

Extended Abstract

“Changing Work patterns of Rural Indian Women in the Context of Mahatma Gandhi National Rural Employment Guarantee Act”

~ Nancy Sebastian

1. Theoretical Focus

Several studies on women’s labor force participation stress the need for policy interventions that would create more job opportunities for women and reduce labor market discrimination in wages. Examination of changes in women’s labor market behavior over a seven year period within which one of world’s largest employment programs, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was implemented, provides a unique opportunity to examine what happens when such policies are actually put in place. MGNREGA, enacted under a legislative act, is expected to provide 100 days of work per year per household on demand. Further, the Act places no restriction on how each household’s quota of 100 days is shared within the household, wage earned is equal for both men and women (Khera and Nayak, 2009). Several aspects of work provided under MGNREGA program are particularly gender friendly. Work under MGNREGA is expected to:

1. Be available within 5km radius of home
2. One-third of the work is to be reserved for women, although
3. Basic worksite facilities are to be made available including childcare facilities when more than 5 children under 6 years of age are present at the worksite
4. Equal wages are to be offered to men and women

Apart from the fact that MGNREGA work is provided in the village itself, the fact that women work in groups and that work is provided by the government helps to make MGNREGA work "socially acceptable" and thereby reducing discrimination against women working outside the realm of household.

Many studies like Pellissery & Jalan (2011), Khera and Nayak (2009), Sudershan (2009) , Grown (2006) & Chari (2006) claim that MGNREGA work provides additional income opportunity for poor households in the context of limited opportunities for paid agricultural and non-agricultural work available for women. Multiple jobs are undertaken along with MGNREGA work to supplement the seasonal nature of work, especially for women who are employed in low skilled and low-paid jobs which are casual and temporary in nature. Also, MGNREGA is an important work opportunity for rural women who would have otherwise remained underemployed or unemployed particularly visible among the Southern states (MGNREGA Sameeksha, 2012).

Studies have also found that there has been an upward movement of unskilled wages for women post-MGNREGA and has improved the reservation wages for women. MGNREGA wages imply a substantial jump in the earning potential for women. Particularly, MGNREGS has broken the long stagnation in real wage rates in rural India and is contributing towards the goal of inclusive growth. The expansion of MGNREGS is bound to cause a reduction in the availability of rural labour for other activities.

This program is significant in the context of decline female labor force participation in India, observed over the past decade (Desai, 2013). Chand & Srivastava (2014) argue that the decline in WPR (Work Participation Rate) of rural women is largely explained by the withdrawal of women's labour from agriculture, due to an improvement in economic conditions of farm families, rising education pursuits by rural women and low preference for farm work. Employment opportunities are needed on a large scale in rural non-farm sectors to attract women to the workforce. The diversification of the rural labour market is influenced by a set of complex factors such as the pattern of economic growth, inter-sectoral wage rate and worker productivity differentials, education and socio-cultural factors. Since 2006 when the phased implementation of MGNREGA began, rural wages have risen sharply and have led to increasing non-farm work opportunities (Dutta et al. 2014). How women's labor force behaviors respond to these changes forms the central focus of this paper.

2. Research Questions

In this paper we explore the following questions:

1. Where has the growth in MGNREGA come from? Is it drawing in women who were out of the labor force or is it attracting women who were employed in poorly remunerated sectors such as farm work?
2. Is MGNREGA the primary source of employment for women working in MGNREGA or is it one of the options for women who participate in multiple jobs and combine work in farm and non farm sectors?

3. Data and Methodology

IHDS panel data set (at individual level) with sample of 50427 rural women workers has been utilized. Explanatory variables: caste/religion, income quintile, age, age-squared, education level, marital status, unearned income (total family income-own income of women), number of children below 5 years of age in the household. Two methods have been applied. Firstly, a multinomial regression on IHDS-2012 data to see the likelihood of rural women participating in MGNREGA as compared to other forms of work. Secondly, Fixed effect/ Random effect models to analyse the factors affecting the shift towards MGNREGA during 2005 to 2012 in the panel data set.

Further, the data support for the study comes from the nationally representative multi-topic India Human Development Survey (IHDS). The survey had mainly two waves, IHDS-I (2004-05) and IHDS-II (2011-12), Indian Human Development Survey which is a collaborative research program between the National Council of Applied Economic Research and the University of Maryland.

4. Preliminary findings

Using the panel data set, we observe the following:

Table 1 shows the transition of work among rural women workers using the broad categories of No-work, farm, non-farm and combination of farm and nonfarm work in 2005 to farm, non-farm, MGNREGA, no-work, non-farm & farm work and MGNREGA alongside farm work in 2012. Majority of people who had no work in 2005 continued to have no work with few (22%) moving into farm work. Those who were farm workers in 2005, majority of them remained as farm workers in 2012 also but around 25% shifted out from farm work to no-work and around 12% into MGNREGA and farm combination of work. Among the non-agricultural workers of 2005, 33% remained as non-agricultural workers and 31% opted out of non-farm to no-work in 2012. And those who were engaged in both farm and non-farm activities in 2005, around 37% chose exclusive farm work and around 24% workers chose to work in MGNREGA as well as farm activities in 2012.

Table 2 highlights the socio-economic characteristics of rural women worker opting to participate in MGNREGA in 2012. The women workers currently engaged in MGNREGA are mainly in the age group 40-60 years, mostly illiterate. OBC, Dalit and Adivasi women were mainly found as MGNREGA workers. However, the income quintile classification showed that all workers from any work categories in 2005 and currently working in MGNREGA all were found to be in poorest quintile in 2012 except those shifting in from No work categories or those who were exclusive farm or nonfarm in 2005 but are now combining MGNREGA with farm activities were found to be in second or middle quintile income categories in 2012 which implies that NREGA apart from targeting the economically and socially backward classes also serves as a job option for women rather than being out of work.

Lastly, a multinomial logit regression (shown in Table 3) on different types of work depicts the marginal effects with respect to no work status as base category. Except for farm based work, marital status had a negative impact on respective work participation. Unearned income (total family income-own wage of women) is also likely to have a negative impact for participation for all types of work but the marginal effect is minute for each activity but significant. Dalit have a higher probability to participate in any work. OBC are less likely to participate in non-

agricultural work as compared to no-work. Illiterates have higher probability of working in any work except non-farm work and more likely to take up MGNREGA and alongside farm activities. Thus MGNREGA unlike other forms of Non-farm work is promoting participation across various socio-economic groups.

Tables

Table 1: Transition of work during the two waves of IHDS-2005 & IHDS-2012 according to broad categories of work (Row percentages sum upto 100)

<i>Categories of work</i>	2012					
	<i>No Work*</i>	<i>Farm Work*</i>	<i>Non-Farm Work*</i>	<i>Farm & Non-Farm Work</i>	<i>MGNREGA</i>	<i>MGNREGA & Farm</i>
2005						
<i>No work*</i>	68.93	21.29	4.57	1.55	1.45	2.21
<i>Farm Work*</i>	25.4	52.72	3.12	3.99	2.45	12.31
<i>Non- Farm Work*</i>	31.79	14.74	33.58	5.69	5.66	8.55
<i>Farm & Non-Farm Work</i>	15.31	37.09	6.32	12.97	3.73	24.58

Source: Author`s own calculations from IHDS-I and IHDS-II.

*No work: Not working at all.

*Non-farm work includes non-agricultural labor, salary, business in 2005 and includes non-agricultural labor, business, salary, non-MGNREGA work in 2012.

*Farm work includes own farm work and agricultural work (excluding animal care)

Table 2: Socio-economic characteristics of rural women workers who participated MGNREGA in panel dataset (Row percentages sum upto 100)

<i>categories</i>	<i>farm to NREGA</i>	<i>farm to farm & NREGA</i>	<i>nonfarm to NREGA</i>	<i>nonfarm to NREGA & farm</i>	<i>no work to NREGA</i>	<i>No work to NREGA & farm</i>	<i>farm & nonfarm to NREGA</i>	<i>farm & nonfarm to NREGA & farm</i>
Educational attainment								
<i>illiterate</i>	72.63	76.57	54.01	74.94	54.24	63.52	84.82	79.85
<i>primary</i>	7.98	7.51	18	6.38	7.33	7.34	3.67	6.18
<i>middle</i>	16.47	13.56	25	16.94	30.85	23.97	7.65	13.28
<i>secondary</i>	1.49	2.01	2	1.75	4	4.3	2.14	0.13
<i>higher secondary</i>	1.31	0.29	0	0	3.51	0.77	1.72	0.56
<i>Graduation and above</i>	0.13	0.06	0	0	0.08	0.1		
caste								
<i>Forward caste</i>	13.34	8.23	5	2.41	7.05	7.75	5.51	4.36
<i>OBC</i>	26.92	41.51	42	46.09	32.98	33.45	51.22	35.63
<i>Dalit</i>	44.86	36.57	36	33.44	35.36	43.47	28.46	22.72
<i>Adivasi</i>	7.34	11.09	9	13.05	9.54	9.29	9.29	36.64
<i>Muslim</i>	4.67	2.1	7	3.72	10.05	5.8	5.53	0.64
<i>Christian, Sikh, Jain</i>	2.87	0.5	3	1.29	5.03	0.24		
Income quintiles								
<i>poorest</i>	23.82	22	27.71	18.04	20.24	24.84	44.07	37.79
<i>2nd</i>	22.67	23	25.01	36.41	19.65	27.85	13.75	30.48
<i>middle</i>	21.06	25	17.73	29.27	24.02	23.93	21.35	17.5
<i>3rd</i>	18.42	18	15.54	10.91	21.9	16.53	16.82	10.84
<i>richest</i>	12.93	9	14	2.66	13.3	6.78	4.02	3.39
age categories								
<i>10 to 14</i>	-	0	-	-	1	1.29	-	-
<i>15-19</i>	-	0	-	1.69	4.77	9.25	-	0.15
<i>20-29</i>	7.55	9	9.72	15.92	13.32	15.43	10.77	10.84
<i>30-39</i>	20.84	31	22.15	33.69	26.79	29.84	22.38	32.46
<i>40-59</i>	58.92	52	62.77	39.43	36.17	34.91	64.24	51.53
<i>60 & above</i>	12.7	8	5.36	9.26	18.33	9.28	3	5.01

Table 3: Average marginal effects of multinomial logit regression (Number of obs = 155591042, Model VC : OIM, base outcome: No Work)

<i>Variables</i>	Farm work only		non-farm work only		Nonfarm & farm work		MGNREGA only		MGNREGA & farm	
	dy/dx	p-value	dy/dx	p-value	dy/dx	p-value	dy/dx	p-value	dy/dx	p-value
Married	0.08	0.00	-0.07	0.00	-0.01	0.00	-0.01	0.00	-0.01	0.00
Illiterate	0.10	0.00	-0.04	0.00	0.00	0.00	0.00	0.00	0.06	0.00
Unearned Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OBC	0.06	0.00	-0.02	0.00	0.02	0.00	0.00	0.00	0.08	0.00
Dalit/Adivasi	0.01	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.11	0.00
Age	0.02	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.00
Age squared	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Author`s own calculations from IHDS-I and IHDS-II.

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