Journal of Rural Development, Vol. 34 No. (4) pp. 457 - 473 NIRD&PR, Hyderabad.

RURAL LABOUR MARKET IN THE CONTEXT OF MGNREGA

C.S. Murty*

ABSTRACT

The article brings together secondary data pertaining to the rural labour market and argues that it is inappropriate to judge the impact of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) based on the trends in employment/Labour Force Participation Rate (LFPR) because the Act can both prop up and dampen them while enhancing welfare. Instead, it is noted that the impact of the Act can best be ascertained by analysing the trends in unemployment and real wage rates. After a close look at these trends, it is concluded that the MGNREGA served rural India adequately enough to accomplish its objective of improving the living conditions of the poor by containing unemployment, by effecting an increase in real wage rates and by reducing gender gap in wage rates.

Introduction

The article employs secondary data on employment, unemployment and wages in rural India pertaining to the period immediately before and after the enforcement of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in February 2006 to examine the impact of the Act on the rural labour market.

The employment and unemployment data used in the paper are sourced mainly from the reports of large-scale Employment and

Unemployment Surveys (EUS) of National Sample Survey Office (NSSO). The reports of the Rounds 50 (1993-94), 55 (1999-2000), and 61 (2004-05) pertaining to the pre-MGNREGA period, and of the Rounds 64 (2007-08), 66 (2009-10) and 68 (2011-12) corresponding to the post-MGNREGA period figure in the analysis of the article. The data on wages are accessed from two sources; namely, the aforementioned NSS reports and the article by Usami (2012), wherein the data published by the Labour Bureau in Wage Rates in Rural India (1998-99 / 2010-11), are used.

ICSSR Senior Fellow, (Affiliation: Centre for Economic and Social Studies, Hyderabad). House No. 1-56-22/1, First Floor, Plot No. 218, Sector 2, MVP Colony, Visakhapatnam – 530 017. E-mail Id: csmurty52@gmail.com

Trends in Rural Employment and Unemployment

(a) Labour Force: Here we look at the Labour Force Participation Rates (LFPRs) in rural India, separately for males, and females, between 1993-94 and 2004-05 (pre-MGNREGA period) and between 2004-05 and 2011-12 (post-MGNREGA period). As the year 2004-05 was a drought year, it is not ideally suited to be used as the cut-off year between the two periods (Himanshu, 2011). Yet, we use it because the next year for which NSS data are available is 2007-08, which is sometime after the initiation of MGNREGA. However, to get a proper perspective, we also present the data of 2007-08 for reference. The LFPRs are available for four different activity statuses, viz., usual principal status (US (PS)), usual status (principal status + subsidiary status) (US (PS+SS)), current weekly status (CWS) and current daily status (CDS). Particular attention is paid to the data on CWS and CDS for the impact of the MGNREGA is reflected most in these two sets of data. The LFPR as defined here is the number of persons/persondays in the labour force per 100 persons/persondays. Those seeking work/available for work get figured here. It is generally postulated

that with development, the LFPR first declines and then increases following a U-shaped pattern. It first declines because, with an increase in the level of living, people at subsistence try to avoid the double burden of paid and unpaid labour. However, as development proceeds, it becomes rewarding to join the paid labour force. The opportunity cost of unpaid labour increases with development and people join the labour force in increasing numbers (Abraham, 2013, 100).

The MGNREGA, ever since it was pushed through, generated employment by the millions, for males and females almost in equal measure. This is the reason why one expects the LFPRs to differ between the pre- and post-MGNREGA periods. As per the MGNREGA website of the Ministry of Rural Development (MoRD), a total of 9050.54 lakh persondays of employment was generated in the year 2006-07. Women figured prominently among the MGNREGA workers, accounting for 3637.02 lakh persondays in the year (with 40.19 per cent of the total days). Total employment generated reached its peak in the year 2009-10 with 28359.57 lakh persondays and thereafter there was a slide. Women employment too reached the zenith in 2009-10 with 13640.51 lakh persondays. However, women's share in total

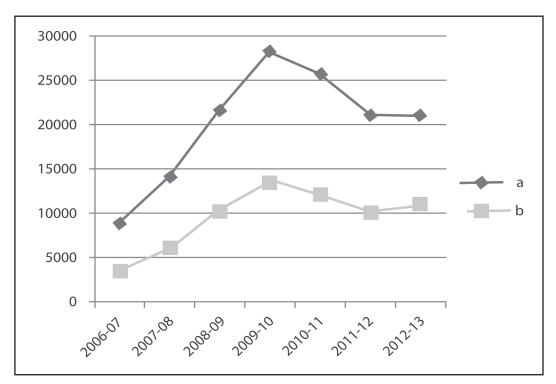


Chart 1 : Employment Generated Under MGNREGA

a: Total persondays of employment (lakhs).

b: Of which women days (lakhs).

employment was the highest thus for in 2012-13 (with 52.08 per cent) (Chart 1).

There are studies which doubt, with reason, the figures put out by the MoRD. Comparing the data of the NSSO (household level data of the 66th Round) and of the MoRD, it is noted that the former's estimate of the number of days of employment generated under the MGNREGA was about 22 per cent lower than the figure put out by the latter in the year 2009-10 (Usami and Rawal, 2012, 87). Even after allowing for over-reporting by the MoRD, the poor secured employment in a large measure because of the MGNREGA. The question now is whether the MGNREGA hiked the LFPRs of the rural population.

It is plausible that the employment generated under the MGNREGA impacts on the LFPR in two opposite ways. On the positive side, the increased employment and attractive wage opportunities following the MGNREGA can motivate those not seeking work (or the unemployed) to join the labour force. This tendency should contribute to an increase in the LFPR and therefore, in the welfare of the households. On the negative side, employment under the MGNREGA, with its wage enhancing influence, can make labour households

withdraw some of their children and adolescents from the labour force to give them the benefit of education. Some of the labourers may also withdraw from the labour force because of 'discouraged worker' effect, that is, because the financial security that they now enjoy makes them prefer leisure to work (at least up to the time the wage rate turns further more attractive to again take to work sacrificing leisure) and participate less actively in the labour market (Chandrasekhar and Jayati Ghosh, 2013, Abraham, 2013). Note that this too has the welfare enhancing influence. The net impact of these opposing forces is what would be evident in the data on employment/ LFPR. Whatever be the net effect of the opposing forces on LFPR, there should be an increase in the welfare following MGNREGA.

Considering males, we find that the LFPR hardly changed between the pre- and post-MGNREGA periods. This is true of all the activity statuses. It is particularly worth noting that the CWS and CDS measures also do not show any sign of increase even though the public works carried out under the MGNREGA get reflected here. In the year 2004-05, a year before the enactment of the MGNREGA, the LFPRs of males were 54.6, 55.5, 54.5, and 53.1 per cent for US (PS), US (PS+SS), CWS, and CDS, respectively. In the year 2011-12, the corresponding LFPRs were 54.7, 55.3, 54.5 and 53.4 per cent. The conclusion that the LFPR of males changed little holds even if we compare with the years 2007-08 and 2011-12 (Table 1).

Gender/	NSS Round and Year (July - June)					
Activity status	Round 50	Round 55	Round 61	Round 64	Round 66	Round 68
	1993-94	1999-00	2004-05	2007-08	2009-10	2011-12
MALES						
PS	54.9	53.3	54.6	55.1	54.8	54.7
PS+SS	56.1	54.0	55.5	55.9	55.6	55.3
CWS	54.7	53.1	54.5	54.7	54.8	54.5
CDS	53.4	51.5	53.1	53.6	53.6	53.4
FEMALES						
PS	23.7	23.5	24.9	22.0	20.8	18.1
PS+SS	33.0	30.2	33.3	29.2	26.5	25.3
CWS	27.6	26.3	28.7	24.5	23.1	21.5
CDS	23.2	22.0	23.7	20.4	19.7	18.0

Table 1 : Labour Force Participation Rates in Different Activity Statuses: All India – Rural Areas : For All Ages (Per Cent)

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As for females, if we ignore the drought year 2004-05, there is a systematic secular decline in LFPR irrespective of the activity status considered. Also, the LFPR of females is substantially lower in the post-MGNREGA period compared to the pre-MGNREGA period. This comes as a great surprise, since women participate in the MGNREGA work in large numbers. The observed decline is termed as "de-feminisation" of the labour force (Abraham, 2013). Thus, the LFPR declines at a time when the GDP growth rate was of a very high order. In fact, this happened when GDP growth rate between 2004 and 2009 was of the order of 8.4 per cent. On the eve of the enactment of the MGNREGA in 2004-05, the LFPRs of females were 24.9, 33.3, 28.7, and 23.7 per cent for US (PS), US (PS+SS), CWS, and CDS, respectively. In the year 2011-12, the corresponding LFPRs were 18.1, 25.3, 21.5 and 18.0 per cent (Table 1). The extremely low LFPR is an indication, in one sense, of the wastage of human capital. But, in so far as it is because of education and patriarchy (Abraham, 2013; Chowdhury, 2011) it is a sign of enhanced societal welfare.

We estimated the size of the labour force for rural areas taking the LFPRs and the rural population. Our estimates show that the increase in the number of labourers between the pre- and post-MGNREGA periods is but marginal for males. In the year 2004-05, the labour force was 2176.53, 2212.40, 2172.54 and 2116.73 lakhs as per the US (PS), US (PS+SS), CWS, and CDS, respectively. By the year 2011-12, the labour force increased to 2361.52, 2387.42, 2352.88 and 2305.40 lakhs for the four activity statuses. The increase is, on any account, very small. What is more surprising is that the number of female labourers actually recorded an absolute decline between the two years being considered. The female labour force was 939.96, 1257.06, 1083.41 and 894.66 lakhs for the four activity statuses in the pre-MGNREGA year 2004-05. This recorded a steep decline by the year 2011-12, the post-MGNREGA year, to 741.80, 1036.88, 881.14 and 727.70 lakhs in respect of the four activity statuses.

We arrived at Compound Annual Growth Rates (CAGRs) to better showcase the changes in the level of labour force (Table 2). The rates for the period between 1999-00 and 2004-05, the pre-MGNREGA period, for males were respectively 1.77, 1.84, 1.81 and 1.90 per cent for US (PS), US (PS+SS), CWS, and CDS. For females the rates were higher than for males at 2.51, 3.33, 3.11, and 2.85 per cent, respectively for the four activity statuses. These high rates were for sometime received with jubilation, for they suggest increasing employment opportunities in the country. But before long there arose a widespread belief that the high rates were because of the distress in the countryside. It is noted that the year 2004-05 was a bad agricultural year and therefore, increasing number of persons (from among children, women, the old and the disabled) participated in the labour force to make ends meet (Himanshu, 2011; Abraham, 2009, 2013).

Gender/Activity status	1999-00/	2004-05/	
	2004-05	2011-12	
MALES			
PS	1.77	1.17	
PS+SS	1.84	1.09	
CWS	1.81	1.15	
CDS	1.90	1.23	
FEMALES			
PS	2.51	-3.33	
PS+SS	3.33	-2.71	
CWS	3.11	-2.91	
CDS	2.85	-2.72	

Table 2 : Compound Annual Growth Rates (CAGRs) of Labour Force for Different Activity Statuses: All-India – Rural: For All Ages

The growth rates of the labour force for the post-MGNREGA period between 2004-05 and 2011-12 were lower than in the pre-MGNREGA period, and in fact, they turned negative for females (Table 2). The CAGRs for the post-MGNREGA period were 1.17, 1.09, 1.15, and 1.23 per cent for males during the period for the activity statuses US (PS), US (PS+SS), CWS, and CDS, respectively. The corresponding rates for females were -3.33, -2.71, -2.91, and -2.72 per cent.

The reasons advanced for the decline in the growth rates in the post-MGNREGA period are many. Important among them include education. With schemes like Sarva Shiksha Abhiyan (the 'education for all movement' of the government) working well and with agriculture turning resilient and with real wages rates increasing, thanks to MGNREGA, many people are turning to education. And this has contained the growth rate of the labour force (Chandrasekhar and Jayati Ghosh, 2011, 2013; Rangarajan et. al., 2011; Abraham, 2013). However, education alone does not fully explain the fall in the growth rates of the labour force in the post-MGNREGA period. It is said that, because of higher incomes, more and more rural people, especially women, are opting out of the labour force because of 'discouraged worker' effect. It is claimed that women are withdrawing from the labour force and are confining themselves to only domestic work and are avoiding the double burden of domestic and farm work (Abraham, 2013). Greater financial security also seems to make them a privileged lot and the patriarchal norms of behaviour that restrain women to work outside of home has induced them to withdraw from the labour force (Kannan and Raveendran, 2012; Chandrasekhar and Jayati Ghosh, 2013; Abraham, 2013).

Rural Labour Market in the Context of MGNREGA

(b) Unemployment: The unemployment rates – defined as the number of persons/persondays unemployed per 100 persons/persondays in the labour force – as per the four activity statuses and for the six NSS rounds being considered are presented in Table 3. One does not find a definite trend in the rates. However, if we compare the year 2004-05 (pre-MGNREGA) and the year 2011-12 (post-MGNREGA), we find that the CWS and CDS rates in the latter year were distinctly lower than in the former year. Thus, in case of males, the two unemployment rates were 3.8, and 8.0 per cent, respectively in 2004-05. The two rates for the year 2011-12 were 3.3 and 5.5 per cent. In respect of females, the CWS and the CDS rates were, respectively 4.2, and 8.7 per cent in 2004-05 and 3.5, and 6.2 per cent in 2011-12. It is prudent to attribute at least part of the decline in both the male and female rates to the MGNREGA.

		Aleas. I OI A	in Ages (i ei	cent,		
Gender/	NSS Round and Year (July - June)					
Activity status	Round 50	Round 55	nd 55 Round 61	Round 64	Round 66	Round 68
	1993-94	1999-00	2004-05	2007-08	2009-10	2011-12
MALES						
PS	2.0	2.1	2.1	2.3	1.9	2.1
PS (ADJD)	1.4	1.7	1.6	1.9	1.6	1.7
CWS	3.1	3.9	3.8	4.1	3.2	3.3
CDS	5.6	7.2	8.0	8.5	6.4	5.5
FEMALES						
PS	1.3	1.5	3.1	1.9	2.4	2.9
PS+SS	0.9	1.0	1.8	1.1	1.6	1.7
CWS	2.9	3.7	4.2	3.5	3.7	3.5
CDS	5.6	7.0	8.7	8.1	8.0	6.2

Table 3 : Unemployment Rates in Different Activity Statuses: All-India – RuralAreas: For All Ages (Per Cent)

The positive impact of the MGNREGA comes out prominently if we consider the number of unemployed under CWS and CDS categories between the pre- and post-MGNREGA periods. The number of unemployed witnessed an absolute decline in the post-MGNREGA period. Thus, in case of males, the unemployed in the year 2004-05 under CWS and CDS were 82.56 and 169.34 lakhs, respectively. For the year 2011-12, the corresponding numbers of the unemployed were 77.65 and 126.80 lakhs. When we

consider the female unemployment the decline is much more stark between the two years. In the year 2004-05, the unemployed females numbered 45.50 and 77.84 lakhs as per CWS and CDS. The corresponding numbers for the year 2011-12 were 30.84 and 45.74 lakhs.

The CAGRs of the unemployed in case of CWS and CDS are revealing (Table 4). They were respectively 1.28 and 4.07 per cent for males and 5.76 and 7.42 for females in the pre-MGNREGA period 1999-00 / 2004-05. In the post-MGNREGA period 2004-05 / 2011-12, they were all negative. The CWS and CDS rates were respectively -0.87 and -4.05 per cent for males and -5.41 and -7.31 per cent for females during the period. But for the MGNREGA, the noted negative growth rates in unemployment would not have been possible.

•		5	
Gender/Activity status	1999-00/	2004-05/	
	2004-05	2011-12	
MALES			
PS	1.77	1.17	
PS (ADJD)	0.61	1.97	
CWS	1.28	-0.87	
CDS	4.07	-4.05	
FEMALES			
PS	18.52	-4.24	
PS (ADJD)	16.22	-3.50	
CWS	5.76	-5.41	
CDS	7.42	-7.31	

 Table 4: Compound Annual Growth Rates (CAGRs) of Unemployed in Different

 Activity Statuses: All-India – Rural Areas: All Ages

Trends in Real Wages in Rural India as Seen From NSS Data

than MGNREG public works, and (c) casual labour in MGNREG public works.

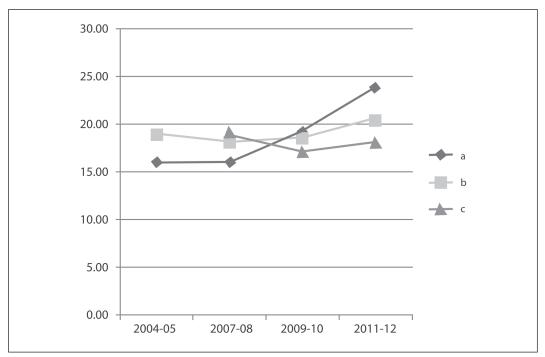
Employing the NSS data of rural India, we examine here (1) the trends in real wages separately for males and females, and (2) the trends in the ratio of female wages to male wages. Both the trends are assessed in respect of (a) casual labour in works other than public works, (b) casual labour in public works other It is hypothesised that the additional employment opportunities generated under the MGNREGA have made the rural labour market competitive and, as a result, the real wage rates of all hues, especially of the casual labour, increased in the post-MGNREGA period over the pre-MGNREGA period. It is further

hypothesised that with females receiving wages on par with males under the MGNREGA, the bargaining power of the female labour has increased and, as a result, the generally wide female-male gap in wage rates in the rural labour market has got narrowed down over time.

As one would expect, the nominal wages of casual labour (of age 15-59 years) of

the casual labour categories (a), and (b) (noted above) reported by the NSSO, both in respect of males and females, increased appreciably over time at the all-India level, starting 2004-05. But what matters are the real wages. These have been arrived at by deflating the nominal wages of the labour with the Consumer Price Index of Rural Labour (CPIRL) (Charts 2A and 2B).

Chart 2A : Real Average Wage (₹) Received by Casual Labour (15-59 yrs.) (Males): All India (Rural)



- a: In works other than public works (Code 51).
- b: In public works other than MGNREG public works (Code 41).
- c: In MGNREG public works (Code 42).

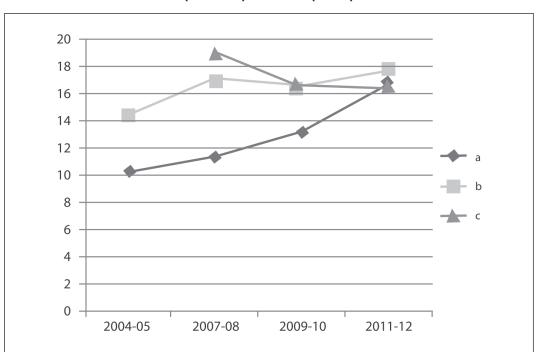


Chart 2B: Real Average Wage (₹) Received by Casual Labour (15-59 yrs.) (Females): All India (Rural)

- a: In works other than public works (Code 51).
- b: In public works other than MGNREG public works (Code 41).
- c: In MGNREG public works (Code 42).

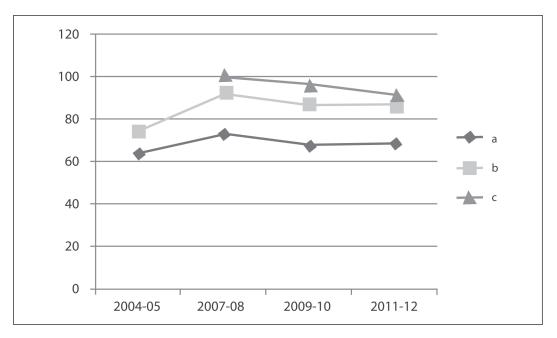
Between 2004-05 and 2011-12, the real wages of (a) casual labour in works other than public works and (b) casual labour in public works other than MGNREG public works increased substantially, in case of both males and females. Thus, for males, the real wages in case of (a) and (b) above were \gtrless 16.00, and \gtrless 18.99 in 2004-05 in the year 2004-05 and they rose to \gtrless 23.97 and \gtrless 20.45, respectively by 2011-12. For females, the real wages, which were \gtrless 10.16 and \gtrless 14.30, respectively for

categories (a) and (b) in the year 2004-05, increased to ₹ 16.58 and ₹ 17.76 by the year 2011-12. The observed phenomenon is in line with what is hypothesised. Note, however, that the real wages of labourers of category (c), that is, casual labour in MGNREG public works, did not record any increase over time, if any, they were marked by a decline. Between the years 2007-08 and 2011-12, the real wages of casual labour in MGNREG public works fell for both males and females. Thus, the real wages show

positive trend for casual labour of categories (a) and (b) and negative trend for the category (c) (Charts 2A ant 2B).

One observation about the real wages is in order. The wages of casual labour of categories (a) and (b) rose markedly in the period between 2009-10 and 2011-12. It is useful to recall that this period saw marked deceleration in the MGNREGA works, with the employment generated under the Scheme coming down. Because of this fatigue in the Scheme, the increase in real wages would not have brought about a significant increase in total rural income. It is noted that the female wage as a percentage of male wage was much higher in the post-MGNREGA period over the pre-MGNREGA period, again in accordance with the formulated hypothesis. In case of casual labour of categories (a) and (b), the female-male wage ratios were 63.49 and 75.29 per cent, respectively in 2004-05. By 2011-12, the ratios increased to 69.17 and 86.84 per cent, respectively. These ratios were still quite distant from 100 per cent. Nevertheless, the data signify that the wage gap has been on the decline and the condition of female labour force is improving in the era of the MGNREGA.

Chart 3: Female Wage as Per Cent of Male Wage (for Workers 15-59 yrs.) All India (Rural) (NSS)



a: In works other than public works (Code 51).

- b: In public works other than MGNREG public works (Code 41).
- c: In MGNREG public works (Code 42).

It may be noted that the female-male wage ratio of labourers of category (c) did not increase over time, but the ratio remained close to 100 per cent, suggesting that the female wages were almost on par with the male wages (Chart 3).

Trends in Real Wages in Rural India as Seen From Labour Bureau Data

The Labour Bureau (GoI) makes available data on nominal wage rates for farm and non-farm labour in its publication Wage Rates in Rural India (WRRI). These data are compiled and real wage rates calculated by Usami (2012) for a long period ending 2010-11. While arriving at the real wages, he employs the Consumer Price Index for Agricultural Labourers (CPIAL) (1986-87 = 100) to deflate the wages of farm labour and the Consumer Price Index for Rural Labourers (CPIRL) (1986-87 = 100) to deflate the wages of non-farm labour. From Usami's article, we can discern trends in real wages for seven categories in the farm sector – ploughing (male), sowing (male), weeding (female), transplanting (male), transplanting (female); and five categories in the non-farm sector – carpenter (male), blacksmith

Oc	cupation	Trend growth rate (%)		
		1999-00/ 2004-05	2005-06/ 2010-11	
Far	m occupations:			
1.	Ploughing (Male)	-0.63	3.12	
2.	Sowing (Male)	-0.42	2.24	
3.	Weeding (Female)	-1.61	3.66	
4.	Transplanting (Male)	0.61	2.13	
5.	Transplanting (Female)	-0.64	3.78	
6.	Harvesting (Male)	-0.57	3.14	
7.	Harvesting (Female)	-0.81	3.57	
No	n-farm occupations:			
1.	Carpenter (Male)	0.02	0.71	
2.	Blacksmith (Male)	-0.90	0.11	
3.	Mason (Male)	0.43	0.94	
4.	Unskilled (Male)	-0.36	3.98	
5.	Unskilled (Female)	-1.23	4.34	

Table 5 : Trend Growth Rates of Real Wages of Farm and Non-Farm Labour:All-India – Rural Areas

(male), mason (male), unskilled labour (male) and unskilled labour (female). What we have done here in this Section is to arrive at the trend growth rates of real wages of farm and nonfarm labour of all types for two periods, one, the pre-MGNREGA period (1999-00/2004-05) and, two, the post-MGNREGA period (2005-06/ 2010-11) (Table 5).

The trend growth rates of real wages bring out the positive impact of the MGNREGA clearly. Thus, the growth rates of real wages of farm and non-farm occupations, which were either negative or very low in the pre-MGNREGA period, generally assumed large values in the post-MGNREGA period. Particularly striking is the increase witnessed in the growth rates of real wages in occupations where females feature. The growth rate of real wages of females for weeding was -1.61 per cent in the pre-MGNREGA period. This shot up to 3.66 per cent in the post-MGNREGA period. Similarly, in case of real wage of females for transplanting the growth rate increased from -0.64 to 3.78 per cent between the two periods. In respect of harvesting, the growth rate of female wage shot up from -0.81 to 3.57 per cent. Also, the

growth rate of female wage for unskilled labour increased from -1.23 to 4.34 per cent between the pre- and post-MGNREGA periods (Table 5). The sharp increase in the growth rates of real wages of female labour is to be expected. The reservation wage of females increased significantly in the recent past in the rural labour market because they are now paid wages on par with males under the MGNREGA. This must have aided, in no small measure, the observed sharp increase in their real wages.

We examined if there is any trend in the female wage rate as a percentage of male wage rate in the pre- and post-MGNREGA periods. It is plausible that the percentage increased between the two periods because of MGNREGA. Here, we could consider only three occupation categories because only in these categories both males and females participated, viz., transplanting (male and female) harvesting (male and female) and unskilled labour (male and female). It is noticed that at the all-India level, the female-male wage ratio decreased in the pre-MGNREGA period but increased, though marginally, in the post-MGNREGA period in case of all the three occupations (Chart 4).

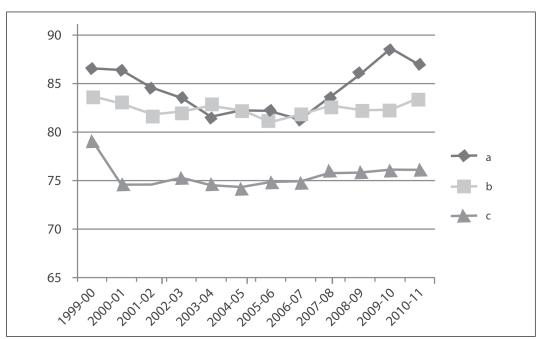


Chart 4 : Female Wage as Per Cent of Male Wage: All India (Rural) (Labour Bureau)

- a: For labour in transplanting.
- b: For labour in harvesting.
- c: For unskilled labour.

The Summing Up

Here in this article we garnered the secondary data to study the impact of MGNREGA on labour force, unemployment, real wages and female-male wage ratio in rural India. We sought to study this impact by comparing the all-India data on the conditions obtaining in the rural labour market before the MGNREGA with those prevailing after it. Other things like the performance of the agricultural sector remaining the same, the MGNREGA can prop up labour force in the countryside for it offers employment opportunities at attractive wages. Also, ceteris paribus, this very reason of attractive employment avenues under the MGNREGA can make people withdraw from the labour force, however. There is ample evidence that higher and more assured incomes can cause increasing number of people, especially the adolescents and females, to go to schools and colleges, to avoid the double burden of domestic and farm work, and to submit to patriarchal norms of behaviour, quitting the labour force. These changes impact negatively on the labour force growth but are desirable in so far as they enhance societal welfare. Therefore, it is not appropriate to discern the effect of the MGNREGA on

employment from a study of trends in labour force. The net effect of the opposite forces might be such as to prompt one to conclude wrongly that the MGNREGA had no effect on rural labour market in rural areas. Ideally, one should look at the unemployment situation and real wages in rural areas (and not at the LFPRs) to pass any judgement on the impact of the MGNREGA on the rural labour market. Apart from factors such as agricultural development, the MGNREGA can lessen unemployment. Also, when people withdraw from the labour force to turn to education, to reduce double burden of work, and to uphold patriarchy, unemployment will be moderated.

Our analyses of the LFPRs showed that they increased little as between the pre- and post-MGNREGA periods in respect of males. And more surprisingly, the rates for females recorded a decline in the latter period. As to the CAGRs of the labour force, they were lower but positive for males, and lower and negative for females in the post-MGNREGA period as compared to the pre-MGNREGA period. As argued above, one should refrain from drawing firm conclusions as to the employment effect of the MGNREGA from the observed trends.

Important, however, are the CWS and CDS unemployment rates. They were lower in the post-MGNREGA year 2011-12 than in the pre-MGNREGA year of 2004-05, for both males and females. Again for both males and females, the CAGRs of the unemployed, which were positive in the pre-MGNREGA period, were negative in the post-MGNREGA period. The negative growth rates in the number of unemployed must have been caused, at least in part, by the MGNREGA.

On wage rates, we had access to two sources of data - the NSS and the Labour Bureau - to study whether they were influenced by the MGNREGA. The NSS data showed that between 2004-05 and 2011-12, the real wages of casual labour in the non-MGNREGA works increased substantially, in case of both males and females. The trend growth rates of the wages were also positive. Attractive wages under the MGNREGA must have had a cascading effect on rural wages in general. It is also seen that with females receiving wages on par with males under the MGNREGA, the bargaining power of the female labour force in the rural labour market increased and, consequently, the generally wide female-male wage gap in the non-MGNREGA works got narrowed down over time. Note, however, that the female-male wage ratio in the non-MGNREGA works is still quite distant from 100 per cent. The data on wage rates from the Labour Bureau add credence to the NSS data and show that the growth rates of real wages of farm and nonfarm occupations, which were negative or very low in the pre-MGNREGA period, generally assumed large positive values in the post-MGNREGA period. Particularly striking is the increase in the growth rates of real wages of females. The MGNREGA must have aided the observed sharp increase in their real wages. The female-male wage ratio (in comparable occupations) also showed improvement in the post-MGNREGA period.

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