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## Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Labour Markets

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# Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Labour Markets

D Narasimha Reddy, A Amarender Reddy, N Nagaraj  
and Cynthia Bantilan

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## **Abstract**

This study has evaluated the differentiating impact of MGNREGA on the extent of fulfilment of the basic entitlements such as days of employment, wages and earnings and the extent of coverage of social groups like dalits, adivasis and women and poverty alleviation. This study has disaggregated state level data to discern the factors that make a difference to the performance. Also some micro level scenarios are presented based on the reports of focus group discussions (FGDs) in the villages of Andhra Pradesh. There is growing evidence of an increase in agricultural wages across the country over the period between 2006-07 and 2011-12, in which the impact of MGNREGA is considerable. This review has also revealed a steep increase in female agriculture wage and a substantive decline in the male-female wage gap. The search for information on the impact of MGNREGA on agricultural labor markets leads to some evidence on labor shortage, changes in wages, mechanization, peak season adjustment of work or adoption of MGNREGA calendar and migration. The absolute decline in labor force has tightened the rural labor market leading to shortage of labor for farm operations. Thus labor scarcity has emerged as one of the major constraints to increase agricultural production in India. Furthermore, the tightened labor market has offered, better bargaining power to agricultural laborers, better treatment at the place of work, ability to negotiate the duration of the working day and has initiated a growing shift towards piece rate or contract work on agriculture facilitating change in the number of working days. Based on macro level results and micro level evidence some policy interventions are suggested - such as development of labor saving technologies and machines to mitigate labor scarcity, an inclusive farm mechanization program especially for women and youth, strengthening rural-urban connectivity, social protection for migrant labor and Capacity building programs for skill augmentation. Further, a revision of the time frame of MGNREGA work to create more employment in the lean season has been recommended.

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**D Narasimha Reddy, A Amarender Reddy, N Nagaraj  
and Cynthia Bantilan**



**International Crops Research Institute  
for the Semi-Arid Tropics**

2014

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## Summary

With the objective of producing a well designed wage employment program to address poverty more effectively, the Government of India formulated the National Rural Employment Guarantee Act (MGNREGA) in 2005, aimed at enhancing the livelihood security of the poor by providing at least 100 days of guaranteed employment in a financial year to every household whose adult members are willing to do unskilled manual work.

The MGNREGA has evoked wide interest because of the magnitude of rural poverty which it is expected to reduce by providing an exit pathway. According to the latest statistics, India was home to 355 million people living in poverty out of which 278 million or 78% were in rural areas. The argument for developing and implementing strategies to reduce poverty by increasing productive employment opportunities in rural areas is compelling and has shown results. Agricultural wages have increased across the country, and the impact of MGNREGA has been considerable in this regard. This review paper is largely based on the official sources of data ([www.nrega.nic.in/](http://www.nrega.nic.in/)) and other studies made on different aspects of the scheme.

An attempt has been made here to assess wage rates across the states over the years. MGNREGA national average money wage rates per person-day have been showing a rising trend over the years, but the real wage rates have been virtually stagnant between 2006-07 and 2011-12. Agricultural wages have also increased across the country over the same period. MGNREGA has been an important driving force behind this rising wage rate. The rate of increase in the agricultural wage for females has been much higher than that for males, and the historically high male-female differentials in agricultural wages have declined substantially.

But the overall performance of the scheme as a measure of social protection depends not only on providing better wages but also on achieving the objective of bringing more households under the fold of hundred days of employment. The review shows that there is no state which could provide 100 days of employment even to 50% of the participating households in 2011-12. Therefore employment provided under the scheme has been showing a tendency towards deceleration in recent years.

The search for information on the impact of MGNREGA on agricultural labor markets leads to some evidence on labor shortage, changes in wages, mechanization, peak season adjustment of work or adoption of the MGNREGA calendar and migration. Beginning with the 1980s there has been a continuous decline in the rate of growth of overall employment in the Indian economy. Between 1993-94 and 2011-12 the share of agriculture in rural employment declined from 78% to 64% and the pace of decline in the last quinquennium was much faster. The absolute decline in labor force has tightened the rural labor market leading to a shortage of labor for farm operations.

The peak period labor shortages in agriculture that have also been observed in several regions are due to tightening of the labor market. A clear response to peak season agriculture labor shortage is the negotiated MGNREGA calendar that avoids implementing works during the agricultural peak season and provides developmental works during the lean season. Although this kind of a time schedule is not universal it is welcomed by farmers as well as workers wherever it is adopted.



This tightening of labor markets in the other-way has offered better bargaining power to agricultural laborers, better treatment at the place of work, and ability to negotiate the duration of agricultural working days. It has also caused a growing shift towards piece rate or contract work in agriculture, facilitating a change in the number of working days.

There is no evidence of any marked decline in the area cultivated either due to a rise in agricultural wages or due to a shortage of labor. On the contrary, there are counteracting forces by way of 'additional worker effect' achieved by drawing particularly women from certain social groups into the 'government employment' of MGNREGA wage-work; and 'additional area effect' by making some of the fallow lands of the poor more productive.

There is clear evidence that rise in wages is one of the factors, along with other rising input costs, contributing to the increasing costs of cultivation. While SC, ST and other small-marginal farmers who are also participants in the MGNREGA were not affected much, or in many cases gained considerably, the better off farmers were able to bear the rising costs partly through mechanization.

The worst affected are the small and marginal farmers who are neither participants in MGNREGA work nor beneficiaries of works on their private lands. This section may not be small, and it faces severe crisis. In this context, the Planning Commission's proposal to make the scheme more farmer-friendly by extending its coverage to some of the agricultural operations, may address the problems of excluded small and marginal farmers, provided it is designed properly.

One of the salutary effects of MGNREGA on poor rural households is the drastic reduction in distress migration. But there is no reason to share the apprehension, as expressed by some that the scheme "may discourage them from moving to more economically dynamic areas". As is the case with the decline in distress migration effectuated by the scheme, there is equally strong evidence to show that migration for higher wage work that lasts for a relatively longer period in a year remains unaffected, and possibly would improve, if skill formation and capacity building activities that would enhance human capabilities are also brought under MGNREGA.

Finally, it is suggested that technology driven options like, development of short duration - labor saving improved cultivars amenable to mechanization need to be adopted to mitigate the problem of labor scarcity. In addition, easy access to cheaper institutional credit for farm mechanization, promotion of farmer producer companies, policy support towards infrastructure, transport, storage, a credit market, an inclusive farm mechanization program especially for women and youth, institutional changes to ensure security, safety and social protection to migrant labor have been suggested. A revision of the time frame of MGNREGA work so as to create more employment in the lean season was recommended.

## 2. Introduction

Though there have been rapid strides in growth in the past two decades in India, there is a widely shared view that the decline in poverty level is not commensurate with growth. While faster growth is necessary, it is well recognized that the approach to reduction of poverty needs a multi-pronged strategy. Policy initiatives directly addressing poverty reduction may be grouped into three types. The first type refers to institutional measures like organization of the poor to enable them to acquire better capabilities like the promotion of community based organizations (CBOs), provision of targeted credit etc. The second type of measure comprises transfer payments including direct cash transfers, pensions or indirect transfer like subsidized food and essentials through the Public Distribution System (PDS). The third set of measures involves provision of self-employment and wage employment programs. The experience of welfare programs in India shows that considerable efforts have been made in all three modes. Here we shall concentrate on one of the major initiatives viz The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and the resultant scheme.

Given the magnitude of rural poverty, the MGNREGA has evoked wide interest because it is expected to ease this burden by providing a way to move out. Even as recently as 2009-10, India was home to 355 million people living in poverty out of which 278 million or 78 % were in rural areas. The argument for developing and implementing strategies to reduce poverty by increasing productive employment opportunities in rural areas is compelling. This review paper on the impact of MGNREGA on agriculture and rural labor markets is largely based on the official sources of data and other studies made on different aspects of the scheme. It is divided into five sections. This brief introduction is followed by the second section which describes the context and the salient features of the scheme. The third section provides an inter-state comparative perspective of the implementation of MGNREGA in terms of provision of employment, gender and social inclusion, some aspects of 'decent work', wages earned, and poverty reduction. The fourth section collates the available evidence on the impact of MGNREGA on rural labor markets. The concluding section brings together certain observations which are relevant for further research and policy measures.

## 3. MGNREGA: Context and Salient Features

### 3.1 The Context

Since independence, one of the major challenges faced by successive governments of India has been the provision of adequate remunerative employment to the vast majority of rural workers who are unemployed or, more commonly underemployed in meager subsistence livelihood activities. The Indian Constitution addressed the issue in the Directive Principles of State Policy. According to Article 39, the state must ensure that "citizens, men and women equally, have the right to an adequate means of livelihood" and Article 41 decrees that "the state, shall within the limits of its economic capacity and development, make effective provision for securing Right to Work..." In the first three decades of planning, from the 1950s to the early 1980s, employment growth was seen as incumbent upon faster economic growth. However growth in these decades was too low to absorb the growing labor force. Though there was rising unemployment, the

right to guaranteed work did not emerge as a policy priority because of the resource constraints associated with the slow growing economy. However, from time to time the government of India did undertake public works related wage employment programs since the 1960s. These programs were mostly *ad hoc* in nature, had limited impact on the generation of employment, and lacked proper planning in relation to the creation of assets. As a result, most, assets created were of poor quality and often suffered from poor maintenance. These programs did not make any lasting impact either on rural unemployment or in improving rural resources.

Beginning with the initiation of economic reforms in 1991, a structural shift has taken place in development strategy towards market driven growth. The reforms did bring about accelerated growth in GDP in the 1990s (6.7%) compared to the 1980s (5.2%) or the much slower growth in the earlier decades. However, there was a deceleration in the rate of growth of employment in the 1990s (1.07%) compared to the 1980s (2.7%). There was actually an increase in unemployment and underemployment and much of what little growth was witnessed was in the informal sector, with formal employment in the private sector stagnating and in the public sector declining. The trickle down that was anticipated did not occur. On the contrary, the rate of decline in poverty decelerated and inequalities increased. There was extensive exclusion of marginalized groups and marginalization of large sections, especially small and marginal farmers due to declining state support measures and exposure to the volatility of market fluctuations. The widespread crisis in agriculture that ensued was marked by the suicides of farmers and distress migration for employment. Of the several public demands, employment creation as a part of the growth process was widely discussed and 'right to work' emerged as an important political agenda. The National Rural Employment Guarantee Act 2005 came into force on 2 February 2006 and was implemented in phases. In the first phase, it was introduced in 200 of the most backward districts. Beginning with 1 April 2007, the second phase brought another 130 districts under its fold. The third phase followed in quick succession, and was launched on 28 September 2007 by extending the Act to the remaining 285 districts. Since then the MGNREGA Scheme<sup>1</sup> has been in operation in all the 615 rural districts of India.

### **3.2 MGNREGA: Salient Features**

MGNREGA is based on the twin principles of universality and self-selection. It offers the legal right to work at a specified minimum wage. For those who request it work is provided within 15 days of applying. Because of its universal nature the program also eliminates targeting errors. With a people-centred, demand-driven architecture, completely different from the earlier rural employment programs, MGNREGA is expected to augment the intensity of employment in the widespread underemployment conditions of rural India. The process of implementation involves undertaking rural resource development work executed by the Panchayat without engaging contractors or machinery, and community involvement in the form of planning and social audit. It is also expected to improve participation, transparency and accountability, and reduce, if not eliminate, corruption and malpractices associated with earlier public works programs.

Box 1 provides the salient features of the NREGA. Special emphasis is placed on providing employment to women and a provision is made for the development of land and water resources on the private lands of households of Scheduled Castes (SC), Scheduled Tribes (ST), Below Poverty Line (BPL), Indira Awas Yojana (IAY) housing and land reform (assigned lands)

## **Box 1. National Rural Employment Guarantee Act 2005**

### **Objective:**

NREGA aims at enhancing the livelihood security of the people in rural areas by guaranteeing hundred days of wage employment in a financial year, to a rural household whose members volunteer to do unskilled manual work. The act also seeks to create durable assets to augment land and water resources as well as rural connectivity and strengthen the livelihood resource base of the rural poor.

### **Salient Features of the Act:**

- Provision of unskilled manual employment to adult members of a rural household for up to one hundred days in a financial year.
- Employment to be given within 15 days of application for work.
- In case employment is not provided within 15 days, daily unemployment allowance in cash is to be paid. Liability of payment of unemployment allowance is of the States.
- At least one-third of persons to whom work is allotted are to be women.
- Disbursement of assured minimum wages has to be done on a weekly basis and not beyond a fortnight.
- Panchayat Raj Institutions (PRIs) have a principal role in planning and implementation.
- Each district has to prepare a shelf of projects. These are to be selected from the list of permissible works. Categories of permissible works are as follows:
  - ▶ Water conservation and water harvesting
  - ▶ Drought proofing (including plantation and afforestation)
  - ▶ Irrigation canals including micro and minor irrigation works
  - ▶ Flood control and protection works
  - ▶ Minor irrigation, horticulture and land development on the land of SC/ST/BPL/IAY and land reform beneficiaries
  - ▶ Renovation of traditional water bodies including desilting of tanks
  - ▶ Land development
  - ▶ Rural connectivity
  - ▶ Any other work notified by the Central Government in consultation with the State government.

The shelf of projects has to be prepared on the basis of priority assigned by the Gram Sabha. At least 50% of the works are to be allotted to Gram Panchayats for execution. A 60:40 wage and material ratio has to be maintained. Contractors and use of labor displacing machinery are prohibited.

- Work should ordinarily be provided within a 5 km radius of the village or else extra wages of 10% are payable.
- Work site facilities such as crèche, drinking water and shade have to be provided.
- Social Audit has to be done by the Gram Sabha at least once in every six months.

**Funding:**

The Central Government bears the costs on the following items:

- The entire cost of wages of unskilled manual workers.
- 75% of the cost of material, wages of skilled and semi-skilled workers.
- Administrative expenses as may be determined by the Central Government, which will include, inter alia, the salary and allowances of the Program Officer and his supporting staff and work site facilities.
- Expenses of the Central Employment Guarantee Council.

The State Government bears the costs on the following items:

- 25% of the cost of material, wages of skilled and semi-skilled workers.
- Unemployment allowance payable in case the State Government cannot provide wage employment on time.
- Administrative expenses of the State Employment Guarantee Council.

**Source:** MoRD, GoI (2010)

beneficiaries. In June 2008, this provision was extended to small-marginal farmers working with job cards under MGNREGA. Given the fact that 80% of land holdings belong to such farmers who together account for 40% of the cultivated area, the potential for improving land productivity and income of small farmers and improving wage employment opportunities in agriculture is considerable.

### **3.3 MGNREGA as Social Protection**

The initiation of measures that would make the ‘right to work’ a legal entitlement resulted in an intensive debate on the nature of the entitlement. One argument was that the process of growth with redistribution is now envisioned through employment, as opposed to the earlier attempts that were based on trickle down theories. By ensuring regular work at minimum wages, the thrust was to be on “employment first, with growth as an outcome”, rather than vice-versa (Bhaduri 2005). This path towards full employment alone can, it was argued, ensure the “economic content of participatory democracy” and allow for “development with dignity” (Ibid). The point being emphasized is that the ‘right to work’ should not be reduced to an effort to cushion the negative effects of globalization through the creation of wage employment and assets in rural areas. The hope was that “NREG would have potential to lead the economy

towards a labor-intensive growth path, especially in the light of the low and declining growth rate of productive employment...". (NCEUS, 2006) Thus the wage-work program needs to be seen from a long-term perspective, with a strong planning component. It should be dovetailed with ongoing development efforts, incorporating decentralized planning and implementation, skill training and maintenance of public assets. Eventually it should absorb wage-earners into mainstream employment. Furthermore, the realization of decent livelihood through a 'rights based approach' like MGNREGA is seen as contingent upon a certain minimum social security in the absence of which many deserving people may be at a disadvantage.

MGNREGA as designed is only a rudimentary right. If we raise the question whether the right to work as enshrined in NREGA is a "right to a job" or "right to employment", the answer is quite clear. NREGA does not guarantee a regular job. It only guarantees certain minimum days of work at an assured minimum wage so as to enable the underemployed or unemployed workers earn a minimum supplementary income to overcome deprivation or distress migration. While provision of work enhances both demand and the home market, the works executed are expected to increase development potential through their productivity. The caveat is that the quality of employment and productivity of work are critical in enhancing the content of any attempt towards the right to work (Rodgers 2009).

## 4. Implementation of MGNREGA: A Comparative Overview

### 4.1 Inter-State Comparison

Table 1 gives the basic facts relating to the coverage of the scheme in terms of districts, person days of employment generated, expenditure and the extent of inclusion of social groups over the past six years of its implementation. By any standard, it would qualify as one of the largest state-sponsored programs that has ever been launched in the country. There has been rapid progress in the first four years from 2006-07 to 2009-10 because of the increase in the number of districts covered. By 2009-10 all the rural districts in the country had been brought under the scheme. The average person-days of employment per household increased from 43 in 2006-07 to 54 in 2009-10. The share of women increased from 42% to nearly 50% in the later years. The share of households of Scheduled Caste (SC) and Scheduled Tribe (ST) communities together has remained steady at just over 50%. The flow of resources to districts under the scheme was massive. The average expenditure per district increased from Rs 44 million in 2006-07 to Rs 640 million in 2010-11. The average rate of money wage per person day increased from Rs 65 in 2006-07 to Rs 117 in 2011-12. However within this overall increase there is a slowing down and decline after the first four years. Both total person-days employment and person-days of employment per household fall after 2009-10. The share of SC and ST communities in the total person-days of employment, declined from 52% to 40% in 2011-12. The average expenditure per district also falls after reaching a peak in 2010-11. This sign of deceleration in the scheme within four or five years of its launch is disconcerting as it is reasonable to expect accelerated growth as experience is gained. There has been very impressive progress on certain counts.

**Table 1. Implementation of MGNREGA: A macro picture.**

Coverage: Employment, Expenditure and Social Groups	Phase I		Phase II		Phase III		
	2006-07	2007-08	2007-08	2008-09	2009-10	2010-11	2011-12
<b>1. Number of Districts under NREGA</b>	200	200+130 = 330	330+285 = 615	615	615	615	615
<b>2. Number of Households covered</b>							
Households with Job Cards (million)	38	65	100	113	119	123	123
Households Provided Employment (million)	2.1	3.4	4.5	5.3	5.4	5.0	5.0
<b>3. Person Days of Employment Guaranteed</b>							
Total (million)	900	1440	2160	2840	2570	2110	2110
Per Household Employed in NREGA	43	42	48	54	47	42	42
<b>4. Share of Marginalized Groups in NREGA Employment (%)</b>							
Women	40	42	49	49	48	48	48
Scheduled Tribes (ST)	36	29	25	21	21	18	18
Scheduled Caste (SC)	26	27	29	30	31	22	22
<b>5. Expenditure on NREGA</b>							
Total Expenditure (Rs million)	8813	12,0570	27,2510	37,9050	39,7720	37,6370	37,6370
Average Expenditure per district (Rs. million)	44	48	44	62	640	610	610
Average Expenditure per person day (Rs)	98	110	126	134	153	178	178
Average wage per person day (Rs)	65	75	84	90	100	117	117
Share of Wages in Total Expenditure (%)	66	68	67	68	68	70	70

Source: <http://nrega.nic.in> (20.10.2012)



The large national picture is not the best basis on which to make any assessment of the functioning of the MGNREGA. It would help to disaggregate at least to the state level to discern the factors that make a difference to the performance. The extent of fulfillment of the basic entitlements such as days of employment, wages and earnings and the coverage of social groups like dalits, adivasis and women could be rough and ready indicators. Since issues related to the inclusion of social groups are embedded in the socio-economic and cultural context of the region, they require nuanced analysis. For the sake of simplicity, we could leave the complexity for later analysis and begin with the differences in some basic entitlements, that take the state or local area as a unit. Table 2 shows the average person days of employment per household, and households with 100 days of employment. If we take average person-days of employment per participating household, Andhra Pradesh, Tripura, Uttar Pradesh, Madhya Pradesh, Rajasthan and Tamil Nadu show consistently higher performance than the national average. Almost all the North Eastern states except Arunachal Pradesh show very high performance with Tripura and Manipur excelling in terms of the proportion of households achieving 100 or more days of employment. However, during the past two years there are indications of declining levels even in better performing large states like Andhra Pradesh, Rajasthan and Uttar Pradesh.

On the other end of the spectrum of poor performance are Punjab, Bihar and West Bengal. These are states with extremely varying socio-economic, cultural and political conditions. Punjab's poor performance in MGNREGA may be because of higher level of rural development including rural infrastructure, higher wage levels and an overall situation of labor shortage. These factors may leave very few in rural areas ready to take on physical work to earn a wage which may be less than the statutory minimum wage in the state. Under the socio-economic conditions prevailing in Punjab, apparently only those who are in real distress opt for MGNREGA, and overall, an MGNREGA of the present type may not be relevant to Punjab as a measure of social protection.

In contrast to Punjab, Bihar presents socio-economic conditions for which MGNREGA apparently is ideally suited. Though there are some signs of improvement, the overall performance of MGNREGA in Bihar leaves much to be desired. Institutional failure at the Panchayat level, cultural constraints on women's work, politics including caste politics at all levels, administrative apathy and suspicion of civil society interventions, together appear to be factors hindering the spread of MGNREGA. Interestingly, and quite contrary to media driven perceptions, political extremism appear to be least responsible for the poor performance in Bihar. On the contrary field reports suggest support by extremist groups for MGNREGA.

The poor performance of the scheme in West Bengal is puzzling and turns out to be inexplicable. Rural poverty in the state is much higher than the national average. Much of agriculture is also seasonal and the growth of the non-farm sector is stagnant. West Bengal is known for well-entrenched Panchayat Raj institutions. Politically, people are supposed to be more rights conscious. Politics apparently are not factional and divisions are supposed to be more on ideological lines. Why then there is no political commitment to a program which is a vital social protection measure and for which there has been widespread people's support?



**Table 2. Household person days of employment under MGNREGA during 2008-09 – 2011-12.**

Sl. No.	States	Average person days of employment per household			2009-10		2010-11		2011-12	
		2006-07	2007-08	2008-09	Average person days of employment per household	Households with 100 days of employment (%)	Average person days of employment per household	Households with 100 days of employment (%)	Average person days of employment per household	Households with 100 days of employment (%)
1	Andaman & Nicobar	-	-	17	29	3.2	23	1.0	43	11.8
2	Andhra Pradesh	55	60	48	66	22.7	54	15.6	56	17.8
3	Arunachal Pradesh	30	30	43	25	0.4	23	0.4	16	0.0
4	Assam	32	35	40	34	6.1	26	2.5	26	1.3
5	Bihar	17	30	26	28	6.9	34	6.0	38	9.2
6	Chandigarh	-	-	0	0	0.0	0	0.0	0	0.0
7	Chhattisgarh	39	43	55	51	7.9	45	7.4	44	7.9
8	Dadra & Nagar Haveli	-	-	25	19	0.6	20	0.0	0	0.0
9	Daman & Diu	-	-	0	0	0.0	0	0.0	0	0.0
10	Goa	-	-	0	28	1.8	27	3.0	28	1.3
11	Gujarat	50	48	25	37	6.5	45	6.2	38	5.1
12	Haryana	31	27	42	38	5.7	36	3.9	39	4.9
13	Himachal Pradesh	12	11	46	57	9.7	49	5.0	52	8.9
14	Jammu And Kashmir	4	1	40	38	6.4	42	12.1	45	6.6
15	Jharkhand	28	27	48	49	7.8	42	6.6	39	3.7
16	Karnataka	51	51	32	57	12.6	49	5.9	42	2.7
17	Kerala	-	-	22	36	4.6	41	5.8	45	8.8
18	Lakshadweep	-	-	60	27	0.4	30	1.6	39	3.2
19	Madhya Pradesh	43	44	57	56	14.4	50	10.6	42	7.0
20	Maharashtra	37	40	46	51	4.2	44	6.3	47	11.3
21	Manipur	51	47	75	73	35.0	68	25.2	61	33.2
22	Meghalaya	21	31	38	49	4.5	58	5.7	49	10.2
23	Mizoram	33	27	73	95	3.9	97	77.2	72	38.0
24	Nagaland	30	35	68	87	31.8	95	54.2	69	11.2
25	Odisha	36	38	36	40	5.9	49	10.2	33	3.5
26	Puducherry	-	-	13	22	1.0	30	0.4	25	0.5
27	Punjab	38	22	27	28	2.8	27	1.9	26	1.5
28	Rajasthan	67	70	76	69	23.2	52	8.5	47	7.2
29	Sikkim	25	40	51	80	23.3	85	45.6	60	16.0
30	Tamil Nadu	81	82	36	55	17.4	54	22.2	48	9.5
31	Tripura	75	43	64	80	37.2	67	14.6	86	35.7
32	Uttar Pradesh	17	16	52	65	14.5	52	9.3	36	4.1
33	Uttarakhand	30	46	35	35	4.0	42	4.7	42	4.5
34	West Bengal	18	18	26	45	2.1	31	2.1	26	2.0
	Grand Total	40	44	48	54	13.5	47	10.1	42	7.8

Note: For 2006-07 and 2007-08 the data refer to first phase districts only. Source: <http://nrega.nic.in>

## 4.2 Social Dimension

We shall turn to social inclusion in terms of the share of SC and ST households in the employment generated under MGNREGA. The incidence of poverty among ST and SC households is disproportionately higher. Even in 2009-10, as against the overall rural poverty level of 34%, 47% of STs and 42% of SCs were poor. Hence, a real test of whether a social protection scheme like MGNREGA is reaching the right social group or not, would be the share of SCs and STs in the employment created. Similarly inclusion of rural women who play the major part in supporting livelihoods, would indicate its reach to the deserving. Here an attempt is made to assess the inclusion of these social groups in relation to their share in population, and in the case of women, in terms of their work participation rate in different states. Table 3 shows SC households in the total person days of employment created under MGNREGA during last six years. The assessment of SC household participation in the MGNREGA should also factor

**Table 3. Percentage share of SCs in total person days of MGNREGA employment.**

State	% of SC population to total population <sup>1</sup>	% Share of SCs in MGNREGA employment					
		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	18.45	29.82	27.86	25.85	25.03	24.25	26.99
Arunachal Pradesh	0.34	0	-	0	-	0	0
Assam	6.71	8.65	6.85	6.56	8.44	5.9	5.55
Bihar	16.39	47.08	47.59	51.83	48.25	24.4	24.57
Chhattisgarh	11.41	12.01	13.13	13.91	13.75	10.03	9.63
Gujarat	6.87	7.04	6.19	10.64	11.72	9.17	7.85
Haryana	21.36	60.03	65.37	69.18	58.28	54.05	49.68
Himachal Pradesh	25.59	30.4	24.54	29.03	27.28	29.99	30.08
Jammu & Kashmir	8.34	5.42	4.93	5.9	4.85	4.38	7.36
Jharkhand	12.35	23.48	20.83	18.65	16.49	12.29	12.75
Karnataka	18.39	33.05	30.48	31.14	19.15	17.21	15.7
Kerala	10.83	20.12	16.84	18.74	16.76	15.15	14.32
Madhya Pradesh	15.7	15.87	16.38	14.79	15.87	19.75	21.16
Maharashtra	10.93	16.19	19.41	18.46	22.94	6.12	5.8
Manipur	1.21	0	0	0	0	1.46	0.6
Meghalaya	0.38	0.29	0.46	0.59	1.01	0.73	0.65
Mizoram	0.01	0	0	0	0	0	0.13
Nagaland	0	0	0	0	0	0	0.62
Orissa	17.19	23.65	23.12	19.11	17.72	18.64	17.5
Punjab	33.04	69.36	64.44	59.45	62.36	78.67	77.44
Rajasthan	17.88	15.97	15.06	12.78	12.08	18.27	16.76
Sikkim	4.96	0.83	6.88	2.56	1.07	4.45	4.55
Tamil Nadu	23.79	56.06	57.38	60.15	59.81	29.12	28.88
Tripura	17.17	15.92	18.2	18.36	14.55	16.84	17.99
Uttar Pradesh	23.38	56.85	57.53	57.35	56.13	33.12	31.55
Uttarakhand	19.91	26.7	25.71	24.36	22.42	18.6	18.34
West Bengal	25.79	36.08	35.11	37.2	35.85	33.85	33.74
All States	17.82	25.36	26.67	26.71	28.6	22.79	22.02

1. Source: Census 2001 and <http://www.nrega.nic.in>

in the relative share of SC population in each of the states. The proportion of SC population varies from as low as 6.9% in Assam and 7.10% in Gujarat to as high as 28.9% in Punjab, 24.7% in Himachal Pradesh and 23.0% in West Bengal. For the country as a whole, there was gradual increase in the share of SC households in the total person-days of employment from 25.36% in 2006-07 to 30.49% in 2009-10 but later it decelerates. However, in all these years and in almost all the states, the SC share in employment is higher than their population share. This is expected because most of the landless as well as land-owning poor in rural areas who depend on wage labor belong to SC households.

The higher participation of SC households appears to happen at two ends of development. At one end, there are relatively better developed states where most of the MGNREGA participants are SC households. Punjab, Tamil Nadu and Haryana to this upper end. At the bottom end are the relatively poor states, where again the share of SC households is high. Uttar Pradesh and Bihar belong to this category. What this suggests is that at both the ends of the development spectrum extreme exclusion is suffered by these households. The first level of assessment is their inclusion in wage employment. The second level may be to assess the extent of benefits that flow to them through asset creation in their lands specified under the MGNREGA. This requires field level assessment.

Table 4 shows the share of STs in the respective state population, and the share of ST households in the employment created under MGNREGA in different states during the last four years. What is striking is that the share of ST households in the total employment created starts off initially in 2006-07 at a disproportionately high level - more than four times their population share - and then declines but is still at a relatively high level. This is because the population share of STs in the 200 districts included in the first phase was significantly high, and most ST households suffer from extreme poverty. In such contexts MGNREGA is of great assistance as a livelihood provider. The higher share is a positive inclusion. The later decline in *share* may not mean decline in actual employment accessed by this group but increasing participation of other social groups.

Women's access to at least one-third of the share of total employment created is a specific entitlement under NREGA. However, there are several factors like socio-cultural, economic and locational factors which affect women's participation in work. Historically, there have been wide variations in the female work participation rates across the country because of socio-cultural reasons. Female work participation rates have been very high in Andhra Pradesh (48.3%), Tamil Nadu (46.1%), Maharashtra (47.4%), Rajasthan (40.7%), Madhya Pradesh (36.6%) and Himachal Pradesh (50.60%). The female work participation rates are much lower than the national average in Eastern India, Uttar Pradesh and even Kerala (25.6%). This is well reflected in the very high share of female employment in the MGNREG scheme in Tamil Nadu, Kerala, Rajasthan and Andhra Pradesh. A study of four states (Pankaj and Tankha 2010) examines the impact of MGNREGA on women's economic empowerment and finds that the scheme broadened women's choices by opening a new avenue of paid employment under a government program as against working for a private farm or non-farm proprietors, and by reducing economic dependence. A study which covers Himachal Pradesh, Kerala and Rajasthan, (Sudarshan et al. 2010) examines the reasons behind wide variations in women's participation across states and finds that women's participation in the MGNREG scheme is dependent upon

**Table 4. Percentage share of STs in the total person days of MGNREGA employment.**

State	% of ST population to total population <sup>1</sup>	Percentage ST Share in MGNREGA Employment					
		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	8.39	13.01	13.41	14.05	14.64	14.32	18.36
Arunachal Pradesh	70.51	100	-	100	-	97.95	100
Assam	13.55	46.26	49.14	46.9	42.96	19.25	22.82
Bihar	0.97	3.21	2.72	2.48	2.04	1.81	1.77
Chhattisgarh	37.63	45.55	43.46	44.99	44.34	31.26	37.56
Gujarat	21.63	64.26	64.44	60.52	55.86	37.38	40.26
Haryana	0	0	0	0	0	0.04	0.02
Himachal Pradesh	4.32	22.41	25.81	19.6	23.54	6.35	6.11
Jammu & Kashmir	13.83	23.22	26.62	28.22	30.45	11.32	14.98
Jharkhand	31.02	40.29	41.76	39.87	43.6	40.48	39.1
Karnataka	8.41	20.35	19.52	15.97	12.49	9.95	8.3
Kerala	1.48	12.4	17.3	14.05	14.07	2.92	2.37
Madhya Pradesh	25.35	48.64	51.84	51.85	52.14	28.84	27.42
Maharashtra	13.42	40.88	35.21	36.62	34.08	12.63	17.11
Manipur	41.09	100	100	100	100	26.49	70.7
Meghalaya	90.24	83.15	88.07	88.17	83.17	92.54	93.97
Mizoram	96.27	100	100	100	100	99.83	99.52
Nagaland	93.73	100	100	100	100	89.01	92.48
Orissa	24.61	49.27	41.65	39.53	42.73	31.72	38.17
Punjab	0	0	0	0	0	0.04	0
Rajasthan	15.52	64.36	62.99	64.05	64.01	25	24.54
Sikkim	21.19	98.35	79.35	92.65	93.78	29.22	35.94
Tamil Nadu	1.58	2.37	2.84	2.17	2.45	1.27	1.28
Tripura	36.48	62.18	58.55	60.91	68.38	46	42.03
Uttar Pradesh	0.07	3.11	2.49	3.46	3.12	1.06	1.25
Uttarakhand	3.81	1.4	2.49	1.89	1.86	2.72	2.89
West Bengal	6.87	18.61	16.62	18.67	18.41	8.93	10.24
All States	10.63	36.45	32.78	31.94	27.19	15.31	18.25

1. Source: Census 2001 and <http://www.nrega.nic.in>.

several factors like parity in wages, role played by women's organizations, breaking of traditional gender roles and provision of child-care facilities if the work is away from home. Table 5 shows that regardless of these cultural differences, in most of the states women's share in MGNREGA employment has been higher than work participation rates in these respective states. The exceptions are Punjab, Uttar Pradesh and Himachal Pradesh where women's share in MGNREGA work has been less than their overall work participation rates. Of course, Himachal stands on a different footing because female work participation in the state is several-fold higher than in the other two states. Bihar, Uttar Pradesh, Jammu and Kashmir and West Bengal are the major states which did not fulfill the statutory requirement of providing at least 33% of the total employment women under MGNREGA. Assam also slipped below the norm during 2010-11 and 2011-12. And Nagaland and Mizoram ended up as underperformers in the share of women in employment during recent years. While MGNREGA employment did break the barrier of

**Table 5. Percentage share of women in total person days of MGNREGA employment.**

State	Rural female participation rate (%) <sup>1</sup>	% Women person days to total person days					
		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Andhra Pradesh	34.1	54.79	59.78	59.83	59.79	58.01	57.79
Arunachal Pradesh	NA	30.02	-	32.2	-	34.59	41.18
Assam	9.1	31.67	34.92	36.94	37.83	24.66	24.92
Bihar	13.8	17.38	30.48	32.99	32.72	30.58	28.64
Chhattisgarh	4.7	39.32	42.63	46.36	46.69	48.02	45.25
Gujarat	42.7	50.18	47.51	46.83	47.17	43.21	45.23
Haryana	31.7	30.6	27.46	29.72	30.01	40.89	36.43
Himachal Pradesh	50.6	12.24	10.73	15.26	26.23	60.04	59.51
Jammu & Kashmir	26.7	4.46	0.7	0.85	1.89	17.92	17.72
Jharkhand	31.3	27.89	26.86	28.37	34.28	32.31	31.28
Karnataka	45.9	50.56	51.21	57.76	35.38	47.21	45.93
Kerala	25.6	65.63	70.95	83.86	86.99	92.56	92.85
Madhya Pradesh	36.6	43.24	44.44	45.23	46.22	42.67	42.65
Maharashtra	47.4	37.07	39.5	47.78	42.79	45.44	45.98
Manipur	NA	50.89	0	60.66	35.01	42.69	33.46
Meghalaya	NA	20.69	30.87	33.06	45.63	41.89	41.59
Mizoram	NA	33.38	27.43	33.2	31.02	23.48	23.62
Nagaland	NA	29.97	34.87	60.98	33.01	27.95	27.05
Orissa	32.2	35.6	38.33	40.67	40.4	38.39	38.65
Punjab	32.2	37.76	22.28	26.04	25.19	47.8	43.24
Rajasthan	40.7	67.14	69.89	68.92	67.7	69.5	69.17
Sikkim	NA	24.79	39.86	33.23	38.84	47.83	44.76
Tamil Nadu	46.1	81.11	82.41	81.94	83.49	74.5	74.02
Tripura	NA	75	43.35	54.8	35.2	41.74	38.65
Uttar Pradesh	24	16.55	16.45	20.67	24.39	18.84	17.13
Uttarakhand	42.7	30.47	46.42	52.02	57.89	43.89	44.59
West Bengal	17.8	18.28	17.81	27.72	33.98	33.02	32.44
All States	32.7	39.52	44.22	46.52	47.11	53.87	48.15

1. Source: FWPR based on NSS 61<sup>st</sup> Round (2004-05) Usual Principal and Subsidiary Status and <http://www.nrega.nic.in>.

cultural considerations against women's work since it is considered more dignified government work, there are other factors like equal wages, which also means higher wages. These need to be analyzed in depth.

### 4.3 MGNREGA, Decent Work and Worksite Facilities

Since MGNREGA is a statutory entitlement of work, it does incorporate elements of provisions that would inculcate the culture of facilitating decent work. Here an attempt is made to draw from a larger survey of three states, Andhra Pradesh, Rajasthan and Bihar, the basic elements of 'decent work' that are incorporated in MGNREGA and the extent to which these are fulfilled (Reddy et al. 2010). MGNREGA worksite facilities are thought of as part of the provision of decent work. While awareness of these facilities enables workers to demand them,

actual provision depends on the administration. The provision or lack of worksite facilities varied with the type of facility. Drinking water and first aid were available to a large extent in Andhra Pradesh, and to a lesser extent in Bihar and Rajasthan. Both these facilities improved substantially in the one year between the two surveys. There was less provision of shade at worksites. In Andhra Pradesh, the sheets supplied for shade were often kept by the village assistant, for the stated reason that there were no proper support frames for erecting them near worksites. In Rajasthan, the village assistants in some areas explained that too much wind caused the sheets to fly off or break. The poor record in providing crèches was partly explained by the fact that worksites only need provide a crèche if five or more women with children below the age of six are working there. The data in Table 6 is confined to sample worksites that did not have the requisite number of children. Discussions with workers revealed that provision of crèches was rare.

**Table 6. Availability of worksite facilities (%).**

	Andhra Pradesh	Bihar	Rajasthan
Drinking Water	96.3	87.1	91.3
First aid	64.8	35.5	34.8
Shade	13.2	3.2	17.4
Crèche	0	0	4.4

Source: Worksite survey

### **Workers' Wellbeing and Safety**

In all three states, workers received an hour's break for lunch. In Andhra Pradesh and Rajasthan, there was a state-sanctioned weekly day off - for instance, in Rajasthan all MGNREGA worksites were closed on Thursdays. MGNREGA requires the provision of tools and instruments for work, but in many instances, especially in Bihar, workers had to bring their own tools, which prevented many from participating. In Andhra Pradesh, workers were given tools but not in adequate numbers. Non-supply of tools was compensated for by adding an additional allowance of Rs 2 per person day of work. There was also dissatisfaction expressed at certain worksites that the tools provided were not the right ones. Regardless of local conditions and the nature of work, tools were procured at the district level and distributed across panchayats.

There were some reported instances of injury to workers at worksites in all three states; free medical aid was provided. The Act provides that if any worker is permanently disabled or dies at the worksite, his/her relatives may receive an ex-gratia payment of Rs 25,000. However, this amount was not received by the worker's family in one such case that came to light in Rajasthan.

### **Nature and Duration of Work**

Workers described work under the scheme variously as 'very difficult' or 'moderately difficult'. Furthermore, average daily hours worked were the longest in Bihar (eight hours), whereas in Andhra Pradesh and Rajasthan the daily average was six. It was observed during fieldwork that in both Andhra Pradesh and Rajasthan government notifications had been issued for reduced



hours of work during the hot summer months. In Rajasthan, as per state notification, in the month of June, when fieldwork was carried out, MGNREGA work was officially meant to be carried on between 6am and 10am so that workers would avoid the worst of the heat. There were similar changes in the work schedule in Andhra Pradesh, where there was only one long session before noon.

#### 4.4 MGNREGA and Fixation of Wages

The issue of wage rate for MGNREGA has been a subject of controversy because it is not fixed as a uniform daily wage rate applicable to all states. Nor is it linked to statutory minimum wages, which vary from state to state. Except in Himachal Pradesh, MGNREGA wages are paid in terms of piece rates linked to the 'Standard Schedule of Rates' (SSRs) of the Public Works Departments of different state governments. This brings in the issues of fairness of rates, fair time measurement etc (See Boxes 2 and 3). One of the basic principles that is followed is that of equal wages to male and female workers. When the scheme was launched in 2006 an indicative wage rate of Rs 80 per person-day was proposed. This meant that workers engaged under MGNREGA would be assigned physically measurable work equivalent to Rs 80 as per the Standard Schedule of Rates. Later, in 2009 the indicative wage was raised to Rs 100 per person-day. Further it was agreed to revise the base wage rate of Rs 100 indexed on the basis of the inflation rate.

#### Box 2. Payment of wages

Assured minimum wages and timely payment of the same are basic entitlements under MGNREGA. But it turned out to be a controversial issue because of the complexity involved. The complexity is because of the choice of the mode of payment under MGNREGA. Except Himachal Pradesh, all states in the country are required to pay MGNREGA wages on piece rate basis, not on time rate or daily wages. This is the beginning of the problem. The assured minimum wage that is fixed under MGNREGA is to be realized through a physically measurable equivalent of work. This leads to the second problem of an acceptable Standard Schedule of Rates (SSRs). A third problem is the timely measurement of work completed. How frequently should it be done, who should do it and who approve it, are the questions often raised. And finally, who pays the wages? The implementing agency or an independent agency? How are these steps to be integrated? And at the end of it, how might timely payment be ensured?

For instance, the Andhra Pradesh government dealt with these problems systematically. Since the SSRs used in contract works involves machines, these rates are not comparable to solely manual work as stipulated under MGNREGA. The Engineering Staff College of India was commissioned by the Government of Andhra Pradesh to make work-time-motion studies<sup>1</sup> and suggest amendments to SSRs to ensure minimum wages under MGNREGA.

1. It is called Electronic Muster Measurement System (e-MMS). Under this system the Village Assistant records measurements every day and transfers the 'e-muster' through a mobile phone. The Technical Assistant takes the measurements every week and transfers the 'e-measurement' data to the mandal by mobile phone. The Engineering Consultant (two or three for each mandal) makes the 'e-check measurement' and the Mandal Program Officer acts as the 'e-muster verification officer' with power to verify and consolidate the information.

The results showed that according to existing SSRs, even after a day's work, the wages would be only one-third to one-half of the stipulated minimum wage under MGNREGA. Based on the study, the government of Andhra Pradesh revised the SSRs for MGNREGA by reducing the physical quantity by one-third to one-half. In fact, this change was accepted by the Union MoRD and was recommended to other States so they could follow a similar methodology. Despite this there were complaints that there were no rates in SSRs for certain tasks like, for example, tank desilting, jungle and bush clearance etc. The state government asked NGOs like Centre for Environment Concerns (CEC) to execute further studies particularly focused on women's tasks in MGNREGA works. Based on the results of these studies the SSRs were further revised reducing the load of work to match one day's work to minimum wages.

The second problem of measurement is solved by the twin approaches of 'single-pit' or appropriate marking of the worksite and by fixing the visit of the technical assistant who logs the work done in the muster on a fixed day of the week for each cluster. Recently, there has been further upgradation of the system by developing software that enables transfer of measurements through a mobile phone. The problem of agency of payment was solved by making payments through post-offices and banks using new technologies including biometrics. To ensure smooth working of the system coordination meetings are held between the divisional level postal officials and the district level rural development officials on a fixed schedule twice a month. All this also has been changing fast. Presently, AP has moved from payment through post-office to payment by a biometric smart card system operated by O-Mass Agency. In each Panchayat, the system is operated by a woman candidate sponsored by the village organization of SHGs. Payments are made based on a biometric device which is linked to a bank by a mobile phone. The system is amazingly simple, and the village coordinators handle payments up to Rs 2 lakh a day during peak periods.<sup>2</sup> The Technical Support Unit (TSU) of the AP State Employment Guarantee Council, of which the Chief Minister is the Chairman, took direct interest and initiated a few pilot projects to test different models and chose the one which ensures payment in less than a week.

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2. The person chosen is one of the Vice-Presidents of the Village Organisation of SHGs. Often she is also an MGNREGA worker. She is paid a commission of Rs 500 per Rs 1 lakh.

An attempt is made here to assess the wage rates across the states over the years. Table 7 presents the average wage rate per person day for the last six years across the states. The average wage rates are derived by dividing the total wage expenditure in the state by the person days of employment provided in the state in the year concerned. The derived wage rate per se may not be adequate to conclude whether the concerned state is doing better or worse in terms of supplementing the earnings of rural households through the scheme. A better indicator is the total earnings per household under the scheme which depends not only on the wage level but also on the number of days of employment provided in the concerned year. In almost all states there has been a rise in money wage rates. But given the fact that there has been a very high



### **Box 3. Wage determination and work measurement issues in group based work**

A peculiar problem was observed in Rajasthan. Usually large numbers of workers (up to 50-70 persons) were present at worksites, and they were further divided into teams to undertake tasks (see also Khera 2009). Gender and caste-related issues surfaced in some cases. It was found that only some members of the group worked, while others shirked, assuming they would be paid anyway. As a result of this we found 70 year olds and even some college students at the worksite during their summer holidays, not working, merely hanging around. In Tonk district we found some people playing cards at the worksite. Moreover, members of dominant communities such as Gujjar and Jat did not work, but threatened associates and officials and got them to mark their attendance so that they could claim wages.

But there is also evidence that points in other directions. In Andhra Pradesh there were three instances where weak, elderly and female workers were allowed lighter tasks. Lactating mothers were also allowed breaks in order to breastfeed. In these cases, wages were shared equally by consensus among the groups.

However, there were also cases where male laborers in a mixed group did not work hard, making women to do much of the work, leading to female laborers preferring to work without men in their groups. The program officer in charge of NREGA in Tonk District mentioned that they were experimenting by trying to make separate groups for males and females, but often this too was not acceptable.

One of the reasons for low daily wages in Rajasthan is crowding at worksites. In one instance in Nadri Panchayat of Tonk District, an area with hard soil and rock, after the division of wages among workers, only Rs1 per day accrued to each of them due to the large number of workers, suboptimal work output and the outdated schedule of rates (SOR), specifying quantum of work to be completed to earn minimum wages. On the contrary, in another village where the numbers of 'sitting' laborers were few, wages were above Rs 80.

*Source: Reddy et al. 2010*

rate of inflation during these years, it would be more appropriate to examine whether there has been any improvement in real wages realized under the scheme by deflating the money wages by the Consumer Price Index for Rural Labor. Such an exercise is done by taking the national average wage rate per person-day during the past six years and the results are presented in Figure 1. It is clear from the results that though money wage rates have been rising over the years, the real wage rates have been virtually stagnant. But for the decision to index the MGNREGA wage rate to inflation there would have been a steep decline in real wages.

**Table 7. Average wages earned per person-day and average annual earnings per household under MGNREGA during 2006-07 – 2011-12.**

Sl. No.	States	MGNREGA average level of wages per day (Rs)			Average level of wages per day (Rs)	Average level of wages per day (Rs)	Average level of wages per day (Rs)
		2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
1	Andaman and Nicobar	-	-	124	144	185	174
2	Andhra Pradesh	86	83	83	92	100	101
3	Arunachal Pradesh	48	-	59	69	95	91
4	Assam	67	72	77	87	107	130
5	Bihar	70	70	85	98	101	133
6	Chandigarh	-	-	0	0	0	0
7	Chhattisgarh	62	68	73	82	104	120
8	Dadra & Nagar Haveli	-	-	1	112	116	0
9	Daman & Diu	-	-	0	0	0	0
10	Goa	-	-	0	95	139	161
11	Gujarat	56	63	68	89	97	112
12	Haryana	97	115	120	151	169	180
13	Himachal Pradesh	69	71	99	110	127	123
14	Jammu And Kashmir	69	70	68	93	113	124
15	Jharkhand	79	82	90	98	103	120
16	Karnataka	67	72	81	86	144	189
17	Kerala	121	118	120	121	133	147
18	Lakshadweep	-	-	80	112	138	152
19	Madhya Pradesh	60	63	73	84	98	122
20	Maharashtra	104	84	75	94	134	165
21	Manipur	75	81	78	78	93	125
22	Meghalaya	73	88	70	79	100	114
23	Mizoram	94	102	109	104	116	116
24	Nagaland	66	100	81	103	103	118
25	Odisha	53	76	92	106	96	123
26	Puducherry	-	-	79	76	91	116
27	Punjab	94	100	111	124	130	145
28	Rajasthan	51	61	88	87	75	90
29	Sikkim	87	88	92	95	100	117
30	Tamil Nadu	80	78	80	72	82	92
31	Tripura	60	71	86	101	103	118
32	Uttar Pradesh	56	90	99	99	105	120
33	Uttarakhand	72	73	85	99	102	127
34	West Bengal	70	79	78	90	107	138
	All States	64	74	84	90	100	117

**Note:** For 2006-07 and 2007-08 average wage rates per person-day refer to first phase districts only.

**Source:** 1. Kannan and Jain (2011) for 2006-07 and 2007-08.

2. <http://www.nrega.nic.in>

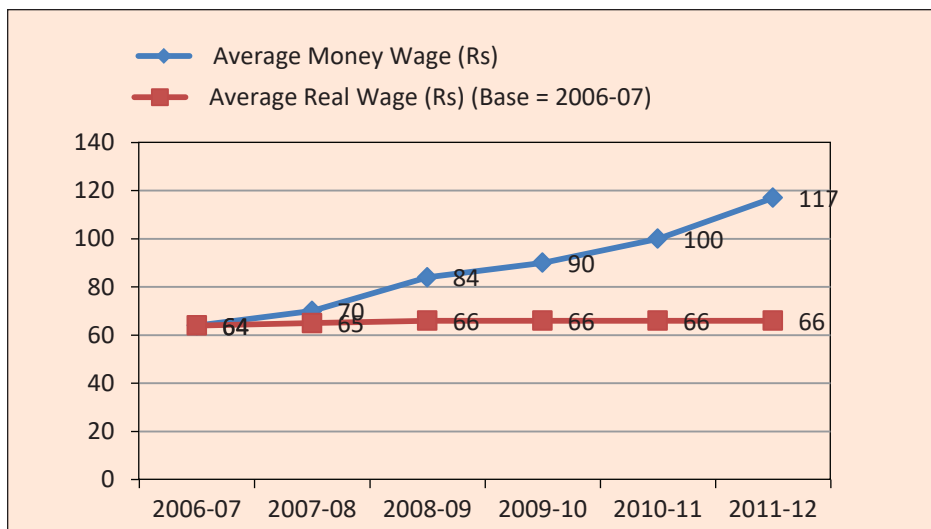


Figure 1: MGNREGA National Average Money and Real Wages per Person Day.  
Source: <http://www.nrega.nic.in>

#### 4.5 Employment, Earning and Impact on Poverty

The overall performance of the scheme as a measure of social protection depends on not only ensuring better wages but also on achieving the objective of ensuring that more households are brought under the fold of one hundred days of employment. Table 2 shows that there is no state which could provide 100 days of employment even to 50% of the participating households in 2011-12. Tripura, Mizoram and Manipur are the only states where at least one-third of the households get 100 days of employment. Of the other five states which have reached more than ten percent, three are Nagaland, Meghalaya and Sikkim. Of the large states only Andhra Pradesh (17.8%) and Maharashtra (11.3%) show hundred days of employment per household crossing two digits level.

The overall performance of providing employment under the scheme shows a tendency towards deceleration in recent years. The macro picture of the average person-days of employment captured in Figure 2 shows a clear downward trend. An attempt is made here to estimate the

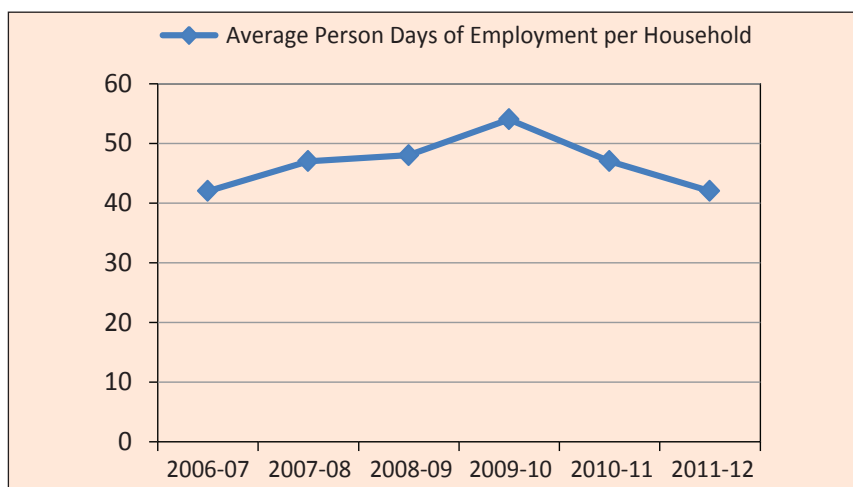


Figure 2: National Average Person Days of Employment per Household.  
Source: <http://www.nrega.nic.in>

impact of earnings under MGNREGA. State-specific estimates of annual earnings of participating households are derived by dividing the total wage expenditure by the average person-days of employment per participating household. Comparing the average household earnings from the scheme with the state-specific estimates of rural household poverty thresholds would indicate the possible extent of the impact of MGNREGA on rural poverty. Table 8 provides the results of these estimates. For the country as a whole the earnings from the scheme are a little over

**Table 8. Impact of MGNREGA on rural poverty (2009-10).**

Sl. No.	States	Average earnings per household under MGNREGA (Rs) 2009-10	Rural household poverty threshold income	MGNREGA earnings of % of poverty threshold income
1	Andhra Pradesh	6032	41580	14.5
2	Arunachal Pradesh	1711	46420	3.7
3	Assam	2982	41500	7.2
4	Bihar	2687	39336	6.8
5	Chhattisgarh	4228	37038	11.4
6	Gujarat	3272	43500	7.5
7	Haryana	5695	47496	12.0
8	Himachal Pradesh	6276	42480	14.8
9	Jammu And Kashmir	3573	43374	8.2
10	Jharkhand	4834	36398	13.1
11	Karnataka	4874	37764	12.9
12	Kerala	4284	46518	9.2
13	Madhya Pradesh	4659	37914	12.3
14	Maharashtra	4814	44622	10.8
15	Manipur	5681	52260	10.9
16	Meghalaya	3901	41214	9.5
17	Mizoram	9872	57000	19.4
18	Nagaland	8987	61008	14.7
19	Odisha	4196	34026	12.3
20	Puducherry	1708	38460	4.4
21	Punjab	3504	49800	7.0
22	Rajasthan	6027	45300	13.3
23	Sikkim	7625	43734	17.4
24	Tamil Nadu	3912	38340	10.2
25	Tripura	8028	39804	20.2
26	Uttar Pradesh	6458	39822	16.2
27	Uttarakhand	3455	43170	8.0
28	West Bengal	4029	38592	10.4
	All India	4870	40368	12.1

Note: 1. Average Earnings per Household under MGNREGA is derived by dividing the total wage expenditure by average person days of employment per household.

2. Calculated on the basis of the State specific poverty line threshold expenditure for 2009-10 based on the Tendulkar Committee revision and assuming household as comprising five consumption units.

Source: 1. <http://www.nrega.nic.in>.

2. Upsportal.com fro State Specific Poverty Lines

12% of the poverty threshold income. These results suggest that in all those cases where the poverty gap is relatively low, there would have been substantial reduction in rural poverty. Perhaps the steep decline in rural poverty in Tripura from 44.5% in 2004-05 to 19.8% in 2009-10 could be substantially attributed to MGNREGA. The highest impact is seen in Tripura where the MGNREGA earnings are as high as over 20% of the poverty threshold income. Mizoram is another high performing state with a share as high as 19.4 %. The performance of some of the relatively backward states like Odisha, Madhya Pradesh, Uttar Pradesh and Rajasthan is better than the national average. But Bihar still lags much behind, which is also reflected in no decline in rural poverty which continued to be as high as 55% in 2009-10 just as it was in 2004-05.

## **5. MGNREGA and Rural Labor Markets**

### **5.1 Evidence from Across the Country**

The search for information on the impact of MGNREGA on agricultural labor markets leads to some evidence on labor shortage, changes in wages, mechanization, peak season adjustment of work or adoption of MGNREGA calendar and migration. The available information, however, is sketchy and uneven across the regions. Implementation experiences also vary widely. Yet some broad trends may be discerned. With the exception of a few well-endowed regions, the pre-existing labor market in agriculture is characterized by surplus labor, low wages, high male-female wage differentials, and non-implementation of statutory minimum wages. The introduction of MGNREGA, with minimum and equal wages for male and female workers, did bring about not only an increase in the overall agricultural wages but also a reduction in the male-female wage differentials. For instance, wage increases were reported in a number of states across the country from Punjab and Haryana and Gujarat to West Bengal (Banerjee and Saha 2010). Even in the tea gardens of Silchar wage hikes are attributed to the impact of MGNREGA. That higher wages due to MGNREGA will divert workers from agriculture and create shortages of labor in agriculture is a theoretically valid proposition but the extent to which it will happen is an empirical question (Papola 2005). This question assumes importance especially in the context where substantial underemployment still prevails in rural areas. The earlier Maharashtra experience with the Employment Guarantee Scheme did put upward pressure on agricultural wages but there was no clear-evidence of a shortage of labor (Acharya 1990; Datt 1994). In agriculturally well endowed regions, the level of agricultural wages was higher even before MGNREGA was launched, and peak season labor demand was met by seasonal migration of labor from labor-surplus regions. The impact of MGNREGA on wages in such areas was not much, except in pockets where the migrant labor flow declined.

There have been a number of reports on labor shortage not only in agriculture but also in non-agricultural activities that depend on rural casual labor. There are reports from states like Andhra Pradesh, Punjab, Haryana, UP and Tamil Nadu that after the introduction of NREGA there has been a shortage of labor during harvesting of crops like wheat and rice.<sup>2</sup> Labor shortage has also been reported during peak paddy sowing season in Punjab,<sup>3</sup> and apple harvesting season in Himachal Pradesh.<sup>4</sup> There are reports as to how with the shortage of labor, the bargaining power of migrant labor in Punjab had increased to the extent of not only raising

wages but also improving working conditions. One report reads: “Besides the TV, cooler, freshly cooked food and accommodation, the laborers are now welcome to live in the houses of farm-owners and not in some dilapidated tube-well room out in the farm. Wages have gone up three-fold. Farmers say seasonal wages have increased from a mere Rs 700 to Rs 2,000 - Rs 2,500 per acre, in just about two years”.<sup>5</sup> While farmers of these regions tend to blame implementation of MGNREGA in labor surplus states like Bihar, UP and Jharkhand, the Commissioner of Punjab Agriculture has a different explanation: “Earlier, the labor force used to come to Punjab sometime by March-end, at the beginning of the harvesting season, and would stay put till paddy sowing was complete by July-end. This assured them ample work for nearly four months. But increased mechanization of farm operations, especially in wheat production, has reduced the duration of their employability and predictably of the workforce has shown a dwindling trend for the past six years or so”.<sup>6</sup>

### **Agricultural Mechanization**

There are also reports that labor shortage is being overcome by mechanization. Farmers in many villages in the Gangetic belt of UP are reported to have resorted to mechanized harvesting of the wheat crop.<sup>7</sup> The use of combined harvesters for paddy harvesting in Puducherry is also attributed to labor shortage resulting from the implementation of the MGNREGA.<sup>8</sup> Mechanisation of sugarcane harvesting in Maharashtra, and provision of heavy subsidies to harvesting machines beginning with this year are also shown as a consequence of MGNREGA.<sup>9</sup> In Andhra Pradesh, Tamil Nadu and Karnataka mechanization of paddy transplantation is promoted by providing subsidies on the machines.<sup>10</sup> Even in West Bengal there was resort to mechanization to beat rising labor costs (Babu et al. 2011). An interesting report on the significant rise in the tractor market in India in recent years cites shortage of agricultural labor as one of the explanations.<sup>11</sup> There is a danger that these reports could suggest that the MGNREGA is responsible for the mechanization of Indian agriculture. It is a fact that introduction of combined harvesters, sugarcane harvesting machines and paddy transplanters have long preceded MGNREGA. Some of these mechanization processes themselves, as observed by the Commissioner of Agriculture of Punjab cited above, disturbed the stable stream of labor supply. However, there is no gain saying that tightening of the agricultural labor market along with the state subsidy policy has hastened agricultural mechanization, especially in the agriculturally better endowed regions.

### **Adoption of MGNREGA Work Calendar**

One of the consistent and more sensible suggestions from across the country is to manage the peak season agricultural labor demand by suspending MGNREGA work during seasons of sowing, transplanting and harvesting. Such a measure would not only help farmers to avoid labor shortage but also help workers to get more days of employment by way of peak season agricultural employment and lean season MGNREGA work. There are instances of a number of States where the Panchayats were allowed, by mutual consent between farmers and agricultural workers, to work with a calendar that avoids MGNREGA work in peak season and ensures it in the lean season.<sup>12</sup> Such a calendar is desired even in the context of tea gardens in West Bengal. One executive observed: “The Government would do well, and it would be a win-win situation for all, if they keep MGNREGA work between November and March when we do not need the workers. That way, even workers can make more money” (Bhagat 2010). The

recent initiatives by the Union Ministry of Agriculture and the Planning Commission appear to be working towards making such an MGNREGA calendar official.<sup>13</sup>

## **Migration**

By ensuring work for hundred days at an assured minimum wage at the place of residence, MGNREGA is expected to have a substantial impact on distress migration. Though there are no studies yet estimating the extent of decline in distress migration as a result of MGNREGA, there are a number of studies which gathered the impression of participants on the impact of MGNREGA on migration. The responses vary from state to state and between districts within a state. The available responses from these surveys from Uttarakhand (Singh and Wauriyal 2008), Orissa (Nayak 2010), Andhra Pradesh and Karnataka (Kamath 2008) and Tamil Nadu (IITM 2009) show that, by and large, there has been decline in distress migration.

A study of select villages of Dhenkanal (Orissa), Bastar (Chattisgarh), Khunti and Gumla (Jharkhand) districts shows that earlier due to lack of employment opportunities within the villages, there was outmigration to agriculturally more advanced states like Punjab and Haryana (Banerjee and Saha 2010). Marginal and small farmers depended mostly on wage labor, with very little earnings from the low yields in agriculture. The commencement of NREGA works, has ensured not only employment in their native places, but also afforded them an opportunity to save for investment in their farming that has resulted in higher yields. As a result, though migration has not stopped entirely from these regions, the incidence of seasonal outmigration has come down.

A study with a specific focus on the impact of MGNREGA on Scheduled Tribes in Kandhamal and Koraput districts of Orissa shows that distress migration declined by 72.5% among males, and by 45.5% among females. Furthermore, the average duration of migration declined from 69 days to 23 days per worker (Rao et al. 2011). However, a study in Purulia and Jalpaiguri in West Bengal shows marginal impact of MGNREGA on distress migration, with the average number of days of migration declining only by about 10 % (Babu et al. 2011). A study of five districts in Bihar finds that there was little incidence of migration in Siwan and Begusarai. In Madhubani with migration as high as 50%, only 11% felt that there was any impact of MGNREGA (Rao and Dheeraja 2010).

There are interesting instances of return migration of marginal and small farmers of Barmer district of Rajasthan who migrated to neighboring Gujarat, Punjab and Haryana as wage-labor due to water scarcity and depletion of groundwater (Paliwal 2011). In Barmer district 47,779 'tanks' (small well-with structures made of concrete, cement and sand) and other waterworks were constructed under MGNREGA to collect rain water which improved the groundwater table and enabled crop cultivation. The improved water supply has brought the farmers back to agriculture.

Of course, migration is not a linear phenomenon, nor are its outcomes binary like for example, good or bad. The impact would depend on the nature and context of migration. One study shows that improved irrigation facilities, soil conservation, increase in area cultivated and crop diversification resulting in more employment reduced migration by 60% in Sidhi district of Madhya Pradesh (CSE 2008). Reports from Dungarpur, Udaipur and Rajsamand districts show



that rural men continue to migrate for factory work in Mumbai, Udaipur and Gujarat. In all these cases the wages in these activities are higher than that of MGNREGA, and the duration of employment is also for longer periods. These can hardly be called distress migration. From these households while men migrate for high-wage and relatively long duration non-agricultural work, women and elderly remain in the village to take to MGNREGA work which certainly is an addition to overall household income. But to call this as a “failure to curb distress migration” is misleading.<sup>14</sup>

That MGNREGA impacts distress migration is evident in the reports from non-farm activities like textiles, jute mills and large numbers of small and medium enterprises (SMEs). The textile industry is dependent on migrant workers especially from Uttar Pradesh, Bihar and Orissa. Since schemes like MGNREGA provide livelihood to workers nearer home, it discourages labor migration from catchment areas to production centers. This cannot be read as the cause for labor shortage although it adds to the difficulty of mobilizing ‘additional workforce’ that is needed in this sector. The growth projections of the textile industry suggest that the workforce requirement would increase from the current level of about 35 million to 47 million by 2015. Most of the workers earning about Rs 7000 a month are migratory in nature. They move from the agricultural sector to cities after the sowing season for half of the year, and get back to the village when the harvest season starts. The MGNREGA is seen as discouraging labor migration from rural to urban areas.<sup>15</sup> But there is no evidence that migration for work that ensures higher wages and longer duration was discouraged by MGNREGA. The Secretary General of the Confederation of Indian Textile Industry (CITI) observes that the problem in the textile industry is not that they are losing workers, but that the industry is not getting additional workers, especially skilled workers. “The challenge will be to find enough workers and to train them. Though the training needs are neither complicated nor time consuming, the magnitude of the requirements would make it a herculean task”.<sup>16</sup> Within the textile industry, it is claimed that jute mills in West Bengal pay the maximum daily wages with a fresher getting Rs 227 per day and a skilled worker Rs 404. These wages are two to four times MGNREGA wages. Yet, it is claimed that the shortage of labor in jute mills is due to MGNREGA which discourages workers from migrating.<sup>17</sup> Similarly, the Indian Industries Association (IIA), Ghaziabad Chapter also considers MGNREGA as the cause for labor shortage in small and medium industries.<sup>18</sup> But there is evidence from field studies, as we shall see, that migration for high wage employment, especially by male members of the household has not declined due to MGNREGA.

## **5.2 MGNREGA and the Rural Labor Market in Andhra Pradesh**

One of the major impacts of MGNREGA in rural Andhra Pradesh, as in many other parts of the country, is on the labor market. Based on the reports of focus group discussions (FGDs) spread over a fairly large number of villages (77), Table 9 presents some broad indicators of the change in the rural labor market as a result of MGNREGA. These indicators have to be interpreted in all the nuances captured in the FGDs .

### **MGNREGA Minimum Wages**

In the first phase of MGNREGA, the minimum wage fixed was Rs 80 per day. It was increased in Andhra Pradesh to Rs 100 in 2009. Since the MGNREGA wage is calculated on the basis of work done at the schedule of rates, the minimum wage level is only indicative. The wage level could



**Table 9. Impact of MGNREGA on rural labor market in select villages in Andhra Pradesh 2008-09\*.**

Indicator	(Number of Villages)				
	Increased	Decreased	No change	No clear response	All villages
1. Agricultural Wages	70	Nil	2	5	77
2. Peak Season Shortage of Agricultural Labor	62	Nil	6	9	77
3. Male-Female Agricultural Wage Differential	Nil	71	Nil	6	77
4. Migration (a+b)	Nil	51	20	6	77
a) Villages with Migration Before NREGS	Nil	51	4	Nil	55
b) Villages with no Migration Before NREGS	Nil	Nil	12	Nil	12

\*The evidence is based on reports of Focus Group Discussions (FGD) of 77 villages (panchayats) spread over 8 districts (Chittoor, Nalgonda, Medak, Ranga Reddy, Adilabad, Karimnagar and Kurnool). These FGD reports are part of the two projects: Galab S, et al. (2008) and Reddy, DN et al. 2011)

be higher or lower depending on the turnover of work. But in Kuppanagar, a village that is used as a case study, the average wage level obtained has always been higher than the minimum indicated. Even earlier, in years when the minimum wage was Rs 80, Kuppanagar workers logged wages ranging from Rs 93 to Rs 126. The results of the household survey show an average rate of Rs 103 in 2009-10. In Kuppanagar, as in other places in the state, work is allotted to a group calibrating the quantity equivalent to the schedule of rates that would fetch a minimum wage to each member. Often, some members of the group do not turn up but the remaining ones complete the allotted work, and this increases the average wage to a level higher than the indicated minimum wage. Wherever, the workers are formed into Shrama Shakti Sangams (SSS), as in Kuppanagar, there is better motivation to work as a team and complete the work allotted even if some members do not turn up. The result is an average wage which is higher than the minimum wage. Average wages are paid equally to men and women. Average MGNREGA wages logged by Kuppanagar workers are higher than local agricultural wages, especially for women. The impact of MGNREGA wages are felt in two ways. First, overall agricultural wages have increased. Male wages in agriculture increased from Rs 80 before MGNREGA to the present level of Rs 100, and female agricultural wages increased from Rs 50 to Rs 80. The male-female wage gap has declined substantially. The number of hours of agricultural work has also declined and it is invariably half a day of work at the wages mentioned above. The net impact on agriculture is higher wage costs.

The responses in the group discussions reveal an interesting pattern. Regardless of the social group, most of the MGNREGA workers are also small-marginal farmers and they too feel the impact of rising agricultural wages on their farms but only marginally, for two reasons. First, their earnings from MGNREGA, especially those of women, is substantial. Second, they have substantial gains by way of improved productivity of their land due to MGNREGA land development works on their private lands. Therefore, the small-marginal farmers do not

complain much about rising wages. The landless workers acknowledge rising agricultural wages. Their main complaint is about the steep rise in prices of essential commodities.

The response of relatively bigger farmers, normally non-participants in MGNREGA, is about rising agricultural wages. Interestingly, in many villages, they do not complain about the MGNREGA as such, since most of them benefited from the rise in the water table and increase in water in their wells and bore wells due to MGNREGA works, especially due to desilting of tanks and ponds, and construction of a number of percolation tanks. These relatively bigger farmers have repeatedly asked for half of their agricultural work and wages to be shared by MGNREGA. Paradoxically, they have developed a vested interest in MGNREGA hoping their wage costs would be shared under the scheme. The political forces appear to be actually nursing this hope.

### Agricultural Wages

When the fieldwork was being carried out during 2008-09, the NREGS minimum wage for both male and female workers was Rs 80. In some of the villages, the male agricultural wage was equal or marginally more than the NREGS wage. However the female agricultural wage level was much lower in almost all the villages. The introduction of NREGS increased the demand for labor in rural areas and resulted in an increase in agricultural wages as well. The rise in female agricultural wages, which were at a much lower level, was much steeper than the rate of increase in male wages. As a result the difference between male-female agricultural wages declined substantially in almost all villages (71). The data showing this trend is available. An evaluation based on a large sample drawn from nine districts of Andhra Pradesh shows a 43% increase in wages since the time of inception of the scheme up to 2010-11 (GoAP 2011).

The Andhra Pradesh experience of the high, average and low performance in MGNREGA employment, wage rates and household earnings is highly instructive and worth presenting here as a summary statement (Reddy 2011). While the relatively high average for the State as a whole could be attributed to State level political and administrative commitment and initiatives, the high and the low averages observed at the grass root level is for the most part a result of the presence or absence of participatory governance at the Panchayat level (Table 10).

**Table 10. Employment and earnings under high, average and low MGNREGA performance in Andhra Pradesh (2009-10).**

Indicator	Kuppanagar village (high)		State average	Makkarajpet village (low)
	Sample households	All households		
1. Average person days of employment per household	161 <sup>1</sup>	84	65	31
2. Average wage per person day (Rs)	103	110	92	86
3. Average annual MGNREGA earnings per household (Rs)	16,137	9,240	5,980	2,781
4. MGNREGA earnings as % of poverty threshold income (Tendulkar Poverty Line)	40.0	23.0	14.9	6.9

1. The high number of days is due to combining drought relief work with MGNREGA in the village during 2009-10.

Source: nrega.ap.gov.in and Household Sample Survey (Reddy 2011).

## **Hunger and Food Insecurity**

The experiences of Kuppanagar and Makkarajpet show the difference that implementation of MGNREGA could make to food insecurity in dryland areas. While Kuppanagar with the best performance with respect to MGNREGA may show that hunger is a thing of the past, in Makkarajpet where MGNREGA performance has been poor, 85% still feel that they have to suffer the privation. There has however been an improvement in the consumption of food and food insecurity has reduced. Everywhere there was growing concern about rising prices. There are interesting instances reported in FGDs which reveal varying degrees of impact depending on the local conditions and the performance of MGNREGA. For instance, the five villages in Karimnagar district report that MGNREGA has had no impact on food insecurity, which means that, Karimnagar, being an agriculturally prosperous district already had higher levels of employment, wages, and levels of consumption of food, and hence MGNREGA did not make any difference. Adilabad is a relatively backward district but here too, ironically, MGNREGA did not make much difference to food insecurity. This is because of poor implementation of the MGNREGA in the district, no assured employment, low earnings from the scheme and continued migration which together perpetuate low levels of food consumption.

In contrast, in Khammam district, where there were villages with food deficit and hunger before MGNREGA, reports show a complete turnaround in food consumption and security because of better implementation of MGNREGA, more employment, earnings and access to food. In most of the villages, besides improved consumption levels in food, MGNREGA earnings have enabled the households to buy food in larger quantities. There is also a change in food habits and some households have reported that they consume 'tiffin' for breakfast. A larger survey reports that a big proportion of MGNREGS households are able to buy chicken and meat (68%) and vegetables (58%) and for 87% of these households MGNREGS has become a source of lean season employment. There are moving instances of livelihood dilemmas of the poor where before MGNREGA their incomes were too meager to meet their own consumption requirements and therefore, the needs of the aged members of the household had to be neglected. MGNREGA has enabled them to take better care of aged parents. Some households reported that they are actually able to provide their parents with pocket money to buy toddy and beedies.

## **Shortage of Labor and Changes in Working Day**

Even before MGNREGA, in peak agricultural season labor shortage was experienced in many villages. Of course, there were a few dryland villages where it was more a shortage of work, than a shortage of labor, which continues to be a problem. But after MGNREGA, 62 out of 68 villages reported an increase in labor shortage. However, out of 77 villages, only two villages reported that there was any decline in area under cultivation due to rise in wages or shortage of labor in the peak season. In Kuppanagar village, there has actually been increase in the area cultivated in the last two years, due to MGNREGA investment in fallow and rainfed lands belonging to SCs. A number of strategies are being adopted to meet the changing labor market situations which in turn are also leading to many changes in the nature of rural, and especially agricultural, labor markets. Six villages reported labor being brought from outside the village by paying transport charges in addition to wages. In three villages wages were paid in advance to ensure labor supply in the peak season for agriculture. There has been a growing tendency towards piece rate or contracting out of agricultural work as opposed to employing labor on daily wages.

Agricultural workers reported better bargaining power, better treatment at the farm, visible change in the form of respect and less pressure at the place of work. Besides a rise in wages, in most of the villages workers have been able to negotiate reduced duration of the agricultural working day. And the growing shift towards piece rate or contract work in agriculture has facilitated this change in the length of the working day. There has also been an increasing tendency for the MGNREGA working day to begin early in the day by seven in the morning and terminate by one in the afternoon. There are instances where the workers take to agricultural work in the afternoon, often on their own farms, after attending MGNREGA work in the forenoon. There is an emergence, in some villages, of a dual mode of work in a given day with MGNREGA work in the forenoon and agricultural work in the afternoon (Reddy 2011). The latter is usually carried out by the workers on their own farms. Such adjustments appear to soften the shortages of agricultural labor. More importantly the working day itself is being redefined due to changes in the labor market brought about by MGNREGA.

### **Group Work**

There are important changes in the nature of work, duration of working hours and attitude to group work. Almost all work under MGNREGA is in the form of group work. The workers in many places, like Kuppanagar, are organized into fixed labor groups called Shramik Shakti Sangams (SSSs). The group formation, imparting training to 'mates' of the groups and working together for over two years appears to promote better awareness, solidarity and motivation to perform better. The majority of the groups, with a few exceptions, are groups of mixed castes. There was considerable mutual understanding and sharing of work. The reaction of workers to group work reveals some of the finer elements of work, like work not being looked upon as mere drudgery or exploitation but as a positive involvement. The workers' response was that under group work, which often involves the entire adult family members along with others, even hard work is not felt as difficult work. There is a sense of mutual sharing when old people and the physically disabled are also part of the group. This has been possible because some stronger members agree to compensate by taking on more load and share wages equally. In the perception of workers, there is also a certain amount of dignity associated with MGNREGA, since it is government work, with no room for exploitation.

### **MGNREGA Calendar**

Though there are reports elsewhere about mechanization of agriculture as a response to labor shortage, there is no such perceptible change towards mechanization as a response to MGNREGA in the villages of the eight districts discussed here. But there is a widespread demand by farmers for stopping MGNREGA work during the agricultural peak season. In fact, a number of Gram Panchayats have evolved, through mutual negotiation, a work calendar that avoids MGNREGA work during the local agricultural peak season. Such an adjustment is seen as a mutually beneficial measure that helps farmers prevent labor shortage in the peak season, and provides workers with NREGS work in the lean season thereby increasing the overall days of employment in a year.

### **Migration**

Of the seventy seven villages reported in Table 9, in twelve villages there was no migration before or after MGNREGA. Of the remaining, in four villages there was not much change in

the migration situation even after the job scheme, and in six other villages there was no clarity in the information recorded. In the rest of the fifty five villages there were varying degrees of decline in migration. Most of the decline is in distress migration, but not in the emerging process of movement towards higher paying, relatively high productivity non-agricultural work, and often, rural to urban mobility. At least four villages reported complete stoppage of distress migration. Some villages in districts like Ranga Reddy reported a decline in long distance distress migration to Mumbai and Pune. This is similar to the decline in migration from drought prone Mahabubnagar district which was well documented elsewhere (Sainath 2008). In many other villages, the participants in discussions observed that there would be a further decline in distress migration if MGNREGA work is provided for longer periods at a time, and if wages are paid without much delay. Their arguments were well reasoned. They were conscious of the costs of migration including raising informal loans at high interest rates to meet the expenses of mobility, high rents and fuel costs in unfamiliar destinations, the ordeal of having to live in sub-human conditions and the risk of their children missing a chance to go to school.

The non-distress type of migration from these villages, which is not affected much by MGNREGA, is of three types. One is the migration of male members of the households for high paying non-agricultural work for relatively longer durations. For instance, from the villages of Kurnool district which borders Karnataka, male members of the households migrate to Bellary to work in construction, mining and other activities. The second type of non-distress migration that continues even after MGNREGA is rural to rural migration from dryland areas to fertile areas for agricultural work. For instance, from Mandals like Aspari in Kurnool district, entire household members migrate to Guntur district during June-August to work in the mirch (chilli) and tobacco fields where each migrating couple make as much as Rs 500 per day. These families return during September - October to their own villages to work in agriculture, and some, even in MGNREGA. The third type of continuing migration is - strictly speaking not migration - it is daily commuting to neighboring towns. For instance, in Kurnool district members of some rural households commute to neighboring towns like Allagadda to work in shops and other establishments where the wages are high. Interestingly, some work in MGNREGA in their villages in the forenoon, and commute in the afternoon to nearby towns to work in odd jobs including vegetable and fruit vending. Another independent survey cutting across 81 villages in nine districts of AP reports 44% percent reduction in migration (GoAP 2011).

### **Additional Worker and Additional Employment Effect**

A question often raised is, if there were to be a substantial increase in employment under MGNREGA, what would be the impact on agriculture? Would there be shortage of labor for agriculture? Or a decline in the area cultivated due to shortage of labor? The experience of Kuppanagar village, suggests that although initially there were signs of shortage of labor, over the past three years there have been interesting developments in the working hours and the working day. Gradually there has been a shift in the daily work schedule of MGNREGA works. It is increasingly now tending to be confined to the forenoon. With it, there is also a tendency on the part of workers who are engaged in the forenoon to take up either agriculture wage labor or work on their own farms in the afternoon. As observed earlier, many workers earn MGNREGA wages in the forenoon, and also earn from agriculture in the second half of the day, thereby doubling their day into two working and earning days. This is hard work, but preferred by many

workers since there is a substantial increase in income. This is a clear additional employment effect. The other factor contributing to the additional worker effect is the inducement of relatively higher wages for women in MGNREGA as compared to agriculture. Some women from certain social groups who did not perform wage labor, are participating in MGNREGA work. This is because of it being 'government' work and not work for a contractor or a landowner which carried a social stigma for certain social communities. Thus, the additional employment and additional worker effects together appear to keep labor supply to agriculture from being greatly disturbed.

## 6. Concluding Observations

- One of the clear evidences on the impact of MGNREGA on agriculture relates to the labor market. The findings may be summarized into the following broad stylized facts:
- Agricultural wages have increased across the country, in which the impact of MGNREGA is considerable.
- The rate of increase in the female agricultural wage has been much higher than male wages, and the historically high male-female differentials in agricultural wages have declined substantially.
- The tightening labor market has offered better bargaining power to agricultural laborers, better treatment at the place of work, and ability to negotiate the duration of the working day.
- The terms of wages are increasingly tending towards piece rate contracts.
- The peak period labor shortages in agriculture are observed in several regions and are resulting in a number of changes - in the working hours, working day and MGNREGA work calendar.
- The ongoing process of agricultural mechanization is hastened especially in certain operations like ploughing and harvesting of paddy.
- A clear response to peak season agriculture labor shortage is the negotiated MGNREGA calendar that avoids implementing works during agricultural peak season and provides developmental works during the lean season. Such a time schedule though not universal is welcomed by farmers as well as workers wherever adopted.
- There is no evidence that there has been a marked decline in the area cultivated either due to a rise in agricultural wages or shortage of labor. On the contrary, there are counteracting forces by way of 'additional worker effect' which are drawing women especially from certain social groups into the 'government employment' of MGNREGA wage-work; and 'additional area effect' by making some of the fallow lands of the poor more productive.
- There is clear evidence that the rise in wages is one of the factors contributing, along with other rising input costs, to the increasing costs of cultivation. While SC, ST and other small-marginal farmers who are also participants in the MGNREGA were not affected much, or in many cases gained considerably, the better off farmers could face the rising costs partly through mechanization.



- The worst affected are the small-marginal farmers who are neither participants in the MGNREGA work nor beneficiaries of works on their private lands. This section of the small-marginal farming community may not be small, and faces serious crisis. In this context, the Planning Commission's proposal to make the scheme more farmer-friendly by extending the coverage to some of the agricultural operations,<sup>19</sup> if designed properly, may address the problems of excluded small-marginal farmers.
- One of the salutary effects of MGNREGA on poor rural households is the drastic reduction in distress migration. But there is no reason to share the apprehension, as expressed by some (Farrington et al. 2007), that the scheme "may discourage them from moving to more economically dynamic areas". Just as it is in favor of a decline in distress migration, there is equally strong evidence to show that migration for higher wage work that lasts for a relatively longer period in a year remains unaffected, and possibly would improve if skill formation and capacity building activities that would develop human capabilities are also brought under MGNREGA.

## 7. Notes

1. By an amendment to Schedule I and II of the National Employment Guarantee Act in March 2007, the name of the program was changed to National Rural Employment Guarantee Scheme (Gazette of India No. 231, dated 6 March 2007). By a further amendment on 7 January 2010, the name of the Act and Scheme was renamed the Mahatma Gandhi National Rural Employment Guarantee Act and Scheme respectively. NREG, NREGS, and MNREGS are used interchangeably in this paper.
2. "Government nulls 'lean period' for rural job scheme in harvesting season", *Financial Express*, 11 August 2008.
3. *The Tribune*, 24 April 2010.
4. <http://greenworldinvestor.com/2010/07/17>
5. "Punjab Farmers Reap Bitter NREGA Harvest" *Times of India*, 13 June 2010.
6. "Aspirations within Misery: Labor Shortage in Agriculture", *Sanhati*, 5 August 2008.
7. "NREGS lures laborers away from fields", *The Pioneer*, 4 May, 2010.
8. 'Labor shortage affects paddy harvest', *The Hindu*, 23 September 2010.
9. 'Sugar mills go high-tech to beat labor shortage' *Business Standard*, 14 August 2011.
10. "Farmers of Tamil Nadu, Andhra show the way", *The Hindu*, 6 June 2011.
11. [http://www.researchandmarkets.co/research/d5e163/indian\\_tractor-ind](http://www.researchandmarkets.co/research/d5e163/indian_tractor-ind)
12. *The Financial Express*, 11 August 2008 and *The Asian Age*, 18 July 2011.
13. "Agriculture Ministry wants MNREGA labor glitch uprooted", *The Pioneer*, 24 July 2011.
14. A very detailed report on how male members of the household migrate to high paying factory work and women and elderly take to NREGS is reported as "MNREGS fails to curb distress migration in parts of Rajasthan", *Business Standard*, 14 August 2011.

15. Rawat DS, Secretary General, ASSOCHAM in *India Infoline News Service*, 26 June 2011.
16. Nair DK, Secretary General, Confederation of Indian Textile Industry (CITI) in *SME Times*, 28 April 2011.
17. *Fibre 2 Fashion* (online) 14 August 2011.
18. *SME Times*, 7 May 2011.
19. It is reported that the draft proposal by the Planning Commission submitted to the Ministry of Rural Development suggests rechristening the Scheme as MNREGS-II so as to cover agricultural activities like sowing, harvesting, soil and compost preparation, irrigation and allied activities like tending livestock. It is also proposed that to begin with the farm activities will be allowed under the revised scheme only in 2000 backward blocks, with a goal of putting back small-marginal farmers on their own farms. (*The Pioneer*, 19 August 2011 and *Tehelka*, 20 August 2011).

## 8. References

- Acharya S.** 1990. Maharashtra Employment Guarantee Scheme: A Study of Labor Market Intervention. New Delhi: ILO-ARTEP.
- Babu VS, Dhanyashree B, Abraham J and Rao KH.** 2011. Impact of MGNREGA on Scheduled Castes in West Bengal. Hyderabad: NIRD (Processed).
- Banerjee K and Saha P.** 2010. The NREGA, The Maoists and Development Woes of the Indian State. *Economic and Political Weekly XLV(28):42-47.*
- Bhaduri A.** 2005. Development with Dignity. New Delhi: National Book Trust. 1-107 pp
- Bhagat R.** 2010. A World of Cultivated Taste. *The Hindu Business Line* 26 February.
- Centre for Science and Environment (CSE).** 2008. An Assessment of the Performance of the National Rural Employment Guarantee Program in terms of its Potential for Creation of Natural Wealth in India's Villages. New Delhi: CSE, September. 1-47 pp.
- Datt G.** 1994. Poverty Alleviation through Rural Public Works: The Experience of Maharashtra Employment Guarantee Scheme. *The Indian Journal of Labor Economics* 37(4):707-718
- Farrington JRH and Stater R.** 2007. Linking Social Protection and the Productive Sectors. Briefing Paper 28. London: Overseas Development Institute. 1-4 pp.
- Galab S, Reddy P, Revathi, E and Ravi M.** 2008. Evaluation Report on the Impact of MGNREGA in Andhra Pradesh. Hyderabad: Centre for Economic and Social Studies (Processed).
- GOAP.** 2011. Impact of MGNREGA on Poverty and Levels of Living of Poor. Hyderabad: (Akshara Livelihood Private Ltd.), Department of Rural Development, GoAP.
- GOI.** 2010. *Rojgar Sutra*, MoRD-Gol, NREG and UNDP.
- GOI.** 2010. Mahatma Gandhi National Rural Employment Guarantee Act 2005: Report to the People. 2 February 2006 to 2 February 2010, MoRD, Gol.
- IITM.** 2009. Evaluation of National Rural Employment Guarantee Act. Madras: Rural Technology and Business Incubator, IIT.



- Kamath R.** 2008. NREGA Surveys in Anantapur, Adilabad, Raichur and Gulbarga (2007-08). Bangalore: (MoRD and UNDP Sponsored), Indian Institute of Management.
- Kannan KP and Jain V.** 2011. Implementation of NREGA Across Indian States: A Phase-wise Analysis. Paper presented at Final Workshop under CDS-ASSR Project on Monitoring the Implementation of Social Security for the Working Poor in India's Informal Economy. Thiruvananthapuram: Centre for Development Studies (CDS).
- Khera R and Nayak N.** 2009. Women Workers and Perceptions of the National Employment Guarantee Act. *Economic and Political Weekly* XLIV(43):49-57.
- Nayak NC.** 2010. Appraisal Processes and Procedures of NREGS in Orissa: A Study of Mayurbhanj and Balasore District. Kharagpur: Indian Institute of Technology.
- NCEUS.** 2006. Social Security for Unorganized Workers. A Report. New Delhi: National Commission for Enterprises in the Unorganized Sector, Government of India.
- Paliwal A.** 2011. Water Turns the Tide. *Down to Earth*. April 15.
- Pankaj A and Tankha R.** 2010. Empowerment Effects of the NREGS on Women Workers: A Study in Four States. *Economic and Political Weekly* 40 (30): 45-55.
- Papola TS.** 2005. A Universal Programme is Feasible. *Economic and Political Weekly*, February 12.
- Rao K H, Subrahmanyam S, Murthy, CS and Babu VS.** 2011. Impact of MGNREGA on Scheduled Tribes in Orissa. Hyderabad: NIRD (Processed).
- Rao KH and Dheeraja C.** 2010. Changing Gender Relations through MGNREGA: Bihar State Report, NIRD, Hyderabad (Processed).
- Reddy DN, Tankha R, Upendranadh C and Sharma AN.** 2010. National Rural Employment Guarantee as Social Protection. *IDS Bulletin* 41(4):63-76.
- Reddy DN, Upendranath C, Tankha R, Sharma AN, et al.** 2011. Institutions and Innovations in the Implementation Process of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) in India. Report 09. Sussex, UK: Centre for Social Protection Research, Institute of Development Studies.
- Reddy DN.** 2011. Functioning of National Rural Employment Guarantee Scheme (MGNREGA) in Andhra Pradesh. Paper presented at Final Workshop under CDS-ASSR Project on Monitoring the Implementation of Social Security for the Working Poor in India's Informal Economy. Thiruvananthapuram: Centre for Development Studies.
- Rodgers G.** 2009 The Right to Work and the Reduction of Poverty: An Economists' View. New Delhi: Mimeo, IHD.
- Sainath P.** 2008. NREGA: A Fine Balance. Source:<http://www.indiatogether.org/2008/jul/psa-finebal.htm>
- Singh SP and Nauriyal DK.** 2009. System and Process Review and Impact Assessment of NREGS in the State of Uttarakhand. Roorkee: Indian Institute of Technology.
- Sudarshan R M, Bhattacharya R and Fernandez G.** 2010. Women's Participation in the NREGA: Some Observations from Fieldwork in Himachal Pradesh, Kerala and Rajasthan. *IDS Bulletin* 41(4):77-83.







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