It is observed that the female participations have variation within the States in India. There are States namely Kerala, Manipur, Karnataka, Tamil Nadu, Sikkim, Andhra Pradesh, Puducherry where significant proportions of females workers are found as against the States namely West Bengal, Chhattisgarh, Uttar Pradesh, Punjab, Rajasthan, Haryana, Bihar, Chandigarh.

15.3 Not only female work participation in manufacturing sector is low but also wage differentials with respect to industry divisions and States are also alarming. From the

analysis, it is found that industries with a comparatively higher proportion of female workers are paying them lower than the average male-wages. Thus, wage differentials may be one of the major reasons for less participation of female workers in manufacturing sector. Exploitation or gender bias is well exhibited in the factory sector revealed through ASI.

15.4 In the development of the economy, the informal sectors are growing fast. There is a possibility of engagement of female workforce in the informal sector. Women are also traditionally associated with the service sector jobs. Formal sector service employment of women remains quite limited. Even in the emerging service sectors such as IT, the share of women is quite low. In the software industry, for example, the share of women workers is estimated to be around 27 percent. On the whole, in the emerging sectors, women's work tends to be concentrated in a low end- low skilled job (Ghosh, 2004). Agriculture continues to register highest share of female employment (Khanna,2012).

15.5 The variation in female participation within the State may be due to the following reasons:

- (i) The position of industrialization in the State.
- (ii) Possibilities of alternative employment like in primary and services sector.
- (iii) Social restrictions.
- (iv) Degree of hardship and labour involved.
- (v) Wage differentials
- (vi) Higher engagement in the informal sectors.

15.6 Government of India has implemented many laws and policies for safety and protection of the female work force in manufacturing sector, in terms of policies such as The Factories Act, 1948, The Maternity Benefit Act, 1961, The Equal Remuneration Act, 1976, The Mines Act, 1952 etc. for the safety in the work place with special reference to female workers. However, the gender bias as revealed in the study requires to be removed through proper policy planning and serious institutional corrections. The absence collective bargaining power of female workers is revealed in female worker dominated industries where the wage differentials are found to be very high against women. This directs towards weakness in women empowerment in the society.

16. Limitations of the Study

This study has not taken the input from the informal/unorganized sector due to data limitation.

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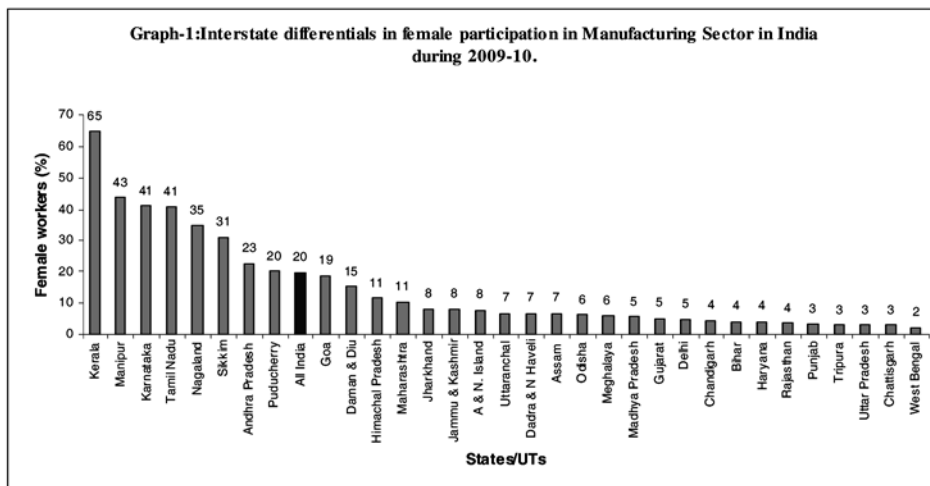


Table-1: Percentage of Female Participation in Manufacturing Sector in India during 2000-01 to 2009-10.

Year	Female Participation (%)
2000-01	18.05
2001-02	19.08
2002-03	19.62
2003-04	19.49
2004-05	20.36
2005-06	19.81
2006-07	20.66
2007-08	19.78
2008-09	20.05
2009-10	19.81

Table – 2: Percentage distribution of Female workers in Indian Industries (NIC-2008) during 2008-09 and 2009-10.

NIC-08 (2-digit)	Description	Female worker (%)	
		2008-09	2009-10
12	Tobacco products	50.70	58.79
14	Wearing apparel	52.56	50.36
15	Leather and related products	33.08	31.58
10	Food products	32.57	31.35
01	Post harvest crop and seed processing activities	34.19	28.06
26	Computer, electronic and optical products	23.17	23.26
20	Chemicals and chemical products	23.69	22.92
32	Other manufacturing	20.31	21.43
13	Textiles	19.54	19.28
21	Pharmaceuticals, medicinal chemical and botanical products	13.96	15.27
16	Wood and products of wood and cork, except furniture	10.36	11.67
11	Beverages	12.09	11.22
18	Printing and reproduction of recorded media	8.72	10.80
17	Paper and paper products	10.95	10.54
23	Other non-metallic mineral products	8.94	9.90
22	Rubber and plastics products	9.21	9.86
08	Other mining and quarrying	2.83	9.32
27	Electrical equipment	10.42	8.47
29	Motor vehicles, trailers and semi-trailers	5.30	7.12
19	Coke and refined petroleum products	4.37	6.01
33	Repair and installation of machinery and equipment	2.60	5.79
31	Manufacture of furniture	3.68	4.81
25	Fabricated metal products, except machinery and equipment	3.14	3.32
38	Waste collection, treatment & disposal activities; materials recovery	12.13	3.21
28	Machinery and equipment n.e.c.	2.21	2.21
24	Basic metals	1.92	1.67
58	Publishing activities	1.31	1.38
30	Other transport equipment	1.58	1.09
Other	Other industries	1.31	2.62

Table-3: NIC-2008 wise percentage of female workers in Tobacco Industries during 2009-10.

NIC-2008	Description	Male Workers (no.)	Female Workers (no.)	Total Workers (no.)	Female Workers (%)
12002	Manufacture of bidi	30670	67402	98072	68.73
12004	Manufacture of cigars and cheroots	46	92	138	66.67
12009	Manufacture of other tobacco products including chewing tobacco n.e.c.	2363	2754	5117	53.82
12001	Stemming and redrying of tobacco	4742	4295	9037	47.53
12005	Manufacture of snuff	475	217	692	31.36
12006	Manufacture of zarda	2478	305	2783	10.96
12008	Manufacture of pan masala and related products.	4585	307	4892	6.28
12007	Manufacture of catechu(katha) and chewing lime	1765	51	1816	2.81
12003	Manufacture of cigarettes, cigarette tobacco	5774	26	5800	0.45
Total		52898	75449	128347	58.79

Table-4: NIC-2008 wise percentage of female workers in Wearing Apparel Industries during 2009-10.

NIC-2008	Description	Male Workers (no.)	Female Workers (no.)	Total Workers (no.)	Female Workers (%)
14102	Manufacture of rain coats of waterproof textile fabrics or plastic sheetings	42	118	160	73.75
14103	Manufacture of hats, caps and other clothing accessories such as gloves, belts, ties, cravats, hairnets etc.	2981	7874	10855	72.54
14101	Manufacture of all types of textile garments and clothing accessories	193644	234540	428184	54.78
14104	Manufacture of wearing apparel made of leather and substitutes of leather	3618	4304	7922	54.33
14201	Manufacture of wearing apparel and clothing accessories made of fur	104	123	227	54.19
14309	Manufacture of other knitted and crocheted apparel including hosiery	13981	9383	23364	40.16
14301	Manufacture of knitted or crocheted wearing apparel and other made-up articles directly into shape (pullovers, cardigans, jerseys, waistcoats and similar articles)	93079	58930	152009	38.77
14109	Manufacture of wearing apparel n.e.c.	6057	3401	9458	35.96
14105	Custom tailoring	562	167	729	22.91
14202	Manufacture of fur and skin rugs and other similar articles	177	3	180	1.67
Total		314245	318843	633088	50.36

Table-5: NIC-2008 wise percentage of female workers in Leather and Related Product Industries during 2009-10.

NIC-2008	Description	Male Workers (no.)	Female Workers (no.)	Total Workers (no.)	Female Workers (%)
15121	Manufacture of travel goods like suitcase, bags, hold alls etc.	1092	1075	2167	49.61
15201	Manufacture of leather footwear such as shoes, sandals, chappals, leather-cum-rubber/plastic cloth sandals and chappals	60380	42306	102686	41.20
15129	Manufacture of other consumer goods of leather and substitutes of leather n.e.c.	2143	1124	3267	34.40
15116	Embroidering and embossing of leather articles	164	83	247	33.60
15122	Manufacture of purse, ladies' handbags, artistic leather presented articles and novelties	13660	5612	19272	29.12
15209	Manufacture of other footwear n.e.c.	8936	2279	11215	20.32
15112	Tanning and finishing of sole leather	1948	405	2353	17.21
15115	Finishing of upper leather, lining leather and garment leather etc.	12789	2246	15035	14.94
15114	Scraping, currying, tanning, bleaching, shearing and plucking and dyeing of fur skins and hides with the hair on	161	27	188	14.36
15123	Manufacture of saddlery and harness	1411	125	1536	8.14
15119	Other tanning, curing, finishing, embossing etc. of leather	2105	157	2262	6.94
15202	Manufacture of footwear made primarily of vulcanized or moulded rubber and plastic.	11485	722	12207	5.91
15111	Flaying and curing of raw hides and skins	933	46	979	4.70
15113	Tanning and finishing of industrial leather	5046	223	5269	4.23
Total		122253	56430	178683	31.58

Table-6: NIC-2008 wise percentage of female workers in Food Processing Industries during 2009-10.

NIC-2008	Description	Male Workers (no.)	Female Workers (no.)	Total Workers (no.)	Female Workers (%)
10793	Processing of edible nuts	10484	181062	191546	94.53
10736	Preserving in sugar of fruit, nuts, fruit peels and other parts of plants	305	862	1167	73.86
10614	Grain milling other than wheat, rice and dal	3627	5561	9188	60.52
10306	Manufacture of pickles, chutney etc.	1906	2798	4704	59.48
10204	Processing and preserving of fish crustacean and similar foods	2251	2727	4978	54.78
10205	Processing and canning of fish	3227	3878	7105	54.58
10796	Manufacture of papads, appalam and similar food products	1274	1204	2478	48.59
10799	Other semi-processed, processed or instant foods n.e.c. except farinaceous products and malted foods and manufacturing activities like manufacture of egg powder, sambar powder etc. (this excludes the activities covered under 10619)	8576	7964	16540	48.15
10615	Vegetable milling (production of flour or meal of dried leguminous vegetables (except dal), of roots or tubers, or of edible nuts)	364	282	646	43.65
10622	Manufacture of sago and sago products	2314	1768	4082	43.31
10203	Radiation preservation of fish and similar food	135	101	236	42.80
10798	Processing of salt into food-grade salt, e.g. iodized salt	3175	2033	5208	39.04
10407	Manufacture of non-defatted flour or meals of oilseeds, oilnuts or kernels	22	13	35	37.14
10797	Manufacture of vitaminised high protein flour, frying of dal and other cereals	1783	1049	2832	37.04
10795	Grinding and processing of spices	5160	2998	8158	36.75
10623	Manufacture of glucose, glucose syrup, maltose etc.	172	95	267	35.58
10307	Canning of fruits and vegetables	2935	1597	4532	35.24
10750	Manufacture of prepared meals and dishes	7740	3790	11530	32.87
10304	Manufacture of fruit or vegetable juices & their concentrates, squashes and powder	2003	934	2937	31.80
10739	Manufacture of other cocoa, chocolate, sugar confectionery products n.e.c.	1738	762	2500	30.48
10792	Coffee curing, roasting, grinding blending etc. and manufacturing of coffee products	2709	1070	3779	28.31

Table-6: NIC-2008 wise percentage of female workers in Food Processing Industries during 2009-10 (contd.)

NIC-2008	Description	Male Workers (no.)	Female Workers (no.)	Total Workers (no.)	Female Workers (%)
10309	Preservation of fruit and vegetables n.e.c.	2218	749	2967	25.24
10619	Other grain milling and processing n.e.c.	8574	2816	11390	24.72
10505	Manufacture of ice-cream, kulfi etc.	1466	445	1911	23.29
10740	Manufacture of macaroni, noodles, couscous and similar farinaceous products	1418	405	1823	22.22
10209	Production, processing and preservation of other fish products n.e.c	775	221	996	22.19
10616	Manufacture of cereal breakfast foods obtained by roasting or swelling cereal grains	1751	498	2249	22.14
10104	Poultry and other slaughtering, preparation	467	129	596	21.64
10305	Manufacture of sauces, jams, jellies and marmalades	1972	543	2515	21.59
10727	Manufacture of 'boora' and candy from other than sugarcane	27	6	33	18.18
10719	Manufacture of other bakery products n.e.c.	2989	627	3616	17.34
10308	Manufacture of potato flour & meals and prepared meals of vegetables	442	78	520	15.00
10732	Manufacture of chocolate and chocolate confectionery	1576	276	1852	14.90
10612	Rice milling	84763	14476	99239	14.59
10613	Dal (pulses) milling	7605	1292	8897	14.52
10109	Production, processing and preserving of other meat and meat products n.e.c.	683	91	774	11.76
10406	Manufacture of oil cakes & meals incl. residual products, e.g. Oleostearin, Palmstearin	2119	278	2397	11.60
10105	Preservation, Processing and canning of meat	2706	333	3039	10.96
10803	Manufacture of prepared feeds for pets, including dogs, cats, birds, fish etc.	1562	186	1748	10.64
10733	Manufacture of sugar confectionery (except sweetmeats)	3568	420	3988	10.53
Total		578357	264068	842425	31.35

Table-7: NIC-2008 wise Wage differentials based on ASI 2009-10 (All India).

NIC-08	Description	Female Participation (%)	Average Male Workers Wages (Rs.) per day	Average Female Workers Wages (Rs.) per day	Wage Differential ratio (F/M)
All		19.81	303	147	0.48
20	Chemicals and chemical products	22.92	412	101	0.24
12	Tobacco products	58.79	214	84	0.39
38	Waste collection, treatment & disposal activities; materials recovery	3.21	232	98	0.42
10	Food products	31.35	221	110	0.50
17	Paper and paper products	10.54	276	138	0.50
23	Other non-metallic mineral products	9.90	254	130	0.51
31	Manufacture of furniture	4.81	320	165	0.52
22	Rubber and plastics products	9.86	299	155	0.52
18	Printing & reproduction of recorded media	10.80	285	153	0.54
19	Coke and refined petroleum products	6.01	961	540	0.56
11	Beverages	11.22	299	176	0.59
32	Other manufacturing	21.43	294	173	0.59
16	Wood and products of wood and cork, except furniture	11.67	168	100	0.60
29	Motor vehicles, trailers and semi-trailers	7.12	447	271	0.61
27	Electrical equipment	8.47	379	232	0.61
13	Textiles	19.28	203	128	0.63
26	Computer, electronic and optical products	23.26	407	270	0.66
15	Leather and related products	31.58	205	142	0.69
30	Other transport equipment	1.09	424	301	0.71
28	Machinery and equipment n.e.c.	2.21	417	309	0.74
01	Post harvest crop and seed processing activities	28.06	168	125	0.74
33	Repair and installation of machinery and equipment	5.79	549	411	0.75
08	Other mining and quarrying	9.32	150	113	0.75
14	Wearing apparel	50.36	204	158	0.77
21	Pharmaceuticals, medicinal chemical and botanical products	15.27	347	269	0.78
58	Publishing activities	1.38	374	300	0.80
25	Fabricated metal products, except machinery and equipment	3.32	298	240	0.80
24	Basic metals	1.67	394	488	1.24
Other	Other industries	2.62	267	255	0.96

Table-8: Selected State-wise Wage differentials based on ASI 2009-10 (All India).

State Name	Female Participation (%)	Average Male Workers Wages (Rs.) per day	Average Female Workers Wages (Rs.) per day	Wage Differential ratio (F/M)
All India	19.81	303	147	0.48
Kerala	64.77	375	113	0.30
Maharashtra	10.61	426	174	0.41
Andhra Pradesh	22.66	309	136	0.44
Karnataka	40.93	354	166	0.47
Tamil Nadu	40.72	276	133	0.48
Rajasthan	3.70	239	128	0.53
Madhya Pradesh	5.44	307	177	0.58
Goa	18.54	480	278	0.58
Uttarakhand	6.66	359	208	0.58
Daman & Diu	15.40	202	120	0.59
Odisha	6.18	385	236	0.61
Gujarat	5.04	276	176	0.64
Assam	6.57	191	126	0.66
Dadra & N Haveli	6.61	216	142	0.66
Puducherry	20.23	287	197	0.69
Chattisgarh	2.83	308	215	0.70
Jammu & Kashmir	8.12	209	151	0.72
West Bengal	2.25	261	198	0.76
Sikkim	30.76	264	204	0.77
Uttar Pradesh	2.88	270	209	0.77
Punjab	3.48	222	174	0.78
Haryana	4.11	302	239	0.79
Manipur	43.44	126	105	0.83
A & N. Island	7.67	210	180	0.85
Delhi	4.83	233	208	0.89
Chandigarh	4.37	326	297	0.91
Jharkhand	8.36	481	446	0.93
Himachal Pradesh	11.44	223	207	0.93
Bihar	4.12	274	276	1.01
Meghalaya	6.07	250	284	1.14

Table-9: NIC-2008 wise Wage differentials based on ASI 2009-10 (Kerala).

NIC-08	Description	Female Participation (%)	Average Male Workers Wages (Rs.) per day	Average Female Workers Wages (Rs.) per day	Wage Differential ratio (F/M)
All		64.77	375	113	0.30
19	Coke and refined petroleum products	1.06	1262	158	0.13
20	Chemicals and chemical products	8.29	707	218	0.31
29	Motor vehicles, trailers and semi-trailers	13.64	335	114	0.34
28	Machinery and equipment n.e.c.	6.90	590	206	0.35
24	Basic metals	1.81	436	163	0.37
21	Pharmaceuticals, medicinal chemical and botanical products	43.17	364	159	0.44
30	Other transport equipment	2.39	1043	469	0.45
10	Food products	88.99	231	104	0.45
17	Paper and paper products	21.72	523	238	0.46
23	Other non-metallic mineral products	29.19	321	150	0.47
13	Textiles	37.21	230	108	0.47
27	Electrical equipment	26.72	492	254	0.52
14	Wearing apparel	76.33	282	151	0.54
22	Rubber and plastics products	15.53	406	222	0.55
26	Computer, electronic and optical products	36.75	781	454	0.58
33	Repair and installation of machinery and equipment	25.51	344	214	0.62
31	Manufacture of furniture	4.15	254	167	0.66
32	Other manufacturing	57.96	299	208	0.69
11	Beverages	26.46	668	470	0.70
16	Wood and products of wood and cork, except furniture	38.62	152	107	0.71
18	Printing and reproduction of recorded media	10.02	454	322	0.71
15	Leather and related products	26.17	200	149	0.75
58	Publishing activities	3.97	513	400	0.78
12	Tobacco products	83.94	80	65	0.81
38	Waste collection, treatment & disposal activities; materials recovery	41.03	142	118	0.84
25	Fabricated metal products, except machinery and equipment	6.28	291	255	0.88
Other	Other industries	4.71	244	169	0.69

Table-10: NIC-2008 wise Wage differentials based on ASI 2009-10 (West Bengal)

NIC-08	Description	Female Participation (%)	Average Male Workers Wages (Rs.) per day	Average Female Workers Wages (Rs.) per day	Wage Differential ratio (F/M)
All		2.25	261	198	0.76
27	Electrical equipment	0.61	450	120	0.27
12	Tobacco products	6.18	129	45	0.35
11	Beverages	0.77	469	203	0.43
20	Chemicals and chemical products	3.17	482	230	0.48
32	Other manufacturing	8.91	216	108	0.50
15	Leather and related products	5.66	244	136	0.56
21	Pharmaceuticals, medicinal chemical and botanical products	7.83	343	206	0.60
17	Paper and paper products	1.06	245	148	0.60
14	Wearing apparel	8.41	207	139	0.67
23	Other non-metallic mineral products	1.83	233	160	0.69
13	Textiles	1.93	231	162	0.70
16	Wood and products of wood and cork, except furniture	1.33	134	102	0.76
19	Coke and refined petroleum products	5.68	970	747	0.77
28	Machinery and equipment n.e.c.	1.62	328	288	0.88
10	Food products	3.24	110	107	0.97
22	Rubber and plastics products	1.54	167	165	0.99
26	Computer, electronic and optical products	6.85	473	495	1.05