

Women and work: a regional perspective from Gujarat, India

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Introduction

The concept of work and employment for women, is blurred and complex. The participation of women in the labour market as self-employed or wage worker, as paid worker or unpaid worker, as full time or part-time worker or being deprived to join the labour market are caused by diverse factors, which may be rooted in complex interplay of economic, social, cultural and personal factors.

Various dimensions of the women workforce have been taken into consideration under this study. The focus is particularly on the rural sector and the working age-groups (15-59 years) in Gujarat, even though for some comparisons we use the urban sector as well as the national level results. This study concentrates on the regional patterns and the trends in women's workforce participation by socio-cultural and demographic characteristics, major industrial categories as well as the status of employment in the rural Gujarat. The state is well known for their entrepreneurial and industrial skills. The share of urban population is around 40 percent in the state that can be a positive factor to impact the growth and development in the state.

This study is organised into nine sections. Section one analyses workforce participation rates (age 15-59 years) for the rural women across the NSSO regions in Gujarat. Section two has analysed trends in the WFPRs for the rural women (age 15-59 years) across the NSSO regions of Gujarat. Section three deals with growth rates of women workers. Section four deals with the age-specific workforce participation rates by various aspects of the rural women. Section five deals with the level of educational attainment and women's workforce participation among the rural women. Section six analyses women's workforce participation by socio-cultural characteristics. Section seven deals with the sectoral distribution of women workers by the major industrial categories. Section eight analyses the distribution of women workers by the status of employment. The section nine examines various determinants of women's work force participation by employing the logistic regression model.

Objectives

- > To explore the level and trends in women's workforce participation in the rural Gujarat.
- ➤ To identify possible socio-economic and demographic factors responsible for the observed level of women's workforce participation in the rural Gujarat.

Research questions

- What is the level and trends of female workforce participation in Gujarat?
- ➤ Is the recent decline in women's workforce participation sparsely or strongly caused by education and age structure?
- ➤ What are the socio-economic and demographic factors influencing the women's workforce participation in the rural settings of Gujarat?

Data source

The most comprehensive data on employment in India is collected by the National Sample Survey Organisation (NSSO) through its quinquennial surveys. The present study utilizes the unit level data from 50th, 55th and 68th rounds of the National Sample Survey (NSS). The 50th round of the NSS was conducted during July, 1993 to June, 1994 and the 55th round of the NSS was carried out during the period of July, 1999 to June, 2000. Further, 68th round of NSS data has been utilized for detailed statistical analysis, which was carried out during the period of July 2011- June 2012. Detailed analysis on employment and unemployment as well as labour force participation rate has been calculated at individual level in the state of Gujarat across the region. As a multivariate analysis, binary logistic regression has been employed on the 68th round of NSS data to explore the probability of work participation among women in Gujarat.

Methodology

In this study, the simple quantitative methods of Rate, Ratios and Proportion have been used to see the levels and distribution of women's workforce participation. Further, the Logistic Regression has been used to analyse the determinants of the rural women's participation in work. Since the outcome variable is dichotomous in nature whether women are participating in work or not, the logistic regression model has been employed to see the net effect of each category of an individual independent factor on the dependent variable.

An Overview of Workforce Participation in Gujarat

Most of the societies have higher workforce participation amongst women; however, fewer women participate in the labour market in Gujarat. The average workforce participation of women workers is 34.4 percent quite lower than the male counterpart's 86.6 percent in 2011-12 in Gujarat. Table 1 reveals remarkable variations in the women's workforce participation across the regions in Gujarat.

Table 1: Workforce Participation Rates (age 15-59 years, in UPSS category) across the Regions of Gujarat, 2011-12

Regions of Sujurut, 2011-12								
Reg	Regions		Plains Northern	Plains Southern	Dry Areas	Saurashtra	Gujarat	
	Male	90.3	83	90.4	85.9	89	87.7	
Rural	Female	53.7	18	51.2	54.2	38.9	40.3	
	Person	72.9	52	71.9	71.1	63.4	66.3	
	Male	85.4	83.5	83	90.6	85.5	85.6	
Urban	Female	27.5	16.9	16.8	15.1	19.8	19.2	
	Person	60.9	51.5	55.3	52.9	56.1	55.3	
Total	Male	87.8	83.3	87.5	87.2	87.3	86.6	
	Female	41.7	17.6	39.2	42.4	30.9	34.4	
	Person	67.1	51.8	65.7	65.9	60.1	62.1	

Source: Based on NSS-68th round Unit level data on employment *NSSO regions adjusted

The WFPRs for the women workers varies between the highest (42.4 percent) in Dry Areas and the lowest in Plains Northern (17.6 percent). There is a wide gap of around twenty four percent between the lowest and the highest WFPRs across regions.

The lowest women's WFPR in Plain Northern is even lower than the half of the state's average in the same category. On the other hand, the male workers see marginal variations in the WFPRs across regions in comparison with their counterparts. The average workforce participation rate for the urban women (19.2 percent) is even lower than their rural counterparts (43.2 percent) in 2011-12.

The WFPRs for the rural women reveals remarkable variations across the regions. With the lowest WFPR (18 percent) and the highest (54.2 percent), the Plains Northern and Dry Areas lies on these two extremes respectively.

Trends in Workforce Participation in Gujarat

Three major NSS-Rounds (NSS-50th in 1993-94, NSS-55th in 1999-00 and NSS-68th in 2011-12) on employment have been analysed in this study. The WFPR have seen a marginal rise in 1999-00 from 1993-94 for all workers (age 15-59 years), thereafter it registered a substantial decline of 8.5 percent in 2011-12 from 1999-00 in Gujarat (Table 2). However, it is important to note that the overall workforce participation has recorded a substantial decline of 7.8 percent in 2011-12 from 1993-94 in the state. This may be due to in and out movement of a substantial section of the population; those are most vulnerable in the contemporary labour market (Himanshu, 2011).

Table 2: Trends in Workforce Participation (in UPSS) for all workers (age 15-59 years)

Across NSSO Regions, Gujarat

NSSO Regions	1993-94	1999-00	2011-12
Eastern	77.7	80.5	67.6
Plains Northern	65.5	70.4	51.8
Plains Southern	67.4	63.0	64.6
Dry Areas	69.8	75.1	65.9
Saurashtra	68.7	63.3	60.1
Gujarat	69.8	70.5	62.0

Source: Based on NSSO various rounds data on employment

Note: 1* NSSO Regions are adjusted

However, Rangarajan et.al., (2011), argue that the recent decline in the workforce are strongly motivated by those people who have opted to stay out of labour force for pursuing education and opted to join domestic works instead. The trends at regional level reveals a similar pattern such as one at the state level, except some unexpected fluctuations in Plain Southern region and a consistent decline in the Saurashtra region.

¹* Here, NSSO regions have been reorganised to make all the rounds comparable for the regional level analysis. These regions are based on the similar compositions in 50th and 55th rounds, that's why NSS-68th round has been reorganised according to NSS-50th round's regional compositions. Thus, the five regions which have been reorganised in NSS-68th round are Eastern, Plain Northern, Plain Southern, Dry Areas and Saurashtra. Kachchh has been included in the Dry Areas.

NSSO Regions, Rural Gujarat 90.0 80.0 70.0 60.0 50.0 40.0 30.0 20.0 10.0 0.0 **Eastern Plains Plains** Dry Areas Saurashtra Northern Southern **Gujarat and their Regions ■** 1993-94 **■** 1999-00 **■** 2011-12

Graph 1: Trends in Women's Workforce Participation rates (age 15-59 years) Across the

Source: Based on NSSO various rounds data on employment *Adjusted NSSO Regions

All the regions have recorded a substantial decline in WFPRs in 2011-12 from 1993-94 beyond the regional variations. The regions average WFPRs is 69.8 percent and 70.5 percent in 1993-94 and 1999-00 respectively, which declined to the all time low (62 percent) in 2011-12 (Table 2). The trends in the rural women's WFPR are similar to the trends of all workers at the state level, while the difference lies with the average which is lower for the rural women (Graph 1). Further, it is important to note that the rural women's WFPR has recorded a drastic decline of 18.6 percent in 2011-12 from 1999-00. Which is quite higher than the decline recorded by their rural male counterparts (around 3 percent) in 2011-12. However, the regional level trend in the women's workforce participation reveals a mixed pattern.

The WFPRs have seen a substantial rise in the Eastern, Plain Northern and Dry Areas in 1999-00, and further substantial decline in 2011-12. However, the Plains Northern region has recorded an exceptionally great decline of more than forty percent in 2011-12 from 1999-00 (Graph 3.1). Such a great decline in the rural women's workforce participation in a particular region is a matter of further investigation. Contrary to the general pattern, the Plains Southern has recorded a substantial decline in the WFPRs in 1999-00, further it rise in 2011-12. Saurashtra region has a trend of consistent substantial decline from 1993-94 to 1999-00 and 1999-00 to 2011-12 (Graph 1).

Gujarat 96.0 94.0 92.0 90.0 88.0 86.0 84.0 82.0 80.0 78.0 76.0 Eastern **Plains Plains** Dry Areas Saurashtra Gujarat Northern Southern **Gujarat and their Regions 1993-94 ■** 1999-00 **■** 2011-12

Graph 2: Trends in Male Workforce Participation (age 15-59 years) Across Regions, Rural

Source: Based on NSSO various rounds Unit level data on employment *Adjusted NSSO Regions

On the other hand, the male workforce participation has recorded a marginal rise in 1999-00 from 1993-94 in the rural areas thereafter, around 3 percent decline in 2011-12 from 1999-00 (Graph 2). The overall decline in the male's WFPRs is quite less than their female counterparts in the rural areas in 2011-12 from 1999-00.

Growth Rates in Women's Workforce Participation

Gujarat has performed well enough in the overall economic development since 1993-94 (particularly in the growth of state domestic product always stands above the national average since 1999-00; A study of state budget RBI Dec. 2014). Even though, the state is a poor performer on the other fronts like employment, social welfare, health and education consistently in the last decade (Sood, 2012). Table 3 reveals a miserable picture of the state regarding employment growth alongside a sound economic development regime, greater than the national average between 1993-94 and 2011-12. The overall growth rate for all workers (age 15-59 years) has been recorded even less than one percent in 1999-00 from 1993-94. Thereafter the state has witnessed a negative growth (of -12 percent) in the workforce participation for all workers (age 15-59 years) in 2011-12.

Table 3: Growth Rates for All Workers (age 15-59 years) Across Regions, Gujarat

NSSO Regions	1993-94 to 1999-00	1999-00 to 2011-12	1993-94 to 2011-12
Eastern	3.7	-16.0	-12.9
Plains Northern	7.5	-26.5	-21.0
Plains Southern	-6.6	2.7	-4.1
Dry Areas	7.6	-12.3	-5.6
Saurashtra	-7.9	-5.0	-12.5
Gujarat	0.9	-12.0	-11.2

Source: Based on NSSO various rounds data on employment * NSSO regions are adjusted

The regional trends in the growth rates are varying across regions from 1993-94 to 1999-00 and 1999-00 to 2011-12. The workforce participation in Plain Northern, Dry Areas and Eastern regions have recorded a remarkable growth of more than 3.5 percent in 1999-00 from 1993-94. Wh²ile the Plain Northern and Saurashtra have witnessed a negative growth of more than 6.5 percent for the same period. Further, there have been recorded substantial decline in the growth rates (negative growth rates) across the regions except Plain Southern in 2011-12 from 1999-00. While it is remarkable to note that Plain Northern, Eastern and Dry Areas have seen a drastic decline in the growth rates. Contrary to these, the Plain Southern has recorded well enough 2.7 percent growth for the same period. For the rural women, there has been a remarkable growth of around six percent in the workforce participation in 1999-00 from 1993-94 (Table 4), which is quite higher than their male counterparts around one percent for the same period (Table 5).

Table 4: Growth Rates by Sex (Male and Female, age 15-59 years) Across Regions, Rural Gujarat

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NCCO Decions	1993-94 to 1999-00		1999-00 to 2011-12		1993-94 to 2011-12	
NSSO Regions	Male	Female	Male	Female	Male	Female
Eastern	2.7	6.8	-1.7	-33.4	0.9	-28.9
Plains Northern	0.1	28.9	-7.8	-76.4	-7.7	-69.5
Plains Southern	1.3	-19.4	-0.3	11.6	1.0	-10.1
Dry Areas	1.5	25.8	-4.8	-25.4	-3.4	-6.2
Saurashtra	0.1	-9.8	-4.7	-29.6	-4.6	-36.5
Gujarat	1.1	6.1	-3.8	-34.2	-2.8	-30.2

Source: Based on NSSO various rounds Unit level data on employment

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^{*} NSSO regions are adjusted

² * NSSO regions have been reorganised in accordance with NSS-50th round's regions.

However, the growth rates are negative for all the workers in 2011-12 from 1999-00, what is more striking to note is the differentials between male and female. The overall growth rate for the rural women workers are astonishing (-34.2 percent) in comparison with their male counterparts (-3.8 percent) in 2011-12 from 1999-00 (Himanshu, 2011).

Further, the regional patterns in the growth rates of women workers vary across the regions in Gujarat. Plain Northern and Dry Areas have recorded a remarkable more than twenty five percent growth in the women's workforce participation followed by Eastern regions around six percent in 1999-00 from 1993-94. It has been seen that most of the women joined the workforce during the above period, which used to attend domestic duties only in these regions. However, significant proportion of those women who used to engage in other works along with domestic duties at their home also moved to the labour force in Eastern region and Dry Areas. On the other hand, other regions have recorded negative growth rates contrary to the state's general pattern for the same period. There has been recorded a very high negative growth rates in women workers across the regions (except Plain Southern) in 2011-12 from 1999-00. The Plain Southern region has witnessed exceptionally very low growth (-76.4 percent) which is even lower than the state's average (-34.2 percent) for the rural women. It seems that majority of women workers returned back to home based works due to losing jobs in the formal labour market. Most of the women workers who have left the workforce during 1999-00 to 2011-12, majority of them have joined the other works along with domestic duties. However, most of the women returned to the domestic work during the same period in Plain Northern region. On the other side, the single region (Plain Southern) has witnessed a remarkable growth rate of 11.6 percent for the same period. As most of the women joined workforce, those were engaged in domestic works earlier. However, the women's workforce participation has recorded an overall negative growth across the regions if we consider the time period 1993-94 to 2011-12 in the rural Gujarat.

The age-specific workforce participation follows a general pattern for the rural women at the state level. It is lower for the younger age-groups (age 15-19, 20-29 years) and higher for the age-groups (30-39, 40-49 and 50-59 years), and then it lowers again in the older age-group 60+ in 2011-12 (Table 5). The regional patterns of age-specific workforce participation vary across regions. However, the age-group (30-49 years) has almost high WFPRs (except Plain Northern) and the older age group (age 60+) have overall lower average in the WFPRs (except Eastern region) across the regions in Gujarat.

Age-specific Workforce Participation

Table 5: Age-specific Workforce Participation Rates for Women Workers across Regions Rural Gujarat, 2011-12

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NSSO Dogiona			Age-gr	oups		
NSSO Regions	15-19	20-29	30-39	40-49	50-59	60+
Eastern	45.3	44.5	63.9	51.2	66	52
Plains Northern	17.7	14.8	16.7	23.5	17.6	8.5
Plains Southern	12.9	27.9	70.9	76.8	43.8	31.9
Dry Areas	39.6	64	63.5	49.1	45	26.8
Saurashtra	47.3	34.2	44.9	41.8	27	10.6
Gujarat	31.2	35.4	46.5	47.2	38.3	23.2

Source: Based on NSS-68th round data on employment *exceptionally high and low WFPRs in some age-groups are due to very low sample size at the regional levels

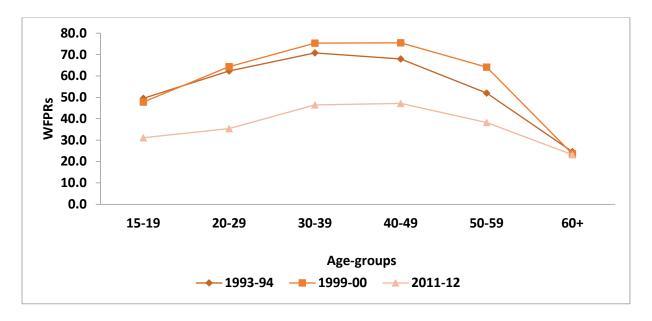
The Eastern and the Plain Northern regions have exceptionally higher and lower level of the WFPRs respectively across the age-groups, because of the small sample size at the regional level. Besides this, some age-groups have unexpected high and low WFPRs in Eastern (20-29, 40-49) and Saurashtra (15-19) regions due to very small sample size in the particular age-groups for the rural women. There is not even a single such fluctuation in age-specific workforce participation if we see the age-specific workforce participation rates for all workers across the regions in 2011-12.

Trends in the Age-specific Workforce Participation

Graph 3, shows trends in the age-specific workforce participation rates, it depicts an obvious inverted U-shaped curve as the younger age-groups (15-19 and 20-29) as well as the older age-group (60+) have lower rates than the rest of the middle age-groups. There have been seen a remarkable rise in the women's workforce participation across the age-groups (except 15-19 and 60+) in 1999-00 from 1993-94.

Thereafter, the age-specific workforce participation rates have witnessed a substantial decline across the age-groups (except 60+) in 2011-12 from 1999-00 for the rural women workers. The decline in the age-specific workforce participation rates is as high as twenty five percent or more for all the age-groups except the age-group 15-19 and 60+.

Graph 3: Trends in the Age-specific Workforce Participation Rates (UPSS) for the Women Workers Rural Gujarat



Source: Based on NSSO's various rounds Unit level data on employment

Most of the declines in women's WFPRs have been caused by those women who opted domestic work and other home-based work in the states. That is contrary to the popular 'withdrawal from the labour market in favour of school' hypothesis as it suggests most of the decline are caused by younger age-groups (Chaddha and Shahu, 2002; Rangarajan et al., 2011).

Educational Attainment and Women's Workforce Participation

Major proportions of the women workers are not literate in the rural Gujarat. The table (Table 6) reveals that more than half of the women workers are not literate. Followed by, the next major group who are literate and educated up to primary level. These two major groups constitute more than eighty percent of the women workers in the rural Gujarat in 2011-12. Followed by the more than thirteen percent of women workers those are educated up to secondary level. The proportion of women workers with education up to higher secondary and graduate & above level are very small around two percent or lower (Table 6).

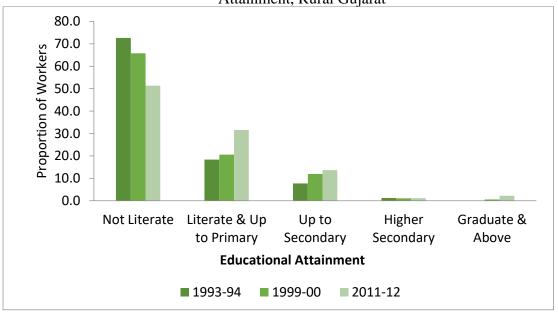
Table 6: Proportion of Women Workers (age 15-59 years) by Level of Educational Attainment across Regions Rural Gujarat, 2011-12

NSSO Regions	Not Literate	Literate & Up to Primary	Up to Secondary	Higher Secondary	Graduate & Above
Eastern	57.5	21.9	20.0	0.6	0.1
Plains Northern	43.7	43.6	11.8	0.3	0.5
Plains Southern	62.1	23.5	11.3	2.2	1.0
Dry Areas	59.0	30.0	8.9	0.3	1.8
Saurashtra	27.4	46.2	16.9	2.0	7.5
Gujarat	51.3	31.6	13.6	1.2	2.2

Source: Based on NSS-68th round Unit level data on employment

The proportion of women workers by level of educational attainment varies across the regions of the rural Gujarat. However, the patterns in proportion of women workers across the educational attainment category follow a similar pattern in all the regions. Contrary to other regions, the Plain Northern and Saurashtra have a major proportion of more than forty three percent women workers with educational attainment as literate or up to Primary level. However, all other regions have majority of women workers in the not literate category (Table 6).

Graph 4: Trends in Proportion of Women Workers (age 15-59 years) by Level of Educational Attainment, Rural Gujarat



Source: Based on NSSO various rounds Unit level data on employment

On the other hand, the proportion of man workers by level of educational attainment show a quite different picture, as the proportion of not literate male workers are as low as around twenty three percent contrary to women worker's more than fifty percent in 2011-12. More than sixty five percent of male workers are literate, educated up to primary and secondary level (Annexure 3.3). While the proportion of male workers with education up to higher secondary and graduation & above level are low around seven percent and four percent respectively.

However, women workers are lagging behind at all the levels in WFPRs by educational attainment when compared with male counterparts. Even though, there are some signs of improvement in the levels of educational attainment for the rural women at the state level (Graph 4). Proportions of women workers are declining consistently in the not literate workers category, whereas there is consistent increase in the literate & up to primary as well as up to secondary level educational categories. The proportion of not literate women workers was overwhelmingly more than seventy percent in 1993-94 which declined to around fifty one percent in 2011-12. Further, the proportion of women workers (those are literate & up to primary and up to secondary level) rise to around forty five percent in 2011-12 from twenty six percent in 1993-94. While this is quite disappointing to note that still two most important educational categories (higher secondary and graduate & above) are sluggish in improvement, which contributes less than four percent together in total women workforce 2011-12 (Graph 4).

Table 7: Women's Workforce Participation Rates (age 15-59 years) by Educational Attainment across Regions Rural Gujarat, 2011-12

	Educational Attainment						
NSSO Regions	Not Literate	Literate & Up to Primary	Up to Secondary	Higher Secondary	Graduate & Above		
Eastern	63.5	38.8	62.2	7.9	16.7		
Plains Northern	22.8	23.6	8.9	1.1	3.6		
Plains Southern	69.0	53.0	25.9	24.9	10.9		
Dry Areas	60.5	57.2	31.5	10.6	58.4		
Saurashtra	32.2	48.5	32.3	21.4	50.1		
Gujarat	49.6	41.5	26.8	12.1	27.9		

Source: Based on NSS-68th round Unit level data on employment

*Adjusted NSSO Regions

The women's workforce participation rates by educational attainment categories are on the line with previous literatures at the state level in 2011-12 (Srivastava and Srivastava, 2009; Raju S., 2010). The table (Table 3.7) reveals that WFPRs for the rural women are higher for the not literate women and declines with the rise in the level of educational attainment, it reveres only for those who have higher educational attainment (graduate & above). However, the regional level analysis does not confirm such pattern (except Dry Areas) of WFPRs and educational attainment.

Women's Workforce Participation by Socio-cultural Characteristics

Social Groups and WFPRs

The women workers belong to the Schedule Tribes category have higher WFPRs than other social groups, followed by the Schedule Castes and the Other Backward class in the rural Gujarat.

Table 8: Women's Workforce Participation Rates (age 15-59 years) by Social Groups across Regions Rural Gujarat, 2011-12

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NSSO Regions		Social Groups					
	STs	SCs	OBCs	Others			
Eastern	57.2	6.1	55.7	35.3			
Plains Northern	10.9	20.4	18.1	19.2			
Plains Southern	57.7	83.7	51.8	25.7			
Dry Areas	71.8	66.5	50.1	49.4			
Saurashtra	N A	63.4	42.3	29.4			
Gujarat	54.1	41.4	37.9	27.4			

Source: Based on NSS-68th round Unit level data on employment

The Other groups have the lowest workforce participation rates among all the social groups (Table 8). Thus, the general pattern of the rural women's WFPRs by social groups at the state level is on the line with earlier literatures (Srivastava and Srivastava, 2009). However, the regional level analysis reveals variations across the regions and some exceptional ups and downs in particular social groups are primarily due to small sample size in that group.

Religious Groups and WFPRs

The women's workforce participation in the rural Gujarat by various religious groups gives a vague picture for other than Hindu. The religious groups have been limited to only three categories due to limitation of inadequate sample size for the rural women. However, the women's workforce participation rates among Hindu are higher (42 percent) than other groups like (16 percent) for Muslim and (more than 5 percent) for others (which includes follower of Christianity, Sikhism, Jainism, Buddhism, Zoroastrianism and others) (Srivastava and Srivastava, 2009). The workforce participation among others group is quite low than the male counterparts (85.4 percent) which may be because of very small sample size in the particular category. However, the WFPRs by religious groups are more than 84 percent for all the three categories among man workers.

Table 9: Women's Workforce Participation (age 15-59 years) by Religious Groups across Regions Rural Guiarat

NSSO Regions	Religious Groups			
Nobo Regions	Hindu	Muslim		
Eastern	55.2	0.0		
Plains Northern	19.5	6.3		
Plains Southern	51.5	47.5		
Dry Areas	57.8	8.8		
Saurashtra	40.9	9.2		
Gujarat	40.9	16.1		

Source: Based on NSS-68th round data on employment

Note: Due to very small sample size other groups are excluded

Further, the regional level analysis show higher workforce participation rates for Hindu women compared with Muslim women across regions, rural Gujarat in 2011-12. The lower WFPRs for Hindu women in Plain Northern and the higher WFPRs for Muslim women in Plain Southern region may be a reflection of small sample size at the regional level.

^{*}Adjusted NSSO Regions

Share of Women Workers by Major Industrial Categories

The workers share in the primary sector are overwhelming in the rural areas as the main avenue of work lies in the agriculture and the allied activities like cultivation, fisheries, wood collections and hunting etc. The rural sector often lacks in the job opportunities beyond agriculture or in the non-agricultural sectors particularly for the women workers. Further, the women workers are unable to access other opportunities in the labour market away from their home due to sole responsibility of domestic chores at home (Srivastava and Srivastava, 2009).

The Table (Table 10) reveals that the share of women workers in primary sector is overwhelmingly high more than eighty five percent across the three major time periods (1993-94, 1999-00 and 2011-12).

Table 10: Sectoral Share of Women Workers (age 15-59 years) by Major Industrial Categories, Rural Gujarat

Major Industrial Categories	1993-94	1999-00	2011-12
Primary Sector	90.5	92.1	85.2
Mining & Quarrying	0.1	0.6	0.9
Manufacturing	4.2	2.0	5.2
Utilities	0.1	0.0	0.0
Construction	1.5	1.9	2.8
Secondary Sector	5.9	4.5	8.8
Trade, Hoteling etc.	1.1	1.4	1.7
Transport & Communication etc.	0.0	0.1	0.1
Financing, Insurance, Real estate & Business Services	0.0	0.0	0.1
Community, Social and Personal Services	2.5	1.9	4.2
Tertiary Sector	3.6	3.4	6.0
All Non-Agricultural	9.5	7.9	14.8
Total	100	100	100

Source: Based on NSSO various round's data on employment

Though, the share of women workers in all non-agricultural sectors (secondary and tertiary sector) stands around eight percent to fifteen percent for the same time periods. However, the trends in the share of women workers show a changing pattern across the industrial categories in the rural Gujarat.

Though the sectoral shift is sluggish from primary sector to secondary and tertiary sectors, there is a marginal rise in the share of women workers in the primary sector in 1999-00 from 1993-94, thereafter the primary sector seen a significant decline in 2011-12 from 1999-00 in

the rural Gujarat. On the other hand, the secondary and the tertiary sector have seen a corresponding decline in the share of the rural women workers in 1999-00 from 1993-94. Thereafter, the secondary and the tertiary sectors have seen a significant rise in the share of women workers in the rural sector in 2011-12 from 1999-00. The majority of the women workers who has left the primary sector shifted to the secondary sector, than the tertiary sector in 2011-12. Within secondary sector the manufacturing and the construction sectors are the main avenue which accommodated the rural women workers. While in the tertiary sector the 'trade, hoteling' and 'the community, social and personal services' are major avenues of jobs for the new entrench women workers. The construction and trade, hoteling have recorded a significant consistent rise in the share of women workers from 1993-94 to 2011-12, respectively in the secondary and the tertiary sectors (Table 10).

The women workers have registered a marginal growth in the primary sector in the rural Gujarat in 1999-00 from 1993-94.

Table 11: Growth in Women Workers (age 15-59 years) by Major Sectors of Industries,

Major Sectors of Industries	1993-94 to 1999-00	1999-00 to 2011-12	1993-94 to 2011-12
Primary Sector	1.8	-7.5	-5.9
Secondary Sector	-24.6	96.6	48.2
Tertiary Sector	-3.9	76.6	69.7

Source: Based on NSSO various round's data on employment

Table 11A: GSDP Sectoral Contribution by Major Industrial Sectors, Gujarat

Industries	At current Price			At 2004-05 Price		
	2004-05	2008-09	2009-10	2008-09	2009-10	
Primary Sector	19.5	18.2	18.2	15.6	14.2	
Secondary Sector	36.5	37.7	36.9	37.5	38.6	
Tertiary Sector	44.0	44.1	44.9	46.9	47.2	

Source: Directorate of Economics and Statistics Government of Gujarat

Further, the primary sector has seen a significant negative growth in the share of the rural women workers in 2011-12 (Table 11). However, the primary sector has seen overall negative growth (-5.9 percent) in the share of women workers from 1993-94 to 2011-12. The share of the women workers have recorded negative growth in the secondary and the tertiary sectors from 1993-94 to 1999-00, though the negative growth rate was seven times higher for the secondary sector than the tertiary sectors (Table 11).

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Table 12: Sectoral Share of Women Workers (age 15-59 years) Across Regions in the Rural Gujarat, 2011-12

Major Industrial Categories	Eastern	Plains Northern	Plains Southern	Dry Areas	Saurashtra
Primary Sector	90.5	82.6	85.7	83.6	82.5
Mining & Quarrying	1.8	0.0	0.2	0.0	2.3
Manufacturing	3.3	10.8	2.5	5.8	6.5
Utilities	0.0	0.0	0.0	0.0	0.0
Construction	2.0	0.9	5.5	2.3	1.8
Secondary Sector	7.0	11.7	8.1	8.0	10.5
Trade, Hoteling etc.	1.2	1.5	1.8	3.4	0.1
Transport & Communication etc.	0.0	0.0	0.4	0.0	0.0
Financing, Insurance, Real estate & Business Services	0.0	0.0	0.2	0.0	0.0
Community, Social and Personal Services	1.2	4.2	3.8	5.1	6.9
Tertiary Sector	2.4	5.7	6.1	8.4	7.0
All Non-Agricultural	9.5	17.4	14.2	16.4	17.5
Total	100	100	100	100	100

Source: Based on NSS-68th round Unit level data on employment

The decline in the share of workers in the primary sector and rise in the other sectors may be good for the workers as the secondary and the tertiary sectors provide better earnings and other benefits than primary sector. However, the better prospects usually lies with the nature of jobs

(like formal or informal and contract basis labour works or permanent jobs) even in the secondary as well as in the tertiary sectors. Further, there are great contrasts between the share of output of the major sectors in the Gross State Domestic Product (GSDP) and the share of these sectors in employment in Gujarat. Table 11A, depicts that the share of the tertiary sector is the highest (around 47 percent at the constant price) to the GSDP, followed by the secondary sector (around 37 percent) then at the last the primary sector (in 2004-05, 2008-09,2009-10 at current price and in 2008-09, 2009-10 at constant price). Whereas, the share of these three major sectors are just opposite with regards to the share of employment. The primary sector holds majority of the total workers, particularly women workers in the rural sector. So, it shows that majority of the women workers are marginalised (as engaged mostly in the primary sector which have low output) and yields low earnings particularly in the rural areas. What is more, the sectoral shift is sluggish as well as mysterious in employment particularly for the rural women workers, in contrast with the excellent growth that have been witnessed in the secondary and the tertiary sectors in the state over the decade.

Table 13: Trends in Sectoral Share of Women Workers (age 15-59 years) by Major Industrial Categories across Regions, Rural Gujarat

		NSSO Regions				
Major Industrial Sectors		Eastern	Plains Northern	Plains Southern	Dry Areas	Saurashtra
	1993-94	92.2	89.4	93.4	82.6	93.0
	1999-00	89.9	95.5	90.0	93.3	89.3
Primary Sector	2011-12	90.5	82.6	85.7	83.6	82.5
	1993-94	5.7	5.3	2.5	13.5	4.7
	1999-00	7.1	1.6	3.5	4.2	7.6
Secondary Sector	2011-12	7.1	11.7	8.1	8.0	10.5
	1993-94	2.1	5.3	4.2	3.9	2.3
	1999-00	3.1	3.0	6.5	2.6	3.1
Tertiary Sector	2011-12	2.4	5.7	6.2	8.4	7.1

Source: Based on NSSO various rounds Unit level data on employment *Adjusted NSSO Regions

The regional level analysis reveals variation across regions in the share of women workers by various industrial categories in the rural Gujarat (Table 12). The proportion of women workers is overwhelming in the primary sector across regions in 2011-12. It varies between the lowest (82.5 percent) in Saurastra and the highest (90.5 percent) in Eastern. Hence, the corresponding

figures in the all non-agricultural sectors stand between lowest (9.5 percent) in Eastern to the highest (17.5 percent) in Saurashtra. The manufacturing and construction are the main avenues of jobs for the rural women workers within secondary sector. Further, within tertiary sector 'trade, hoteling' and 'community, social and personal services' are important sub-sectors for the women workers in the rural areas.

The table (Table 13) reveals that the trends in the sectoral share of the women workers vary across regions of the rural Gujarat in 1993-94, 1999-00 and 2011-12. Saurashtra and Plains Southern have recorded consistent decline in the share of the women workers in the primary sector and a corresponding rise of women workers in the secondary as well as in the tertiary sectors. However, other regions have witnessed a fluctuation in the trends of sectoral share of the women workers in 1999-00 from 1993-94. However, it is important to note that all the regions have witnessed some sort of sectoral shift in 2011-12 from 1993-94. Though, the Saurashtra, Plain Northern and Dry Areas have shown a good move from the primary sector to the other non-agricultural sectors (Table 13).

Share of Women Workers by Status of Employment

The share of women workers are overwhelming in the self-employed category more than fifty five percent in all the three time periods that have been taken into consideration (Table 14). Further, the self-employed category is followed by the casual workers which have around 36 percent to 43 percent share of the total women workers.

Table 14: Distribution of (UPSS) Women Workers (age 15-59 years) by Status of Employment, Rural Guiarat

Employment Status	1993-94	1999-00	2011-12
Self-employed	55.4	58.9	58.6
Wage Workers	1.6	1.6	5.5
Casual Workers	43.0	39.5	35.9

Source: Based on NSSO various round's data on employment

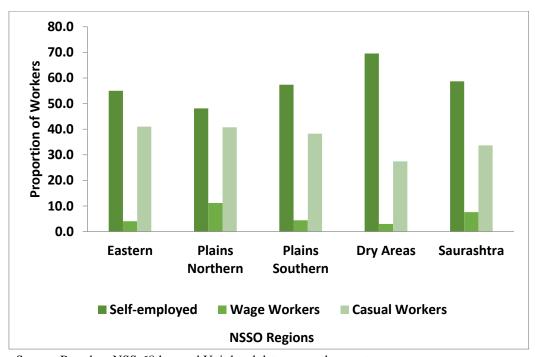
The proportion of the wage workers are quite low (1.5 percent to 5.5 percent) in all the three time periods that have been taken into consideration. Table 14, reveals a significant rise in the self-employed women workers in 1999-00 from 1993-94, thereafter a negligible decline in the next time period in 2011-12. The rise in the self-employed women workers is a matter of worries as it includes a large number of tiny farms as well as women workers engaged in the

Table 15: Growth Rates of Women Workers (age 15-59 years) by Status of Employment for the Rural Gujarat

Employment Status	1993-94 to 1999- 00	1999-00 to 2011-12	1993-94 to 2011-12
Self-employed	6.3	-0.4	5.8
Wage Workers	0.0	241.6	241.6
Casual Workers	-8.1	-9.2	-16.6

Source: Based on NSSO's various round's data on employment

Graph 5: Distribution of (UPSS) Women Workers (age 15-59 years) by Status of Employment across Regions of Rural Gujarat, 2011-12



Source: Based on NSS-68th round Unit level data on employment

own small farm & enterprises which yields extremely low income (as low as below poverty line). The share of casual workers has seen a consistent decline, whereas the share of wage workers has witnessed a remarkable rise in 2011-12. It is a good sign of improvement for the women workers as they are moving into wage work from the casual workers category which is supposed to better in terms of average earning and other benefits. However, earlier studies found increase in casual employment in the Indian labour market (Unni, 2001; Pais, 2002). The women workers in the self-employed category have recorded a significant growth in 1999-00 from 1993-94, while the casual workers have witnessed a considerable decline in the total share

^{*}Adjusted NSSO Regions

of the rural women workers (Table 15). On the other hand, the share of wage workers remain unchanged (with '0' growth in 1999-00) in the total women workers for the same period.

Further, the wage workers have recorded a magnificent growth of more than two hundred forty percent in 2011-12 in the rural Gujarat. Such a remarkable growth in the share of the wage workers (among rural women workers) may be a result of the corresponding growth in the secondary and the tertiary sectors (around 96 percent and around 76 percent respectively) during the same time period (Table 11). Whereas, the share of women workers have recorded a negative growth in the self-employed category as well as in the casual workers category in 2011-12 from 1999-00. However, the declines in the share of the self-employed women workers are marginal contrary to the casual worker's significant decline in the same period.

Graph 5, show that the rural women workers are in overwhelming majority in the self-employed category across the regions followed by the casual workers and at last by the wage workers in 2011-12. However, the share of women workers varies across regions within each category. The share of women workers in the self-employed category varies between the lowest (around 48 percent) in Plain Northern to the highest (around 69 percent) in Dry Areas in 2011-12.

Table 16: Trends in the Share of Women Workers (age 15-59 years) by Status of Employment across Regions, Rural Gujarat

				NSSO Region	ıs	
			Plains	Plains	Dry	
Employmer	nt Status	Eastern	Northern	Southern	Areas	Saurashtra
	1993-94	43.8	66.2	31.0	65.0	65.7
	1999-00	51.1	61.4	54.2	71.1	57.1
Self- employed	2011-12	55.0	48.1	57.4	69.6	58.7
	1993-94	2.3	0.7	2.4	1.8	1.4
	1999-00	1.8	1.2	2.8	1.2	1.7
Wage Workers	2011-12	4.0	11.2	4.4	3.0	7.6
	1993-94	53.9	33.1	66.6	33.2	33.0
	1999-00	47.1	37.5	43.1	27.6	41.2
Casual Workers	2011-12	41.0	40.8	38.2	27.4	33.7

Source: Based on NSSO various round's data on employment

In the casual workers category the share of women workers varies between the lowest (around 27 percent) in Dry Areas to the highest (around 41 percent) in Eastern region. Further, the share of wage workers category stands the smallest (3 percent to around 11 percent) across the region which is supposed to the most important category of employment in terms of earnings and other security benefits. The smaller share of the wage workers may be due to lack of opportunities in the non-agricultural sectors across the regions of the rural Gujarat instead of an impressive economic development over the last two decades.

The Dry Areas have the lowest share (3 percent) of the wage workers among total women workers, whereas Saurashtra and Plains Northern have a better condition with a respectful share (around 7 percent and 11 percent respectively) than other regions (Graph 5).

The trend in the distribution of women workers by status of employment varies across regions significantly. There has been a consistent rise in the share of the self-employed women workers in Eastern and Plain Southern regions accompanied by a subsequent decline in the casual workers from 1993-94 to 1999-00 and 1999-00 to 2011-12 (Table 16).

However, these regions also witnessed a significant rise in the share of wage workers. Eastern region has seen a decline in 1999-00 thereafter a rise in 2011-12, whereas Plain Southern has witnessed a consistent rise (Table 16). The most fascinating trend has been hold by Plains Northern. The share of women workers has been recorded a consistent and significant decline in the self-employed category, accompanied by a consistent and remarkable rise in the share of wage workers particularly in 2011-12 from 1999-00 in Plains Northern. However, the region has also seen a consistent rise in the share of casual workers for the same periods. Further, Dry Areas has seen an overall rise and in the self-employed women workers, which see a marginal decline in 2011-12 from 1999-00. The region sees a consistent sluggish decline in the casual workers and a marginal rise in the wage workers in 1999-00 then in 2011-12.

Saurashtra has witnessed an overall decline in the share of the self-employed women workers with a marginal rise in 2011-12. However, the region has witnessed a consistent rise in the share of the wage workers, which is much higher in 2011-12. The share of casual workers has seen a rise in 1999-00 from 1993-94, thereafter a subsequent decline in 2011-12.

Determinants of women's workforce participation

Women's decisions for participating in workforce are determine by several factors such as economic, demographic and socio-cultural etc. Earlier studies suggest that these factors have

strong bearings on the women's workforce participation. The analysis of these factors, which determine the women's participation in the labour market become more complex as these factors interact to each other and make their independent effect tricky. That's why various models have been employed in regression estimates in order to explore the influencing factors for women's participation in work.

Table 17: Results (Odds Ratios) of Logistic Regression Models for the Rural Women Workers (age 15-59 years), 2011-12

	Model I	Model II
Covariates	N = 2,652	N = 86,445
Age Group (15-19®)	·	
20-29	1.293	2.589***
30-39	1.877**	3.957***
40-49	1.618	3.722***
50-59	0.809	2.518***
Marital Status (Never-Married®)		
Currently Married	1.14	1.113***
Widow	2.620***	2.607***
Divorce/Separated	3.291	3.452***
Education Level (Illiterate®)		
Literate & up to Primary	0.632***	0.754***
Up to Secondary	0.469***	0.536***
Higher Secondary	0.390***	0.399***
Graduate and Above	0.395**	0.574***
Social Group (ST®)		
SCs	0.530***	0.666***
OBC	0.631***	0.626***
Others	0.483***	0.557***
Religion (Hindu®)		
Muslim	0.418***	0.546***
Others	0.411	1.202***
MPCE Quartiles (Lowest®)		
Low	1.402	1.138***
Medium	1.036	1.160***
High	0.919	1.089***
land Possessed (Marginal®)		
Small	1.375	1.307***
Semi-Medium	1.652**	1.153***
Medium	1.596	1.190***
Large	2.858***	1.229**
Household Size (Small®)		
Medium	0.834	0.836***
Big	1.137	0.744***
Log likelihood	-1523.59	-49683.36
Pseudo R2	0.0807	0.0867

Notes: Model I = Madhya Pradesh, Model II = Gujarat, Model III = India.

Binary Variable: 0=Not in the workforce, 1=Worker.

Source: Based on NSS-68th round, India.

^{**}P<0.05, ***P<0.001, *=Reference Category.

The Logistic Regression has been used to analyse the determinants of the rural women's participation in work (in the labour market). Since the outcome variable is dichotomous in nature whether women are participating in work or not, the logistic regression model has been employed to see the net effect of each category of an individual independent factor on the dependent variable. This analysis attempts to explain the association with the outcome variable (whether women are participating in work or not) with various independent variables like age, marital status, educational attainment, social groups, religion groups, land possessed, household size and MPCE quartiles. Here, two separate logistic regression's models have been employed, first one model (Model I) for Gujarat and second one (Model II) for India as a whole.

Model II shows (Table 17) that age, marital status, MPCE quartiles and land possessed have significant positive association with the women's participation in work, while education level, social-groups and household size have significant negative association at the national level. Among the individual characteristics, it is found that compared to women in the youngest age-group (15-19 years), older age-groups are more likely to participate in work after controlling for other variables and women in the age-groups 30-39 have the highest odds ratio (3.9) at the national level (Srivastava and Srivastava, 2009). In comparison to never married women, married, widow and divorced/separated women are more likely to participate in work, and divorced/separated women have the highest odds ratio (3.4). This result is consistence with Srivastava and Srivastava, (2009).

In comparison to illiterate women, women with higher level of educational attainment are less likely to participate in work, after controlling for other variables. There are decline in the odds ratios with rise in the education level, which rise again for graduate & above educated women against reference category (illiterate women). Thus, this finding is similar to earlier studies (Srivastava and Srivastava, 2009; Raju, 2010). In comparison to STs women, other women (SCs, OBCs and Others) are less likely to participate in work (Srivastava and Srivastava, 2009). Women belonging to others category have the lowest odds ratio (0.55). Compared to Hindu women, Muslim women are less likely to participate in work (odds ratio, 0.54) than the reference category (Srivastava and Srivastava, 2009). Women from big and medium households are less likely to participate in work than women belonging to small households. MPCE and land possessed are other factors which have significant association with the rural women's participation in work at the national level.

The educated women are less likely to participate in work than the illiterate women and there are decline in the odds ratios with rise in level of education like the pattern at the national level. Though, higher level of education has strong effect at the national level, but in Madhya Pradesh it is not significant. In comparison to STs Women, others social groups are significantly less likely to participate in work except SCs.

Model I shows, that level of education, social groups, land possessed, religion, age-group and marital status are significant factors which effects women's participation in work in the rural Gujarat. In comparison to illiterate women, educated women are less likely to participate in work, after controlling for other factors and odds ratios decline with rise in educational attainment. Contrary to India and Madhya Pradesh, Gujarat has not seen any significant rise in the odds ratio for the higher level of education (graduate & above) against the reference category. Compared to STs women, other women are significantly less likely to participate in work. In comparison to Hindu women, Muslim women are very less likely to participate in work. Compared to never married women, widow women are significantly more likely to participate in work. Surprisingly, age-group and marital status are not significant factors to determine women's workforce participation in Gujarat. Compared to women belonging to marginal land holding families, women belong to the large land holding families are more likely to participate in work and have odds ratio (2.8).

Summary and conclusion

The women's workforce participation is higher in the rural areas though it does not mean their better position or earning in the rural labour markets. There have been seen an overall decline in the workforce participation rates for the all workers (age 15-59 years) from 1993-94 to 2011-12 across regions in Gujarat. Further, the decline in the WFPRs is even greater for the women workers across regions in the rural areas (Mehrotra et al., 2014). The regional level analysis is not very clear due to some fluctuations. Even though, all the regions have witnessed an overall decline during 1993-94 to 2011-12 (Himanshu, 2011; Mehrotra et al., 2014). Though, some of the regions (like Eastern, Plain Northern and Dry Areas) have recorded significant rise in between 1993-94 to 1999-00, thereafter a substantial decline in 2011-12. Further, the trends in the age-specific workforce participation have seen a substantial decline for the rural women across the age-groups at the state level. Though, the regional level trends are not so much clear due to very small sample size in some age-groups and regions.

The proportion of the women workers are overwhelming in the not literate category followed by the literate & up to primary in the rural Gujarat. This constitutes the majority of women workers (Srivastava and Srivastava, 2009; Raju, 2010). The majority of the women workers are illiterate or having very low level of education (up to primary) and unskilled end up with very low earnings. So the higher workforce participation among the rural women workers does not necessarily mean the wellbeing of these marginalised sections. However, the women workers with literate & up to primary, up to secondary and graduate & above level education have seen significant growths in their proportion. It is a progressive sign for the women workers to access the better prospects in the labour markets, though the lack of skills and sole responsibility of domestic work deprive them from most of the benefits particularly in the rural sphere.

The workforce participation is higher for the women belongs to STs and SCs categories in comparison with the OBCs and Others categories (Srivastava and Srivastava, 2009). Among major religious groups, the Hindu women have higher workforce participation than the Muslim women (Srivastava and Srivastava, 2009).

The economic development is accompanied by the sectoral shift of the workers from the agricultural activities dominated Primary sector to (the non-agricultural activities dominated) the secondary and the tertiary sectors.

The trends in the sectoral share of the women workers show a significant decline in the primary sector and a corresponding rise in the secondary and the tertiary sectors in 2011-12 from 1999-00. Though, there has been a fluctuation in 1999-00 from 1993-94 as the primary sector has recorded a marginal rise and corresponding decline in the non-agricultural sectors. Earlier finding shows decline in the manufacturing employment (Mehrotra et al., 2014). However, most of the women workers get engaged into manufacturing sector in the rural Gujarat in 2011-12, followed by 'community, social and personal services' (in the service sector) those have been moved from the primary sector. Next important sectors, where the sectoral shifts occur are construction and 'mining & quarrying' in the secondary sector; 'trade, hoteling etc.' in the tertiary sector. The manufacturing, construction and 'community, social and personal service' have seen significant rise in the women workers, even though it is not easy to say that it will improve wellbeing of these workers. As most of the women workers are lacking higher education as well as modern skills which assure better jobs and other benefits.

Further, the regional level analysis shows variations in the changing pattern of the sectoral share. These changes are quite sluggish in Eastern and Dry Areas. Contrary to others, the Dry Areas has seen an overall marginal rise in the share of the primary sector for women workers from 1993-94 to 2011-12. However, in the light of the excellent share of the tertiary and the secondary sectors in the GSDP (Gross State Domestic Product) leads to doubt against the lower share of these sectors in employment, particularly for the rural women from 2004-05 to 2009-10. Thus, the sectoral shift of women workers seems sluggish as well as mysterious in the rural Gujarat.

Even though, the remarkable growth in the wage workers in 2011-12 and consistent decline in the casual workers may be a good sign of improvement in employment situation for the rural women, though it is quite possible the majority of jobs belongs to low yielding unskilled labour. However, the share of the women workers is still overwhelming in the self-employed category in all the three time periods that have been taken into consideration. Such a high proportion of self-employed kill good hope as the majority of these workers may be most vulnerable in the low yielding small enterprises, unpaid labourer at their own tiny farms without any security and other benefits.

All most all the socio-economic and demographic (independent) variables that have been taken in to consideration have been found in association (positive or negative) with the women's workforce participation, particularly at the national level in 2011-12. However, there are some significant factors like age-group, marital status, level of educational attainment, social groups, land possessed and religion which have strong bearing on the rural women's WFPR at the national level as well as in Gujarat at the state level. Though, economic variables like MPCE and Household Size are not significant factors at the state level.

Educational attainment is among the most significant factor to effect women's participation in work in the rural areas of Gujarat. Earlier literatures have also found that compared to illiterate women, educated women are less likely to participate in work (Srivastava and Srivastava, 2009; Raju, 2010). Further, the women's workforce participation tends to decline with rise in the level of educational attainment 'up to higher secondary' level education then it reverses for the higher educated women. Thus, women's WFPRs have a U-shaped relationship in Gujarat like earlier findings (Goldin, 1994; Tansel, 1998; Mazumdar and Guruswamy, 2006; Fatima and Sultana, 2009; Raju, 2010, Srivastav and Srivastav, 2010). Social groups are also one of the most significant factors to determine women's participation in work in Gujarat. In comparison with

STs women, other (SCs, OBCs and Others) women are less likely to participate in work and the 'Others' group (which includes mostly the upper castes) has the lowest workforce participation. In comparison to Hindu women, Muslim women are very less likely to participate in work (Srivastava and Srivastava, 2009). Muslim religious group is a highly significant factor among religious factors in Gujarat and at the national level. Size of landholdings is a significant factor in the rural Gujarat. Increase in the size of land possessed increases the possibility of women to participate in work. Women from large landholding families are more likely to participate in work than marginal landholding families and large land possessed have the highest odds ratio (2.85). Surprisingly age-groups are not much significant factors in Gujarat contrary to national level findings.

It has been found that socio-economic and demographic factors have significant effect on women's workforce participation in the rural settings of India as well as at the state level in Gujarat. Though, among all the factors level of educational attainment, social groups, land possessed, age-group, marital status, and religion have stronger effect on women's participation in work in the rural Gujarat.

Limitation of the study

The study is based on the secondary data source (NSSO's various rounds data) which has own limitations of capturing the employment data particularly for women. There is a problem with appropriate sample size at the NSSO region level (particularly with the sub-groups of age, social group and religion etc. for the rural women) which influences the results in some way or other. This study primarily uses the Usual Status (Usual principal + Usual subsidiary status) approach to calculate the workforce participations, which hides many aspects of current employment status of a person in comparison with CWS (Current Weekly Status) and CDS (Current Daily Status) approaches.

Note: This work is part of my M.Phil. dissertation work submitted at the CSRD, SSS, JNU, New Delhi.