# Differential Determinants of Female Work Participation in Rajasthan and Gujarat

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*Abstract*: Labour is an essential factor of production that contributes to development. The total number of workers in labour supply is highly affected by the behavior of women. In an economy like India both economic and social-cultural factors determine the level of female employment with their dual responsibilities of homemaker and worker. Several studies have suggested and identified some of the possible determinants of female work participation in India (Gulati, 1975; Dholakia & Dholakia, 1978; Bardhan, 1979; Dasgupta, 2005). A major conclusion that one may draw from these studies is that education and the number of young (below 5 years) in the household had a negative effect on women's labour force participation. Sex ratio significantly increased the participation rate in rural and urban areas. Bardhan found out that low caste and tribal women participate more in labour force than higher caste women even in rural areas.

## Introduction

Employment has a positive effect not only on quality of life of women but it also significantly improves the living standard of the entire household (Subbarao & Rainey, 1993; Dreze and Sen, 1989). Further, drawing women into the labour force by imparting necessary skill training is important for the country as a whole in order to reap the benefits of demographic dividend. Increasing participation of females in the labour force and workforce can be considered as a signal of rising women empowerment. or an outcome of adverse economic shock. The labour force participation rate plays a very essential role in determining socio-economic development and growth. It also has a strong bearing effect on poverty reduction. The labour force participation rate shows the supply of labour in the economy and the composition of the human resources of the country. The analysis of the labour force participation is helpful in determining employment and human resource development related policies at state level also. Yet there is no specific attention at state level in India except few states like Kerala, West Bengal, Punjab and Uttar Pradesh. Chakraborty, I & Chakraborty, A (2010), in their study on Female Work participation and Gender Differential in Earning in West Bengal found that blocks with low female literacy have high work participation and those with high concentration of Muslim population tend to show relatively lower work participation by women. Nomita, P.K. (2013), in her paper entitled Female work Participation in Uttar Pradesh: Trends and Determinants concluded that sex ratio and presence of schedule caste population in a region has positive association while literacy rate has negative association with rural FWPR.

There have been very few studies aimed at examining various dimensions of women's work in Rajasthan and Gujarat. Figure 1 show that female work participation rate of Rajasthan is 35.1% which is 9.6% higher than national average and is growing with a satisfactory level also. But the entire picture is very gloomy and the structure of female work participation has attracted our attention. The total work force in Rajasthan, according to the 2011 census estimates is 29.9 millions, out of which 18.3 millions are males and only 11.6 millions are females. It is more important to highlight that 10.6 millions female are working in rural areas while only 0.98 millions female are engaged as main and marginal workers in urban areas in Rajasthan. Around 82 percent of total rural female workers and 18 percent of total urban female workers are engaged as cultivators and agricultural labourers, where wages are minimum and working conditions are not appropriate due to climatic reasons in Rajasthan (Table 1). Thus, urban female workers where wages are comparatively higher than rural females engaged as agricultural labourers. The trend and structure of the female work participation has attracted attention over the past few decades in the world and from the past few years in India is also an effective in Rajasthan to highlight the real situation of women participation, whether they are empowering with their raising level of work participation.

## Objectives

The main objective of this study is to analyze female employment scenario across sub districts of Rajasthan and to find out its determinants. The study proposes to investigate keeping in view the existing literature:

1. To understand the level and nature of female labour activity at the block/sub district level in Rajasthan.

2. To analyze Sectoral shifts of female labour into different occupational categories.

3. To identify and explain various demographic and socio-economic factors responsible for the observed levels and changing patterns of female workforce participation rate across the state.

#### **Hypothesis 1:**

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Over the years, Indian society has strongly believed that it is a woman's responsibility to ensure that household chores are taken care of. As the average size of households (number of people) increases, the woman in the house has more responsibility to fulfill at home which would render her joining the work force unfeasible. Hence, as the average size of households increases for a given area, female work participation rate is hypothesized to go down.

## **Hypothesis 2:**

Sex Ratio by definition is the number of females for every 1000 males for a particular region over a particular time period. As the number of females increases for a particular region, more females would be exposed to the factors that positively affect female workforce participation rate. Hence, it is hypothesized that sex ratio will have a positive effect on female work participation rate.

## **Hypothesis 3:**

Literacy is one of the important socio-cultural variable affecting the extent and nature of women's gainful employment. A higher level of literacy is expected to have a negative impact on female employment as literacy raises the expectation of women about jobs. Hence, it is hypothesized that female literacy will have a negative effect on female work participation rate.

## Data analysis and interpretation

Owing to these hypotheses and economic theory developed above, the dependant and explanatory variables were chosen in this study. It'll be interesting to study how these hypotheses vary across the rural and urban distinction in Rajasthan. Each rural and urban sub-district of Rajasthan is taken in to consideration for the purpose of this paper. All data have been obtained from various publications of Census of India, 2011. Detail of selected variables and their respective data sources have been provided in table 2 & 3. As statistical methods, we have used correlation, regression and quintile regressions to prove given hypothesis and fulfill our objectives of the present paper.



Figure 1: Female Work Participation Rate in Rajasthan, Gujarat and India, 1981-2011.



Figure 2: Residence wise Female Work Participation in Rajasthan and Gujarat, 1981-2011

Figure 3: Structural Change in female Work Participation in Rajasthan and Gujarat during 2001-2011.



Figure 5: District wise decline in Female Work Participation Rate in Gujarat during 2001-11.





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Table 1: N	Mean of the	Districts	of Raj	asthan	and	Gujarat,	2001-	2011.

	Gujarat (	Mean)		Rajasthan (Mean)			
Variable	Total	Rural	Urban	Total	Rural	Urban	
AHS	5.10	5.17	4.93	5.68	5.74	5.57	
SR	937	943	911	925	930	903	
PPBS	14.13	14.78	12.19	17.27	17.98	14.47	
PPSC	6.32	6.14	7.01	17.52	18.30	15.47	
PPST	22.50	25.16	7.19	15.86	18.01	4.07	
FLR	61.52	55.39	76.09	46.06	40.82	66.14	
FWPR	29.08	29.69	11.36	35.70	41.83	11.45	
PSFC	23.82	26.85	3.92	57.70	61.04	12.67	
PSFAL	44.49	52.29	12.92	21.74	22.92	10.01	
PSFHIL	2.30	1.56	5.81	2.65	1.98	11.86	
PSFOW	29.45	25.08	77.34	17.89	14.05	65.45	
Observation	52	52	52	66	66	66	
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Table 2: C.V. of the Districts of Rajasthan and Gujarat, 2001-2011.

	Gujarat (C	.V.)		Rajasthan (C.V.)				
Variable	Total	Total	Rural	Urban	Rural	Urban		
AHS	0.08	0.11	0.11	0.11	0.08	0.06		
SR	0.04	0.05	0.05	0.04	0.03	0.04		
PPBS	0.16	0.14	0.14	0.14	0.16	0.10		
PPSC	0.53	0.35	0.38	0.25	0.57	0.38		
PPST	1.33	1.23	1.17	0.94	1.29	1.35		
FLR	0.18	0.19	0.22	0.11	0.19	0.07		
FWPR	0.34	0.19	0.13	0.27	0.32	0.21		
PSFC	0.63	0.29	0.26	0.67	0.60	0.95		
PSFAL	0.28	0.49	0.51	0.62	0.26	0.55		
PSFHIL	0.86	0.36	0.33	0.47	0.57	0.58		
PSFOW	0.51	0.58	0.65	0.19	0.57	0.11		
Observations	52	52	52	66	66	66		

Table 3: Coefficient of	Correlation of the	Districts of Rajas	than and Gujarat	, 2001-2011.

	Gujarat (C	orrelation)		Rajasthan (Correlation)				
Variable	Total	Rural	Urban	Total	Rural	Urban		
AHS	0.30	0.24	-0.32	-0.27	-0.32	-0.55		
SR	0.65	0.69	0.25	0.35	0.27	0.51		
PPBS	0.55	0.45	-0.37	0.15	-0.11	-0.41		
PPSC	-0.57	-0.62	-0.36	-0.36	-0.28	0.02		
PPST	0.76	0.82	0.65	0.51	0.34	0.41		
FLR	-0.61	-0.40	0.39	-0.48	-0.16	0.33		
PSFC	0.39	0.36	-0.04	0.29	0.25	-0.08		
PSFAL	0.27	0.49	0.45	0.03	-0.10	0.46		
PSFHIL	-0.42	-0.50	-0.50	-0.59	-0.46	-0.19		

PSFOW	-0.56	-0.69	-0.16	-0.44	-0.29	-0.09		
5% critical v	value (two-ta	iled) $= 0.2$	27  for  n =	5% critical value (two-tailed) = $0.24$ for n				
52				= 66				

## **Result and discussion**

To investigate the factors determining the FWPR in district level settings we have estimated three separate regression equations for total, rural and urban FWPR. Pooled OLS model estimated for rural FWPR suggests that percent population of Schedule caste has insignificant negative, while percent population of schedule tribe has significant positive impact on total FWPR. The coefficient of female literacy rate (FLR) is significant and negative suggesting an inverse association with total FWPR. Percentage share of female workers in household industry labourer (PSFHL) has statistical significant negative association with both total and rural FWPR in districts of Rajasthan for last two decades. Results for urban FWPR show that percent population of schedule tribe (PPST), female literacy rate (FLR) and percentage share of female workers engaged in agricultural labourer (PSFAL) have significant positive impact on urban female work participation rate in Rajasthan. There is a need to generate education based jobs like household industry and other workers in rural areas. State Government should prepare and implement policies for participation of rural women's in permanent salaried jobs. The revealing Quintile Regression results indicate that the female literacy rate and percentage share of female workers engaged in household industry workers (PSFHL) have significant negative effect at all the quintiles and it is increasingly negative at successively higher quintile, while the percentage shares of schedule tribe and schedule caste population have significant and positive effect at lower quintiles but became negative yet an insignificant on upper quintiles.

## References

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