

# FEMALE WORKFORCE IN HARYANA: INSIGHTS FROM NSSO DATA

HEMLATA SHARMA

Assistant Professor, Department of Economics, Kurukshetra University, Kurukshetra  
E-mail: hemsharma4@mail.com

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**Abstract** - Using NSSO data, this paper analyses the proportion and distribution of female workers in Haryana and its districts along with rural – urban and inter- district differences. The findings of the study reveal that proportion of female workers increased during 1999-2000 to 2004-05 but declined during 2004-05 and 2011-12. Our results show that proportion of female workers is lower in urban sector as compared to rural sector. The highest percentage of female workers in rural sector is of own account workers and unpaid family workers whereas in urban sector majority of females is either own account workers or regular wage/ salaried workers.

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**Keywords** - NSSO, female workers, Rural Sector and Urban Sector

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## I. INTRODUCTION

Haryana is one of the most prosperous state of India with one of the highest per capita incomes of the country and lower incidence of poverty. It has also made commendable progress in the fields of health and education, resulting in a decline in overall mortality and increased life expectancy as well an increase in literacy rates. However, Women in Haryana record mixed progress. On one hand maternal mortality is low and improving, on the other hand, the state has the worst child sex ratio in the country and female labour force participation has declined dramatically, especially after 2005 (World Bank; 2017). This makes one believe that development in Haryana is not Gender neutral as it is assumed to be.

This paper analyses the distribution of female workers in Haryana along with their employment status because the participation of females as workers in an economy is crucial not only to ensure gender equality but also to achieve poverty reduction and support economic growth. The paper is divided into sections. Section II gives a brief review of literature, Section III discusses methodology, Section IV presents percentage distribution of female workers in rural and urban sector of Haryana and final section concludes the paper.

## II. REVIEW OF LITERATURE

Women's labour force status relative to that of men is an important benchmark of their status in society (Mammen and Paxson; 2008). The narrowing of prospects of work in formal sectors, gender segregation within paid labour work and feminization of poverty are some of major apprehensions that might affect women in the process of growth and liberalization (Dewan; 1999). For instance, a gendered economy prevalent in Haryana results in segregation between men and women and as women

tend to be less educated, they are underprivileged and over worked than men (Wright; 1996). Gender discrimination in the labour market, as measured by female to male ratio in managerial roles and non-agricultural workers has a substantial negative impact on per capita income (Esteve-Volart ;2004).

In Haryana female workforce and labour force participation has declined in recent years and the gap between female and male work participation ratio has increased. Majority of the reduction in labour force are from rural areas and are largely from poorer households. (Kannan & Raveendran 2012). Female labour force participation in rural areas also tends to increase during periods of distress (droughts or decline in growth rates of agricultural output, depressed wages and so on), and recede again when the economy improves (Himanshu; 2011, Bhalotra and Umaña-Aponte; 2012). In fact, the spurt in employment growth during 1999-00 to 2004-05 can be partially attributed to the crisis in the agricultural sector which forced the normally non-working population to enter the labour market to supplement household income (Abraham; 2009). Number of explanations have been given in literature for fall in female LFPR the most important being; economic development and women's economic activity have a U-shaped relationship (Tansel 2002; Tam 2011; Luci 2009). But, the same may not be true always (Durand ;1975, Goldin ;1995 and Horton ;1996). In case of Haryana it is very evident that economic growth does not guarantee enlargement of the economic opportunities for women as the impact of growth varies across different constructs of gender inequality (Kabeer and Natali (2013)

## III. METHODOLOGY

The methodology employed in this paper deals with two issues (i) calculation of proportion of female and Male work force and (ii) sources of data

**(i) Proportion of Male and Female workers in Haryana**

$$\text{Proportion of Male/Female Workers} = \frac{\text{Number of Male/Female workers in Haryana}}{\text{Total Population in Haryana}} \times 100$$

Similarly, percentage of male and female workers has been calculated for both rural and urban sectors as well as different districts of Haryana.

**(ii) Sources of data**

The Study is based on NSSO's data for 55<sup>th</sup>, 60<sup>th</sup> and 68<sup>th</sup> rounds which covers a period from 1999-2000 to 2011-12. However, in between these years' boundary of the districts changed and some new districts emerged. (Panchakula on 15 August 1995, Fatehabad and Jhajjar on 15 July 1997, Mewat on 4 April 2005 and Palwal on 15 August 2008). Therefore, data for certain districts is missing in various rounds.

We have followed NSSO's 68th round - employment and unemployment survey classification for working status of females which is as follows:

Code in NSSO's 68th Round	Status of worker
11	Worked in household enterprise (self-employed): own account worker
12	Employer
21	Worked as helper in household enterprise (unpaid family worker)
31	Worked as regular salaried/ wage employee
41	Worked as casual wage labour: in public works
51	Worked in other types of work

Table-1

**IV. RESULTS AND DISCUSSION**

Table - 2 presents percentage of male and female workers among total workers in Haryana. In 1999-2000 out of total workers 72.49 % were males and 27.51% were females. In 2004-05 the proportion of females increased to 35.78 % whereas for males it declined to 64.22 %. It again increased to 79.31 % for males and came down to 20.69 % for females in 2011-12.

District	1999-2000		2004-05		2011-12	
	Male	Female	Male	Female	Male	Female
Ambala	83.67	16.33	91.62	8.38	87.68	12.32
Bhiwani	58.19	41.81	51.9	48.1	92.41	7.59
Faridabad	93.32	6.68	61.72	38.28	85.19	14.81
Fatehabad	N.A.	N.A.	59.68	40.32	79.83	20.17
Gurgaon	80.18	19.82	74.78	25.22	87.42	12.58
Hisar	77.57	22.43	60.53	39.47	71.21	28.79
Jhajjar	N.A.	N.A.	63.67	36.33	91.15	8.85
Jind	55.23	44.77	56.84	43.16	71.4	28.6
Kaithal	93.36	6.64	64.57	35.43	79.78	20.22
Karnal	55.84	44.16	67.29	32.71	69.93	30.07
Kurukshetra	93.77	6.23	85.8	14.2	72.97	27.03
Mahende Garh	50.86	49.14	51.28	48.72	87.97	12.03
Mewat	N.A.	N.A.	N.A.	N.A.	87.77	12.23
Panchakula	N.A.	N.A.	71.54	28.46	74.28	25.72

Panipat	70.04	29.96	55.41	44.59	70.68	29.32
Rewari	67.03	32.97	63.74	36.26	94.86	5.14
Rohtak	87.25	12.75	66.08	33.92	88.01	11.99
Sirsa	73.71	26.29	60.44	39.56	79.16	20.84
Sonipat	61.2	38.8	57.92	42.08	64.53	35.47
Yamuna Nagar	94.29	5.71	76.52	23.48	96.26	3.74
<b>Haryana</b>	<b>72.49</b>	<b>27.51</b>	<b>64.22</b>	<b>35.78</b>	<b>79.31</b>	<b>20.69</b>

Source: Author's calculations

Table-2: Percentage of workers by Sex in Haryana: Rural Sector

It is clear from the table that in rural sector percentage of female workers is quite low as compared to male workers. Moreover, there are high disparities in districts - from negligible 5.71 % in Yamunanagar to 19.82 % in Gurgaon and almost equal to male in Mahendergarh (49.14%). In 2004- 05 when there was a visible increase in percentage of female workers in Ambala, percentage of female workers fell to 8.38 % from 16.33% in 1999-2000 but Mahendergarh maintained the highest proportion of female workers (48.72%). However, in 2011-12, a sharp decline in female workers can be seen, the lowest percentage is still in Yamunanagar (3.74 %) but for highest percentage, Mahendergarh (12.03 %) is replaced by Sonipat (35.47 %)

District	1999-2000		2004-05		2011-12	
	Male	Female	Male	Female	Male	Female
Ambala	93.77	6.23	91.38	8.62	83.21	16.79
Bhiwani	86.78	13.22	91.05	8.95	98.62	1.38
Faridabad	86.54	13.46	86.85	13.15	86.06	13.94
Fatehabad	N.A.	N.A.	88.12	11.88	82.54	17.46
Gurgaon	95.79	4.21	80.91	19.09	85.51	14.49
Hisar	85.16	14.84	79.72	20.28	83	17
Jhajjar	N.A.	N.A.	93.35	6.65	91.47	8.53
Jind	61.12	38.88	70.71	29.29	83.17	16.83
Kaithal	90	10	80.78	19.22	97.37	2.63
Karnal	72.34	27.66	69.92	30.08	84.71	15.29
Kurukshetra	100	0	89.49	10.51	77.34	22.66
Mahendergarh	82.67	17.33	74.95	25.05	84.45	15.55
Mewat	N.A.	N.A.	N.A.	N.A.	91.37	8.63
Panchakula	N.A.	N.A.	80.13	19.87	86.15	13.85
Panipat	83.36	16.64	85.42	14.58	83.17	16.83
Rewari	84.96	15.04	80.85	19.15	93.63	6.37
Rohtak	92.1	7.9	86.89	13.11	86.08	13.92
Sirsa	72.73	27.27	75.29	24.71	84.16	15.84
Sonipat	79.5	20.5	65.85	34.15	77.68	22.32
Yamunanagar	86.03	13.97	84.6	15	90.23	9.77
<b>Haryana</b>	<b>85.4</b>	<b>14.6</b>	<b>82.27</b>	<b>17.73</b>	<b>85.65</b>	<b>14.35</b>

Source: Author's calculations

Table-3: Percentage of Workers by Sex Haryana: Urban Sector

Table-3 presents the proportion of workers in urban sector. Similar to rural sector, in urban sector female proportion is much lower than the proportion of male workers, and is lower than the rural sector. Another similar finding is that in urban sector also proportion of female workers increased in 2004-05 from 14.60 % (1999-2000) to 17.73 % and then declined to 14.35 % in 2011-12. In urban sector Gurgaon (4.21 %) in 1999-2000, Jhajjar 6.65 % in 2004-05 and Bhiwani 1.38 % in 2011-12 have lowest proportion of female workers whereas, Jind (38.88%), Sonipat (34.15%) and Kurukshetra (22.66%) have highest proportion of female workers in 1999-2000, 2004-05 and 2011-12 respectively. An interesting point to note here is that data in 1999-2000 showed no female workers in rural kurukshetra. This can be due to the limitation of sampling.

District	1999-2000					2004-05				2011-12				
	11	21	31	41	51	11	21	31	41	11	21	31	41	51
Ambala	52.07	24.54	9.31	0	14.09	28.39	50.35	6.24	15.01	73.01	10.64	16.35	0	0
Bhiwani	36.88	60.76	0.78	0	1.58	71.08	25.86	1.35	1.71	11.16	44.97	14.29	0	29.58
Faridabad	0	100	0	0	0	19.17	72.06	0	8.77	11.51	0	5.15	11.51	71.83
Fatehabad	N.A.	N.A.	N.A.	N.A.	N.A.	33.58	54.61	0	11.81	18.37	47.77	12.56	3.91	17.38
Gurgaon	24.06	58.22	5.4	1.65	10.67	29.83	68.47	1.69	0	34.64	54.8	4.03	6.53	0
Hisar	23.49	42.93	3.17	0	30.41	30.76	44.2	1.52	23.52	36	34.17	1.91	0.19	27.66
Jhajjar	N.A.	N.A.	N.A.	N.A.	N.A.	31.16	65.87	2.97	0	92.33	6.24	1.43	0	0
Jind	54.28	44.14	0.08	0	1.49	35.93	50.5	1.39	12.17	53.98	38.62	0.48	0	6.92
Kaithal	45.85	33.85	0	0	20.3	6.18	55.18	0	38.64	3.39	28.96	3.34	0	64.31
Karnal	34.41	43.46	0	0	22.13	44.06	30.28	4.29	21.37	57.18	35.93	2.95	0	3.93
Kurukshetra	21.13	14.39	31.87	0	32.62	21.09	17.99	17.58	43.34	21.14	24.9	6.21	0	47.75
Mahendergarh	15.6	84.4	0	0	0	62.46	37.54	0	0	0	91.89	8.11	0	0
Mewat	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0	90.03	1.77	5.94	2.25
Panchakula	N.A.	N.A.	N.A.	N.A.	N.A.	39.91	23.58	36.51	0	63.12	36.88	0	0	0
Panipat	40.26	39.82	0	0	19.93	38.61	48.5	2.79	10.1	51.57	17.8	3	0	27
Rewari	41.4	56.86	1.74	0	0	73.62	18.59	0.77	7.02	32.84	7.53	59.63	0	0
Rohtak	31.01	56.67	4.37	0	7.96	36.21	57.84	2.02	3.93	37.03	61.26	1.71	0	0
Sirsa	18.76	26.81	0	0	54.43	36.04	33.48	1.29	29.18	17.25	49.38	1.46	4.1	27.81
Sonipat	43.77	56.23	0	0	0	36.27	49.73	3.48	10.53	69.23	16.14	1.08	0	13.54
Yamuna Nagar	0	0	0	0	100	13.06	49.92	0	37.02	48.27	0	51.73	0	0
<b>Haryana</b>	<b>37.37</b>	<b>48.62</b>	<b>1.46</b>	<b>0.09</b>	<b>12.47</b>	<b>38.41</b>	<b>46.48</b>	<b>2.30</b>	<b>12.81</b>	<b>41.50</b>	<b>33.71</b>	<b>4.16</b>	<b>1.18</b>	<b>19.45</b>

Source: Author's calculations

Table-4: Distribution of Female Workers in Haryana: Rural Sector

As is clear from Table -4, in rural sector of Haryana out of total female workers in 1999-2000, 37.37 % were own account workers, 48.62 % worked as unpaid family workers, 1.46 % worked as regular salaried/wage employees, 0.09% worked as casual labour in public works and 12.47 % worked in other types of works. For 2004-05 and 2011-12, this percentage distribution changed to 38.41 % and 41.50 % for own account workers 46.48 % and 33.71 % for unpaid family workers 2.30 % and 4.16 % for regular wage workers and 12.81 % and 1.81 % for casual workers in public works. In 2011-12 9.45 % females also worked in other types of work. The increase in workers in public works may be attributed to introduction of MGNREGA.

At district level also, the maximum female workers are either own account workers or unpaid family workers or are engaged in other types of works. Very few females are regular salaried/wage employees and casual labour in public works in 1999-2000 and 2004-05 (with Kurukshetra and Panchkula being an exception), however, there is visible increase in percentage of female regular wage workers (though percentage of total female workers has declined) which is positive sign. An important point is that no female worker in rural sector, in any district is there in category -12 i.e. employer. This can be simply due to illiteracy and strong patriarchal and feudalistic values prevalent in rural sector.

District	1999 2000				2004-05				2011-12				
	11	21	31	51	11	21	31	51	11	12	21	31	51
Ambala	23.1	2.01	74.89	0	67.63	6.47	25.9	0	11.12	0	0	88.88	0
Bhiwani	0	0	30.1	69.9	24.69	0	75.31	0	0	0	0	0	100
Faridabad	31.21	7.87	43.21	17.71	45.79	16.09	30.19	7.93	18.62	0	7.41	73.97	0
Fatehabad	N.A.	N.A.	N.A.	N.A.	14.45	36.79	14.45	34.31	50.39	0	0	31.78	17.83
Gurgaon	22.32	27.73	49.95	0	36	7.1	25.59	31.34	4.5	0	0	95.5	0
Hisar	31.97	22.81	45.21	0	26.47	9.4	53.53	10.6	25.88	0	12.39	61.73	0

Jhajjar	N.A.	N.A.	N.A.	N.A.	23.85	51.54	10	14.62	64.1	0	0	35.9	0
Jind	50	2.37	0	47.63	26.27	46.42	19.93	7.39	25.15	0	21.91	39.95	12.99
Kaithal	26.54	0	46.91	26.54	9.34	58.17	17.41	15.08	0	4	0	96	0
Karnal	43.18	38.14	8.65	10.03	61.38	22.28	15.3	1.05	43.97	0	15.83	24.35	15.85
Kurukshetra	0.00	0.00	0.00	0	1.34	27.39	71.27	0	17.28	0	0	77.74	4.99
Mahendergarh	11.29	35.46	53.24	0	55.23	0	40.17	4.6	0	0	51.91	33.21	14.88
Mewat	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	0	0	56	0	44.24
Panchakula	N.A.	N.A.	N.A.	N.A.	13	9.84	74.98	2	0	0	0	100	0
Panipat	49.45	2.75	30.41	17.4	41.19	31.28	19.26	8.26	14.67	0	10.09	57.41	17.83
Rewari	42.35	50.22	7.43	0	44.15	25.84	30.01	0	0	0	0	88.89	11.11
Rohtak	40.66	10.06	49.29	0	11.57	14.61	69.54	4.28	22.26	0	2.28	75.45	0
Sirsa	20.05	9.73	47.28	22.94	43.92	13.31	42.77	0	18.29	0	0	79.56	2.15
Sonipat	16.55	13.45	61.8	8.2	19.19	50.21	5.84	24.76	24	0	25.25	46.27	4.08
Yamuna Nagar	27.54	0	72.46	0	44.11	9.15	41.29	5.45	36.79	5.37	33.98	23.86	0
<b>Total</b>	<b>33.16</b>	<b>20.38</b>	<b>32.97</b>	<b>13.49</b>	<b>35.55</b>	<b>23.16</b>	<b>32.05</b>	<b>9.24</b>	<b>19.06</b>	<b>0.2</b>	<b>8.52</b>	<b>67.48</b>	<b>4.73</b>

Source: Author's calculations

Table-5: Distribution of Female Workers in Haryana: Urban Sector

In urban sector, Own account workers and regular wage/ salaried workers constitute the highest proportion of female workers. The percentage of female regular wage/ salaried workers increased from 32.97 % in 1999-2000 to 67.48 % in 2011-12 with a little decline (32.05 %) in 2004-05. During these rounds no female casual labour in public works is reported, however, distribution for 2011-12 shows two positive developments. One, there are female employers (though only 0.2 %) and two, the percentage of unpaid family workers has declined from 20.38 % in 1999-2000 to 8.52 % in 2011-12. The casual workers in public works are absent in urban sector because in urban sector most of the females are in construction sector (which is private and unorganised) and hence are covered in other type of workers.

## CONCLUSION

The analysis of female workers shows that the proportion of female workers is lesser than the male workers in all the years under study. However, the proportion of female workers in rural sector is higher but in rural sector females are either own account workers or unpaid family workers. In urban sector although proportion of female workers is lower but more females are regular salaried/wage workers. An increase in the number of casual workers in public works in rural sector supports the argument that MGNREGA is bringing positive difference for females.

However, it is also true that proportion of female workers which showed a little increase in 2004-05 have declined in 2011-12 in both rural and urban sector. Females constitute 46.77% of population in Haryana (Census; 2011) but the work participation rate for females is 17.79 % (20.8 % in rural sector

and 12.1 % in urban sector (Census; 2011). It is particularly disturbing for a developed state like Haryana. Efforts should be made to increase the economic participation (work Participation) not only to ensure equality in employment but also to make the development process participatory.

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