

Chapter 3

MGNREGS Implementations and the Dynamics of Rural Labour Markets

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3.1 Introduction

Recently, labour scarcity has emerged as one of the major constraints leading to an increase in agricultural production cost in India. Therefore, in this chapter, evaluation of differential impacts 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*, women members and poverty alleviation has been done. Then, this chapter also analyze state level data by disaggregating by

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socials classes, men and women and to the factors that make a difference to the performance. Also, some micro-level findings and alternate scenarios are presented based on the findings based on a series of focus group discussions (FGDs) conducted in the villages of Andhra Pradesh. The secondary data presented on agriculture and rural labour markets are largely based on the official sources of data and from other studies made on different aspects of the scheme (Reddy et al. 2014).

Though, national economy of India has been growing at a rapid pace in the past two decades, there is a widely shared view that the increase in employment has not been commensurate with growth in the national economy. While faster growth of economy is beneficial to various stakeholders, the employment growth is more critical to reduce poverty in the economy. The policy initiatives directly addressing poverty reduction may be grouped into three types. They are:

- (a) *Institutional measures* such as strengthening organization of the poor to enable them to acquire better capabilities like the promotion community based organizations (CBOs), provision of targeted credit, etc.
- (b) *Transfer payments* which include direct cash transfers, pensions or indirect transfers like subsidized food and essentials through Public Distribution System (PDS).
- (c) *Provision of self-employment* and wage employment programmes to the targeted group of population in the economy.

The experience of welfare programmes in India shows that considerable efforts have been made on all three modes in terms of effectiveness in their implementation and providing wider coverage to all the needed population. Here, we concentrate on one of the major initiatives, viz. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) of 2005, and the resultant Schemes and its implications on rural employment.

3.2 Fixation of Wages

The issue of wage rate for MGNREGS has been a subject of controversy since its initiation as an Act in 2005, because it is not fixed as a uniform daily wage rate applicable to all states at the same level. Nor it is linked to statutory minimum wages, which vary from State to State. Except in Himachal Pradesh, the wage payments under MGNREGS is done in terms of piece rate linked to the 'Standard Schedule of Rates' (SSRs) followed by the Public Works Departments, rather the MGNREGA wage varies from states to state due to the local economy-related factors. This brings-in the issues of fairness of rates, fair in time measurement, employment hours of work, etc. Details are in Boxes 3.1 and 3.2.

One of the basic principles followed is payment of an equal level of wages to male and female workers participating under the MGNREGA schemes. When the Scheme was launched in 2006, an indicative wage rate of ₹ 80 per person day was proposed. This meant that workers engaged under MGNREGS would be assigned

physically measurable work equivalent to ₹ 80 as per the Standard Schedule of Rates followed in the state. Later, in 2009, the indicative wage rate was raised to ₹ 100 per person day, further, it was agreed to revise the base wage rate of ₹ 100 indexed on the basis of inflation rate in each of the states over the years.

Box 3.1: Payment of Wages

Assured minimum wages and timely payment of the same are basic entitlements under MGNREGS. 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 MGNREGS. Except Himachal Pradesh, all states in the country are required to pay MGNREGS 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 MGNREGS is to be realized through the physically measurable equivalent of work. This leads to the second problem of acceptable Standard Schedule of Rates (SSRs). The third problem is a timely measurement of work that is done. How frequently it should be done, who should do it and who should approve it, are the questions often raised. Fourth problem is who should pay wages? Implementing agency or an independent agency? How to integrate these steps? And at the end of it, how to ensure timely payment?

For instance, 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 MGNREGS. The Engineering Staff College of India was commissioned by the Government of Andhra Pradesh to make work–time–motion studies and suggest amendments to SSRs to ensure minimum wages under MGNREGS. 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 MGNREGS. Based on the study, the government of Andhra Pradesh revised the SSRs for MGNREGS 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 to follow a similar methodology. Still there were complaints that there were no rates in SSRs for certain tasks like, for example, ‘tank silt’, jungle and bush clearance, etc. The state government took the help of NGOs like Centre for Environment Concerns (CEC) to carry further studies, particularly focused on women’s tasks in MGNREGS 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 technical assistant on fixed day in a week for each cluster and logging the

same in the muster. Recently, there has been further technological up gradation of the system by developing software to transfer measurements through cell phone.¹ The third problem of agency of payment was solved by opting for postoffices and banks for payment using latest technology including biometrics. For making the system work smoothly 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 postoffice to payment by biometric smart card system operated by O-Mass Agency. At each Panchayat, the system is operated by a women candidate sponsored by the village organization of SHGs. Payments are made based on a biometric device which is linked to a bank by a cell phone. The system is amazingly simple and the village coordinators handle up to Rs. 2 lakh a peak payments day.² The Technical Support Unit (TSU) of the A.P 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. With a view to avoid bogus attendance and to check instances of tempering and misuse of muster rolls, the e-Muster system has been introduced. For smooth fund flows cross-systems, the electronic Fund Management System. (e-FMS) has been introduced recently. This also reduces delays in payment of wages. Likewise, kwage payments under MGNREGA has been now linked with Aadhaar numbers in 300 Direct Benefit Transfer (DBT) districts which will eliminate ghost beneficiaries and for a faster disbursement of wages. Under this new plan, wage payments will be routed directly into the accounts of the beneficiaries using electronic transfer systems.

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

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

Box 3.2: Wage Determination and Work Measurement Issues in Group Basedworks

A peculiar problem was observed in Rajasthan. Usually large numbers of workers were present at worksites, up to 50–70 persons and they were further divided into teams to undertake tasks (Khera 2008). 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 one could find 70 year olds and even some college students at the worksite during their summer holidays, not undertaking work but merely hanging around. In Tonk district were 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 to mark their attendance so that they could claim wages.

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

However, there were also cases where male labourers in a mixed group did not work hard, making women to do much of the work, and leading to female labourers preferring to work without men in their groups. The programme 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 preferred.

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 Rs. 1 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’ labourers were few in number, wages were above Rs. 80.

Source Reddy et al. 2010.

Table 3.1 presents information on the average wage rate paid per person per day under MGNREGA scheme from 2006–07 to 2011–12. The average wage rates are derived by dividing the total MGNREGA wage expenditure in the state by the person days of employment provided in the state in the year concerned. The derived wage rate per person 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 the number of days of employment provided for 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 rate of inflation during these years, it would be more

Table 3.1 Average wages earned per person day and average annual earnings per household under MGNREGS during 2008–09 to 2011–12

Sl. No.	States	MGNREGS average level of wages per day (₹)			Average level of wages per day (₹)	Average level of wages per day (₹)	Average level of wages per day (₹)
		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

(continued)

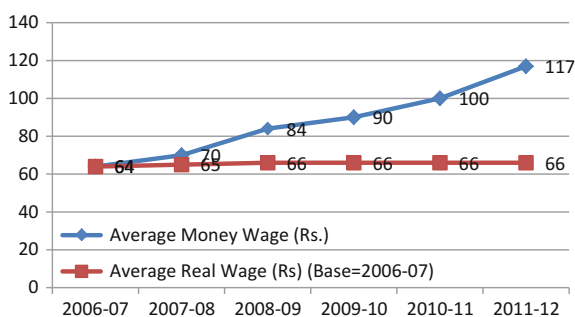
Table 3.1 (continued)

Sl. No.	States	MGNREGS average level of wages per day (₹)			Average level of wages per day (₹)	Average level of wages per day (₹)	Average level of wages per day (₹)
		2006–07	2007–08	2008–09			
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>

Fig. 3.1 MGNREGS national Average money and real wages per person day



appropriate to examine whether there has been any improvement in real wages realized under the scheme by deflating the money wages by Consumer Price Index for Rural Labour. Such an exercise is done by taking the national average wage rate per person day during the past 6 years and the results are presented in Fig. 3.1. 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, if there were a decision to index the MGNREGS wage rate with the national inflation, there would have been a steep decline in real wage payments under the MGNREGS.

3.3 Impact of MGNRGA on Employment, Earning and 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 hundred days of employment, at least as per the demand in the local areas. Table 3.1 shows that there is no state which had provided 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 had obtained 100 days of employment, but the size of their economy is very small compared to the economic size of the other major states of India. Of the other five states, which have reached more than 10%, three of them are Nagaland, Meghalaya and Sikkim. Among the large scale of States, only Andhra Pradesh (17.8%) and Maharashtra (11.3%) have achieved 100 days of employment per household crossing two digit levels under the MGNREGA programme activities.

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 Fig. 3.2 shows a clear downward trend. An attempt is made here to estimate the impact of the earnings under the MGNREGS across the states. State-specific estimates of annual earnings of participating households are derived by dividing the total wage expenditure under MGNREGA work 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 threshold expenditure would indicate the possible extent of the impact of the MGNREGS on rural poverty.

Table 3.2 provides the results of these estimates. For the country as a whole, the earnings from the scheme are a little over 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 a 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 MGNREGS.

Fig. 3.2 National average person days of employment per household. Source <http://www.nrega.nic.in>

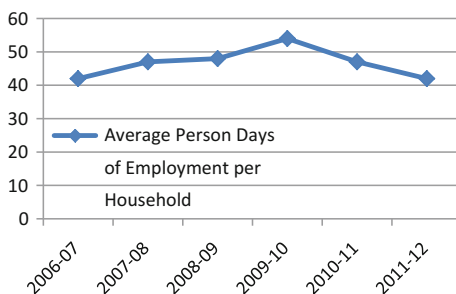


Table 3.2 Impact of MGNREGS on rural poverty (2009–10)

Sl. No.	States	Average earnings per household under MGNREGS (₹) 2009–10	Rural household poverty threshold income	MGNREGS earnings of % of poverty threshold income
1	Andhra Pradesh	6032	41,580	14.5
2	Arunachal Pradesh	1711	46,420	3.7
3	Assam	2982	41,500	7.2
4	Bihar	2687	39,336	6.8
5	Chhattisgarh	4228	37,038	11.4
6	Gujarat	3272	43,500	7.5
7	Haryana	5695	47,496	12.0
8	Himachal Pradesh	6276	42,480	14.8
9	Jammu and Kashmir	3573	43,374	8.2
10	Jharkhand	4834	36,398	13.1
11	Karnataka	4874	37,764	12.9
12	Kerala	4284	46,518	9.2
13	Madhya Pradesh	4659	37,914	12.3
14	Maharashtra	4814	44,622	10.8
15	Manipur	5681	52,260	10.9
16	Meghalaya	3901	41,214	9.5
17	Mizoram	9872	57,000	19.4
18	Nagaland	8987	61,008	14.7
19	Odisha	4196	34,026	12.3
20	Puducherry	1708	38,460	4.4
21	Punjab	3504	49,800	7.0
22	Rajasthan	6027	45,300	13.3
23	Sikkim	7625	43,734	17.4
24	Tamil Nadu	3912	38,340	10.2
25	Tripura	8028	39,804	20.2
26	Uttar Pradesh	6458	39,822	16.2
27	Uttarakhand	3455	43,170	8.0
28	West Bengal	4029	38,592	10.4
	All India	4870	40,368	12.1

Note Average earnings, per household under MGNREGS is derived by dividing the total wage expenditure by average person days of employment per household

1. 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 for State-Specific Poverty Lines

The highest impact on households' earning is seen in Tripura state, where the household earnings from MGNREGS are as high as a little over 20% of the poverty threshold income. Mizoram is another high-performing state with the share as high as 19.4%. The performance of some of the relatively backward states like Odisha, Madhya Pradesh, Uttar Pradesh and Rajasthan was better than the national average. But, Bihar still lags much behind, which is also reflected in no decline in rural poverty in the state, which continued to be as high as 55% in 2009–10, the almost at same level of poverty as it was in 2004–05.

3.4 Impact of MGNREGS on Rural Labour Markets

3.4.1 Evidence from Across the Country

The search for information on the impact of MGNREGS on agricultural labour markets leads to some evidence on labour shortage, changes in wages, mechanization, peak season adjustment of work or adoption of MGNREGS calendar and migration. The available information, however, is sketchy and uneven across the regions. The implementation experiences also vary widely across the states. Yet some broad trends can be discerned.

With the exception of a few well-endowed regions, the pre-existing labour market in agriculture is characterized by surplus labour, low wages, high male–female wage differentials, and non-implementation of statutory minimum wages. The introduction of MGNREGS, with minimum and equal wages for male and female workers, has, in fact, brought not only an increase in the overall agricultural wages, but also reduction in the male–female wage gap of agricultural labour operation. For instance, agricultural wage increases were reported in a number of states right from Punjab and Haryana to Gujarat to West Bengal (Banerjee and Saha 2010). Even in tea gardens of Silchar, wage hikes are attributed to MGNREGS implementation in the state. That higher wages in the MGNREGS will divert workers from agriculture and create shortages of labour 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 still substantial underemployment does prevail 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 shortage of labour (Acharya 1990; Datt 1994). In agriculturally well-endowed regions, the level of agricultural wages was higher even before the MGNREGS was launched, where peak season labour demand was met by seasonal in-migration of labour from labour-surplus regions. The impact of MGNREGS on agricultural wages in such areas was not much, except in pockets where the migrant labour flow declined.

In the villages, most of the forward caste and large farmers are of the opinion that MGNREGS is the main reason for the labour shortage. While agricultural labourers and Schedule Castes and Schedule Tribe (SC/ST) communities are of the opinion that out-migration and work opportunities in non-farm sector are opening labour market for higher wage employment, and thereby they are demanding higher wages for agricultural sector. Hence, shortage of labour is not same for the farmers and agricultural labourers, and also among different social groups.

Recently, several previous studies in India have pointed out labour shortage not only in agriculture but also in non-agricultural activities that depend on rural casual labour.³ These studies were from many states like Andhra Pradesh, Punjab, Haryana, UP and Tamil Nadu have pointed out that after the introduction of NREGA, there has been a shortage of labour during harvesting of crops like wheat and rice.⁴ Labour shortage is also reported during peak paddy sowing season in Punjab,⁵ and apple harvesting season in Himachal Pradesh.⁶

There are reports as to how with the shortage of labour, the bargaining power of migrant labour in Punjab had increased to the extent of not only raising wages but also in improvement in working conditions. One study in Punjab even reported ‘Besides the TV, cooler, freshly cooked food and accommodation, the labourers 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 threefold in some of these places. Farmers say seasonal payment of wages has increased from a mere ₹ 1,750 to ₹.5,000–₹. 6,250 per ha, in just about two years’.⁷

While farmers of these regions of Punjab (and other developed states) tend to blame implementation of MGNREGS in labour-surplus states like Bihar, U.P and Jharkhand, the Commissioner of Punjab Agriculture has a different explanation: ‘Earlier, the labour force used to come to Punjab sometime by end of March, at the beginning of the harvesting season of wheat, and would stay there till paddy sowing operation was complete by end of July. This assured them ample opportunity of work for nearly four months. But increased mechanization of farm operations, especially in harvesting and threshing of wheat, has reduced the duration of employability for the migrant rural in Punjab, and predictability of the workforce migration to Punjab from Bihar has shown a dwindling trend from 2006–07 to 2011–12’.⁸

³“Aspirations within Misery: Labour Shortage in Agriculture”, Sanhati, August 5, 2008.

⁴“NREGS lures labourers away from fields”, The Pioneer, May 4, 2010.

⁵‘Labour shortage affects paddy harvest’, The Hindu, September 23, 2010.

⁶‘Sugar mills go high-tech to beat labour shortage’ Business Standard, August 14, 2011.

⁷“Farmers of Tamil Nadu, Andhra show the way”, The Hindu, June 6, 2011.

⁸http://www.researchandmarkets.co/research/d5e163/indian_tractor-ind

3.4.2 *Impact on Farm Mechanization*

Recently, many studies have suggested that the shortage of labour in agriculture can be met by increased pace of farm mechanization. Farmers in the many villages of Gangetic belt of Uttar Pradesh (UP) have decided to go for mechanized harvesting of the wheat crop due to shortage of rural labour forces.⁹ They have attributed the labour shortage to implementation of MGNREGS.

The use of combined harvesters for paddy harvesting in Pondicherry is also attributed to labour shortage resulting from the implementation of the MGNREGS.¹⁰ Mechanization of sugarcane harvesting in Maharashtra and provision of heavy subsidies to harvesting machines are also shown as a consequence of MGNREGS.¹¹ In Andhra Pradesh, Tamil Nadu and Karnataka mechanization of paddy transplantation are promoted by providing subsidies on the machines.¹² Even in West Bengal, mechanization is being promoted to beat rising labour costs (Babu et al. 2010).

An interesting report on the significant rise in the tractor market in India in recent years has cited shortage of agricultural labour as one of the explanations for the need of speedy mechanization.¹³ There is a danger that these reports could be read as if the MGNREGS is responsible for mechanization of Indian agriculture. It is a fact that introduction of combined harvesters, sugarcane harvesting machines and paddy transplanters have long preceded MGNREGS.

Some of these mechanization processes themselves, as observed by the Commissioner of Agriculture of Punjab cited above, disturbed the stable stream of labour supply. Tightening of agricultural labour market along with the state policy of subsidizing farm machinery ownership by farmers has been hastening agricultural mechanization, especially in agriculturally better-endowed regions, and the regions that are performing better in agriculture in the recent past.

Overall, the pace of growth rate in farm mechanization is faster in almost all the crops and states between 1997 and 2010 (Table 3.3). Growth rates in farm mechanization were above 10% per annum for paddy in Odisha and MP; for chickpea in UP; for cotton in AP and Karnataka; for maize in AP and Rajasthan.

The medium growth rate (from 5% to 10%) was observed for maize in Bihar; for chickpea in Haryana; for cotton in MP, Haryana, TN; for paddy in WB, UP, Bihar; for wheat in Bihar and MP. In the case of sugarcane, no state recorded more than 5% growth in farm mechanization. The growth rate in farm mechanization in

⁹The Financial Express, August 11, 2008 and The Asian Age, July 18, 2011.

¹⁰“Agriculture Ministry wants MGNREGA labour glitch uprooted”, The Pioneer, July 24, 2011.

¹¹A 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, August 14, 2011.

¹²D.S. Rawat, Secretary General, ASSOCHAM in India Infoline News Service, June 26, 2011.

¹³D.K. Nair, Secretary General, Confederation of Indian Textile Industry (CITI) in SME Times, April 28, 2011.

Table 3.3 Machine labour (Rs/ha) triennium ending 2010

State	Maize	Chickpea	Cotton	Paddy	Wheat	Sugarcane	Total
AP	2094(1.51)		1838(12.69)	1894(0.46)		1475(-4.01)	1829(4.41)
Bihar	1509(6.13)	1770(1.81)		1564(9.14)	1983(6.06)	3091(1.04)	2076(5.48)
Gujarat			1993(2.52)		2952(3.04)		2473(2.82)
Haryana		2024(6.19)	2404(7.46)	3824(3.95)	5284(4.05)	1143(0.4)	2939(4.24)
Karnataka	1510(4.64)		964(14.53)			1872(0.46)	1447(2.96)
Maharashtra			1111(4.66)			7134(4.21)	4122(4.28)
MP	702(4.75)	2226(4.22)	663(8.44)	1023(11.19)	2808(5.25)		1488(5.00)
Odisha				742			742
Punjab			4525(3.03)	4852(2.01)	5507(4.57)		4961(3.25)
Rajasthan	1830(13.97)	1576(3.54)	1803(3.3)		3399(1.69)		2152(3.87)
TN			3126(7.35)			1449(3.02)	2300(3.42)
UP	1756(4.93)	2538(11.31)		2482(6.07)		1111(2.75)	1972(6.58)
WB				1279(7.10)			1279(7.10)
Total	1610(7.42)	1986(5.41)	2051(4.84)	2200(4.22)	3840(3.98)	2386(1.04)	2324(4.23)

Note Figures in parenthesis are ACGR (%) machine labour from 1997 to 2010

Source Difference publication of GOI

agricultural lagging states like Odisha, WB, UP, Bihar and MP were much higher than other states, which could be due to counting of growth rate from a lower base in these lagging states.

3.4.3 Adjustment Work Calendar of MGNREGA to Local Conditions

One of the local demand by farmers across the several places in India is to manage peak season agricultural labour demand by suspending MGNREGS work during peak farming seasons of sowing, transplanting and harvesting of paddy and wheat. Such a measure would not only help farmers to avoid labour shortage but also help workers to get more days of employment by way of peak season agricultural employment in farming, as well as, the lean season of employment from MGNREGS work. To address these public voices, in a number of states, the local Panchayat bodies were allowed, by mutual consent between farmers and agricultural workers, to work with a crop calendar that avoids commencement of MGNREGS work in peak farming season in the location.

This is also to ensure that it is implemented in the lean season only.¹⁴ Such a calendar of work scheduled has been practiced even in the context of tea gardens in West Bengal, as one executive observed: ‘The Government would do well, and it would be a win-win situation for all, if they keep MGNREGS 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 towards making such an MGNREGS calendar as an official part of the implementation of the programme.¹⁵ For improving convergence with the other government rural development related departments (line agencies) and thereby to improve the quality of assets and infrastructure created under the MGNREGS, the State Convergence Plans have been formulated in many of the states.

There is also a focus from the present government in the centre on ensuring access to water to each agriculture farm by converging resources available under various rural development programmes such as water harvesting, conservation and management activities like MGNREGA, Integrated watershed Management Programme (IWMP) Command Area Development & Water Management (CAD&WM), Repair, Renovation & Restoration of water Bodies (RRR), etc. Accordingly, a comprehensive plan based on all available information on water sources, distribution network, water bodies, new potential for augmentation, efficient management system, etc., have been contemplated under Pradhan Mantri

¹⁴Fibre 2 Fashion (online) August 14, 2011.

¹⁵SME Times, May 7, 2011.

Krishi Sinchai Yojana (PMKSY), as launched late 2014, when the new government came to power in New Delhi in mid of 2014.

3.4.4 Asset Creation in Rural Areas

Although asset creation is not the primary aim of the MGNREGA scheme, in the recent years, asset creation related issues of the programme are gaining importance in public discourses. Recently, the Government of India and many other scholars working on rural development issues have proposed that at least 60% of the works to be taken up in a district in terms of cost shall be for the creation of productive assets directly linked to agriculture and allied activities through development of land, water and trees. It is proposed that the wage-material ratio for works taken up by agencies other than Gram Panchayat would be counted at the district level, and not at block level as practiced until now to facilitate for taking more durable assets under the MGNREGS programme (Government of India, Ministry of Rural Development, Rajya Sabha, Unstirred question No-2044, answered on 16.03.2015, Performance of MGNREGA).

Likewise, for improving convergence with other line departments, and thereby to improve the quality of assets created under the MGNREGS programme, the State Convergence Plans need to be formulated. As noted earlier, there is a focus on ensuring access to water to each agriculture farm by converging resources available under various programmes undertaking water harvesting, conservation and management activities like integrated watershed programmes, command area development programmes, etc. Accordingly, a comprehensive plan based on all available information on water sources, distribution network, water bodies, new potential for augmentation, efficient management system, etc., is contemplated under Pradhan Mantri Krishi Sinchai Yojana (PMKSY), or is also called as Prime Minister Irrigation Plan. The impact of the programme (MGNREGS) is visible in many states in terms of increased water tables, reduction of fallow lands and increased land productivity, after the wider spread implementation of the MGNREGS.

3.4.5 Migration

By default on design of the programme, the MGNREGS, by ensuring work for hundred days at an assured minimum wage at the place of residence under the MGNREGS act in 2005, was expected to have a substantial impact on the reduction of distress migration. Though there are no studies yet in estimating the extent of decline in distress migration because of MGNREGS, there are a number of studies, which gathered the impression of participants on the impact of MGNREGS 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 Nauriyal 2009), Odisha (Nayak), Andhra Pradesh and Karnataka (Kamath 2008), Tamil Nadu (IITM 2009) and Sikkim and Meghalaya (2009) show, by and large, there has been a sharp decline in distress migration, after successful implementation of MGNREGS in the places of these states, where the studies were carried out.

A study of select villages of Dhenkanal (Odisha), Bastar (Chattisgarh), Khunti and Gumla (Jharkhand) districts shows that earlier due to lack of employment opportunities within the villages, there was out-migration of large number of rural forces to agriculturally more advanced states like Punjab and Haryana (Banerjee and Saha 2010). The marginal and small farmers depended mostly on wage labour income, with very little earnings from the income from their farm operation, due to low yields in agriculture.

The commencement of MGNREGA works has ensured not only employment in their native places, but also afforded them an opportunity to save their labour forces for investment in their own farming activities that have resulted in higher yields. As a result, though out migration of labour has not been stopped entirely from these regions; the incidence of seasonal out-migration has come down sharply in the recent days.

A study with a specific focus on the impact of MGNREGS on Scheduled Tribes in Kandhamal and Koraput districts of Odisha shows that distress migration among the ST communities has declined by 72.5% among males and by 45.5% among females, after implementation of the programme activities in the states. And also, the average duration of migration of a labour household declined from 69 days in 2004–05 to 23 days per worker in 2001–12 (Rao et al. 2010). But a study of Purulia and Jalpaiguri in West Bengal shows only a marginal impact of MGNREGS on addressing distress migration, where the average number of days of migration declined only by about 10% (Babu et al. 2010). A study of five districts in Bihar finds that there was not much of incidence of migration in Siwan and Begusarai. Whereas, in Madhubani district, with an incidence of as high as 50% of out-migration of labour forces, only 11% felt that there was any significant impact of MGNREGS on rural labour wage markets. (Rao and Dheeraja 2010).

There are interesting instances of return migration of marginal and small farmers of Barmer district of Rajasthan who migrated to neighbouring Gujarat, Punjab and Haryana as wage labour due to water scarcity and depletion of groundwater (Paliwal 2011). In Barmer district, 47,779 'tankas' (small well-like structures made of concrete, cement and sand) and other water works were constructed under MGNREGS to collect rain water which improved groundwater table that enabled crop cultivation. The improved water supply has brought the small and marginal farmers back to agriculture from the seasonal labour work in other states.

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

Reports from Dungarpur, Udaipur and Rajsamand districts show that rural men continue to migrate to factory work in Mumbai, Udaipur and Gujarat. In all these cases, the wages in these activities are higher than that of MGNREGS, and the duration of employment is 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 MGNREGS work, which certainly is an addition to overall household income. Nevertheless, to call this as a 'failure to curb distress migration' is misleading.¹⁶

The positive impacts of MGNREGS in reducing distress migration are evident in the reports from non-farm activities like textiles, jute mills, and a large number of small and medium enterprises (SMEs). The textile industry is dependent on migrant workers especially from Uttar Pradesh, Bihar and Odisha. Since schemes like MGNREGS provide livelihood to workers nearer home, it discourages labour migration from catchment areas to production centres. However, this cannot be read as the cause for labour shortage although it adds to the difficulties in mobilizing 'additional workforce' needed in this sector. The growth projections of the textile industry also earlier suggested that the labour demand would increase from the about 35 million in 2011–12 to 47 million by 2015.

Most of the workers earning about Rs. 7,000 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 village when the harvest season starts. The MGNREGS is seen as discouraging migration of unskilled labour from rural to urban areas. but, there is no evidence that migration of labour for works that ensure higher wages and longer duration was discouraged by the implementation of MGNREGS in the rural areas.

The Secretary General of Confederation of Indian Textile Industry (CITI) observes that the problem in the textile industry is not losing workers, but 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'. 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 MGNREGS wages.

Therefore, it is a widely held claim among many industrials and related stakeholders of jute mills there that shortage of labour in jute mills is due to MGNREGS, since MGNREGS activities in the villages have discouraged agricultural workers to

¹⁶It 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, August 19, 2011 and Tehelka, August 20, 2011).

migrate from rural to urban areas. However, this does not reflect a true situation of migration behaviours of rural population. Similarly, the Indian Industries Association (IIA), Ghaziabad Chapter, has also reported that MGNREGS as the main culprit for labour shortage in small and medium industries in India now. Moreover, there are also several evidences and case studies from field across the places in India that migration for high-wage employment, especially male members of the household has not declined even after implementation of MGNREGS across India, but only distress migration of women and other vulnerable groups.

3.4.6 Youth and Educated

Educated and unemployed youth were more interested to migrate to work in urban/non-agricultural works, even though there are opportunities to work in agriculture and MGNREGA. They are attracted neither to agricultural work nor to MGNREGA works. It is due to laborious nature and also due to low social status attributed to such agricultural work. Besides, a small farmer (especially youth) is not interested in agriculture because of the low income and insecurity of return from the land.

Farmers and rural youth are concerned that the hard work they put in agriculture may go waste, if there are natural calamities like drought, hail storms, frost, and insect-pest and disease infestations. Penetration of electronic media in the rural areas has changed the attitude of the youths and turned them against agriculture. Their interest in agriculture is further waning, because of low expected returns from agricultural produce. Youth of the village do not want to work in agriculture and MGNREGA works, because it is strenuous work for long durations and is a low paid job if opportunities exist outside. Hence, MGNREGS has less impact on stopping the migrant labour who moves for higher wage rates.

In short, the review of evidence shows that MGNREGS has certainly provided dent on following aspect of rural livelihoods.

- (i) reduced distress migration among rural poor,
- (ii) smoothened rural consumption in the lean season,
- (iii) set high standards and transparency in doing rural development even in hinder-land villages,
- (iv) addressed underemployment problem in vast tract of rural India,
- (v) created assets that improved livelihoods of rural poor,
- (vi) gave boost to the financial inclusion
- (vii) strengthened activities and functions of Gram Panchayats
- (viii) improved the wage levels in rural areas and thereby increasing the income levels of the poorest of poor
- (ix) set standards for decent working conditions and
- (x) Helped in bringing fallow lands into cultivation.

In fact, the MGNREGS programme has also faced several challenges on its implementations such as,

- (i) delays in payment of wages
- (ii) corrupt practices in implementation
- (iii) denial of entitlements
- (iv) poor technical capacity to implement large number of works and
- (v) poor quality of assets created.

3.5 Impact of MGNREGS on Rural Labour Market in Telangana and Andhra Pradesh

One of the major and direct impacts of MGNREGS in rural Telangana and Andhra Pradesh, as in many other parts of the country, is felt in the rural labour market. Based on the series of focus group discussions (FGDs) spread over a fairly large number of villages (77), Table 3.4 presents some broad indicators of the change in the rural labour market as a result of implementations of MGNREGS in those villages. These indicators have to be interpreted in all their nuances to the extent the FGDs could capture them.

Table 3.4 Impact of MGNREGS on rural labour market in select villages in Telangana and Andhra Pradesh 2008–09^a

Indicator	Increased	Decreased	No change	No clear response	All villages
1. Agricultural wages	70	Nil	2	5	77
2. Peak season shortage of agricultural labour	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

^aThe 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 et al. (2008) and Reddy et al. (2014)

3.5.1 Job Security

As a result of MGNREGA, not only did the rural labour have been able to obtain increased wage rates but also their holding of job cards has given them a sense of job security. The labours consider job cards as a measure of minimum security of job that will be offered to them in future, especially in the off-season of agriculture where the unemployment is rampant in all rural areas, especially in a dry region with less access to irrigation water to grow crops all rounds the year. Because of this perceived assurance of future availability of jobs and at assured wage rates, the labour is empowered with increased bargaining power for setting their wage rates even in other seasons than the case of without the minimum guarantee of employment as was the case before implementation of MGNREGS in 2006.

This increased bargaining power of the agricultural labour, at least in relative sense, is also one of the factors that the farmers community at large have felt their reduced says in setting the rural wage and hiring the labour forces in many parts of the year, and so has become a point of criticizing the MGNREGS activities by the farming communities. These points have been expressed by many farmers during the focus discussions with the farming communities regarding assessing the impact of the MGNREGS. However, a more thorough sociological and political economy related study on the topics may provide further insight on this social-cultural aspect of the age-old patronizing type of relationship between farming communities and agricultural labour forces in Indian sub-continent.

3.5.2 High Risk Perception of Farming

In general, a small farmer is not interested to depend on his all livelihood activities in agriculture because of the inadequate income from farming and an insecurity of return from the crop husbandry in general. In addition, the majority of the rural youth in India are concerned that the hard work they put in agriculture is not sufficient to sustain their livelihoods. In the case of any of the natural calamities like drought, hail storms, frost, and insect-pest and disease infestations, their labour and investments in farming would be wasted.

Likewise, penetration of electronic media in the rural areas has changed the attitude of the youths and turned them against agriculture. Their interest in agriculture is further waning, because of low expected returns from agricultural produces, and uncertainty in farm income. Therefore, for educated rural youth, farming is a strenuous work for long durations, and is a low paid job compared to alternate jobs for them in the non-farm sector. Thereby, in many parts of India, educated rural youth and women, even unemployed ones, are usually do not attracted to agricultural work due to drudgery and due to low social status attributed to agricultural work than services and other sector employment.

3.5.3 Perception of Different Social Groups

In the villages, at many times, large sections of the forward caste community of agricultural families have often complained that the MGNREGA is the main reason for the labour shortage in their communities. The authors have faced such feedback and remarks from farmers during their case studies and focus group discussions at several dryland villages in western and southern India. While agricultural labourers are of the opinion that out-migration and work opportunities in non-farm sector are opening labour market for higher wage employment, hence they are also demanding higher wages for the agricultural sector in the rural areas; otherwise, they prefer to go to non-farm sector jobs in the nearby cities. Hence, the notion of a shortage of labour in large part of the rural India is not same for the farmers and agricultural labourers and among different social groups within a rural community.

3.5.4 MGNREGA Wage Rates

In the first phase of MGNREGS, the minimum wage was fixed at ₹ 80 per day. It was increased in Andhra Pradesh to ₹ 100 in 2009. Since the MGNREGS wage is calculated on the basis of work done at the schedule of rates, the minimum wage level is only indicative and the wage level could be higher or lower depending on the nature of work and group efforts in completion of the work on time. But, in Kuppanagar, a village used here as a case study, the average wage level obtained has always been higher than the minimum indicated. Even in the earlier years when the minimum wage was ₹ 80, Kuppanagar workers logged wages ranging from ₹ 93 to ₹ 126.

The results of the household survey showed average wage rate of ₹ 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 minimum wage to each member. Often, some members of the group do not turn up but yet the remaining ones complete the total allotted work and this increases the average wage to a level higher than an indicated minimum wage. Wherever, the workers are formed into Shrama Shakti Sangams (SSS), as in Kuppanagar, there is a better motivation to work as a team and complete the work allotted at a time, even if some members do not turn up. The result is the average wage of the group is then higher than the minimum wage.

Besides, the average wages are paid equally to men and women. The average MGNREGS wages logged by Kuppanagar workers are higher than local agricultural wages, especially for women. The impact of MGNREGS wages is felt in two ways. First, overall agricultural wages have increased. Male wages in agriculture increased from Rs. 80 before MGNREGS to ₹ 100 in 2008–09, and female agricultural wages increased from ₹ 50 to ₹ 80. The male–female wage gap has declined substantively. The hours of agricultural work also have declined and it is

invariably half a day work at the wages mentioned above. In the second half of the day, the same agricultural labours have also worked on farm on piece rate basis. The net impact on agriculture is higher wage costs.

The feedbacks of farmers in the group discussions held by the authors have revealed an interesting pattern. Regardless of the social group, most of the MGNREGS workers are also small and marginal farmers and they too feel the impact of rising agricultural wages on their farms, but marginally, because of two reasons. First, their earnings, especially those of women, from MGNREGS are substantially higher now than the case of 5–6 years before the implementation of MGNREGS.

Second, they have substantially gained by way of improved productivity of their land due to MGNREGS sponsored land development works on their private lands. In many cases, after improvement of the land development work, even the value of land has become double within a year. Therefore, the small-marginal farmers do not complain much about rising wages recently, as they also get paid on increased wage rate now. The landless workers, in fact, acknowledge rising agricultural wages. However, their main complaint is about the steep rise in prices of essential commodities.

The response of relatively bigger farmers, normally non-participants in MGNREGS, is about the rising agricultural wages. Interestingly, in many villages, they do not complain about the MGNREGS as such, since most of them benefited from rising water table and increase in yield of their wells and bore wells due to MGNREGS works in the villages, especially due to de-silting of tanks and ponds and construction of a number of percolation tanks. These relatively bigger farmers have been repeatedly making a plea that half of their agricultural work and wages could be shared under MGNREGS. Paradoxically, they have developed a vested-interest in MGNREGS hoping their wage costs would be shared under the Scheme and, the political forces appear to be nursing this hope!

3.5.5 *Agricultural Wages*

At the time of the fieldwork during 2008–09, the MGNREGS minimum wage for both male and female workers was ₹ 80. In some of the villages, the male agricultural wage was equal or marginally more than the MGNREGS wage rate, but the female agricultural wage level was much lower in almost all the villages. The introduction of MGNREGS increased the demand for labour in rural areas and resulted in increase in agricultural wages for both male and female workers.

The rise in female agricultural wages, which were at much lower level, was much steeper than the rate of increase in male wage rates. As a result, the difference between male–female agricultural wages declined substantially in almost all villages (71) studied. An evaluation based on a large sample drawn from nine districts of Telangana and Andhra Pradesh shows 43% increase in wages in 2011–11 from the time when the inception of the scheme was done in 2005/06 (GoAP 2011).

The Telangana experience of the high, average and low performance in MGNREGS employment, wage rates and household earnings is highly instructive

Table 3.5 Employment and earnings under high, average and low MGNREGS performance in Telangana (2009–10)

Indicator	Kuppanagar Village (High)		State average	Makkarajpet village (Low)
	Sample households	All households		
1. Average person days of employment per household	161 ^a	84	65	31
2. Average wage per person day (₹)	103	110	92	86
3. Average annual MGNREGS earnings per household (₹.)	16,137	9,240	5,980	2,781
4. MGNREGS earnings as % of poverty threshold income (Tendulkar poverty line)	40.0	23.0	14.9	6.9

^aThe high number of days is due to combining drought relief work with MGNREGS in the village during 2009–10

Source <http://www.nrega.ap.gov.in> and Household Sample Survey (Reddy 2011)

and worthwhile presenting here as a summary statement (Reddy 2011; Reddy et al. 2014). While, the relatively high average wage rate for the state as a whole could be attributed to state level political and administrative commitment and initiatives, the high and the low observed at the grassroots level is for most part a result of the presence or absence of participatory governance at the Panchayat level (Table 3.5).

3.5.6 Food Insecurity and MGNREGA

The experiences of Kuppanagar and Makkarajpet show what difference effective implementation of MGNREGS could make to food insecurity in dryland areas. While best performing Kuppanagar may show that hunger is a thing of the past, in poor performing Makkarajpet 85% still feel that they have to suffer the privation. While there has been an improvement in the consumption of food and reduced food insecurity, but 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 MGNREGS. For instance, the five villages in Karimnagar district report that MGNREGS has no impact on food insecurity, meaning, Karimnagar, being agriculturally prosperous district did have higher levels of employment, wages and levels of consumption of food and hence MGNREGS did not make any difference. At the same time there is Adilabad, a relatively backward district but here too, ironically, MGNREGS did not make much difference to food insecurity. It is because of poor implementation of the MGNREGS 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 MGNREGS, reports show complete turnaround in food consumption and security because of better implementation of MGNREGS, more employment, earnings and access to food. In most of the villages besides improved consumption levels in food, MGNREGS earnings have enabled the households to buy food in lump sum quantities. There is also change in food habits and some households have reported that they consume 'tiffin' for the breakfast.

A larger survey reports that large proportions 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 that before MGNREGS their incomes were too meagre to meet their own consumption requirements and therefore, neglected the needs of the aged members of the household. MGNREGS has enabled them to take better care of the aged parents. Some households reported that they provide pocket money to parents to buy toddy and beedies (local signature).

3.5.7 MGNREGA and Labour Shortage for Agriculture

Even before MGNREGS, in peak agricultural season labour shortage was experienced in many villages. Of course, there were a few dryland villages where it was shortage of work, than shortage of labour, which continues to be a problem. But after MGNREGS, 62 out of 68 villages reported increase in labour shortage. However, out 77 villages, only two villages reported that there was not any decline in area under cultivation due to rise in wages or shortage of labour in the peak season.

In Kupanagar village, there has actually been an increase in the area cultivated in the last 2 years, due to MGNREGS investment in fallow and rainfed lands of SCs. A number of strategies are being adopted to meet the changing labour market situations which in turn are also leading to many changes in the nature of rural and especially agricultural labour markets. Six villages reported labour being brought from outside the village by paying transport charges in addition to wages. In three villages wages were paid in advance to ensure labour supply in the peak season for agriculture. There has been growing tendency towards piece rate or contracting out of agricultural work than employing labour 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 agricultural working day. And the growing shift towards piece rate or contract work on agriculture facilitated the change in the working day. There has been increasing tendency in the MGNREGS 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 the MGNREGS work in the forenoon. There is an emergence, in some villages, a dual mode of work in a given day with MGNREGS work in the forenoon and agricultural work in the afternoon (Reddy 2011). The latter mostly on own farms. Such adjustments appear to soften the shortages of agricultural labour. And the very working day is being redefined due to changes in the labour market brought about by MGNREGS.

3.5.8 *Group Work*

There are important changes in the nature of work, duration of working hours and attitude to group work. Almost all work under MGNREGS is in the form of group work. The workers in many places, like in Kuppanagar, are organized into fixed labour groups called Shramik Shakti Sangams (SSSs). The group formation, imparting training to 'mates' of the groups and working together for over 2 years appears to promote better awareness, solidarity and motivation to perform better. The majority of 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 mere drudgery or exploitation but as a positive involvement. Worker's 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 physically disabled are also part of the group. This has been possible because some stronger members compensate by taking more load and share wages equally. In the perception of workers, there is also certain amount of dignity associated with MGNREGS, since it is government work and no room for exploitation.

3.5.9 *MGNREGS Calendar*

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

3.5.10 Migration

Of the 77 villages reported in Table 3.11, in twelve villages there was no migration before or after MGNREGS. Of the remaining, in four villages there was not much change in the migration situation even after the scheme and in six other villages, there was no clarity in the information recorded. In the rest of the 55 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 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 further decline in distress migration if MGNREGS 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 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 MGNREGS, 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 MGNREGS 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 ₹ 500 per day.

These families return during September–October to their own villages to work in agriculture, and some, even in MGNREGS. The third type of continuing migration is—strictly speaking not migration—daily commuting to neighbouring towns. For instance, in Kurnool district members of some rural households commute to neighbouring towns like Allagadda to work in shops and other establishments where the wages are high. Interestingly, some work in MGNREGS 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 A.P reports 44% reduction in migration (GoAP 2011).

3.5.11 Extra Worker and Extra Employment Effect

A question often raised is, if there were to be substantial increase in employment under MGNREGS, what would be the impact on agriculture? Would there be shortage of labour for agriculture? Or a decline in the area cultivated due to shortage of labour? The experience of Kuppenagar village, suggests that though initially there were signs of shortage of labour, 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 MGNREGS works. It is increasingly now tending to be confined to 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 labour or own farm work in the afternoon.

As observed earlier, many workers earn MGNREGS wages in the forenoon and also earn on 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 extra employment effect. The other factor contributing to extra worker effect is the inducement of relatively higher wages for women in MGNREGS compared to agriculture. Some women from certain social groups who did not perform wage labour are participating in MGNREGS work. It is because of being 'government' work, not work for a contractor or a landowner which carried a social stigma for certain social communities. Thus, the extra employment and worker effects together appear to keep labour supply to agriculture from being greatly disturbed.

3.5.12 Need for Improvement and e-FMS

However, there are number of complaints on the functioning of MGNREGS from the grassroots level participants. The complaints mainly relates to cases of job cards not provided, misappropriation of funds, engagement of contractors, forgery of muster roll, manipulation in job cards, underpayment of wages, non-payment of wages, corruption and other irregularities, use of machinery, delay in payments, etc., which needs to be addressed both at macro- and micro-level.

With a view to reduce above malpractices and to avoid bogus attendance and to check instances of tempering and misuse of muster rolls, the e-Muster system has been introduced. For smooth fund flow, the electronic Fund Management System (e-FMS) has been introduced which would also reduce delays in payment of wages. With a view to eliminate ghost beneficiaries and for a faster disbursement of wages, it has been decided to link the payments under MGNREGA to Aadhaar numbers 300 Direct Benefit Transfer (DBT) districts. Under this, payments will be routed directly into the accounts of the beneficiaries using the electronic system. Already, there are visible signs of reducing malpractices in a number of villages.

3.6 Concluding Observations

There is a 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 wages and a substantive decline in the male–female wage gap. The search for information on the impact of MGNREGA on agricultural labour markets leads to some evidence on labour shortage, changes in wages, speeding up mechanization process, peak season adjustment of work or adoption of MGNREGA calendar and migration.

The absolute decline in labour force in rural areas has tightened the rural labour market leading to shortage of labour for farm operations. Thus, labour scarcity has emerged as one of the major constraints to increase agricultural production in India. Furthermore, the tightened labour market has offered, better bargaining power to agricultural labourers, 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 labour saving technologies and machines to mitigate labour scarcity, an inclusive farm mechanization programme especially for women and youth, strengthening rural–urban connectivity, social protection for migrant labour and capacity building programmes for skill augmentation. Further, a revision of the time-frame of MGNREGA work to create more employment in the lean season has been recommended.

Based on the facts and figures presented earlier, some of the clear evidence on the impact of MGNREGS relates to labour market emerging out of the study are summarized as follows:

- Agricultural wages have increased across the country, in which the impact of MGNREGS 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 peak period labour shortages in agriculture are observed in several regions and are resulting in a number of changes in working hours, working day and MGNREGS work calendar.
- The tightening labour market has offered better bargaining power to agricultural labourers, 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 ongoing process of agricultural mechanization is hastened especially in certain operations like ploughing and harvesting of paddy, chickpeas, wheat even in backward states.
- A clear response to peak season agriculture labour shortage is the negotiated MGNREGS calendar that avoids implementing works during agricultural peak

and provides developmental works during the lean season. And 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 marked a decline in the area cultivated either due to rise in agricultural wages or shortage of labour. On the contrary, there are counteracting forces by way of ‘extra worker effect’ by drawing especially women from certain social groups into the ‘government employment’ of MGNREGS wage work; and ‘extra area effect’ by making the some of the fallow lands of the poor more productive.
- There is clear evidence that rise in wages is one of the contributing factors, along with other rising input costs, to increasing costs of cultivation. While SC, ST and other small-marginal farmers who are also participants in the MGNREGS were not affected much, or in many cases gained considerably, the better off farmers could face the rising costs partly through mechanization.
- One of the salutary effects of MGNREGS 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 in favour of decline in distress migration, there is equally strong evidence to show that migration for higher wage work that lasts for relatively longer period in a year remains unaffected and possibly would improve if skill formation and capacity building activities that would improve human capabilities are also brought under the MGNREGS.
- The worst affected are the small-marginal farmers who are neither participants in the MGNREGS work nor beneficiaries of works on their private lands. This section of the small-marginal farming community may not be small and face 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, if designed properly, may address the problems of excluded small-marginal farmers.

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References

- Acharya, S. 1990. *Maharashtra Employment Guarantee Scheme: A Study of Labour Market Intervention*. ILO-ARTEP: New Delhi.
- Babu, V. Suresh., B. Dhanyashree., Joseph Abraham., and K. Hanumatha Rao. 2010. Impact of MGNREGS on Scheduled Castes in West Bengal, NIRD, Hyderabad (Processed).
- Banerjee, Kaustav., and Partha. Saha. 2010. The NREGA, The Maoists and Development Woes of the Indian State. *Economic and Political Weekly* XLV (28), July 10.
- Bhagat, Rasheeda. 2010. A World of Cultivated Taste. *The Hindu Business Line*, February 26.
- Centre for Science and Environment (CSE). 2008a. *An Assessment of the Performance of the National Rural Employment Guarantee Programme in terms of its Potential for Creation of Natural Wealth in India's Villages*. New Delhi: CSE.
- Centre for Science and Environment (CSE). 2008b. *NREGA—Opportunities and Challenges*. New Delhi, CSE, Policy Paper 2008.
- Datt, Gaurav. 1994. Poverty Alleviation through Rural Public Works: The Experience of Maharashtra Employment Guarantee Scheme. *The Indian Journal of Labour Economics* 37 (4).
- Farrington, J., R. Holmes, and R. Stater. 2007. *Linking Social Protection and the Productive Sectors, Briefing Paper 28*. London: Overseas Development Institute.
- Galab S., Pruthvikar. Reddy, E. Revathi., and M. Ravi. 2008. Evaluation Report on the Impact of MGNREGS in Andhra Pradesh. *Centre for Economic and Social Studies*. Hyderabad (Processed).
- GOAP. 2011. Impact of MGNREGS on Poverty and Levels of Living of Poor, (Akshara Livelihood Private Ltd.), Department of Rural Development, GoAP, Hyderabad.
- IITM. 2009. *Evaluation of National Rural Employment Guarantee Act*. IIT, Madras: Rural Technology and Business Incubator.
- Kamath, R. 2008. *NREGA Surveys in Anantapur, Adilabad, Raichur and Gulbarga (2007–08) (MoRD and UNDP Sponsored)*. Bangalore: Indian Institute of Management.
- Kannan, K.P., and Varinder, Jain. 2011. Implementation of NREGA Across Indian States: A Phase-wise Analysis. In *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*. Centre for Development Studies (CDS), Thiruvananthapuram.
- Khera, R. 2008. "Empowerment Guarantee Act", *Economic and Political Weekly*, 43 (35), 8–10.
- Nayak, N.C. ND. Appraisal Processes and Procedures of NREGS in Orissa: A Study of Mayurbhanj and Balasore District. Kharagpur, Indian Institute of Technology.
- Paliwal, Ankur. 2011. Water Turns the Tide. *Down to Earth*, April 15.
- Papola, T.S. 2005. A Universal Programme is Feasible. *Economic and Political Weekly*, February 12.
- Rao, K. Hanumantha., S. Subrahmanyam., C.S. Murthy., and V. Suresh Babu. 2010. Impact of MGNREGS on Scheduled Tribes in Orissa. NIRD, Hyderabad (Processed).
- Rao, K. Hanumantha, and C. Dheeraja. 2010. *Changing Gender Relations through MGNREGS: Bihar State Report*. Hyderabad (Processed): NIRD.
- Reddy, D.N., C. Upendranath., Rukmini, Tankha., and Alakh Sharma et al. 2011. Institutions and Innovations in the Implementation Process of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India. *Centre for Social Protection Research Report 09*. Sussex, UK: Institute of Development Studies.
- Reddy, D.N. 2011. Functioning of National Rural Employment Guarantee Scheme (MGNREGS) in Andhra Pradesh. In *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.
- Reddy, D.N., R. Tankha, C. Upendranadh, and A.N. Sharma. 2010. National Rural Employment Guarantee as Social Protection. *IDS Bulletin* 41 (4): 63–76.

- Reddy, D.N., Reddy, A.A., and Bantilan M.C.S. 2014. The Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Labor Markets and Agriculture. *India Review* 07/2014; 13(3).
- Sainath, P. 2008. NREGA: A Fine Balance. Source: <http://www.indiatogether.org/2008/jul/psa-finebal.htm>.
- Singh, S.P., and D.K. Nauriyal. 2009. *System and Process Review and Impact Assessment of NREGS in the State of Uttarakhand*. Roorkee: Indian Institute of Technology.